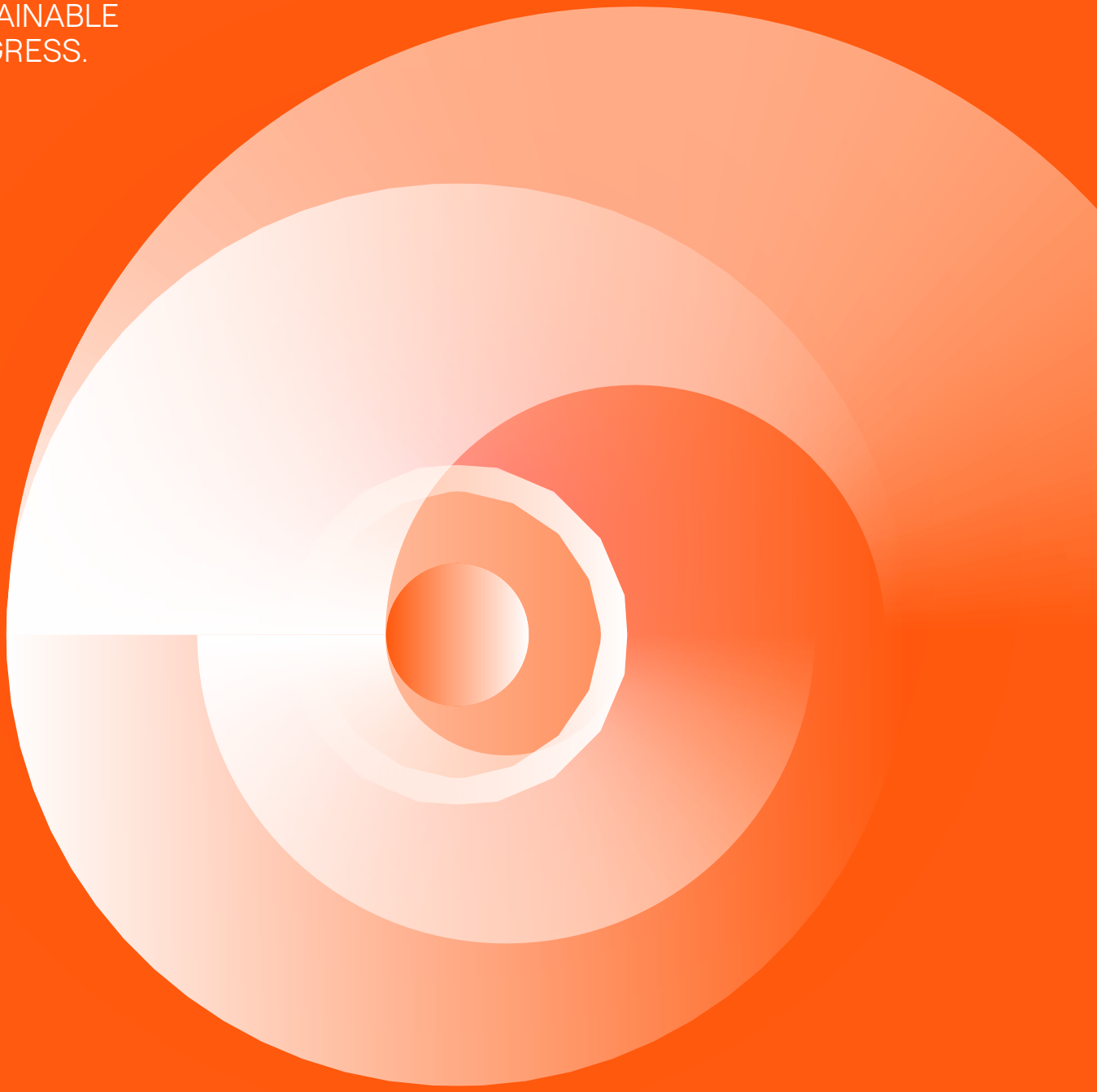
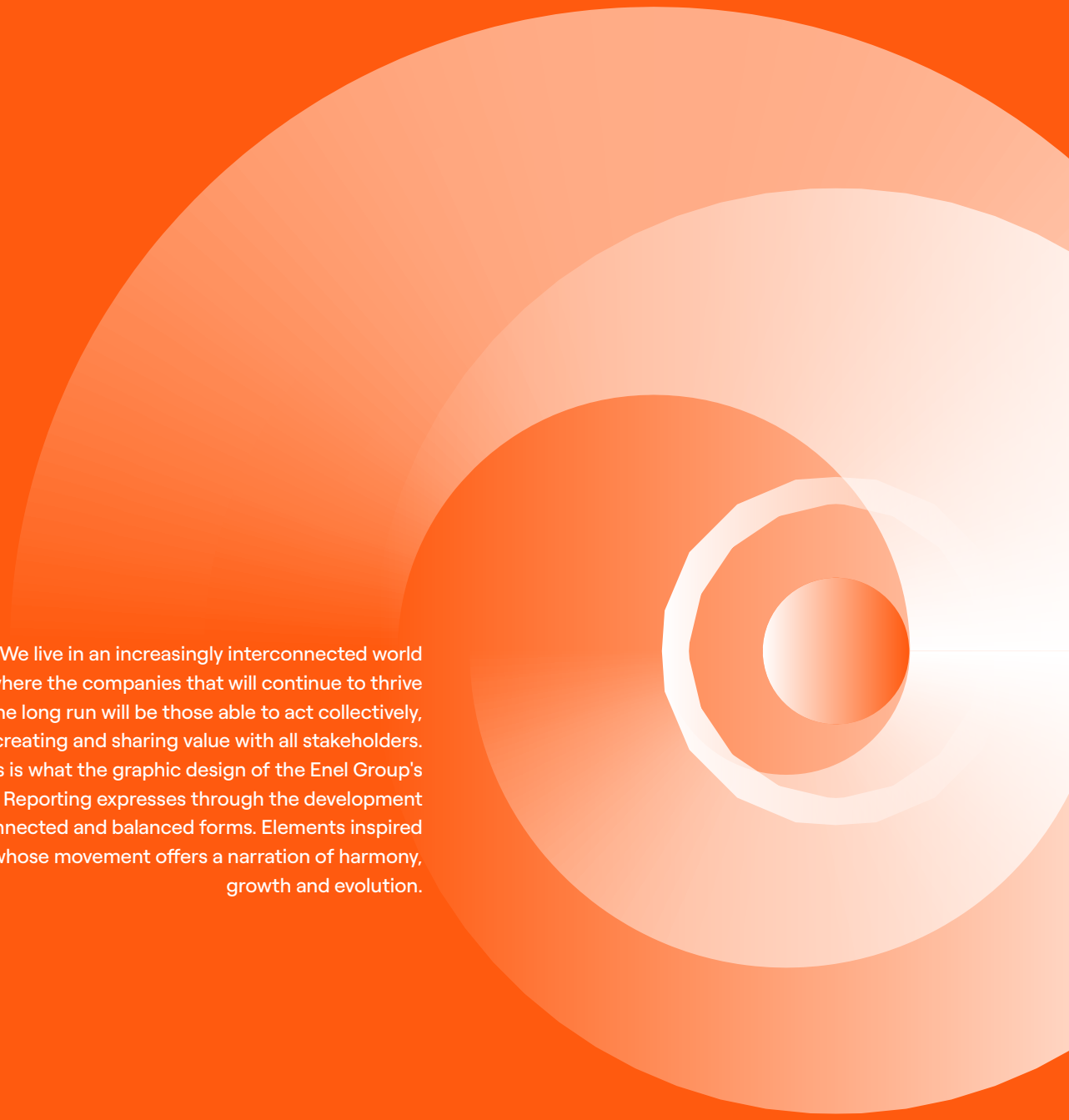
OPEN POWER FOR A BRIGHTER FUTURE.

WE EMPOWER SUSTAINABLE PROGRESS.



Integrated Annual Report
2022

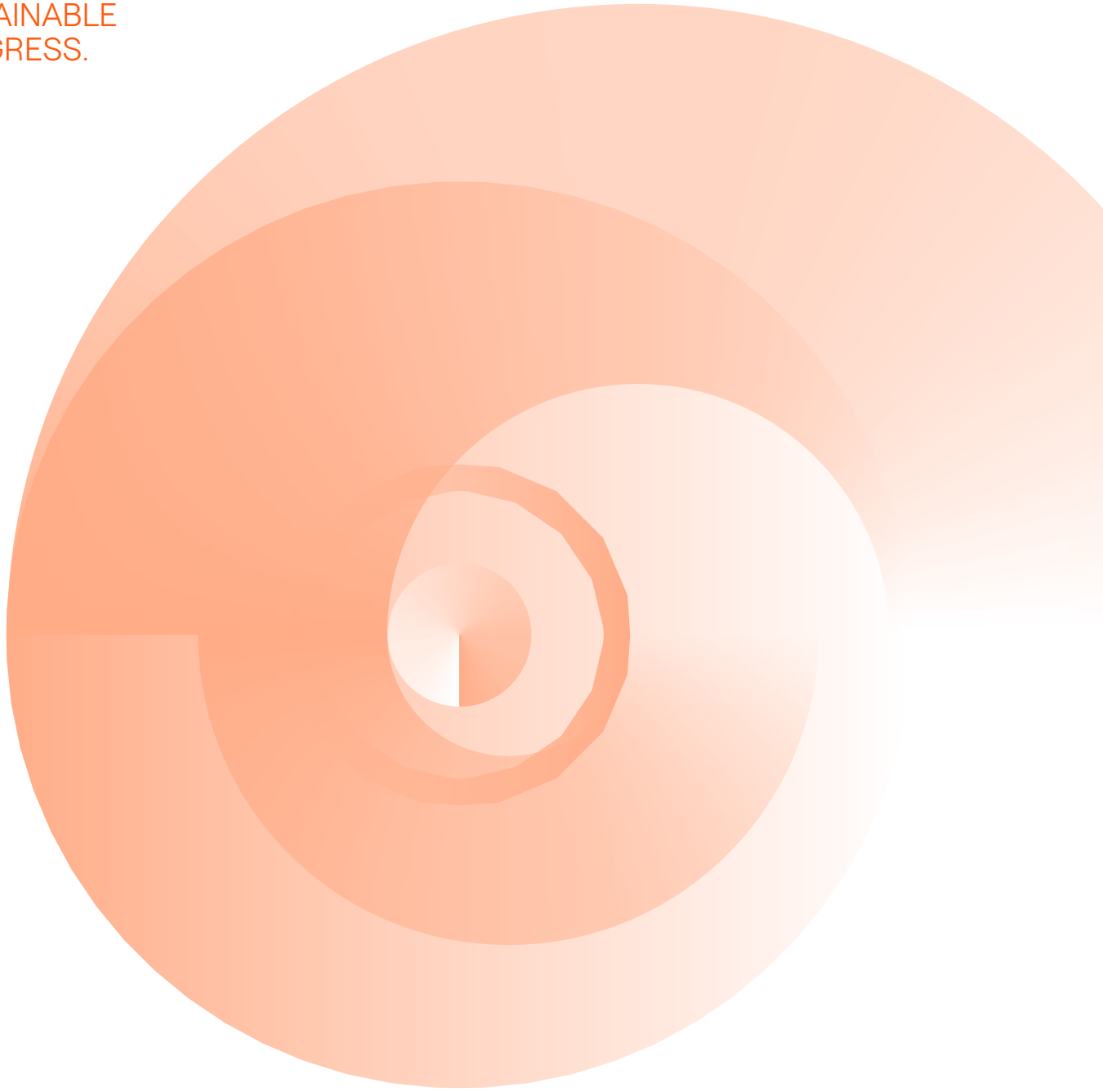
enel



We live in an increasingly interconnected world where the companies that will continue to thrive in the long run will be those able to act collectively, creating and sharing value with all stakeholders. This is what the graphic design of the Enel Group's Corporate Reporting expresses through the development of connected and balanced forms. Elements inspired by nature, whose movement offers a narration of harmony, growth and evolution.

OPEN POWER FOR A BRIGHTER FUTURE.

WE EMPOWER SUSTAINABLE PROGRESS.



Integrated Annual Report 2022

This document has been prepared in PDF format in order to facilitate readers of the financial statements. This document is a supplementary variant of the official version compliant with the provisions of Commission Delegated Regulation (EU) 2019/815 (the ESEF Regulation - European Single Electronic Format) available on the Company's website (www.enel.com) and at the authorized storage mechanism "eMarket STORAGE" (www.emarketstorage.com).

Enel is Open Power



PURPOSE

OPEN POWER FOR A BRIGHTER FUTURE.

WE EMPOWER SUSTAINABLE PROGRESS.

VISION

Open Power to tackle some of the world's biggest challenges.

POSITIONING

Open Power





PRINCIPLES OF CONDUCT

- Make decisions in daily activities and take responsibility for them.
- Share information, being willing to collaborate and open to the contribution of others.
- Follow through with commitments, pursuing activities with determination and passion.
- Change priorities rapidly if the situation evolves.
- Get results by aiming for excellence.
- Adopt and promote safe behavior and move proactively to improve conditions for health, safety and well-being.
- Work for the integration of all, recognizing and leveraging individual diversity (culture, gender, age, disabilities, personality, etc.).
- Work focusing on satisfying customers and/or coworkers, acting effectively and rapidly.
- Propose new solution and do not give up when faced with obstacles or failure.
- Recognize merit in co-workers and give feedback that can improve their contribution.



MISSION

- Open access to electricity for more people.
- Open the world of energy to new technology.
- Open up to new uses of energy.
- Open up to new ways of managing energy for people.
- Open up to new partnerships.

VALUES

- Trust
- Proactivity
- Responsibility
- Innovation

Letter to shareholders and other stakeholders

Dear shareholders and stakeholders,

During 2022, the Enel Group pursued with determination its growth strategy along the lines of increasingly decarbonized electrification to guarantee its customers competitive prices, sustainability and energy security.
Enel confirms its position as the largest private operator in the renewable energy sector in the world, having reached around 59 GW of managed capacity with the plants built this year. It is also the largest private electricity distributor globally, with around 73 million end users connected to increasingly digital grids, with around 63% of users equipped with smart meters. Furthermore, the Group manages the largest customer base among private companies, with about 67 million customers.

Our business model, entirely based on digital platforms, allows the Group to optimally seize the opportunities generated by the energy transition now under way at the global level.
The Group's financial performance in 2022 demonstrated our resilience even in highly volatile and adverse environments, such as that characterizing the year just ended.
The Group's leadership in sustainability has once again been recognized worldwide, underscored by its constant presence in various major sustainability rankings and indices.

73 million
End users

59 GW
Renewables capacity managed





Michele Crisostomo

Chairman

Francesco Starace

Chief Executive Officer
and General Manager

The macroeconomic environment

After a strong post-pandemic recovery, the global macroeconomic environment in 2022 experienced a generalized slowdown in the real economy, with global GDP growth of around 3% on an annual basis. The world economies were impacted by sudden and growing inflationary pressures that forced many central banks to rapidly tighten their monetary policies, with a consequent impact on the financial markets. The military conflict between Russia and Ukraine, and the resulting global uncertainty, has also aggravated conditions on the energy, commodity and food markets, with direct repercussions on the prices of final consumer goods.
In the United States, the real economy was heavily affected by growing inflationary pressures, which prompted the Federal Reserve to implement rapid increases in its benchmark interest rate. In the euro area, the 1st Half of the year witnessed an economic recovery that outpaced expectations, while in the 2nd Half, with the emergence of the great uncertainty engendered by the hostilities between Russia and Ukraine and the sudden increase in energy prices, the European economies saw growth slow significantly. The European Central Bank also decided to rapidly adjust its monetary policy stance, with multiple increases in its benchmark rates.
In Latin America, the macroeconomic context was characterized by two different phases. The 1st Half of the year saw a significant post-pandemic recovery, while in the 2nd Half the economies of the area experienced the rapid and large high increase in international commodity prices, mainly driven by the conflict between Russia and Ukraine. National central banks responded by tightening their monetary policies, which, as a result, dampened the economic recovery.
On the energy front, in 2022 the European gas market experienced substantial volatility. The sharp rise in prices, which saw the TTF (Title Transfer Facility) index exceed €300/MWh during August, was caused by the supply uncertainty of flows from Russia, which steadily decreased over the past year. The achievement of high storage filling percentages achieved before the winter season, together with temperatures that exceeded seasonal averages in November and December, subsequently led to a sharp fall in European gas prices in the closing months of 2022.
The rise in gas prices and a number of hitches along the supply chain in turn led to an increase in coal prices, which in 2022 reached an average of $290/t.
The quotations of CO_2 within the ETS (Emission Trading System) also increased, rising by over 50% compared with the previous year, despite the slowdown in economic activity in the 4th Quarter.
The bullish dynamics on the commodity markets produced a sharp increase in electricity prices

throughout Europe, which in the case of Italy and Spain exceeded 140% and 50%, respectively, compared with 2021.
As had occurred in 2021, 2022 was also characterized by pronounced volatility in the industrial metals sector, albeit with different dynamics. The 1st Half of the year was characterized by unexpected peaks and sharp increases in prices, mainly for aluminum and nickel. In the 2nd Half, however, fears for the short-term growth outlook dominated, with a partial reversal of benchmark prices compared with the peak recorded in the 1st Half.

Performance

In 2022, the Enel Group continued its growth path despite the turbulence associated with the volatility of the prices of commodities and raw materials.
In particular, the 2022 financial year closed with ordinary EBITDA of €19.7 billion, an increase of 3% compared with 2021. Ordinary profit amounted to €5.4 billion, down about 4% compared with the previous year. The dividend for 2022 amounts to €0.40 per share, up 5% compared with 2021. In terms of cash generation, FFO in 2022 amounted to about €9.1 billion. Net debt amounted to €60.1 billion, down €9.6 billion compared with September 30, 2022.

Main developments

As in previous years, in 2022 Enel once again achieved a new record for generation capacity from renewable sources, globally building 5,223 MW of new renewables capacity, including 387 MW of BESS.
With the plants built in 2022, installed renewable capacity, including batteries, reached about 59 GW, producing a total of about 124 TWh of power from renewable sources over the year, of which about 66 TWh from wind and sun, about 52 TWh from hydroelectric and about 6 TWh from geothermal.
The pipeline of projects under development in 2022 also set a record, with 462 GW, inclusive of renewable energy plants, batteries capacity and capacity already under construction, an increase of around 24% compared with the previous year. At the same time, the process of decommissioning and conversion of coal-fired plants continues.
As a result, the Group's specific greenhouse gas emissions linked to electricity generation in 2022 amounted to 229 gCO_{2eq}/kWh, in line with the objectives certified by the Science Based Target initiative (SBTi) in accordance with the path to limit the increase in global temperature to 1.5 °C.
In 2022, the creation of digital platforms was also completed. Using advanced analytics and artificial intelligence algorithms, these will analyze more than 50 million data points on a daily basis to optimize the management of our wind and solar plants throughout their entire life cycle, from design and construction to operation and maintenance.
2022 was also a crucial year for the opening of the 3SUN Gigafactory construction site in Sicily. The project will increase the production of photovoltaic panels at the current factory from 200 MW per year to 3 GW by 2024, raising efficiency standards while improving the reliability and sustainability of the panels produced. A journey that began more than fifteen years ago and which will help make a substantial contribution to the revival of the photovoltaic industry in Italy and Europe, giving the country a position on a strategic supply chain for the energy transition.
Enel's strong commitment to electricity grids, which are enablers and protagonists of the energy transition, also continues. Thanks to the investment in their modernization and their even greater digitalization, 63% of the Group's end users are equipped with smart meters, while a total of about 65 GW of distributed renewable energy, more than half of which in Italy, is connected to our grids.
The digital transformation continues through the adoption of a platform operating model based on advanced technological solutions that impact all operating processes – from the design and construction of new grid infrastructure to the optimization of operating and maintenance activities and managing the relationship with customers. The volume of electricity distributed worldwide was 508 TWh, constantly improving the quality of service rendered to our customers.
2022 was also a crucial year for the development and growth of the NewCo Gridspertise, launched in 2021 with the aim of making Enel's innovative solutions in the smart meter field available to third-party distribution companies to accelerate the energy transition.
The strong commitment of the Group to the development of the electricity distribution infrastructure

serving Italy is confirmed once again this year.
Developments in this regard include the successful participation in the two tenders under the NRRP relating to Smart Grids and Grid Resilience, with the award of around €3.5 billion to e-distribuzione, and the success of the Energy for Growth project, with the training of 2,500 people a year once fully operational.
Following the birth of Enel X Global Retail, a new organizational model was defined among the various countries to better develop and manage the increasingly integrated, innovative and sustainable solutions that use the commodity as a competitive lever. Enel X Global Retail focuses on the electrification of consumption, studying its effective benefits for customers with the aim of defining a strategy for acceleration at the global level, leveraging about 67 million customers.
Through the new Global e-Mobility Business Line we are accelerating the electrification of transport thanks to the strategic focus and the strengthening of the offering and the operating model. This has enabled a significant increase in commercial performance in terms of charging points sold (around 92 thousand in 2022, +82% compared with 2021) and charging services provided (43 GWh in 2022, +134% compared with 2021).
In order to ensure that we take a customer-centric approach to all processes, a recurring customer satisfaction survey system was consolidated in 2022 through the continuous measurement on a global scale of the Group Net Promoter Score.[1] In 2022, Global Customer Operations received around 1 million feedbacks, which made it possible to define and guide improvement initiatives to make the customer experience increasingly simple, intuitive and effective. One result was a 34% reduction in commercial complaints compared with the previous year.
On the financial front, Enel issued "sustainability-linked" bonds in euros, US dollars and British pounds in a total amount equivalent to about €12.1 billion. These issues are linked to the achievement of Enel's sustainability objective for the reduction of direct greenhouse gas emissions (Scope 1) and also contribute to achievement of the United Nations Sustainable Development Goal (SDG) 13 ("Climate Action"). For the first time ever for a multinational energy group, a bond linked to full decarbonization was issued, in line with the Group's goal of achieving zero direct greenhouse gas emissions by 2040.
The bond issue programs have made it possible to achieve a ratio between sustainable funding sources and the Group's total gross debt of about 63%.
Furthermore, on December 22, 2022, Enel obtained a €12 billion revolving credit line dedicated to funding the collateral requirements for trading activities on energy markets. This financing operation, the effectiveness of which is subject to the signing of an implementing decree by the competent ministries, falls within the framework of the measures made available to all energy companies based in Italy that meet specific characteristics in order to ensure, in the current environment of high volatility in the energy markets, the effective operation of the market on equal terms with other European operators in the sector.
Among extraordinary transactions, in January 2022 the subsidiary Enel Produzione SpA completed the acquisition of the entire share capital of ERG Hydro Srl, owner of hydroelectric plants located in central Italy with an installed capacity of 527 MW and an average annual output of about 1.5 TWh.
In March 2022, Enel X International Srl renewed its partnership with the private equity fund Cinven in Ufinet Latam, having acquired 79.4% of the share capital of Ufinet Latam SLU from Sixth Cinven Fund and at the same time sold 80.5% of the share capital of the same company to Seventh Cinven Fund, ending up with an indirect stake of 19.5% of the share capital.
In October 2022, Enel completed the closing for the sale of its entire stake in PJSC Enel Russia, equal to 56.43% of the latter's share capital, to PJSC Lukoil and the Closed Combined Mutual Investment Fund "Gazprombank-Frezia", thus completing the divestment of all its electricity generation assets in Russia.
In December 2022, a) Enel completed, through Enel Grids Srl, the sale of 50% of the subsidiary Gridspertise Srl to the private equity fund CVC Capital Partners Fund VIII, following which Enel and CVC now exercise joint control over the company; b) the subsidiary Enel Chile SA completed the sale of the entire investment, equal to 99.09% of the share capital, held in Enel Transmisión Chile SA, a Chilean electricity transmission company, to Sociedad Transmisora Metropolitana SpA; and c) the subsidiary Enel Brasil SA completed the sale of its entire stake held in the Brazilian electricity distribution company Celg Distribuição SA – Celg-D, equal to about 99.9% of the latter's share capital, to Equatorial Participações e Investimentos SA.

(1) The Net Promoter Score (NPS) is calculated as the percentage of "promoters" less the percentage of "detractors" (score between 0 and 6 out of 10). The values therefore lie in a range of -100 to +100 (NPS = % Number of Promoters - % Number of Detractors).

Strategy and forecasts for 2023-2025

The combined effect of two years of the COVID-19 pandemic, geopolitical tensions and extreme weather events related to climate change has increased the need for an acceleration in the energy transition and digitalization, together with the reorganization and rebalancing of global supply chains.
The current situation underscores the need to achieve certain objectives in terms of accessibility, safety and sustainability. To achieve these objectives, over the course of the Plan, the Group plans to focus on an integrated business model targeted at the sustainable electrification of energy consumption, an increasingly necessary step in global energy systems, supplying about 90% of fixed-price sales in the core countries with zero-emission electricity in 2025, bringing generation from renewable sources to around 75% of the total, and digitalizing about 80% of grid customers.
The consequence of the strategy focused on the integrated margin is the particular attention to the countries where the Group's presence covers the entire value chain in order to fully seize the opportunities associated with the energy transition. In this context, the process that began years ago towards the disposal of the assets no longer aligned with our strategy is reaching completion, with planned disposals of around €21 billion over the 2022-2024 period in terms of the positive contribution to the reduction of the Group's net debt. The majority of this plan is expected to be completed by the end of 2023, completing the path towards a more agile corporate structure, focused on the six core countries (Italy, Spain, United States, Brazil, Chile and Colombia).
The Group intends to ensure growth and financial strength by combining a compound annual growth rate ("CAGR") of 9-10% in ordinary profit with an expected FFO/net debt ratio of 28% starting in 2023, as well as maintaining a fixed DPS of €0.43 in 2023-2025, an increase on the €0.40 paid in 2022. In addition, the DPS for 2024 and 2025 is to be considered a sustainable minimum, not a maximum.
The Group confirms the use of two different business models: the Ownership model, in which the Group directly invests in renewables, grids and customers, and the Stewardship model, in which the Group invests capital in existing businesses, newly established enterprises or acquiring minority stakes, in order to maximize the value of the know-how developed in the various businesses. These models will be applied, depending on the geographical area and the operational context, to achieve the defined objectives.
The Group's investments in 2023-2025 will amount to about €37 billion. More than 80% will be aligned with the criteria of the European taxonomy, as they relate to activities that contribute to the mitigation of climate change thanks to the strong contribution of investments in renewables, the connection of distributed generation to the grid and advanced services for industrial and private customers.
Some 60% of the Group's investments, of which about 50% in generation and about 10% in advanced energy customers and services, are expected to support the Group's integrated commercial strategy, with grids accounting for about 40% of investments over the period covered by the Strategic Plan. At the country level, about 85% of these investments are expected to be allocated to Italy, Spain and the United States, where the Group can also benefit from policies to support sustainable electrification introduced by the EU and the United States.
By 2025, the Group plans to add about 21 GW of installed renewable capacity, including 4 GW of BESS.
The decarbonization strategy, combined with the push towards electrification, enables the Group to once again confirm its commitment to combating climate change. In 2022, the Group delineated a decarbonization roadmap, which covers both direct and indirect emissions along the entire value chain. It is composed of four targets that were certified by the Science Based Target initiative (SBTi) in December, in line with the goal of keeping global warming below 1.5 °C.
Enel's new certified targets follow up on the ambition set by the Company in 2021, when it brought forward its commitment to achieving zero emissions by ten years, from 2050 to 2040.
The Plan is based on the implementation of a number of fundamental strategic steps: i) the abandonment of coal-fired generation by 2027 and gas-fired generation by 2040, replacing the thermal generation portfolio with new renewables capacity and hybridizing renewables with storage solutions; ii) by 2040, 100% of the electricity sold by the Group will be generated from renewables and by the same year the Group will stop selling gas to end users.
About 40% of investments over the course of the Strategic Plan will be dedicated to the grids in five of

the six core countries, specifically Italy, Spain, Brazil, Chile and Colombia, where the Group has an integrated position and where its experience in digital evolution can be best deployed, mainly in large metropolitan areas. The drivers of investments are: the continuous improvement of the quality and resilience of grids to better handle the increase in loads, the continuation of the digitalization process now under way and the increase in demand for new connections in the wake of the substantial growth of distributed energy and the expansion of urban grids.

The Group's net debt will reach around €51-52 billion by the end of 2023, with a ratio of net debt to EBITDA of around 2.4-2.5x, remaining stable over the rest of the Plan period.

The Group's ordinary EBITDA will grow to between €22.2 and 22.8 billion in 2025, from €19.7 billion in 2022, with a CAGR of 4-5%, and the Group's ordinary profit will grow to €7.0-7.2 billion in 2025, from €5.4 billion in 2022, with a CAGR of 9-10%.

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Guide to navigating the report

To facilitate navigation, hyperlinks have been integrated into the document

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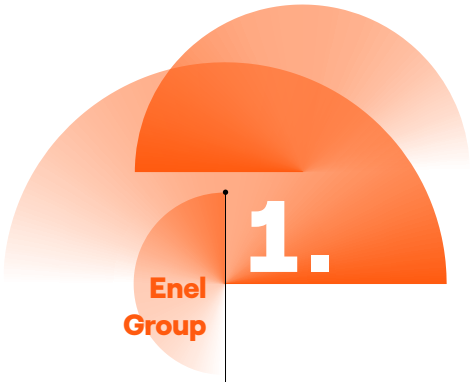
IPL Income Statement

IBS Statement of Financial Position

ICF Statement of Cash Flows

IEO Statement of Changes in Equity

IOCI Statement of Comprehensive Income



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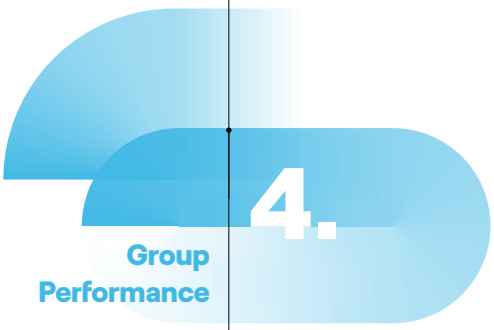

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CONSOLIDATED FINANCIAL STATEMENTS

Basis of Presentation

Enel's approach to corporate reporting

The Integrated Annual Report of the Enel Group, consisting of the Report on Operations inspired by integrated thinking and the consolidated financial statements prepared in accordance with the IFRS/IAS international accounting standards, represents the "core" document of the Enel Group's integrated corporate reporting system, based on the transparency, effectiveness and accountability of information.

The objective of the Enel's Integrated Annual Report is to describe its strategic-sustainable thinking and to present its results and the medium- and long-term outlook for a sustainable and integrated business model that in recent years has fostered the creation of value in the context of the energy transition.

The Enel Group has drawn inspiration from the "Core&More" reporting approach, designing its own corporate reporting system at the service of all stakeholders in a connected, logical and structured manner and developing its own concept for presenting economic, social, environmental and governance information, in accordance with specific regulations, recommendations and international best practices.

This "Core Report" seeks to provide a holistic view of the Group, its sustainable and integrated business model and the related medium/long-term value creation process, including the qualitative and quantitative financial and non-financial information considered most relevant on the basis of a materiality assessment that also considers the expectations of all stakeholders.

The "More Reports", on the other hand, include more detailed and additional information, partly in compliance with specific regulations, than that provided in the Core Report while being cross referenced to the latter.



Corporate Reporting Framework

The Core&More approach of the Enel Group



Sustainability Report
This includes the Consolidated Non-Financial Statement pursuant to Legislative Decree 254/2016 and presents Enel's sustainable business model for creating value for all stakeholders and contributing to achievement of the 17 Sustainable Development Goals of the United Nations

Report and financial statements of Enel SpA
This is prepared in conformity with Article 9, paragraph 3, of Legislative Decree 38 of February 28, 2005

Integrated Annual Report 2022

Report on Corporate Governance and the Ownership Structure
This describes the Enel corporate governance system pursuant to Article 123-*bis* of the Consolidated Law on Financial Intermediation and Article 144-*decies* of the CONSOB Issuers Regulation

Report on Remuneration Policy
This describes the Enel remuneration system, as provided for by Article 123-*ter* of the Consolidated Law on Financial Intermediation

The Integrated Annual Report and materiality analysis

As an expression of integrated thinking, the Integrated Annual Report seeks to represent the capacity of the business model to create value for stakeholders in the short, medium and long term, ensuring the connectivity of the information it contains.

The Group maintains ongoing relationships with all stakeholders in order to understand and meet their reporting needs, taking account of the importance of the impact of the Group's business model for all interests involved, with a view to creating shared value.

The financial and non-financial information presented within the various documents of the corporate reporting system are selected based on their materiality determined on the basis of specific frameworks, methodologies and assessments.

The following represent the key principles underpinning the preparation of the Report on Operations, with the basis of preparation of the consolidated financial statements being discussed in the section "Form and content of the consolidated financial statements".

The Report on Operations includes financial and sustainability information selected on the basis of a materiality analysis that takes account of stakeholder information requirements, including Enel's contribution to achieving the United Nations Sustainable Development Goals (SDGs) included in the Group Strategic Plan (i.e., "Affordable and Clean Energy" (SDG 7), "Industry, Innovation and Infrastructure" (SDG 9), "Sustainable Cities and Communities" (SDG 11) and "Climate Action" (SDG 13)) and on the activities implemented to contribute to their achievement in order to meet the expectations of the main stakeholders in the Integrated Annual Report.

The Enel Group also performs a double materiality analysis, details on which are available in the methodological note of the Sustainability Report.

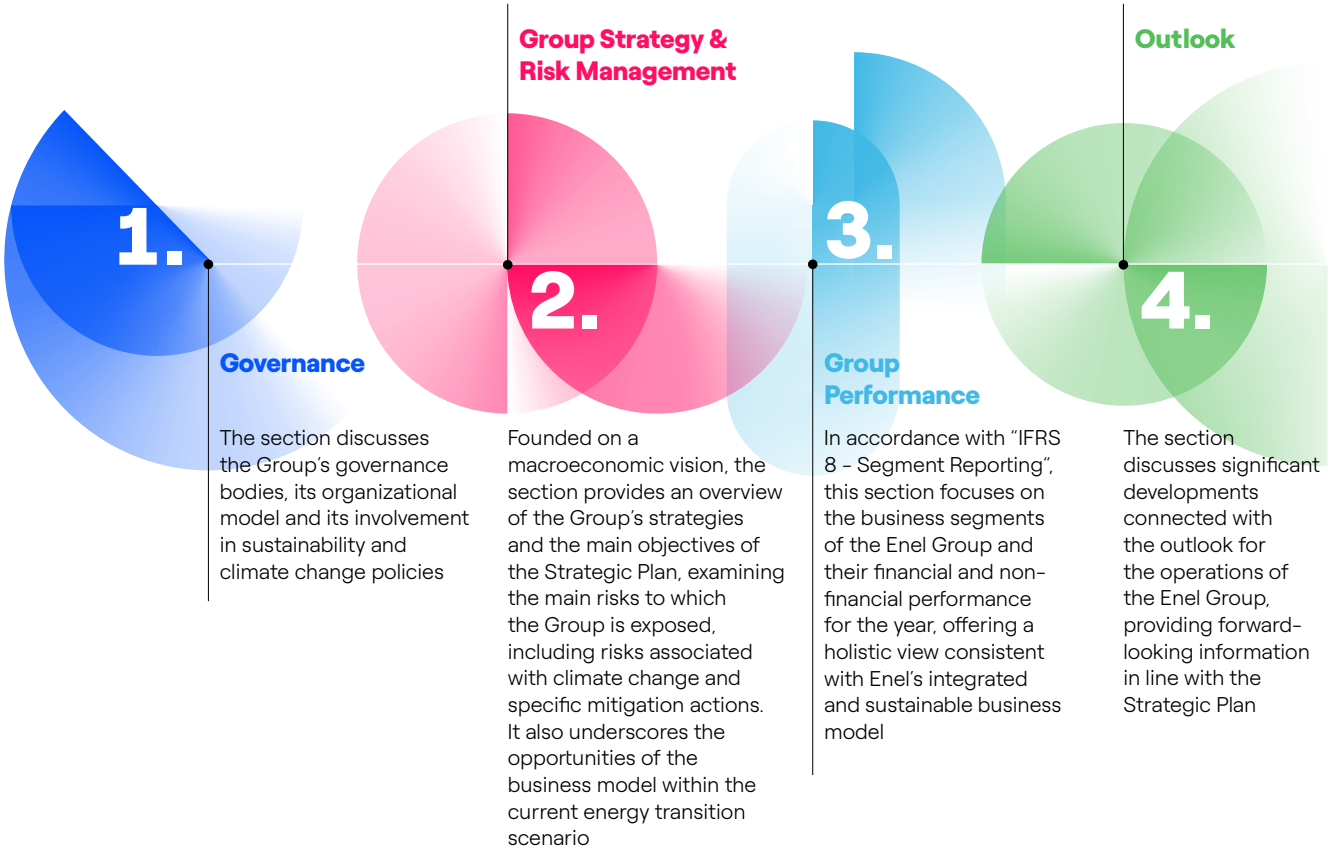
In addition to the concept of materiality, the qualitative and quantitative financial and sustainability information reported in the Report on Operations have been prepared and presented in such a way as to ensure their completeness, accuracy, neutrality and comprehensibility.

The information contained in the Report on Operations is also consistent with the previous year.

Accordingly, the Group applies the same methodologies from year to year, unless otherwise specified, in compliance with international best practices for integrated reporting and non-financial reporting.

For the purposes of preparing sustainability information, especially quantitative information, the Group mainly applies the provisions of the Global Reporting Initiative (GRI) Standard, in line with the Sustainability Report, and the "Aspects" of the GRI supplement dedicated to the Electric Utilities sector ("Electric Utilities Sector Disclosures"). Consideration was also given to the indicators proposed in the white paper "Toward Common Metrics and Consistent Reporting of Sustainable Value Creation" of the World Economic Forum (WEF), the details of which are highlighted in the section below on the WEF and in the "Group Performance" chapter of this report.

The Report on Operations in organized into the following sections:



Taking account of the results of the priority matrix and the significant climate impacts on the Group's value creation process, each section (following the four pillars of the Task force on Climate-related Financial Disclosures (TCFD): Governance, Group Strategy and Risk Management, Group Performance and Outlook) includes information relating to climate change as proposed by the TCFD, which published specific recommendations in June 2017 which were adopted by the Group in its voluntary reporting on the financial impacts of climate risks.
The Group also took account of the recommendations issued by the IASB in November 2019 "IFRS Standards and climate-related disclosures" and November 2020 "Effects of climate-related matters on financial statements ", which emphasize that this risk must be considered in the assumptions of management in the exercise of its judgment in measuring items in the financial statements.

In order to ensure the connectivity of information and to communicate the way in which the progress achieved in sustainability contributes to enhancing current and future financial performance, clear and consistent relationships between key financial and sustainability information have been identified and presented in the Report on Operations for each of the four sections indicated above.
In addition, Enel's Integrated Annual Report has been published in the "Investors" section of the Enel website (www.enel.com).

Connectivity matrix

In order to provide an integrated representation of the Group and represent the connectivity of information, the Enel Group has prepared a matrix delineating the relationships between:

- strategic objectives that also clearly represent Enel's contribution to achieving the United Nations Sustainable Development Goals (SDGs) and in particular to the four key objectives of the Strategic Plan (i.e., SDG 7, SDG 9, SDG 11 and SDG 13);
- the governance, Group strategy and risk management, Group performance and the outlook for each business line.

Enel business	Value creation and business model	Governance	Group strategy	SDGs
ENEL GREEN POWER AND THERMAL GENERATION & GLOBAL ENERGY AND COMMODITY MANAGEMENT	**Enel Green Power and Thermal Generation & Global Energy and Commodity Management** (p. 34)	• Enel shareholders (p. 41) • Corporate boards (p. 42) • The Enel corporate governance system (p. 44) • Enel organizational model (p. 51) • Incentive system (p. 53) • Values and pillars of corporate ethics (p. 54)	**Determination of strategy** (p. 93) I. Strategic Dialogue 2022 II. Strategic Planning III. Long-term positioning IV. Analysis of ESG factors and assessment of materiality in the field of sustainability **The Strategic Plan** (p. 94) • **The "energy trilemma"** (p. 95): affordability, security and sustainability • **Strategic priorities for 2023-2025** (p. 96): I. focus on an integrated value chain aimed at sustainable electrification; II. strategically reposition both businesses and geographical areas; III. ensure growth and financial stability. • **Strategic actions for 2023-2025** (p. 97): I. balancing supply and demand in order to optimize the risk/return profile; II. decarbonization to ensure competitiveness, sustainability and security; III. grid digitalization, enhancement and development to enable the transition; IV. rationalization of the business portfolio and geographical areas. • **Integrated strategy in the core countries** (p. 100) • **Investment plan** (p. 101)	7 AFFORDABLE AND CLEAN ENERGY 13 CLIMATE ACTION
RETAIL				7 AFFORDABLE AND CLEAN ENERGY 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 11 SUSTAINABLE CITIES AND COMMUNITIES 13 CLIMATE ACTION
ENEL X	**Enel X Global Retail** (p. 35)			
ENEL GRIDS	**Enel Grids** (p. 34)			9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 11 SUSTAINABLE CITIES AND COMMUNITIES 13 CLIMATE ACTION

Risk management	Group performance	Outlook
	Value generated and distributed for stakeholders (p. 187) **ENEL GREEN POWER** (p. 204) Operations • Net electricity generation • Net efficient installed capacity Performance • Revenue • Ordinary gross operating profit • Ordinary operating profit • Capital expenditure	
Strategic (p. 118) • Legislative and regulatory developments • Macroeconomic and geopolitical trends • Risks and strategic opportunities associated with climate change • Competitive environment	**THERMAL GENERATION AND TRADING** (p. 198) Operations • Net electricity generation • Net efficient installed capacity Performance • Revenue from thermal and nuclear generation • Revenue • Ordinary gross operating profit • Ordinary operating profit • Capital expenditure Innovation (p. 230) People centricity (p. 235)	**2023-2025** (p. 284) The Group plans to invest a total of about €37 billion, of which 60% in support of the Group's integrated commercial strategy (generation, customers and services) and 40% in grids to support their role as enablers of the energy transition. The Plan will focus on four strategic actions: I. balancing client demand and supply to optimize risk/reward profile; II. decarbonization to ensure competitiveness, sustainability and security; III. strengthening, developing and digitalizing grids to enable the transition; IV. rationalization of business portfolio and geographical areas.
Financial (p. 140) • Interest rate • Commodity • Currency • Credit and counterparty • Liquidity	Value generated and distributed for stakeholders (p. 187) **END-USER MARKETS** (p. 216) Operations • Electricity sales • Natural gas sales Performance • Revenue • Ordinary gross operating profit • Ordinary operating profit • Capital expenditure Innovation (p. 230) People centricity (p. 235)	
Digital technology (p. 143) • Cyber security • Digitalization, IT effectiveness and service continuity	Value generated and distributed for stakeholders (p. 187) **ENEL X** (p. 220) Operations • Demand response • Lighting points • Storage • Charging points Performance • Revenue • Ordinary gross operating profit • Ordinary operating profit • Capital expenditure Innovation (p. 230) People centricity (p. 235)	**2023** (p. 284) • continuation of the investment policy in renewable energy to support industrial growth and as part of the decarbonization policies followed by the Group; • further investment in distribution grids, especially in Italy, with the aim of improving service quality and increasing the flexibility and resilience of the grid; • continuation of the investment policy dedicated to the electrification of consumption, with the aim of enhancing the growth of the customer base, as well as continuous efficiency improvement through global business platforms.
Operational (p. 145) • Health and safety • Environment • Procurement, logistics and supply chain • People and organization		
Compliance (p. 148) • Personal data protection	Value generated and distributed for stakeholders (p. 187) **ENEL GRIDS** (p. 210) Operations • Electricity distribution and transmission grids • Average frequency of interruptions per customer • Average duration of interruptions per customer • Grid losses Performance • Revenue • Ordinary gross operating profit • Ordinary operating profit • Capital expenditure Innovation (p. 230) People centricity (p. 235)	

REPORT ON OPERATIONS

1.

Enel Group

The value chain and business model

Integrated representation of how the Group turns available resources into outcomes and value for stakeholders while pursuing the Sustainable Development Goals (SDGs) as a priority.

WEF metrics and European taxonomy

Clear, transparent and comparable information with WEF metrics and the European taxonomy.

Business model

Enel confirms the use of two business models: the Ownership model, which envisages the development of an integrated business or important investments in so-called "Tier 1" countries (Italy, Spain, Chile, Colombia, Brazil, United States), and the Stewardship model, in countries where joint ventures, PPAs, acquisitions of non-controlling interests offer particularly profitable prospects.

Highlights



Performance

Revenue

+63.9%

€140,517 million

€85,719[(1)] million in 2021

GROSS OPERATING PROFIT

+15.6%

€19,918 million

€17,233[(1)] million in 2021

ORDINARY GROSS OPERATING PROFIT

+2.5%

€19,683 million

€19,210 million in 2021

Results

Profit attributable to owners of the Parent

-47.3%

€1,682 million

€3,189 million in 2021

ORDINARY PROFIT ATTRIBUTABLE TO OWNERS OF THE PARENT

-3.6%

€5,391 million

€5,593 million in 2021

NET FINANCIAL DEBT[(2)]

+16.2%

€60,068 million

€51,693 million in 2021

Capital expenditure

Capital expenditure on property, plant and equipment and intangible assets[(3)]

+10.4%

€14,347 million

€12,997 million in 2021

CASH FLOWS FROM OPERATING ACTIVITIES

-12.5%

€8,674 million

€9,915[(4)] million in 2021

People

Group employees

-1.7%

65,124 no. of employees

66,279 in 2021

NO. OF "LIFE CHANGING" (LCA) INCIDENTS - ENEL[(5)]

-

1 in 2021

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

(2) For the sake of clarity, and to take account of the hedging of currency risk, the Group has decided to include the fair value of the cash flow hedge and fair value hedge derivatives used to hedge the currency risk on financing in the measurement of net financial debt. As a result, net financial debt at December 31, 2021 has been restated for the purpose of comparison.

(3) Does not include €156 million regarding units classified as held for sale or discontinued operations (€111 million in 2021).

(4) In order to improve presentation, for comparative purposes only, realized financial income and expense connected solely with loans in currencies have been reclassified under the new item "Collections/(Payments) associated with derivatives connected with borrowings" in the section on cash flows from financing activities.

(5) Injuries whose consequences caused permanent changes in the life of the individual.

Business Line Highlights

SUSTAINABLE DEVELOPMENT GOALS

Global Power Generation

TOTAL NET EFFICIENT INSTALLED CAPACITY

-2.9%

84.6 GW

87.1 in 2021

NET ELECTRICITY GENERATION

+2.3%

227.8 TWh

222.6 in 2021

7 AFFORDABLE AND CLEAN ENERGY

NET EFFICIENT INSTALLED RENEWABLES CAPACITY

+7.0%

53.6 GW

50.1 in 2021

NET EFFICIENT INSTALLED RENEWABLES CAPACITY

+5.9%

63.4 %

57.5% in 2021

ADDITIONAL EFFICIENT INSTALLED RENEWABLES CAPACITY

-4.2%

4.96 GW

5.18 in 2021

NET RENEWABLE ELECTRICITY GENERATION

+3.3%

112.4 TWh

108.8 in 2021

13 CLIMATE ACTION

CO_2 DIRECT GREENHOUSE GAS EMISSIONS - SCOPE 1 - SPECIFIC(1)

+1.3%

232 gCO_{2eq}/kWh

229 in 2021(2)

(1) Specific emissions are calculated by considering total direct (Scope 1) emissions from total renewable, nuclear and conventional thermal generation including the contribution of heat.
(2) The figure for 2021 reflects a more accurate calculation of the numbers.

Enel Grids

END USERS

-3.4%

72,655,170 no.

75,178,777 in 2021

ELECTRICITY DISTRIBUTION AND TRANSMISSION GRID

-9.4%

2,024,038 km

2,233,368 in 2021

ELECTRICITY TRANSPORTED ON ENEL'S DISTRIBUTION GRID

-0.6%

507.7 TWh

510.6 in 2021[2]

END USERS WITH ACTIVE SMART METERS[3]

+1.5%

45,824,963 no.

45,169,318 in 2021[2]

Retail

ELECTRICITY SOLD BY ENEL

+3.8%

321.1 TWh

309.4 in 2021

RETAIL CUSTOMERS

-3.7%

66,784,895 no.

69,342,818 in 2021

of which free market

+12.2%

27,864,392 no.

24,839,600 in 2021

Enel X Way

PUBLIC CHARGING POINTS[4]

+20.1%

22,617 no.

18,069 in 2021[2]

STORAGE

760 MW

375 in 2021

Enel X

DEMAND RESPONSE

+9.9%

8,476 MW

7,713 in 2021

(2) The figure for 2021 reflects a more accurate calculation of the numbers.
(3) Of which 25.2 million second-generation meters in 2022 and 23.5 million in 2021.
(4) Please note that the number of charging points including those managed by joint ventures rises to 23,122 in 2022 and 18,344 in 2021.

World Economic Forum (WEF)

The International Business Council (IBC) of the World Economic Forum has produced a report entitled "Measuring Stakeholder Capitalism: Towards Common Metrics and Consistent Reporting of Sustainable Value Creation", with the aim of defining shared common metrics to measure, report and compare levels of sustainability, i.e., the effectiveness of its actions in pursuing the Sustainable Development Goals set by the United Nations (SDGs), in the business model adopted to create value for stakeholders.

The metrics are based on existing standards and seek to increase convergence and comparability between the various parameters used today in sustainability reports.

The following table gives the 21 main indicators specified in the WEF report.

WORLD ECONOMIC FORUM			Integrated Annual Report 2022				
Pillar	**Theme**	**21 CORE KPIs**	**KPIs representing the 21 CORE KPIs of the WEF**	**2022**	**2021**	**Change**	**Chapter/Section reporting all KPIs and disclosure on the 21 CORE KPIs of the WEF**
Principles of Governance	Governing purpose	Setting purpose					Enel is Open Power
	Quality of governing body	Governance body composition	No. of women on Board	4	4	-	"Corporate boards" section in "Governance" chapter
	Stakeholder engagement	Material issues impacting stakeholders					"Basis of Presentation" chapter
	Ethical behavior	Anti-corruption	Employees with training in anti-corruption policies and procedures (%)	47.0	30.3	16.7	"Values and pillars of corporate ethics" section in "Governance" chapter
			Confirmed violations for conflict of interest/corruption (no.)	9	8	1	
		Protected ethics advice and reporting mechanisms	Reports received for violations of Code of Ethics	172	153	19	"Values and pillars of corporate ethics" section in "Governance" chapter
	Risk and opportunity oversight	Integrating risk and opportunity into business process					"Risk management" section in "Group Strategy & Risk Management" chapter
Planet	Climate change	Greenhouse Gas (GHG) emissions	Direct greenhouse gas emissions - Scope 1 (million t_{eq})	53.1	51.6	1.5	"Fighting climate change and protecting and leveraging natural capital" section in "Group Performance" chapter
			Indirect greenhouse gas emissions - Scope 2 - Purchase of electricity from the grid (location based) (million t_{eq})	4.0	3.8	0.2	
			Indirect greenhouse gas emissions - Scope 2 - Purchase of electricity from the grid (market based) (million t_{eq})	6.1	6.1	-	
			Indirect greenhouse gas emissions - Scope 3 (million t_{eq})	75.8	70.5	5.3	
		TCFD implementation					"Governance", "Group Strategy & Risk Management", "Group Performance" and "Outlook" chapters
	Nature loss	Land use and ecological sensitivity	Habitat restoration projects (in hectares)	9,452	9,092	359.6	"Fighting climate change and protecting and leveraging natural capital" section in "Group Performance" chapter
	Freshwater availability	Water consumption and withdrawal in water-stressed areas	Water withdrawals (millions of m^3)	76.0	73.1	2.9	"Fighting climate change and protecting and leveraging natural capital" section in "Group Performance" chapter
			Water withdrawals in water-stressed areas (%)	19.3	23	-3.7	
			Total water consumption (millions of m^3)	45.2	43.9	1.3	
			Water consumption in water-stressed areas (%)	20.6	24.0	-3.4	

WORLD ECONOMIC FORUM

Integrated Annual Report 2022

Pillar	Theme	21 CORE KPIs	KPIs representing the 21 CORE KPIs of the WEF	2022	2021	Change	Chapter/Section reporting all KPIs and disclosure on the 21 CORE KPIs of the WEF
People	Dignity and equality	Diversity and inclusion	Women as proportion of total employees (%)	23.4	22.5	0.9	"People centricity" section in "Group Performance" chapter
		Pay equality	Equal Remuneration Ratio (%)	80.7	81.1	-0.4	"People centricity" section in "Group Performance" chapter
		Wage level	CEO Pay Ratio (%)(1)	60.0	90.0	-30.0	
		Risk for incidents of child, forced or compulsory labor	Assessment of protection of child labor and compliance with ban on forced labor in the supply chain				"Values and pillars of corporate ethics" section in "Governance" chapter
	Health and well-being	Health and safety	Fatal accidents - Enel (no.)	1	3	(2)	"People centricity" section in "Group Performance" chapter
			Frequency of fatal accidents - Enel (i.)	0.008	0.024	(0.016)	
			Life changing accidents - Enel (no.)	-	1	(1)	
			Frequency of life changing accidents - Enel (i.)	-	0.008	(0.008)	
	Skills for the future	Training provided	Average hours of training per employee (hrs/person)	47.4	44.6	2.8	"People centricity" section in "Group Performance" chapter
			Employee training costs (millions of euro)	30	23	7	
Prosperity	Employment and wealth generation	Absolute number and rate of employment	People hired (no.)	6,412	5,401	1,011	"People centricity" section in "Group Performance" chapter
			Hiring rate (%)	9.8	8.1	1.7	
			Terminations (no.)	4,414	5,862	(1,448)	
			Turnover (%)	6.8	8.8	-2.0	
		Economic contribution					"Value generated and distributed for stakeholders" section in "Group Performance" chapter
		Financial investment contribution	Total investment (millions of euro)	14,347	12,997	1,350	"Analysis of the Group's financial position and structure" section in "Group Performance" chapter
			Purchase of treasury shares and dividends and interim dividends paid to holders of hybrid bonds	5,038	5,054	(16)	Consolidated financial statements
	Innovation in better products and services	Total R&D expenses	Investment in R&D (millions of euro)	105	130	(25)	"Innovation" section in "Group Performance" chapter
	Community and social vitality	Total tax paid	Total tax paid (millions of euro)(2)	4,778	4,082	696	"Value generated and distributed for stakeholders" section in "Group Performance" chapter

(1) Ratio between the total remuneration of the CEO/General Manager of Enel and the average gross annual remuneration of Group employees. In order to ensure that the figures for 2022 and 2021 are comparable, the 2021 figure has been adjusted by applying the 2022 exchange rate to the 2021 remuneration data.
(2) The amount represents "total tax borne", which is costs for taxes borne by the Group. For more information, see the 2022 Sustainability Report and the Consolidated Non-Financial Statement. The 2021 figure has been calculated more accurately.

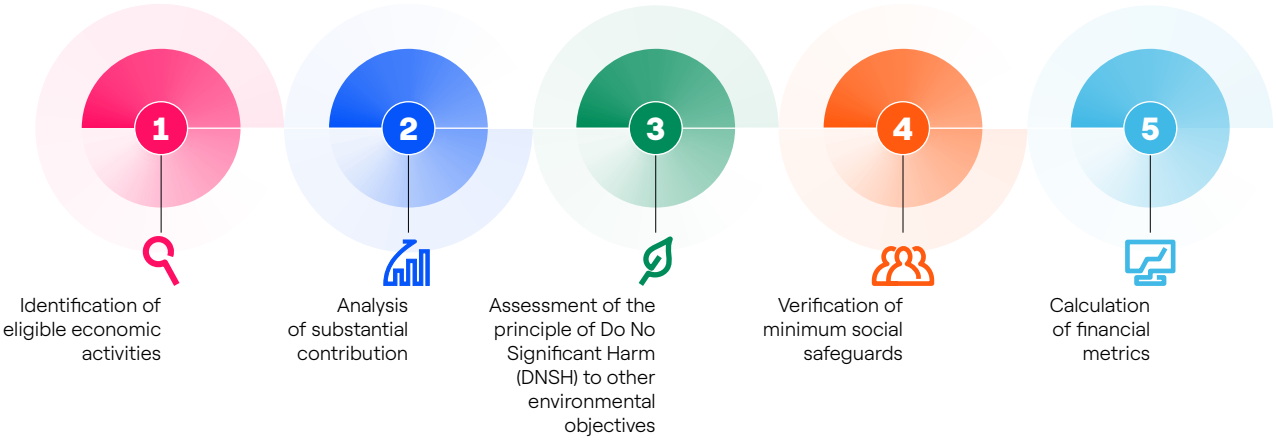
European Union taxonomy

The European taxonomy (adopted by the European Union with Regulation 2020/852) establishes six environmental objectives to identify environmentally sustainable economic activities: climate change mitigation; climate change adaptation; the sustainable use and protection of water and marine resources; the transition to a circular economy; pollution prevention and control; and the protection and restoration of biodiversity and ecosystems.

EU taxonomy reporting pursuant to the regulation, the Climate Delegated Act and the Complementary Delegated Act act is provided in full in the 2022 Sustainability Report - Non-Financial Statement pursuant to Regulation (EU) 2020/852.

The European taxonomy implementation process at Enel

Enel has implemented a process overseen by the CEO and top management, broken down into five steps to analyze the applicability of the European taxonomy along the entire value chain in all countries in which the Group operates.



For more on the phases of the implementation process for the European taxonomy, please see the 2022 Sustainability Report - Non-Financial Statement pursuant to Regulation (EU) 2020/852.

Using this process, Enel has classified all the economic activities along its value chain in the following three categories: eligible-aligned, eligible-not aligned, not eligible.

Consequently, the existence of this third category makes it impossible to achieve a business model fully aligned with the criteria of the EU taxonomy, even if these not eligible activities may not do any harm to EU environmental objectives.

Eligible-aligned

Eligible-aligned: this refers to an economic activity that simultaneously satisfies the following three conditions:

- it is explicitly included in the EU Taxonomy Regulation for its substantial contribution to climate change mitigation; and
- it meets the specific criteria developed by the EU Taxonomy Regulation for that specific environmental objective; and
- it meets all DNSH criteria and minimum social safeguards.

Eligible-not aligned

Eligible-not aligned: refers to an economic activity that:

- is explicitly included in the EU Taxonomy Regulation for its substantial contribution to climate change mitigation or adaptation; but
- does not meet the specific criteria developed by the EU Taxonomy Regulation for those specific environmental objectives; or
- does not meet all the DNSH criteria and/or the minimum social safeguards.

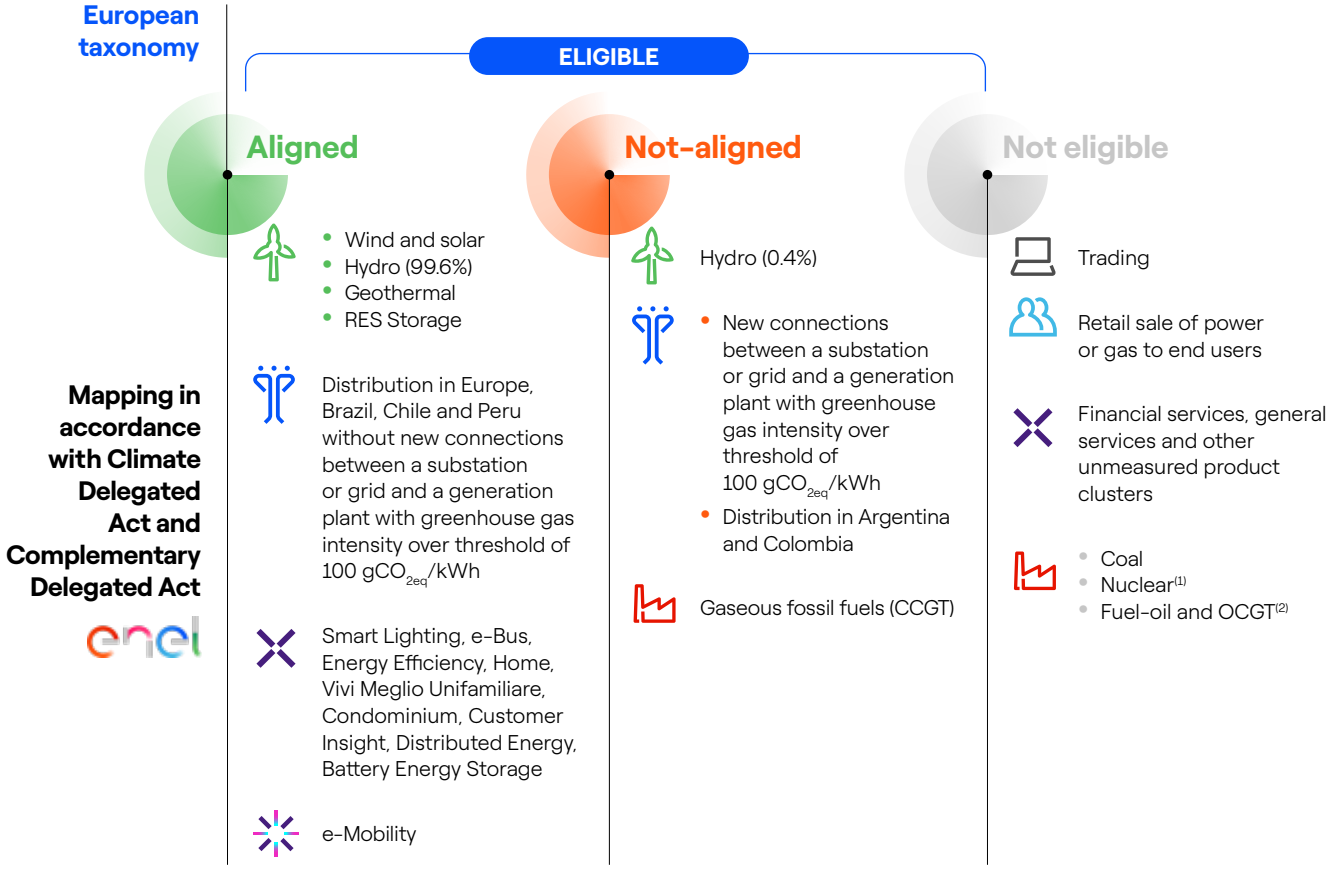
Not eligible

Not eligible: refers to an economic activity that has not been identified by the EU Taxonomy Regulation as a substantial contributor to climate change mitigation and for which no criteria have therefore been developed. The logic of the European Commission is that these activities might:

- not have a significant impact on climate change mitigation or could be integrated into the EU Taxonomy Regulation at a later stage;
- cause a very significant impact on climate change mitigation, so they cannot be eligible in any case.



In 2022, the Enel Group updated the eligibility analyses in accordance with the process and the new definition for the three categories described above and pursuant to the final version of the Climate Delegated Act published in the *Official Journal of the European Union* in December 2021 and pursuant to the Complementary Delegated Act published in the *Official Journal of the European Union in July* 2022. For more information on the results of the eligibility analysis and the classification of economic activities in the three categories (eligible-aligned, eligible-not aligned, not eligible), see the 2022 Sustainability Report - Non-Financial Statement pursuant to Regulation (EU) 2020/852.



(1) The operation of our nuclear generation portfolio is not included among the eligible activities considered by the Complementary Delegated Act in the generation of electricity from nuclear power plants.
(2) Includes both fuel-oil and gas (OCGT) as it is not possible to divide the two types of fuel. Fuel-oil was considered to be the prevalent fossil fuel and is therefore not eligible under the EU Taxonomy Regulation.

Value creation and the business model

The value creation process

The integrated presentation of financial and non-financial information makes it possible to effectively communicate the business model and the value creation process both in terms of results and the short- and medium/long-term outlook. The management of environmental, social and economic aspects is increasingly significant in terms of assessing the ability to create value for all categories of stakeholders.

The following graphical representation summarizes the value chain of the Enel Group: the main inputs used and how they are transformed into outcomes and value created for stakeholders thanks to the work of the organization and its business model. The Group is characterized by sound and transparent governance and a sustainable strategy that prioritizes the pursuit of Sustainable Development Goals (SDGs) 7, 9, 11 and 13. These SDGs are thus the objectives of the Group's strategic action and are translated into the creation of value for the Group itself and for its stakeholders.

Value creation and the business model

Our resources

Planet

0.23 l/kWh$_{eq}$ Total specific freshwater withdrawals
19.3% Water withdrawals in water-stressed areas
26.5 Mtoe Total direct consumption of fuel

People

Enel's people

65,124 Enel employees
24.9% Women as a proportion of total managers
32.6% Female middle managers as a proportion of total middle managers

Prosperity

Financial community

€60,068 million Net financial debt
63% Sustainable financing/Total gross debt (%)
€42,082 million Total equity
€17,520 million Intangible assets
€88,521 million Property, plant and equipment
€14,347 million Capital expenditure(1)
81.9% Capital expenditure in business activities aligned with the EU taxonomy

Customers

46 million End users with active smart meters
37% Digital customers

Suppliers

172,854 no. Suppliers (FTE)
20,434 no. Active suppliers

Communities

1,527 no. CSV application

Partners

32 no. Innovation Hubs and Labs

Our business model

EXTERNAL ENVIRONMENT

RISKS AND OPPORTUNITIES

GROUP PERFORMANCE

enel

PURPOSE

OPEN POWER FOR A BRIGHTER FUTURE

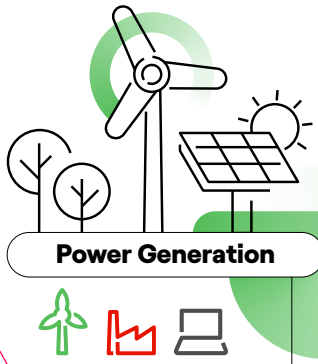
WE EMPOWER SUSTAINABLE PROGRESS

Values TRUST PROACTIVITY

ENEL'S VALUES

Strategic pillars

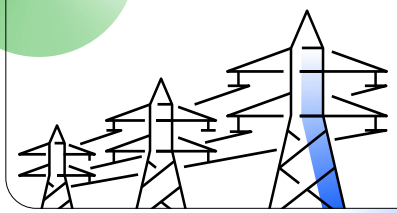
Value chain



Power Generation

TOTAL NET EFFICIENT INSTALLED CAPACITY
84.6 GW

NET EFFICIENT INSTALLED RENEWABLES CAPACITY
63.4 %



END USERS
73 million (no.)

ELECTRICITY DISTRIBUTION AND TRANSMISSION GRID
2,024,038 km

Principles of Governance

44% Women on the Board of Directors
172 Code of Ethics reports (of which 29 violations)

(1) Does not include €156 million regarding units classified as held for sale.

Value created for Enel and our stakeholders

GOVERNANCE

IS OPEN POWER

VISION

Open Power to tackle some of the world's biggest challenges.

MISSION

- Open access to electricity for more people.
- Open the world of energy to new technology.
- Open up to new uses of energy.
- Open up to new ways of managing energy for people.
- Open up to new partnerships.

GROUP STRATEGY & RISK MANAGEMENT

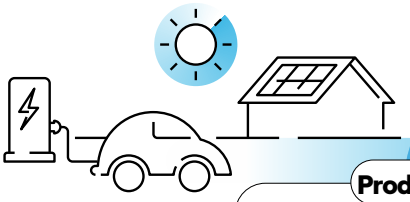
RESPONSIBILITY **INNOVATION**

1. Allocate capital to support the supply of decarbonized electricity

2. Enable the electrification of customer energy demand

3. Leverage the creation of value throughout the value chain

4. Move forward achievement of sustainable Net-Zero objectives to 2040



Products and services

RETAIL CUSTOMERS
66,784,895 no.

PUBLIC CHARGING POINTS
22.6 thousand (no.)

Distribution

OUTLOOK

OUTCOMES

Planet

218 gCO_{2eq}/kWh Intensity of GHG Scope 1 and 3 emissions connected with Integrated power

22.9 million t_{eq} Direct greenhouse gas emissions – Scope 3 (retail gas)

45.2 millions of m^3 Total water consumption

20.60% Water consumption in water-stressed areas

9,452 ha Area involved in habitat restoration projects

49.30% Renewable generation as a proportion of total Group generation

People

Enel's people

0.56 Lost Time Injury Rate (LTI FR)

47.4 hours Average number of training hours per employee

42% Reskilling and upskilling training

6.80% Turnover

Prosperity

Financial community

5,038 Treasury shares and dividends paid

0.40 (€/share) Fixed DPS

3.3% Cost of gross debt

€140,517 million Revenue

€19,683 million Ordinary EBITDA

56.7% Ordinary EBITDA from business activities aligned with the EU taxonomy as a proportion of Group total

Customers

321.1 TWh Electricity sold

507.7 TWh Electricity transported

230.7 min. SAIDI

0.7 million Beneficiaries of new concessions in rural and suburban areas

Suppliers

99.0% Qualified suppliers assessed on ESG issues

0.48 Lost Time Injury Rate – contractors (LTI FR)

Communities

15.6 million (no.) Access to affordable, clean energy

3.7 million (no.) Quality, fair and inclusive education

4.9 million (no.) Decent work and economic growth

€4,778 million Total tax borne

Partners

194 no. Proofs of Concept begun to test innovative solutions

60 no. Solutions in scale-up phase

Business model

Enel's business model has been structured so as to Group's strategic objectives, including the commitments made by the Group in the fight against climate change.

The business model delineates how the organizational units of the Company, linked to our three main businesses (generation, distribution and sales to end users), must work to reap all the possible benefits from the main trends in the sector, in particular from trends bringing about the energy and digital transitions, possibly accelerating their implementation as well.

The role defined for all the major organizational units is also intended to enable them to effectively address all the risks posed by developments in the rapidly changing energy industry.

In order to fully benefit from all the opportunities emerging in the market environment in which it operates, the Group has identified two different business models (Ownership and Stewardship) that it can use to achieve the ambitions we have defined.

The most appropriate and effective business model is selected depending on the geographical area and operating environment involved:

- the Ownership business model, in which the Group makes direct investments in renewables, grids and customers. This model is employed in countries where the entire value chain can already be leveraged, from generation to integration with end user. These six countries are defined as "core" or "Tier 1" countries and today include Italy and Spain in Europe and the United States, Brazil, Chile and Colombia in the Americas. The central role of our customers in the Group's business model makes the integrated margin a pillar of our Plan. The correct management of the integrated margin requires the joint optimization of both sales of power, considering the different options available in the countries in which we operate, and provisioning, which is linked to our generation rather than to the different sourcing options;
- the Stewardship business model, in which the Group invests capital in existing or new joint ventures or acquires minority stakes, with a view to maximizing the value of the know-how developed in the various businesses in which it operates with important financial and industrial partners. This is achieved through the delivery of specific contractual services to partners or the subsequent monetization of these investments on the market. This model focuses mainly, but not exclusively, on "non-core" or "non-Tier 1" countries, where the Group's presence is not integrated and it seeks to build partnerships with third parties to explore new geographical areas or to leverage the Group's operational experience in alternative environments. It can also be activated for innovative businesses in core countries to facilitate start-up and scale-up.

In this design, each country organization acts within its territory in a matrix relationship with the broader and more global business lines, managing activities such as relations with local communities, regulation, the retail market and local communication. The current mission of each business can be summarized as follows:

Generation

- **Enel Green Power and Thermal Generation**: the Group operates through this business line to accelerate the energy transition, continuing to increase investments in new renewable energy capacity, and manages the decarbonization of its generation mix and the countries in which it operates, always aiming to ensure the safety and capacity of electrical systems. Furthermore, it uses digitalization to operate its assets ever more efficiently and effectively, thereby enhancing the performance of our assets and the design of new plants.

Trading

- **Global Energy and Commodity Management**: this business line manages our energy margin in the markets in which we operate as a single portfolio in which Generation and Retail operations are always balanced effectively. In addition, the line manages all trading operations on international desks.

Distribution

- **Enel Grids**: in developing and operating infrastructure that enables the energy transition, the Group ensures the reliability in the supply of energy and the quality of service to communities through resilient and flexible networks, leveraging efficiency, technology and digital innovation, and ensuring appropriate returns on investment and cash generation.

Customers

- **Enel X Global Retail**: having been established at the end of 2021, it is involved in managing energy and beyond-commodity services, maximizing value for customers, innovating and developing the services offered and managing their entire life cycle. In particular, through the Global Retail division, the Group interfaces locally with millions of families, industries, companies and cities. Thanks to our technology, the platform model enables us to improve customer satisfaction and the customer experience, while at the same time achieving ever higher levels of efficiency. The business units optimize the supply of power to their customer base, maximizing the value generated by that resource and fostering long-term relationships with customers. This business line is also enabling the energy transition by offering green energy and beyond-commodity products and services that can act as an accelerator for the electrification and decarbonization of customers, helping them to use energy more efficiently, driving circularity and decarbonization.

e-Mobility

- **Enel X Way**: this line is responsible for managing the portfolio of e-Mobility solutions in both existing and new countries, maximizing value for customers. It is also involved in innovating and developing e-Mobility solutions, managing the entire life cycle.

By exploiting the synergies between the different business areas, implementing actions through the lever of innovation and deploying Open Power approaches, the Enel Group seeks to develop solutions to drive sustainable progress, reduce environmental impact, meet the needs of customers and the local communities in which it operates and ensure high safety standards for employees and suppliers.

Enel around the world

The Enel Group has a presence in 47 countries on multiple continents around the world, with more than 1,000 subsidiaries. The following map shows the distribution of the Enel Group across the globe.

PRESENCE

47 countries

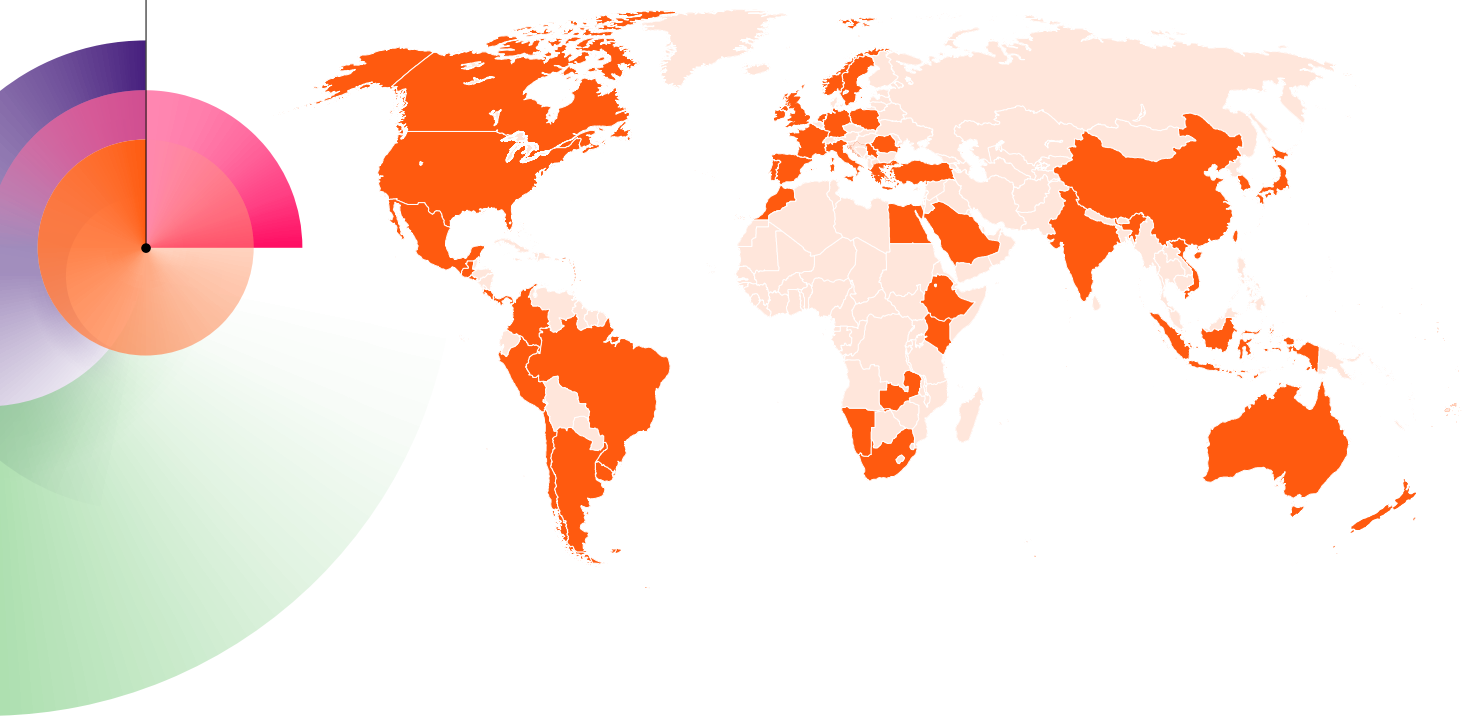
more than

1,000

subsidiaries

65,124 no.

Total Enel employees





REPORT ON OPERATIONS

2.



Governance

Corporate governance system oriented towards the goal of sustainable success.

Governance model in line with international best practices.

Transparency and fairness as founding values.

Enel shareholders

At December 31, 2022, the fully subscribed and paid-up share capital of Enel SpA totaled €10,166,679,946, represented by the same number of ordinary shares with a par value of €1.00 each. Share capital is unchanged compared with that registered at December 31, 2021. In 2022 the Company purchased a total of 2,700,000 treasury shares to support the 2022 Long-Term Incentive Plan (LTI Plan) for the management of Enel and/or its subsidiaries pursuant to Article 2359 of the Italian Civil Code. Considering the 4,889,152 treasury shares already owned and taking into account the award on September 5, 2022 of 435,357 ordinary Enel shares to the beneficiaries of the 2019 LTI Plan, Enel SpA holds a total of 7,153,795 treasury shares, all supporting the 2019, 2020, 2021 and 2022 LTI Plans.

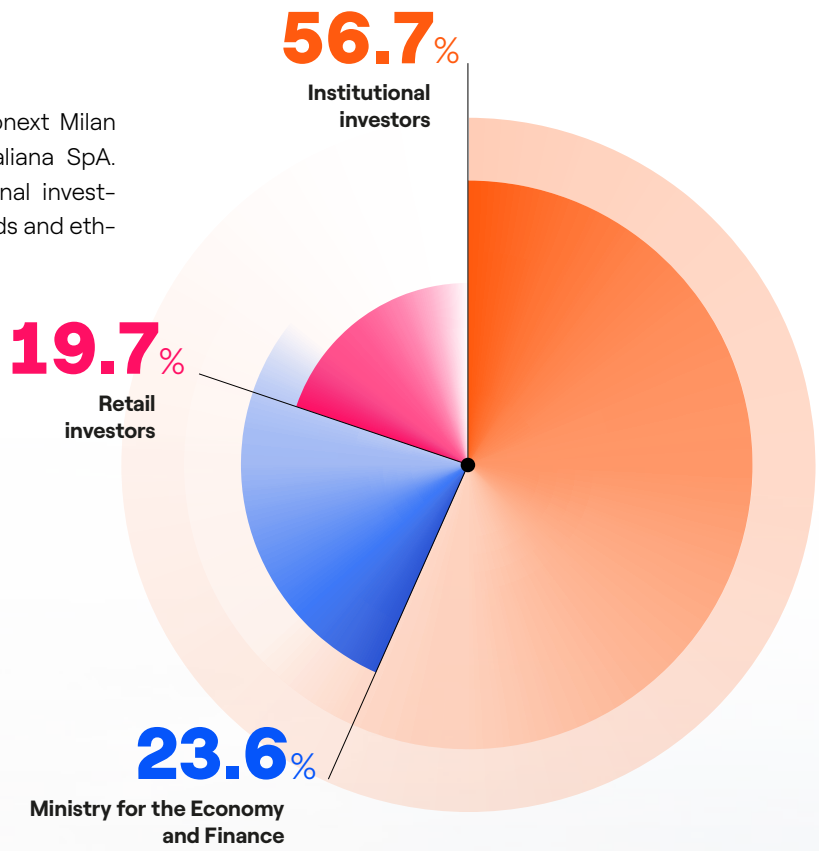
Significant shareholders

At December 31, 2022, based on the shareholders register and the notices submitted to CONSOB and received by the Company pursuant to Article 120 of Legislative Decree 58 of February 24, 1998, as well as other available information, shareholders with an interest of greater than 3% in the Company's share capital included the Ministry for the Economy and Finance (with a 23.585% stake) and BlackRock Inc. (with a 5.114% stake held for asset management purposes).



Composition of shareholder base

Since 1999, Enel has been listed on the Euronext Milan market organized and operated by Borsa Italiana SpA. Enel's shareholders include leading international investment funds, insurance companies, pension funds and ethical funds.



With regard to Environmental, Social and Governance (ESG) investors in Enel, at December 31, 2022, socially responsible investors (SRIs) held around 14.9% of the share capital (from 14.6% at December 31, 2021). Investors who have signed the Principles for Responsible Investment represent 42.1% of the share capital.



Corporate boards

Board of Directors

CHAIRMAN
Michele Crisostomo

CHIEF EXECUTIVE OFFICER AND GENERAL MANAGER
Francesco Starace

SECRETARY
Silvia Alessandra Fappani

DIRECTORS
Cesare Calari
Costanza Esclapon de Villeneuve
Samuel Leupold
Alberto Marchi
Mariana Mazzucato
Mirella Pellegrini
Anna Chiara Svelto

Board of Statutory Auditors

CHAIRMAN
Barbara Tadolini

AUDITORS
Luigi Borré
Maura Campra

ALTERNATE AUDITORS
Carolyn A. Dittmeier
Tiziano Onesti
Piera Vitali

Audit Firm

KPMG SpA

2022

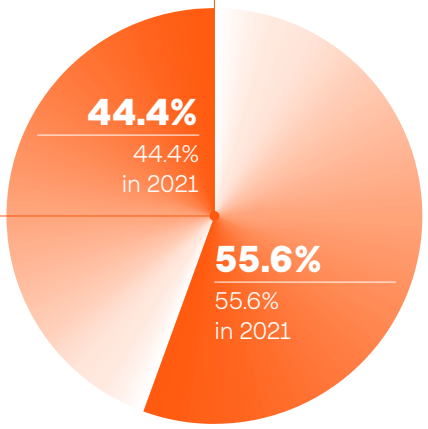
COMPOSITION OF THE BOARD OF DIRECTORS

1 executive director
1 in 2021

8 non-executive directors
8 in 2021

of which 8 independent[1]
8 in 2021

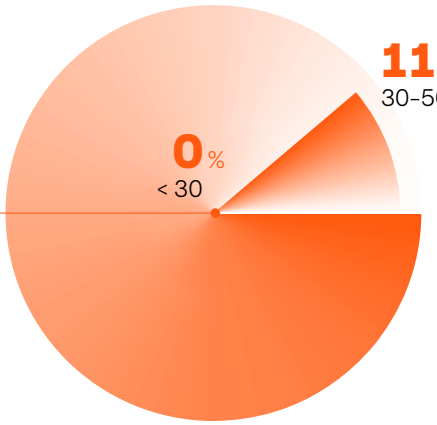
GENDER



4 Women
4 in 2021

5 Men
5 in 2021

AGE



0 %
< 30

11 %
30-50

89 %
> 50

EXPERTISE

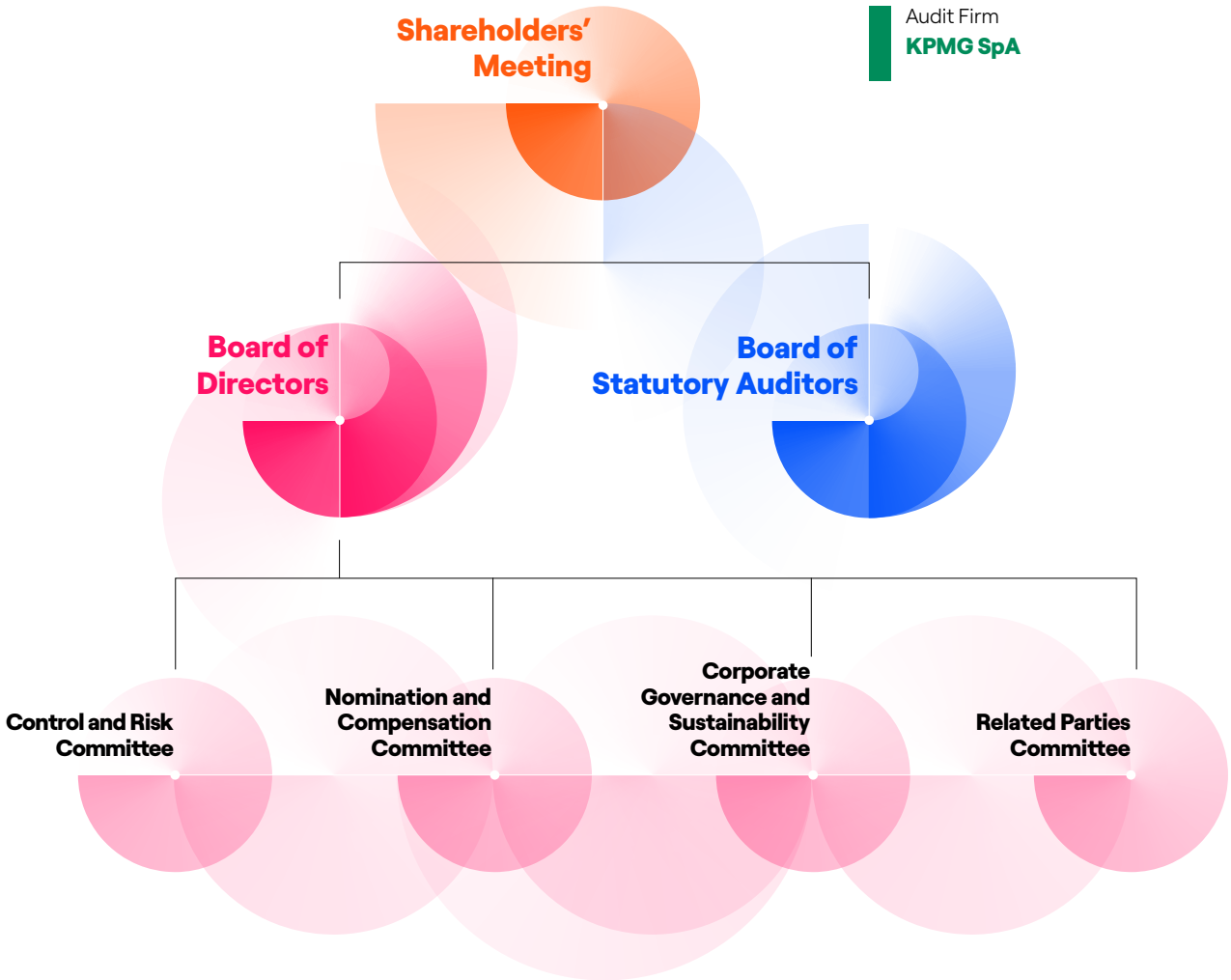


(1) The figures for 2022 and 2021 refer to directors qualifying as independent pursuant to the Consolidated Law on Financial Intermediation and the Italian Corporate Governance Code (2020 edition).

The Enel corporate governance system

The corporate governance system of Enel SpA ("Enel" or the "Company") is compliant with the principles set forth in the edition of the Italian Corporate Governance Code published on January 31, 2020[1] adopted by the Company, and with international best practice. The corporate governance system adopted by Enel is aimed at achieving sustainable success, as it is aimed at creating value for the shareholders over the long term, taking into account the environmental and social importance of the Enel Group's business operations and the consequent need, in conducting such operations, to adequately consider the interests of all relevant stakeholders.
In compliance with Italian legislation governing listed companies, the Group's organization comprises the following bodies:

Corporate governance



(1) Available from the website of Borsa Italiana (at https://www.borsaitaliana.it/comitato-corporate-governance/codice/2020-eng.en.pdf).

Shareholders' Meeting

It is charged with deciding, among other things, in either ordinary or extraordinary session:

- the appointment and removal of the members of the Board of Directors and the Board of Statutory Auditors and their compensation and undertaking any stockholder actions;
- the approval of the financial statements and the allocation of profit;
- the purchase and sale of treasury shares;
- remuneration policy and its implementation;
- share ownership plans;
- amendments to the bylaws;
- mergers and demergers;
- the issue of convertible bonds.

Board of Directors

16

meetings held by the Board in 2022, in 12 of which it addressed issues connected with climate and their impact on strategies and the associated approaches to implementation (16 meetings held by the Board in 2021)

- It is vested by the bylaws with the broadest powers for the ordinary and extraordinary management of the Company and has the power to carry out all the actions it deems advisable to implement and achieve the corporate purpose.
- It plays a central role in corporate governance, hold powers for strategic and organizational guidance and control of the Company and the Group, whose sustainable success it pursues. In this context, it examines and approves corporate strategy, including the annual budget and Business Plan (which incorporate the main objectives and planned actions, including with regard to sustainability,(2) to lead the energy transition and tackle climate change), taking account of the analysis of key issues for the generation of long-term value and therefore promoting a sustainable business model.
- It also performs a policy-setting role and provides an assessment of the adequacy of the internal control and risk management system (the ICRMS). More specifically, it determines the nature and level of risk compatible with the strategic objectives of the Company and the Group, incorporating in its assessments all factors that could be relevant to achieving the sustainable success of the Company. The ICRMS consists of the set of rules, procedures and organizational structures designed to enable the identification, measurement, management and monitoring of the main business risks to which the Group is exposed. These include the risks associated with climate change and, more generally, the risks that the Group's activities may engender in the areas of the environment, society, personnel and respect for human rights.
- It determines the remuneration policy for directors, statutory auditors and key management personnel with a view to pursuing the Company's sustainable success, taking due account of the need to have, retain and motivate people with the skills and expertise required by the positions they hold, submitting this policy for approval by the Shareholders' Meeting.
- Activities performed in 2022 included addressing climate-related issues on the occasion of (i) the examination and approval of the Business Plan of the Company and the Group; (ii) the determination of Enel's remuneration policy for 2022; (iii) the examination of the 2021 Sustainability Report, which incorporates the Consolidated Non-Financial Statement pursuant to Legislative Decree 254/2016 for the same year. In addition, it discussed climate-related issues as part of the analysis of transactions connected with decarbonization strategy and sustainable finance, as well as in relation to its engagement with investors.
- With regard to enhancing gender diversity, it agreed on the introduction of a performance objective in the 2022 Long-Term Incentive Plan, represented by the percentage of women in top management succession plans at the end of 2024.
- Finally, the Board of Directors receives regular updates on the impact of the COVID-19 pandemic and cyber security and safety-related issues in the countries in which the Group operates, as well as timely information on developments in and the substance of the various forms of investor engagement.

In compliance with the provisions of the Italian Civil Code, the Board of Directors has delegated part of its management duties to the Chief Executive Officer and, in accordance with the recommendations of the Corporate Governance Code and the provisions of the applicable CONSOB regulations, has appointed the following committees from among its members to provide recommendations and advice.

(2) Sustainability comprises issues connected with climate change, atmospheric emissions, managing water resources, biodiversity, the circular economy, health and safety, diversity, management and development of employees, relations with communities and customers, the supply chain, ethical conduct and human rights.

Corporate Governance and Sustainability Committee

6

meetings held by the Committee in 2022, in 3 of which it addressed issues connected with climate and their impact on strategies and the associated approaches to implementation (5 meetings held by the Committee in 2021)

- A majority of its members are independent directors and in 2022 it was composed of the Chairman of the Board of Directors and two other directors, all of whom met independence requirements.
- It assists the Board of Directors in assessment and decision-making activities concerning the corporate governance of the Company and the Group and sustainability, including climate change issues and the interaction of the Group with all stakeholders.
- With regard to sustainability issues, it examines:
  - the guidelines of the Sustainability Plan, including the climate objectives set out in the plan, and the materiality matrix, which specifies the priority themes for stakeholders in the light of the Group's business strategies;
  - the approach to implementing the sustainability policy;
  - the general approach and the structure of the content of the Non-Financial Statement and the Sustainability Report – which may be presented in a single document – and the comprehensiveness and transparency of the disclosures they provide, including with regard to climate change, and their consistency with the principles envisaged in the reporting standard adopted, issuing a prior opinion to the Board of Directors, which is called upon to approve those documents.
- Activities performed in 2022 included addressing climate-related issues on the occasion of the examination of: (i) the 2021 Sustainability Report, which incorporates the Consolidated Non-Financial Statement pursuant to Legislative Decree 254/2016 for the same year; (ii) the materiality analysis and the guidelines of the 2023-2025 Sustainability Plan; (iii) updates on the main sustainability activities performed by the Enel Group in 2022, on the state of implementation of the 2022-2024 Sustainability Plan and on the inclusion of Enel in the main sustainability indices.

Control and Risk Committee

14

meetings held by the Committee in 2022, in 8 of which it addressed issues connected with climate and their impact on strategies and the associated approaches to implementation (17 meetings held by the Committee in 2021)

- It is composed of non-executive directors, the majority of whom (including its Chairman) are independent. In 2022 it was made up of four independent directors.
- It has the task of supporting the assessments and decisions of the Board of Directors relating to the internal control and risk management system (ICRMS), as well as those relating to the approval of periodic financial and non-financial reports. In particular, it issues its prior opinion to the Board of Directors, *inter alia*: (i) on the guidelines of the ICRMS, so that the main risks concerning Enel and its subsidiaries – including the various risks that may be relevant from the perspective of sustainable success – are correctly identified and adequately measured, managed and monitored; (ii) on the degree of compatibility of the risks referred to in point (i) above with company operations consistent with the strategic objectives identified; and (iii) on the adequacy of the ICRMS with respect to the characteristics of the Company and the risk profile assumed, as well as the effectiveness of the system itself.
- It evaluates whether periodic financial and non-financial reporting correctly represents the business model, the strategies of the Company and the Group it heads and the impact of company activities and the performance achieved, coordinating with the Corporate Governance and Sustainability Committee with regard to periodic non-financial reporting.
- It examines the issues relevant to the ICRMS addressed in the Non-Financial Statement and the Sustainability Report, which may be presented in a single document and contains corporate disclosures on climate issues, issuing a prior opinion on these aspects to the Board of Directors, which is called upon to approve these documents.
- Activities performed in 2022 included addressing climate-related issues on the occasion of the examination of: (i) issues concerning the ICRMS dealt with in the 2021 Sustainability Report, which incorporates the Consolidated Non-Financial Statement pursuant to Legislative Decree 254/2016 for the same year; (ii) a study of investor engagement activities; (iii) meetings with the heads of the Enel Green Power and Thermal Generation and Enel Grids Global Business Lines and the Europe and North America Regions concerning the activities carried out and the risks existing in their respective areas of responsibility, as well as the tools used to mitigate their effects; (iv) the analysis of the compatibility of the main risks associated with the strategic objectives of the Business Plan.

Nomination and Compensation Committee

11

meetings held by the Committee in 2022 (12 meetings held by the Committee in 2021)

- It is composed of non-executive directors, the majority of whom (including its Chairman) are independent. In 2022 it was made up of four independent directors.
- It supports the Board of Directors in, *inter alia*, evaluations and decisions relating to the size and optimal composition of the Board and its committees, as well as the remuneration of directors and key management personnel. In this regard, the remuneration policy for 2022 provides that a significant portion of the short- and long-term variable remuneration of the Chief Executive Officer/General Manager and key management personnel shall be linked to sustainability-related performance objectives. In particular, with regard to the long-term variable component of the remuneration of the Chief Executive Officer/General Manager and key management personnel, the performance objectives of the 2022 Long-Term Incentive Plan included (i) an objective related to gender diversity, represented by the percentage of women in top management succession plans at the end of 2024, as well as (ii) a target concerning the reduction of specific greenhouse gas emissions, consistent with the Group's decarbonization strategy, which provides for the progressive reduction of such emissions in line with the Paris Agreement. As regards the short-term variable component of the remuneration of the Chief Executive Officer/General Manager, 2022 remuneration policy is linked, among other things, to (i) a performance objective for preserving workplace safety, as well as (ii) a performance objective measuring the level of customer satisfaction through the annual number of commercial complaints filed at the Group level, with the latter objective being associated with two gate objectives[(3)] for the number of commercial complaints filed in the free commodity market in Italy and for the average annual duration of service interruptions for low-voltage customers (System Average Interruption Duration Index - SAIDI).

Related Parties Committee

1

meeting held by the Committee in 2022 (7 meetings held by the Committee in 2021)

- It is composed of independent non-executive directors. In 2022 it was made up of four independent directors.
- It performs the functions provided for in the relevant CONSOB regulations and in the specific Enel procedure for transactions with related parties, essentially issuing particular reasoned opinions on the interest of Enel – and any direct or indirect subsidiary that may be involved – in carrying out transactions with related parties, expressing its assessment of the benefits and substantive appropriateness of the associated conditions, subject to receiving timely and comprehensive information on the transaction.

Board of Statutory Auditors

24

meetings held by the Board in 2022 (28 meetings held by the Board in 2021)

It is charged with overseeing:

- compliance with the law and the bylaws, as well as compliance with the principles of sound administration in carrying out corporate activities;
- the financial reporting process and the appropriateness of the organizational structure, the internal control system and the administrative-accounting system of the Company;
- the statutory audit of the annual accounts and the consolidated accounts, as well as the independence of the Audit Firm;
- the approach adopted in implementing the corporate governance rules envisaged by the Corporate Governance Code.

(3) Achieving these is necessary to achieve the overall customer satisfaction target.

Chairman of the Board of Directors

- The Chairman is vested by the bylaws with the powers to represent the Company and to sign on its behalf.
- The Chairman presides over Shareholders' Meetings.
- The Chairman convenes the meetings of the Board of Directors, establishes the agenda and presides over its proceedings.
- The Chairman acts as a liaison between the executive directors and the non-executive directors and, with the support of the Secretary of the Board of Directors, is responsible for the effective operation of the Board. More specifically, the Chairman, with the support of the Board Secretary, is responsible, among other things, for ensuring:
  - that information provided before Board meetings and supplementary information provided during meetings enables the directors to act in an informed manner in the performance of their duties; and
  - that the activity of the Board committees is coordinated with that of the Board of Directors.
- The Chairman ensures that the Board of Directors is informed in a timely manner on developments in and the substance of engagement activities with all shareholders.
- The Chairman ascertains that the Board's resolutions are carried out.
- Pursuant to a Board resolution of May 15, 2020, the Chairman has been vested with a number of additional non-executive powers.
- In the exercise of the function of stimulating and coordinating the activities of the Board of Directors, the Chairman plays a proactive role in the process of approving and monitoring of corporate and sustainability strategies, which are sharply focused on the decarbonization and electrification of energy consumption.
- During 2022, the Chairman also chaired the Corporate Governance and Sustainability Committee.

Chief Executive Officer

- Like the Chairman of the Board of Directors, the CEO is vested by the bylaws with the powers to represent the Company and to sign on its behalf, and in addition is vested by a Board resolution of May 15, 2020 with all powers for managing the Company, with the exception of those that are otherwise assigned by law, regulation or the bylaws or that the aforesaid resolution reserves for the Board of Directors (making the Chief Executive Officer the officer with primary responsibility for managing the Company).
- In the exercise of these powers, the CEO has defined a sustainable business model, delineating a strategy to lead the energy transition towards a low-carbon model. The CEO is also responsible for managing the business activities connected with Enel's efforts in combatting climate change.
- The CEO reports to the Board of Directors on the activities performed in the exercise of the powers granted to him, including business activities to maintain Enel's commitment to address climate change.
- The CEO represents Enel in various initiatives that deal with sustainability, holding positions of leadership in international institutions such as the Global Investors for Sustainable Development (GISD) Alliance launched by the United Nations in 2019.
- As the officer with primary responsibility for managing the Company, the CEO has primary authority for engaging with institutional investors, providing them with any appropriate clarification concerning matters that fall within the scope of the Chairman's management powers, in line with the policy for engaging with institutional investors and with Enel's shareholders and bondholders as a whole.
- The CEO has also been designated as the director responsible for establishing and maintaining the ICRMS.

Statutory audit of the accounts

- The statutory audit is performed by a specialized firm entered in the appropriate register of auditors, which is appointed by the Shareholders' Meeting on the basis of a reasoned proposal from the Board of Statutory Auditors.

Good corporate governance practices

- Following up on the comprehensive induction program organized in the 2nd Half of 2020 in order to provide the directors with an understanding of the sectors in which the Group operates (including issues related to sustainability), in 2021 this program continued with specific examination of corporate governance and climate change issues. In 2022, the induction program continued with additional examination of cyber security and risk governance issues.
- At the end of 2022 and during the first two months of 2023, the Board of Directors carried out, with the assistance of a specialized independent advisor, an assessment of the size, composition and functioning of the Board and its committees (the "board review"), in line with the most advanced corporate governance practices accepted at the international level and incorporated within the Corporate Governance Code. The board review was also carried out using a "peer review" approach, i.e., evaluating not only the operation of the body as a whole, but also the style and substance of the contribution made by each of its members, and it was extended to include the Board of Statutory Auditors. The board review also specifically sought to verify the directors' perception of (i) the effectiveness of induction activities and (ii) the Board's involvement with sustainability issues and their integration into corporate strategy, including climate change issues. The findings of the board review are reported in Enel's Report on Corporate Governance and Ownership Structure.
- The Board of Directors and the Board of Statutory Auditors have approved, each within their own sphere of competence, specific diversity policies that set out the characteristics considered optimal for the members of these bodies, so that each can exercise their duties most effectively, taking decisions that can effectively draw on the contribution of a plurality of qualified points of view, able to examine the issues under discussion from different perspectives. The policy approved by the Board of Directors establishes that with regard to the types of diversity and the associated objectives:
  - the optimal composition of Board members should provide for a majority of independent directors;
  - even when the regulatory provisions on gender balance expire, it is important to continue to ensure that at least one-third of the Board of Directors, both at the time of appointment and during its term of office, shall be made up of directors of the least represented gender;
  - the international scope of the Group's activities should be taken into consideration, ensuring that at least one-third of directors should have adequate experience in the international arena, which is also considered useful for preventing the standardization of opinions and the emergence of "group thought";
  - in order to achieve a balance between the need for continuity and renewal in management, it would be necessary to ensure a balanced combination of people of differing seniority – and age – within the Board of Directors;
  - non-executive directors should have a management and/or professional and/or academic and/or institutional background such as to create a diverse and complementary set of skills and experience;
  - in view of the differences in their roles, the Chairman and the CEO should have the appropriate skills (specifically indicated in the policy) for the effective performance of their respective duties.

Good corporate governance practices

- In July 2015 the Board of Directors also approved (and subsequently amended in February 2019) a number of recommendations aimed at strengthening the corporate governance of Enel subsidiaries with shares listed on regulated markets and at the same time ensuring the implementation of local best practices in this area by those companies. Among other issues, these recommendations concern the composition of the management body, with regard to which it is also suggested to integrate a diversity of professional and management experience and skills, combined, where possible, with a diversity of gender, age and seniority, without prejudice to the provisions of applicable local legislation.
- In order to regulate the procedures for the Company's engagement with institutional investors and with its shareholders and bondholders as a whole, in March 2021 the Board of Directors adopted, acting on a proposal from the Chairman formulated in agreement with the Chief Executive Officer, a specific policy in this area (the "Engagement Policy"). It largely incorporates the practices already followed by Enel to ensure that this dialogue is based on principles of fairness and transparency and takes place in compliance with EU and national regulations concerning market abuse, as well as in line with international best practices. In drawing up the Engagement Policy, which was consistently applied during 2022, the best practices adopted in this field by institutional investors and reflected in "Stewardship" codes were taken into account.

For more detailed information on the corporate governance system, please see the Report on Corporate Governance and Ownership Structure of Enel, which has been published on the Company's website (http://www.enel.com, in the "Governance" section).

Enel organizational model

Enel Group Chairman
M. Crisostomo

Enel Group CEO
F. Starace

Holding Function

ADMINISTRATION, FINANCE AND CONTROL
A. De Paoli

PEOPLE AND ORGANIZATION
G. Stratta

COMMUNICATIONS
R. Deambrogio

LEGAL AND CORPORATE AFFAIRS
G. Fazio

INNOVABILITY
E. Ciorra

AUDIT
S. Fiori

GLOBAL PROCUREMENT
F. Di Carlo

GLOBAL CUSTOMER OPERATIONS
N. Melchiotti

GLOBAL DIGITAL SOLUTIONS
C. Bozzoli

Global Business Line

Enel Grids
A. Cammisecra

Global Energy and Commodity Management
C. Machetti

Enel Green Power and Thermal Generation
S. Bernabei

Enel X Global Retail
F. Venturini

Global e-Mobility
E. Ripa

Country and Region

ITALY
N. Lanzetta

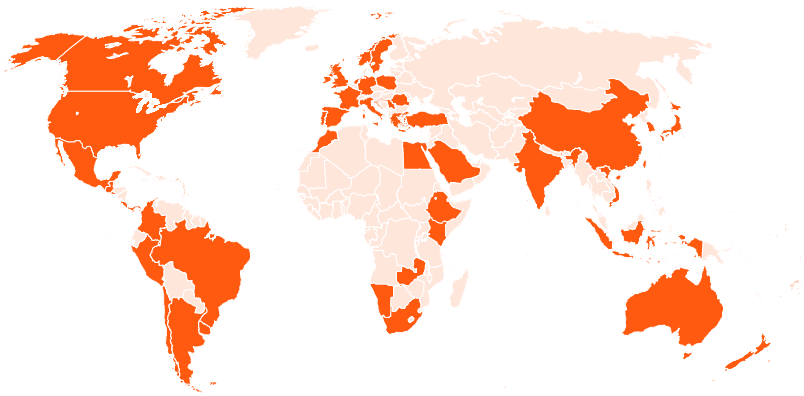
IBERIA
J. Bogas Galvez

EUROPE
S. Mori

AFRICA, ASIA AND OCEANIA
S. Bernabei

NORTH AMERICA
E. Viale

LATIN AMERICA
M. Bezzeccheri



The Enel Group structure is organized into a matrix that comprises:

Global Business Lines

The Global Business Lines are responsible for managing and developing assets, optimizing their performance and the return on capital employed in the various geographical areas in which the Group operates. In addition, in compliance with safety, protection and environmental policies and regulations, they are tasked with maximizing the efficiency of the processes they manage and applying best international practices, sharing responsibility for EBITDA, cash flows and revenue with the countries.
The Group, which also draws on the work of an Investment Committee,[4] benefits from a centralized industrial vision of projects in the various business lines. Each project is assessed not only on the basis of its financial return but also in relation to the best technologies available at the Group level, which reflect the new strategic line adopted, explicitly integrating the SDGs within our financial strategy and promoting a low-carbon business model. Furthermore, each business line contributes to guiding Enel's leadership in the energy transition and in the fight against climate change, managing the associated risks and opportunities in its area of competence.
The new Global e-Mobility Business Line was recently launched, created to focus activities connected with the global expansion of the electric mobility market, charging solutions and related platforms for the delivery of power to zero-emission vehicles. e-Mobility was born from a desire to accelerate technological evolution and growth along the entire value chain linked to the e-mobility sector, responding to the needs of current and future users with a structured portfolio of charging solutions and software for the public and private sector, promoting the growth of electric mobility through partnerships and strategic alliances, and continuing the path of innovation in charging technology in which Enel is now recognized as a large and reliable international player.

Regions and Countries

Regions and Countries are responsible for managing relationships with institutional bodies and regulatory authorities, as well as selling electricity and gas, in each of the countries in which the Group is present, while also providing staff and other service support to the business lines. They are also charged with promoting decarbonization and guiding the energy transition towards a low-carbon business model within their areas of responsibility.

The following functions provide support to Enel's business operations:

Global Service Functions

The Global Service Functions are responsible for managing information and communication technology activities, procurement at the Group level and managing global customer relationship activities.
The Global Service Functions are also focused on the responsible adoption of measures that allow the achievement of sustainable development objectives, in the specific in managing the supply chain and developing digital solutions to support the development of enabling technologies for the energy transition and the fight against climate change.

Holding Company Functions

The Holding Company Functions are responsible for managing governance processes at the Group level. The Administration, Finance and Control Function is also responsible for consolidating scenario analysis and managing the strategic and financial planning process aimed at promoting the decarbonization of the energy mix and the electrification of energy demand, key actions in the fight against climate change.

(4) The Group Investment Committee is made up of the heads of Administration, Finance and Control, Innovability, Legal and Corporate Affairs, Global Procurement, and the heads of the Regions and the Business Lines.

Incentive system

Enel's remuneration policy for 2022, which was adopted by the Board of Directors acting on a proposal of the Nomination and Compensation Committee and approved by the Shareholders' Meeting of May 19, 2022, was formulated on the basis of (i) the recommendations of the Italian Corporate Governance Code published on January 31, 2020; (ii) national and international best practice; (iii) the guidance provided by the favorable vote of the Shareholders' Meeting of May 20, 2021 on the remuneration policy for 2021; (iv) the results of the engagement activity on corporate governance issues pursued by the Company between January and March 2022 with the leading proxy advisors and some Enel's relevant institutional investors; (v) the findings of the benchmark analysis of the remuneration of the Chairman of the Board of Directors, the Chief Executive Officer/General Manager and the non-executive directors of Enel for 2021, which was performed by the independent consultant Mercer.

This policy is intended to (i) foster Enel's sustainable success, which takes the form of creating long-term value for the benefit of shareholders, taking due consideration of the interests of other key stakeholders, so as to incentivize the achievement of strategic objectives; (ii) attract, retain and motivate personnel with the professional skills and experience required by the sensitive managerial duties entrusted to them, taking into account the remuneration and working conditions of the employees of the Company and the Enel Group; and (iii) promote the corporate mission and values.

The 2022 remuneration policy adopted for the Chief Executive Officer/General Manager and key management personnel envisages:

- a fixed component;
- a short-term variable component (MBO) that will be paid out on the basis of achievement of specific performance objectives. Namely:
  - for the CEO/General Manager, annual objectives have been set for the following components:
    - consolidated net ordinary profit;
    - Group opex;
    - funds from operations/consolidated net financial debt;
    - System Average Interruption Duration Index – SAIDI (gate objective), commercial complaints on the free commodity market in Italy (gate objective) and commercial complains received at the Group level;
    - workplace safety;
  - for key management personnel, the respective MBOs identify objective and specific annual goals connected with the Strategic Plan. They are determined jointly by the Administration, Finance and Control function and the People and Organization function;
- a long-term variable component linked to participation in specific long-term incentive plans. In particular, for 2022 this component is linked to participation in the 2022 Long-Term Incentive Plan for the management of Enel SpA and/or its subsidiaries pursuant to Article 2359 of the Italian Civil Code (2022 LTI Plan), which establishes three-year performance targets for the following:
  - Enel's average TSR (Total Shareholder Return) compared with the average TSR for the EURO STOXX Utilities - EMU index for the 2022-2024 period;
  - ROIC (Return on Invested Capital) - WACC (Weighted Average Cost of Capital), cumulative for 2022-2024;
  - Scope 1 GHG emissions per equivalent kWh generated by the Group in 2024;
  - percentage of women in top management succession plans at the end of 2024.

The 2022 LTI Plan establishes that any bonus accrued is represented by an equity component, which can be supplemented – depending on the level of achievement of the various targets – by a cash component. More specifically, the Plan envisages that 130% of the basic bonus of the Chief Executive Officer/General Manager (compared with a maximum of 280% of the basic bonus) and 65% of the basic bonus of key management personnel (compared with a maximum of 180% of the basic bonus) will be paid in Enel shares previously acquired by the Company. In addition, the disbursement of a significant portion of long-term variable remuneration (70% of the total) is deferred to the second year following the three-year performance period covered by the 2022 LTI Plan.

For more information on the remuneration policy for 2022, please see Enel's "Report on the remuneration policy for 2022 and compensation paid in 2021", which is available on the Company's website (www.enel.com).

Values and pillars of corporate ethics

A robust system of ethics underlies all activities of the Enel Group. This system is embodied in a dynamic set of rules constantly oriented towards incorporating national and international best practices that everyone who works for and with Enel must respect and apply in their daily activities. The system is based on specific compliance programs, including: the Code of Ethics, the Compliance Model under Legislative Decree 231/2001, the Enel Global Compliance Program, the Zero-Tolerance-of-Corruption Plan, the Human Rights Policy, and any other national compliance models adopted by Group companies in accordance with local laws and regulations.

Code of Ethics

In 2002, Enel adopted a Code of Ethics,[5] which expresses the Company's ethical responsibilities and commitments in conducting operations, governing and standardizing corporate conduct on the basis of standards aimed to ensure the maximum transparency and fairness with all stakeholders. The Code of Ethics is valid for the whole Group, taking due account of the cultural, social and economic diversity of the various countries in which Enel operates. Enel also requires that all suppliers and partners adopt conduct that is in line with the general principles set out in the Code. Any violations or suspected violations of Enel Compliance Programs can be reported, including in anonymous form, through a single Group-level platform (the "Ethics Point"). With regard to the Code of Ethics, the following table reports total violations received and violations confirmed.

		2022	2021	Change	
Total reported violations of the Code of Ethics received	no.	**172**	**153**	**19**	**12.4%**
Confirmed violations of the Code of Ethics[1]	no.	**29**	**44**	**(15)**	**-34.1%**
- of which violations involving conflicts of interest/bribery	no.	*9*	*8*	*1*	*12.5%*

(1) The analysis of reports received in 2021 was completed in 2022. For that reason, the number of verified violations for 2021 was restated from 41 to 44. Among the three additional violations, one is attributable to a case of conflict of interest in Colombia.

Compliance Model under Legislative Decree 231/2001

Legislative Decree 231 of June 8, 2001 introduced into Italian law a system of administrative (and *de facto* criminal) liability for companies for certain types of offenses committed by their directors, managers or employees on behalf of or to the benefit of the company. Enel was the first organization in Italy to adopt, back in 2002, this sort of compliance model that met the requirements of Legislative Decree 231/2001 (also known as "Model 231"). It has been constantly updated to reflect developments in the applicable regulatory framework and current organizational arrangements.

(5) Most recently updated on February 2021.

Enel Global Compliance Program (EGCP)

The Enel Global Compliance Program for the Group's foreign companies was approved by Enel in September 2016. It is a governance mechanism aimed at strengthening the Group's ethical and professional commitment to preventing the commission of crimes abroad that could result in criminal liability for the company and do harm to our reputation. Identification of the types of crime covered by the Enel Global Compliance Program – which encompasses standards of conduct and areas to be monitored for preventive purposes – is based on illicit conduct that is generally considered such in most countries, such as corruption, crimes against the government, false accounting, money laundering, violations of regulations governing safety in the workplace, environmental crimes, etc.

"Zero-Tolerance-of-Corruption" Plan and the anti-bribery management system

In compliance with the tenth principle of the Global Compact, according to which "businesses should work against corruption in all its forms, including extortion and bribery", Enel is committed to combating corruption. For this reason, in 2006 we adopted the "Zero-Tolerance-of-Corruption" Plan (ZTC Plan), confirming the Group's commitment, as described in both the Code of Ethics and the Model 231, to ensure propriety and transparency in conducting company business and operations and to safeguard our image and positioning, the work of our employees, the expectations of shareholders and all of the Group's stakeholders. Following receipt of the ISO 37001 anti-corruption certification by Enel SpA in 2017, the 37001 certification plan has gradually been extended to the main Italian and international subsidiaries of the Group.

The following table reports the average number of per capita training hours provided on anti-corruption policies and procedures.

		2021	2020	Change	
Training in anti-corruption policies and procedures	no.	**30,564**	**20,074**	**10,490**	**52.3%**
	%	47	30.3	16.7	55.1%
Training in anti-corruption policies and procedures by geographical area:					
- Italy	%	56	34.5	21.5	62.3%
- Iberia	%	51	37.4	13.6	36.4%
- Latin America	%	32	17.8	14.2	79.8%
- Europe	%	12	21.0	(9.0)	-42.9%
- Africa, Asia and Oceania	%	15	27.7	(12.7)	-45.8%
- North America	%	80	75.9	4.1	5.4%

Human Rights Policy

Respect for human rights is part of the very foundation of sustainable progress. Enel's business model is based on the generation of sustainable value, together with its internal and external stakeholders, on continuous innovation, the pursuit of excellence and respect for human rights throughout the value chain. This translates into the rejection of practices such as modern slavery, forced labor and human trafficking, and the promotion of diversity, inclusion, equal opportunity and ensuring that people are treated with dignity and valued for their uniqueness, whether they work within the Company or elsewhere along the value chain in which the Group operates. The main international standards inspiring Enel's commitment are the United Nations framework "Protect, Respect, Remedy", outlined in the guiding principles on business and human rights, and the guidelines for multinational companies of the OECD. This commitment is clearly reflected in the human rights policy drawn up and adopted back in 2013. In 2021, this document was updated to take account of the evolution of international reference frameworks and the operational, organizational and management processes of the Group. The document strengthens and expands the commitments already present in other codes of conduct adopted by Enel such as the Code of Ethics, the Zero-Tolerance-of-Corruption Plan and global compliance models. The update was approved by the Board of Directors of Enel SpA and then adopted by the subsidiaries. Enel undertakes to comply with these principles in every country in which it operates, respecting local cultural, social and economic diversity, requiring each stakeholder to adopt conduct in line with these principles, paying particular attention to high-risk environments or those exposed to conflicts.

Stakeholders are all those who have a direct or indirect interest in the activities of the Enel Group, such as customers, employees of any type or level, suppliers, contractors, partners, other companies and trade associations, the financial community, civil society, local communities and indigenous and tribal peoples, national and international institutions, the media, as well as the organizations and institutions that represent them.

The update, similar to the 2013 version, involved a process of consultation with stakeholders relevant to the Company (internal, other companies, suppliers, human rights experts, think tanks, NGOs) conducted in accordance with the criteria contained in the ''UN Global Compact Guide for Business: How to Develop a Human Rights Policy''.
The updated code identifies twelve principles (compared with the previous eight), again divided into two macro-themes: work practices and community relations.
The Human Rights Policy is a commitment to:

- proactively consider the needs and priorities of people and society in general because this makes it possible to innovate processes and products, a key factor in an increasingly competitive, inclusive and sustainable business model, including through the adoption of the principles of circularity, the protection of natural capital and biodiversity;
- promote the engagement of our main external and internal stakeholders in order to enhance their awareness and develop a constructive dialogue that can provide a valuable contribution to the design of solutions to mitigate climate change.

In addition to the commitment to the contribution to achieving the United Nations Sustainable Development Goals, the updates include: (i) a reminder of how environmental degradation and climate change are interconnected with human rights, in that the implementation of measures to mitigate the effects of human activities on the environment cannot take place without taking account of their social impact; (ii) the strengthening of the principles of "respect for diversity and non-discrimination" and "health and safety" in the part relating to psychological and physical well-being and work-life integration; (iii) an increase in the granularity of our commitment in our relations with communities, with particular regard to local communities, indigenous and tribal populations, privacy and communication.
Enel has undertaken to monitor application of the Human Rights Policy (i) by employing a specific due diligence process in the various countries in which we operate; (ii) by promoting conduct consistent with a just and inclusive

transition; and (iii) by enhancing communication with regard to the action plans developed to prevent and remedy situations in which critical issues could arise.
More specifically, the due diligence process for the management system, which is structured into three-year cycles and has been developed in accordance with the main international standards such as the United Nations Guiding Principles on Business and Human Rights, the OECD guidelines and international best practices, enables us to identify opportunities for improvement and develop specific action plans for each country in which we have a presence, accompanied by a plan for improvement at the central level in order to harmonize and integrate processes and policies defined at the global level and applied at the local level. All of these improvement plans are also integrated into the Sustainability Plan.
In the 2020-2022 cycle, some 170 actions have been identified, covering 100% of operations and sites.

With regard to the sustainability of the supply chain, Enel's purchasing processes are based on fairness, transparency and collaboration, and for this reason the Group's suppliers are required not only to guarantee the necessary quality standards but also to commit to adopting best practices for human rights and the impact of their activity on the environment. These include those concerning working conditions, health and safety, appropriate working hours, rejection of forced or child labor, respect for personal dignity, non-discrimination and the inclusion of diversity, freedom of association and collective bargaining and respect for privacy by design and by default. All of this is delineated by a clear framework of codes of conduct, including, in addition to the Human Rights Policy, the Code of Ethics, the Zero-Tolerance-of-Corruption Plan and global compliance programs. Furthermore, specific clauses are included in all contracts for works, services and supplies, updated periodically to take account of the regulatory developments and ensure alignment with international best practices. The General Terms of Contract comprise a general part, containing the clauses applicable to all countries, supplemented by Country Annexes containing the specific clauses applicable in each country. The General Terms of Contract cover current regulations governing remuneration, contributions, insurance and taxation for all workers employed in any capacity in the execution of a contract by the supplier. Furthermore, specific reference is made to the principles set out in ILO Conventions and legal obligations regarding: the protection of child labor and women; equal treatment; prohibition of discrimination, abuse or harassment; freedom of trade union membership, association and representation; rejection of forced labor; safety and environmental protection and hygienic-sanitary conditions. In the event of a conflict between the latter and the ILO Conventions, the more restrictive rules shall prevail. The clauses also provide that suppliers shall undertake to prevent any form of corruption.

REPORT ON OPERATIONS

3.

Group Strategy & Risk Management

Context and reference scenarios

Recent years have shown us that the definition of macroeconomic, energy, climate and energy transition scenarios based on "alternative futures" is crucial for long-term planning.

Strategic Plan

The founding pillars of the new Strategic Plan include the decarbonization of the generation mix and the electrification of final consumption, to be implemented through an integrated strategy in the core countries, the digitization and strengthening of grids and a strategic and geographical repositioning to ensure growth and financial strength.

Analysis of risks and opportunities

The context of uncertainty in which we operate makes us aware of the risks but also of the opportunities relating to our businesses. The Group evaluates the impact of climate and transition scenarios within a process capable of translating data into information useful for maximizing opportunities and mitigating risks.

Introduction to Group strategy

Since 2015, the Group's strategy has been focused on sustainability and fighting climate change, placing profitability and sustainable progress on the same virtuous track. Enel's commitment initially translated into a desire to contribute to the achievement of the Sustainable Development Goals (SDGs) launched by the United Nations Organization (UN), but in recent years it has expanded this orientation further, seeking to act as an enabling factor in the general context of the fight against climate change and the energy transition.
With these assumptions, the definition of the strategy has gradually been increasingly closely tied to the scenarios developed by the Group. The various transition trajectories hypothesized for the countries in which Enel operates, as well as the climate scenarios, represent one of the fundamental pillars of defining the strategic actions necessary to achieve these ambitious long-term objectives.

Long-term scenarios need to be accompanied by an equally careful and consistent analysis of the context and the short-term evolution of energy and macroeconomic variables. If the medium-long term goal is, in Enel's vision, anchored to the achievement of the Paris objectives on containing climate change, the starting point of each strategic planning cycle has turned out to be changeable over the years, strongly influenced by the disruptions they have characterized the recent past. Unexpected events such as the onset of the COVID-19 pandemic or the outbreak of the Russia-Ukraine conflict have had a substantial impact on the environment in which the Group operates and prompted a series of managerial actions to restore the proper trajectory and achieve goals we have set for ourselves.
The support lent by the definition of the scenarios also underpins the Strategic Dialogue process which, as will be explored later, represents the incubator in which the Group develops and analyzes the most relevant strategic issues every year, with the aim of updating and adapting our positioning and business models.
Some of Enel's most innovative and incisive decisions were born in this context: starting with the decision to abandon coal-fired thermal generation, passing through the more recent commitment to Zero Emissions by 2040 and arriving at Sustainability-linked Finance, Stakeholder Capitalism and Climate Change Strategy. The common thread has always remained anchored to sustainability, but over the years the scope of application has expanded to enable us both to increase the effects of the Group's strategy and to clarify the stakeholders who will be able to benefit from it. Sustainability is integrated into the all-round strategy.
Thanks to the Stakeholder Capitalism frame, the Group has in fact declared its intention to make the creation of sustainable value and well-being generated by its activities more explicit, believing that in an increasingly interconnected world that aims to achieve full sustainability, companies will only thrive in the long term if they act collectively and if they are able to create value and share it with all stakeholders.
In this context, the most recent Capital Markets Day testified to the increased centrality of the integrated country-based strategy in the Group's design and the role that this strategy could play in accelerating the speed of transition of the individual countries in which Enel operates, all while reducing energy costs for our customers.
With the introduction of the Climate Change Strategy, the Group has laid the foundations for tackling climate change even more actively and proactively, expanding the areas of intervention beyond mitigation actions, which include decarbonization initiatives, and including adaptation plans for assets and business models.

Reference scenario

The geopolitical environment

Global economic conditions can significantly impact the Group's activities due to their direct effects on the growth rates of the national GDPs of the countries in which it operates. In recent years, the stability of the euro area has been shaken by a number of adverse events, such as the COVID-19 pandemic, which has produced significant disruptions in supply chains and prompted the imposition of restrictions on economic activities, and the more recent military conflict between Russia and Ukraine. Since the economies of the euro area are among the most highly exposed to these hostilities due to their geographical proximity to the conflict area and their heavy dependence on gas imports from Russia, they have been heavily impacted both in terms of the slowdown in GDP growth and the high level of inflation. The latter was initially driven by the exponential increase in energy and commodity prices. Subsequently, the transfer of the higher costs of firms' production factors to the prices of non-energy industrial goods generated persistent inflationary pressures, which remain a risk factor that requires careful monitoring. The increase in inflation is eroding the purchasing power of households and weighing on industrial production. In response to these inflationary pressures, the European Central Bank (as well as most of the central banks of the advanced and emerging economies) has adopted a restrictive monetary policy stance, which, if it should be tightened and prolonged, could have significant impacts on economic activity and the financial stability of the euro area.

The year 2023 will once again be marked by the evolution of events connected with the military conflict between Russia and Ukraine, with direct impacts on geopolitical and social stability on a global scale. The world context is involved in and impacted by the evolution of the military conflict, which is still causing serious social and economic consequences for the countries directly or indirectly involved. Tensions between countries have increased over the last few months, exacerbated by the fact that there is no obvious end in sight for the Russia-Ukraine conflict and the emergence of strains in Asia and other parts of the world.

On the trade front, sanctions are still in place on international trade that are influencing trade agreements between countries and industrial policies in various regions: the introduction of any new customs duties or restrictions on exports could further aggravate the current macroeconomic environment and make geopolitical conditions even more uncertain.

The main risks in respect of energy commodities primarily regard the reduction in the supply of gas to Europe. With the deterioration in relations with Russia, all of Europe's other supply channels have become even more strategic, and any discontinuity would further drive expectations for higher gas prices. This increase would also involve coal and electricity prices, which are strongly correlated with trends in gas prices. A further source of uncertainty is the possible increase in Chinese gas demand, which could attract the supplies of LNG currently sold in Europe. The recovery of Chinese economic activity could also have repercussions on the oil market, although this could be mitigated by the possible purchase of incremental volumes directly from Russia.

The current geopolitical context will also continue to influence demand in the industrial metals sector, which is affected by the prospects of a slowdown in global economic growth and by the prolonged political and military tensions. In particular, in China, despite expectations for an upturn in demand following the post-COVID reopening of the economy, the recovery in demand in 2023 will be slow and irregular, and will greatly depend on the effect of government stimuli. Specifically, in the construction sector demand is only expected to rise starting from the second half of the year. As regards metals used in renewable energy technologies, such as metals for batteries and polysilicon, current conditions remain colored by uncertainties about the management of Chinese and global supply chains, which will continue to influence prices in the near future. Renewed strains are also expected to emerge for more energy-intensive metals, such as aluminum and steel, the prices of which remain closely linked to developments in the energy markets and the underlying geopolitical dynamics.

Macroeconomic environment

The global macroeconomic environment in 2022 was characterized by a broad slowdown in the real economy, with estimated world GDP growth of around 3% on an annual basis, following the sharp post-pandemic recovery of around 6% the previous year. High levels of inflation quickly and unexpectedly impacted global economies, forcing central banks to take rapid action to adopt restrictive monetary policies, exacerbating financial market conditions. High inflationary pressures on a global scale have been driven both by demand-side pressures generated by earlier central bank measures to accommodate the recovery during the pandemic crisis, and by significant distortions in supply chains that have reduced the supply of goods. Furthermore, the military conflict between Russia and Ukraine, and the resulting global uncertainty this has engendered, has significantly impacted the energy, commodity and food markets, with direct repercussions on the prices of final consumer goods and even more evident consequences for the European energy sector, which has been directly affected by fluctuating gas supplies and consequent impact on expectations of market operators.

In the United States, strong domestic demand generated by the resilience of the labor market and high wage levels, together with a rise in energy and food prices, drove inflation on an annual basis to record levels (8%), values that had not been registered since 1981. To respond to these unsustainable inflationary pressures, the Federal Reserve reacted by implementing a restrictive monetary policy stance with numerous large increases in policy rates. However, these inflationary dynamics, accompanied by restrictive financial conditions, weighed on US economic performance, which saw GDP grow by 2.1% on an annual basis.

In the euro area, macroeconomic conditions changed substantially between the 1st and 2nd Quarters, recording estimated GDP growth of 3.3% on an annual basis. In the first six months, the economic recovery exceeded expectations, supported by a strong recovery in consumption and private investment in response to the relaxation of the restrictions imposed during the pandemic. In the following six months, with the rise in uncertainty in connection with the military conflict between Russia and Ukraine and the sudden increase in energy prices, the European economies recorded a significant slowdown. The euro area has been impacted more significantly by the armed conflict than the United States due to its greater geographical proximity and heavy dependence on Russian gas. The latter factor has contributed significantly to the surge in uncertainty in the European energy markets. Finally, in response to the growing inflationary pressures (inflation stood at 8.4% on an annual basis), after more than a decade of interest rates close to zero, the European Central Bank also swiftly decided to adopt a restrictive monetary policy with repeated increases in its policy rates. This has caused financial conditions in the markets to deteriorate.

In Latin America, the first half of the year saw a significant recovery in private consumption demand for goods and services, supported by a recovery in the labor market and the substantial fiscal support provided by governments in response to the pandemic crisis. Conversely, in the second half of the year, macroeconomic conditions were characterized by the restrictive monetary policy stances adopted by the national central banks, which dampened the economic recovery. The economies of Latin America have been impacted by the rapid surge in the international prices of energy and agricultural commodities, mainly reflecting the military conflict between Russia and Ukraine. In Brazil, the economic recovery in 2022 saw GDP growth outpace expectations at an estimated 3% on an annual basis, driven by robust domestic demand supported by significant social transfers from the government and by an improvement in job growth. However, the final quarters of the year were impacted by growing inflationary pressures (inflation rose to 9.3% on an annual basis) induced by a generalized increase in commodity and food prices, forcing the central bank to roll out a rapid series of restrictive monetary measures, which have had a negative impact on the growth outlook for this year. Furthermore, the possibility that the newly elected president Lula could reverse the economic policy direction adopted by the previous Bolsonaro government, the delay in the approval of structural reforms, together with the intensification of social protests, all raise uncertainties about the actual speed of recovery in the short term and the country's fiscal strength and long-term economic growth potential. In Chile, economic growth was more moderate in 2022, coming in at 2.8% year-on-year after the strong 11.9% increase the previous year. Last year, the Chilean government did not retain many of the generous fiscal measures implemented the previous year, which had enabled the economy to perform beyond its potential. Furthermore, growing inflationary pressures, with annual inflation reaching 11.6%, followed by a deterioration in local and global financial conditions, had a negative impact on private consumption and investment. In Colombia, the real economy continued to perform well, with GDP growth estimated at 7.8%, after the 10.7% rise recorded the previous year. However, the resilience of private consumption and investment was tested, especially in the second half of the year, by a broad increase in prices, with annual inflation amounting to 10.2%. For the Peruvian economy, the growing inflationary pressures resulting from the increase in the prices of agricultural and energy goods (the annual inflation rate stood at 7.9%), the more restrictive monetary conditions adopted by the central bank and the considerable political uncertainty linked to the agenda of Presi-

dent Castillo (replaced in December by Peru's first female president, Boluarte) contributed to a deceleration of the country's real growth, with GDP growth expected to come to 2.9% on an annual basis. After a strong rebound in the real economy in 2021, Argentina registered estimated GDP growth of 5.4% last year. The agreement with the International Monetary Fund has reduced various uncertainties concerning short-term macroeconomic policies. However, steadily rising inflation during the year (to an annual 70.7%) and the divergence between the official exchange rate and the parallel exchange rate had a major impact on the country's consumption, private investment and foreign attractiveness.

%	Inflation		
	2022	2021	Change
Italy	**8.7**	**2.0**	**6.7**
Spain	8.3	3.0	5.3
Russia	13.8	6.7	7.1
Romania	12.0	4.1	7.9
India	6.7	5.1	1.6
South Africa	6.9	4.5	2.4
Argentina	70.7	48.1	22.6
Brazil	9.3	8.3	1.0
Chile	11.6	4.5	7.1
Colombia	10.2	3.5	6.7
Mexico	7.9	5.7	2.2
Peru	7.9	4.0	3.9
United States	8.0	4.7	3.3
Canada	6.8	3.4	3.4

%	GDP	
	2022	2021[(1)]
Italy	**3.8**	**6.7**
Spain	5.3	5.5
Portugal	6.7	5.5
Greece	4.8	8.2
Argentina	5.4	10.4
Romania	4.4	5.3
Russia	-2.9	4.8
Brazil	3.0	5.3
Chile	2.8	11.9
Colombia	7.8	10.7
Mexico	3.1	4.9
Peru	2.9	13.6
Canada	3.3	5.0
United States	2.1	6.0
South Africa	2.4	4.9

(1) The 2021 figures have been calculated more accurately.

	2022	2021	Change
Euro/US dollar	1.05	1.18	-12.38%
Euro/British pound	0.85	0.86	-1.18%
Euro/Swiss franc	1.00	1.08	-8.00%
US dollar/Japanese yen	131.55	109.85	16.50%
US dollar/Canadian dollar	1.30	1.25	3.85%
US dollar/Australian dollar	1.44	1.33	7.64%
US dollar/Russian ruble	69.80	73.71	-5.60%
US dollar/Argentine peso	130.87	95.16	27.29%
US dollar/Brazilian real	5.16	5.40	-4.65%
US dollar/Chilean peso	873.60	760.72	12.92%
US dollar/Colombian peso	4,261.77	3,747.97	12.06%
US dollar/Peruvian sol	3.83	3.88	-1.31%
US dollar/Mexican peso	20.11	20.29	-0.90%
US dollar/Turkish lira	16.58	8.90	46.32%
US dollar/Indian rupee	78.63	73.93	5.98%
US dollar/South African rand	16.37	14.79	9.65%

The energy industry

Energy conditions

The commodities market

The European gas market experienced high volatility in 2022, reflecting the outbreak of the Russia-Ukraine conflict and the consequent deterioration in relations between the European Union and Russia. On average, the TTF benchmark price rose by more than 160% compared with 2021, reflecting the uncertainty about gas flows from Russia, which gradually dwindled over the course of the year until the closure of North Stream 1, the main pipeline serving the European market, at the beginning of September. Record prices were reached during the year (over €300/MWh in August).
In order to respond to the crisis, the European Union introduced a series of actions, including minimum storage obligations and gas price caps. The achievement of high storage percentages (above 90%) before the winter season, combined with mild temperatures in November and December, led to a sharp reduction in European gas prices in the final months of 2022.

The rise in gas prices, combined with various bottlenecks along the value chain, in turn led to an increase in coal prices, which in 2022 reached an average of $290 a ton. High gas prices have made coal-fired generation more attractive, increasing its consumption.

In the first part of 2022, the oil market saw substantial increases in its price indices, reflecting optimism for the recovery of economic activity in a context in which supply appeared to be growing more slowly than demand. During the first half of 2022, the price of Brent, the European oil benchmark, repeatedly exceeded $120 a barrel, recording an average value of $104 a barrel. Starting from July, however, prices began to reverse their trend, reflecting softer demand due to the slowdown in economic activity. The average Brent price was around $99 a barrel in 2022, a 39% increase on 2021.

		2022	2021	Change
Brent	$/barrel	99	71	39.4%
API2	$/ton	290	120	-
TTF	€/MWh	120	46	-
CO_2	€/ton	81	53	52.8%
Copper	$/ton	8,831	9,310	-5.1%
Aluminum	$/ton	2,706	2,472	9.5%
Lithium carbonate	$/ton	71,640	18,645	-
Polysilicon	$/ton	35,589	25,331	40.5%

CO_2 prices in the ETS also rose, increasing by more than 50% on the previous year, despite the adverse impact on the index of the slowdown in economic activity in the 4th Quarter. In general, despite some uncertainties about the regulatory future of this commodity, in 2022 the European Union confirmed that the ETS is the main policy tool available in the fight against climate change. This made the commodity very resilient to market shocks, as already observed in previous years.

As happened in 2021, 2022 was also characterized by strong volatility for the metals sector, albeit with clearly different dynamics. The first half of the year, with the outbreak of the conflict between Russia and Ukraine, experienced sudden price spikes, mainly for metals such as aluminum and nickel, driven by fears of possible critical supply issues and by general strains on commodity markets. Conversely, in the second half of the year concerns about short-term growth prospects dominated.

In 2022, China was once again a protagonist in influencing the balance of the energy and commodity markets. In the first few months of the year, critical supply chain issues dominated, with the closure of Chinese ports, both inbound and outbound, as COVID management problems persisted, which pushed container and international freight prices to record levels, thereby weighing on the prices of metals. Following the easing of logistical strains, fears of a slowdown in growth dampened demand, and therefore prices, for China as well, with difficulties encountered in particular by the construction sector.

Precisely because of its high correlation with developments in economic activity, copper is an excellent example to use in describing the two different price dynamics we witnessed in 2022. Copper prices remained at historically very high levels until June, averaging more than $9,900 a ton over the first five months of the year (from the end of February to April, prices did not fall below $10,000 a ton), before reversing the trend and averaging around $8,000 a ton for the rest of the year (reaching a low of around $7,100 a ton in mid-July, a value not seen since the end of 2020).

As regards the metals used more extensively in renewable energy technologies, such as metals for batteries (lithium) or polysilicon, price dynamics have differed significantly. Following developments in 2021, prices continued to rise throughout the year, driven by market fundamentals, which have remained strained, and in particular by demand from the EV sector and energy in general, which has continued to accelerate, despite global growth fears. For example, lithium carbonate prices in China have averaged above $70,000 a ton, up from around $40,000 a ton in January to around $80,000 a ton in the final months of the year. All this underscores the continuing strength of demand for green technology and related materials, the outlook for which does not appear to be slackening. In the near future, the outlook points to an easing of tensions on the prices of these commodities as well, thanks in particular to the entry of new supplies onto the market.

Electricity demand

Developments in electricity demand[(1)]

TWh

	2022	2021	Change
Italy	**315.5**	**318.1**	**-0.8%**
Spain[(2)]	250.1	255.8	-2.2%
Romania	57.5	62.3	-7.7%
Argentina	145.1	136.4	6.4%
Brazil	610.3	608.9	0.2%
Chile	83.2	81.5	2.1%
Colombia	76.9	73.7	4.3%

(1) Gross of grid losses.
(2) National data.
Source: Enel based on TSO figures. The figures are the best estimate available at the publication date and could be revised by TSOs in the coming months.

In Europe, electricity consumption declined in 2022 due to high prices, especially in the industrial sector.
In the first seven months of the year, electricity demand in Italy exceeded that in the same period of 2021. However, it slowed sharply in the latter part of the year due to tensions in the energy markets, in particular the sharp rise in electricity prices, which caused a slowdown in industrial activity and consequently in electricity consumption. Italian electricity demand closed 2022 with a contraction of 0.8% compared with 2021. The decrease recorded in Spain, equal to 2.2%, was larger, due to the slowdown in the industrial and service sectors, combined with milder temperatures. Demand in Romania also fell sharply, contracting by 7.7% compared with the previous year.
The countries of Latin America ran counter to the trend, with electricity demand expanding compared with 2021. The growth recorded in Argentina (+6.4%) and Colombia (+4.3%) was particularly strong, while more modest consumption increases were registered in Chile (+2.1%) and Brazil (+0.2%).

Electricity prices

Electricity prices

	Average baseload price 2022 (€/MWh)	Change in average baseload price 2022-2021	Average peakload price 2022 (€/MWh)	Change in average peakload price 2022-2021
Italy	**303.1**	**178.0**	**337.7**	**198.0**
Spain	167.7	56.0	169.0	48.4

Electricity prices in Italy and Spain increased sharply compared with 2021, reflecting the rapid rise in prices on the commodity markets.
In particular, the sharp increase in the price of gas, together with lower hydroelectric generation and extensive maintenance work at French nuclear plants, drove the price of energy in Italy up 140% compared with the previous year.
The increase in Spain was more limited (50%), thanks to greater renewables generation and regulatory measures introduced to limit the effects of the increase in gas prices.
Consumer prices for electricity also soared compared with 2021 as a result of developments on the energy markets.
The table below summarizes final market prices for the main consumption segments.

Price developments in the main markets

Eurocents/kWh

	2022	2021	Change
Final market (residential)[1]			
Italy	0.2671	0.1596	67.4%
Romania	0.1688	0.1148	47.0%
Spain	0.2579	0.1618	59.4%
Final market (industrial)[2]			
Italy	0.2483	0.1162	-
Romania	0.1701	0.0910	86.9%
Spain	0.1946	0.0855	-

(1) Annual price net of taxes - annual consumption of between 2,500 kWh and 5,000 kWh.
(2) Annual price net of taxes - annual consumption of between 70,000 MWh and 150,000 MWh.
Source: Eurostat.

Natural gas demand

Billions of m^3				
	2022	2021	Change	
Italy	**67.5**	**75.0**	**(7.5)**	**-10.0%**
Spain	31.3	32.5	(1.2)	-3.7%

The steep increase in gas prices and the consequent commitment of the European institutions to reduce consumption of this commodity produced a sharp contraction in demand in the countries most dependent on Russian gas, above all Italy, where consumption decreased by 10% compared with 2021. The decline recorded in Spain was significantly less pronounced (-3.7%), as the ample availability of alternative sources (LNG and gas pipelines from North Africa), combined with the limited interconnection with the rest of the European continent and the policies to control gas prices adopted in advance of other European countries, kept the surge in prices much less explosive.

Compared with 2021, demand in Italy decreased by 10%. Broken down by individual segment, consumption contracted especially sharply in the distribution grids (13.8%), mainly reflecting milder temperatures recorded in the 4th Quarter, and in industry (-15%), in response to the sharp increase in market prices. Smaller, but still significant, was the decrease in the thermal generation segment (-3.1%).

Natural gas demand in Italy

Billions of m^3				
	2022	2021	Change	
Distribution grids	28.8	33.4	(4.6)	-13.8%
Industry	11.9	14.0	(2.1)	-15.0%
Thermal generation	25.1	25.9	(0.8)	-3.1%
Other(1)	1.7	1.7	-	-
Total	**67.5**	**75.0**	**(7.5)**	**-10.0%**

(1) Includes other consumption and losses.
Source: Enel based on data from the Ministry for Economic Development and Snam Rete Gas.

Energy transition scenarios and climate change

Competitive and transition environment

The competitive environment

In a year marked by the energy crisis and the military conflict between Russia and Ukraine, which had a significant impact on the context in which energy companies operate, the utility sector displayed broad resilience on the financial markets, partly reflecting the concrete steps implemented over the years to make an active contribution to the energy transition process.
In 2022, the markets and businesses in which the Group is present made progress along the path of the energy transition, while being exposed to greater competition and developments in the technological and regulatory fields, with the timing of these changes differing from country to country.
The business opportunities that the energy transition is generating and the strategic repositioning of certain industries towards greater sustainability mean that the utility sector is exposed to growing competitive pressures. The progress of the energy transition and the achievement of net-zero objectives at the global level depend on imparting a strong acceleration to the decarbonization of the generation mix and the electrification of final consumption.
Competition is rising in the sectors of generation and the marketing of electricity and related services and products, reflecting the strategic repositioning of companies operating in contiguous sectors, such as the automotive industry or digital technologies. While these dynamics will have an impact on the level of competition, they will also offer new business opportunities, new value pools, synergies and potential partnerships.

The energy transition context

Defining a solid and resilient strategy is key to fueling the creation of value for all stakeholders. In a complex, rapidly changing world, assessing the evolution of the energy transition process is a fundamental input in the definition of Enel's strategy. This assessment is particularly critical in the current environment, characterized, as discussed earlier, by growing geopolitical tensions, gas price volatility and supply chain difficulties. At the same time, the objectives of the Paris Agreement require an acceleration of the energy transition, in order to limit the increase in average global warming to 1.5 °C compared with pre-industrial levels. According to the Intergovernmental Panel on Climate Change (IPCC), "any further delay in concerted anticipatory global action on adaptation and mitigation will miss a brief and rapidly closing window of opportunity to secure a livable and sustainable future for all".[6] The recent World Economic Forum Annual Meeting[7] placed the issue of energy transition at the center of action for 2023 and for the rest of the decade, inviting action to be taken on investment capacity, public measures for the implementation of long-term objectives, infrastructure suitable for the transition and implementation of decarbonization paths for firms.

While on the one hand the energy transition is proceeding along a path of disorderly policies ("disorderly transition"[8]) compared with expectations, on the other we are witnessing a convergence of calls for energy security, accessibility and sustainability, which is guiding everyone – political decision-makers, citizens and companies – in the same direction: towards an acceleration of the clean electrification process. In particular, the Russia-Ukraine conflict could produce an acceleration in the electrification of consumption and the development of renewables for reasons of energy efficiency and security. According to the International Energy Agency (IEA),[9] we are at a "historic turning point towards a cleaner and more secure energy system thanks to the unprecedented response from governments around the world" to the energy conflict and crisis, including the Inflation Reduction Act in the United States and REPowerEU in the European Union, which add to the renewable energy achievements and targets in countries such as China and India.

The consequence has been an acceleration of the energy transition, evident in the results achieved in recent years and in the advancement of new policies. Additional renewables capacity had set a new record in 2021, increasing by 6% to nearly 295 GW. Growth expectations for 2022 and 2023 have again been revised upwards – despite supply chain challenges, construction delays and higher commodity prices than in the past – bringing expected additional renewables capacity to 320 GW (+8%), thanks to strong political support in China, Europe and Latin America. Photovoltaic power is expected to account for 60% of the increase in global renewables capacity this year, with 190 GW entering service, a 25% increase over last year.[10]
Furthermore, high energy prices have underscored the advantages of greater energy efficiency and are leading to policy and behavioral changes to reduce energy consumption, including through the electrification of final consumption (the demand for primary energy is decreasing thanks to the extraordinary efficiency of electricity as an energy vector). The global economy used energy 2% more efficiently in 2022 than in 2021, with a rate of improvement nearly four times higher than in the previous two years. Global investments in energy efficiency – such as building renovations, public transport and electric car infrastructure – increased by 16% in 2022 compared with the previous year.[11]

Electric mobility has also surged: the number of electric cars in circulation tripled in just three years, reaching over 16.5 million in 2021, with a major increase in sales in China, Europe and the United States, supported by ambitious policies (for example, in Europe the "Fit for 55" package sets a goal of reaching 100% electric vehicle sales by 2035).[12]
Even emerging markets registered substantial growth in 2021, including Latin America, where Chile in particular has set ambitious goals for the penetration of electric mobility.[13]
The transition, therefore, is shifting gears, as is clear in the recent projections for the global energy system produced by the IEA. For the first time, an IEA current policies scenario (STEPS) sees a peak or plateau for all fossil fuels, associated with an increase of about 2.5 °C in global average temperature by 2100. The Announced Policies Scenario (APS) – which is more ambitious than the current policies scenario because it includes climate targets that have been announced but not yet implemented by states,

(6) IPCC, 2022. AR6. WGII, Summary for Policymakers.
(7) Davos, 2023.
(8) According to the definition of the Network for Greening the Financial System, 2022. "Scenarios for central banks and supervisors".
(9) IEA, 2022. World Energy Outlook.
(10) IEA, 2022. Renewable Energy Market Update.
(11) IEA, 2022. Energy Efficiency.
(12) IEA, 2022. Global Electric Vehicle Outlook.
(13) The National Strategy for Electromobility sets the goal of 100% zero-emissions vehicles in sales of light-duty vehicles by 2030; 100% in public transport vehicles by 2035; 100% for long-haul trucks by 2045.

as well as sectoral commitments for specific industries and corporate targets[14] – shows an increase in global average temperature of around 1.7 °C, which is compatible with the Paris minimum targets, while not reaching net zero by 2050 globally. Although the APS scenario raises hopes for the evolution of our energy system, there is still a large gap between today's ambitions and holding the temperature increase to below 2 °C. This gap is largely connected with the need to introduce measures to implement the long-term objectives, with a view to increasing both the development of renewables and the rate of electrification of consumption in the short term. This is all the more important with regard to the most ambitious Paris Agreement objective, namely to limit the increase in global average temperature to +1.5 °C, the achievement of which requires governments and firms to expand their decarbonization objectives even further and the public to actively participate in the energy transition process, seeking out increased efficiency and sustainability in energy consumption.

Climate change and long-term scenarios

Enel promotes transparency in its climate-change disclosures and works to demonstrate to its stakeholders that it is tackling climate change with diligence and determination. Enel has publicly committed to adopting the recommendations of the Task force on Climate-related Financial Disclosures (TCFD) of the Financial Stability Board and to following all published updates. The Group is also taking on board the "Guidelines on reporting climate-related information" published by the European Commission in June 2019, which, together with the TCFD recommendations and the GRI Standard, constituted the main framework for the Group's reporting on climate change issues in 2021. Enel has been involved in a working group to develop specific recommendations to support the implementation of the TCFD guidelines concerning scenario analysis. The TCFD Advisory Council worked on the scenarios in 2020 and, since then, Enel has been involved in various initiatives of scenario analysis, sharing our experience in order to support the increasingly widespread and transparent implementation of this practice among a growing number of organizations.

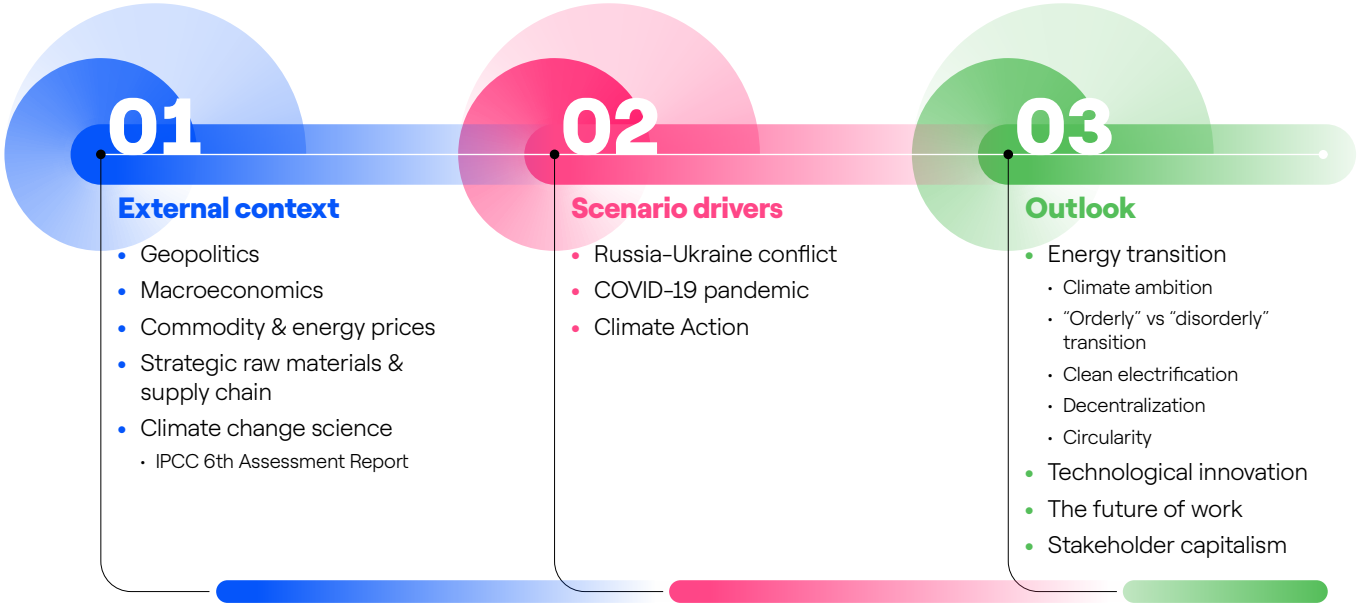
Scenario analysis

The Group develops short, medium and long-term scenarios for macroeconomic, financial, energy and climate developments in order to support planning, capital allocation, strategic positioning and the assessment of the risks and resilience of the strategy. Scenario-based planning involves defining "alternative futures" based on a number of key uncertainty variables, such as achieving the goals of the Paris Agreement. Compared with forecasting, scenario analysis provides greater flexibility and enables us to prepare for handling risks and seizing opportunities. The forecasting approach develops projections based on past trends, which therefore do not anticipate changes, nor does it incorporate assessments of risks or uncertainties. The preparation of scenarios allows companies to explore and model plausible alternative futures, designing various paths forward with different timing and options, and ultimately to support strategic decision-making with a view to maximizing opportunities and mitigating risks. This aspect is particularly relevant in the event of potential significant disruptions.

Trend analysis

Within the scope of defining Enel's scenarios, the mid- and long-term trends have been identified and analyzed in depth, and the results of this analysis are summarized in an Industry View document for internal use. Designed to support the decision-making process and Strategic Dialogue, this document provides an overview of the structural forces and macro-trends, and the scenario and technology drivers expected to act in the sector in which Enel operates. As a result, it provides a framework for the definition of actions aimed at guiding, preventing, and adapting to changes in our various businesses, as well as at seizing related opportunities.

(14) Sector commitments for specific industries and corporate targets were first included in the APS scenario in 2022.



Benchmarking scenario

Benchmarking of external energy scenarios is a key starting point in order to build robust internal scenarios. There are many global, regional and national energy transition scenarios published by various providers and designed for a wide range of purposes, from government planning and policymaking to the support of enterprise decision-making processes. Benchmarking entails analyzing the scenarios produced by the external organizations in order to compare results in terms of the energy mixes, trends in emissions, and technology decisions and to identify the main drivers of the energy transition for each.

Enel's benchmarking of external energy transition scenarios comprises the following steps.

1. **Analysis of the context of global and national scenarios for the countries in which we operate.** The analysis of scenarios, as well as the study of reports and datasets, is supported by constant dialogue with the analysts of the main scenario providers, which takes the form of in-depth meetings organized specifically for the Group and peer-review sessions for their main reports.

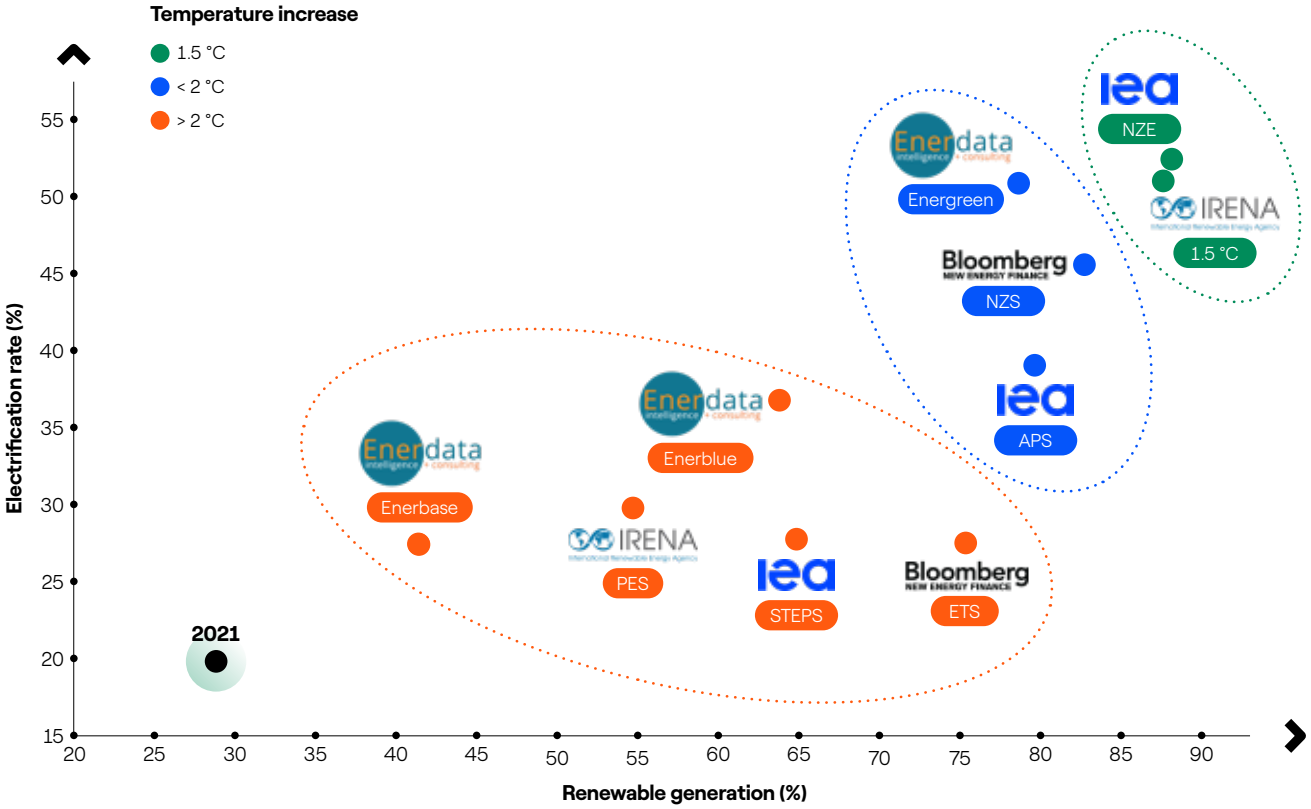
   Global energy scenarios are typically grouped by family based on the degree of climate ambition, as follows:

   - *Business-as-usual/Stated-policies scenarios*: these provide a conservative benchmark for the future and represent how the energy system would evolve in the absence of additional climate and energy policies. These scenarios currently do not manage to achieve the goals of the Paris Agreement.
   - *Paris-Aligned scenarios*: these include a goal of limiting the increase in average global temperatures well below 2 °C above pre-industrial levels. In order to achieve this goal, this family of scenarios consider new, more ambitious policies for the decarbonization, the electrification of end uses and for the development of renewables.
   - *Paris-Ambitious scenarios*: global energy scenarios that take a path towards net-zero emissions by 2050, in line with the most ambitious goals of the Paris Agreement, i.e., to keep the average increase in global temperatures to 1.5 °C, albeit with various probability intervals.

   This classification of scenario families is, among other things, the outcome of work developed over the years and enhanced in 2021 through collaboration with a working group coordinated by the World Business Council for Sustainable Development (WBCSD), in which Enel participated. The project sought to develop a common and transparent approach to the use of public scenarios by enterprises operating in the energy system and to support them in using the scenarios to assess the risks and opportunities associated with climate developments in a manner consistent with the TCFD. The final result of this effort, completed in August 2022, consists of: (i) a report which provides the context for the energy scenarios and describes the shared definition of the scenario families and (ii) an online platform which brings together the variables of multiple scenarios.
2. **Data collection, data analysis and identification of scenario and energy transition drivers.** Data collection involves all the main metrics of the energy system, including, for example: primary energy, total and sectoral

final energy, electrical capacity (total and by technology), electricity generation (total and by technology), hydrogen production with breakdown by "color", electric vehicle fleet, etc. The data analysis gave each provider an understanding of the key elements of the *Business-as-usual/Stated-policies* scenarios and led to the identification of the drivers for accelerating the energy transition in the *Paris-Aligned* and *Paris-Ambitious* scenarios. By way of example, comparing the electrification rate and share of renewables in the various scenarios, the full consensus among energy analysts is clearly that the main drivers for achieving more ambitious climate objectives are electrifying final uses and increasing renewable generation in both the medium and long term. In particular, in the scenarios that trend towards containing the increase in the global average temperature to 1.5 °C, the electrification rate of consumption rises to over 50% by 2050, compared with 20% in 2021.[15] In addition, the share of renewable generation will have to reach at least 88% of the global electricity mix, compared with 28% in 2021.[16]

Global transitions scenarios @ 2050



Source: internal elaborations based on IEA (2022), World Energy Outlook; BNEF (2022), New Energy Outlook; IRENA (2022), World Energy Transition Outlook; Enerdata (2022), EnerFuture.

(15) IEA, 2022, WEO: 52%; IRENA, 2022. World Energy Transition Outlook: 51%.
(16) IEA, 2022. WEO, Net Zero Scenario: 52%; IRENA, 2022. World Energy Transition Outlook: 51%.

3. **Preparation of a summary of the data analysis and digital representation of the main metrics of the external scenarios, to provide support for management in the decision-making process for the Group's scenario framework.** The results of the activities discussed above are summarized in a document to support top management. Within the document, the scenarios of the external providers analyzed are grouped according to the scenario families described above, with identification for each family of the areas of agreement and divergence among the providers. Together with the digital tools developed internally to visualize the different scenarios, this document provides an information base to support top management in selecting the scenario framework.

One climate scenario, multiple energy transition scenarios

An energy transition scenario represents how the contribution of the various energy sources might evolve within a specific economic, social, regulatory and policy context and based on the technology options available. Social and macroeconomic assumptions determine the service demand, while the regulatory, policy and cost restrictions define the optimal mix of technologies needed to meet that demand. Each scenario is associated with a trend in greenhouse gas emissions.
A given long-term result in terms of the global average temperature increase may, on the other hand, be associated with various trends in greenhouse gas emissions and, therefore, to more than one transition scenario. Each energy scenario is associated, more or less strictly, to a specific climate trajectory defined by the Intergovernmental Panel on Climate Change (IPCC) and, consequently, to a range of global average temperature increase estimated to a certain degree of likelihood over a given period of time.[17] In turn, various increases in global temperatures by 2100 (and, therefore, various future scenarios of global warming) also change the trends in the other climate variables (e.g., rainfall, wind, etc.), causing changes in the intensity and frequency of the physical manifestations (e.g., heat waves, extreme rainfall, etc.). It should be underscored that these changes affect the entire globe, but the physical manifestations vary at the regional and local level.

That said, a global energy scenario is said to be Paris aligned when the overall result, in terms of trends in greenhouse gas emissions, may be associated with an average increase in global temperatures that is in line with the Paris Agreement objective of "holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C".[18]

Enel's long-term scenarios

Enel develops scenarios within an overall framework that ensures consistency between the energy transition scenario and the climate physical scenario:

- the "energy transition scenario" describes how energy production and generation evolve in the various sectors in a specific economic, social, policy and regulatory context;
- the issues connected with future trends in climate variables (in terms of acute and chronic manifestations) define the "physical scenario".

(17) For example, the scenario SSP1-2.6 (which includes the assumptions of the scenario SSP1 and the RCP 2.6 climate forecasts) considers a slower reduction in emissions, reaching net-zero emissions in the second half of the century, and is associated with a best-estimate average increase in global temperatures of 1.8 °C by 2018-2100, with a very likely range of 1.3 °C-2.4 °C.
(18) Paris Agreement, published in the *Official Journal of the European Union*. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22016A1019(01)&from=EN.

	Granularity & extended geographical coverage	Forward-looking metrics & KPIs	Automation and advanced analytical techniques	Integration of interdependencies	Open databases available to stakeholders
Macroeconomics and finance	**More than 150 countries monitored** for analysis of country risk and macroeconomic-financial scenarios	Monitoring of market expectations and **sensitivity analysis** of new social and technology paradigms	**General equilibrium models** and **machine-learning** techniques to manage **big data**	Incorporation of **social-environmental effects** in analysis to quantify effects of actions taken (e.g., TSI)	Periodic updating on **interactive platforms** with optimization for **graphical analysis**
Energy	**Broad coverage** of market and geographical indicators and **starting-point focus areas**	Monitoring of trends in electricity demand and price volatility. With analysis of **regulatory and transition impacts**	Econometric models and **neural networks** to produce forecasts	Impact analysis with **exogenous variables** (macroeconomic and climate)	Development of **integrated database** updated automatically
Climate	Climate scenario data available with **worldwide high-resolution coverage**	**Standard and/or *ad hoc* metrics** to assess **developments** in **future scenarios**	**Analytics** and **machine learning** to manage **georeferenced big data** in **downloadable cloud environments**	Integration of **exposure** data (e.g., demographic density, asset location/value)	**Platforms for sharing, visualizing and downloading** results
Integrated System Models	Main countries of interest for Enel. Developed to manage **integrated business models**	Development of scenarios by economic sector to identify trends in **electrification and efficiency**	Use of system models to optimize the use of technologies to **minimize emissions and costs**	Integrated management of both **energy supply** and **demand**	**Technology database** for each service: types of electric vehicles, heat pumps, etc.

The acquisition and processing of the large volume of data and information needed to define the scenarios, and the identification of the methodologies and metrics necessary to interpret phenomena that are complex and – in the case of climate scenarios – at very high resolution, require a continuous dialogue with both external and Enel internal sources. In order to evaluate the effects of physical and transitional phenomena on the energy system, for example, the Group makes use of models that, for each country analyzed, describe the energy system in terms of specific technological, socio-economic, policy and regulatory aspects.

In 2022, in order to facilitate cross-collaboration at the global and local level in the definition of physical and energy transition scenarios – ensuring constant alignment with the requirements of the TCFD – two internal cross-function communities dedicated to the physical and transition scenarios were established. Their main purpose was to discuss and define context analyses, benchmarks and hypotheses concerning long-term scenarios, identifying the relevant impact categories and developing methods for their evaluation to support the determination of strategic and industrial actions.

The adoption of these scenarios and their integration into corporate processes take account of the guidelines of the TCFD and enable the assessment of the risks and opportunities connected with climate change. The process that translates scenario phenomena into useful information for industrial and strategic decisions can be summarized in five steps:



1
Identification of trends and factors relevant to the business (e.g., electrification of consumption, heat waves, etc.)

2
Development of **link** functions connecting climate/transition scenarios and operating variables

3
Identification of **risks** and **opportunities**

4
Calculation of impacts on business (e.g., change in performance, losses, capex)

5
Strategic actions: definition and implementation (e.g., capital allocation, resilience plans)

Enel's energy transition scenarios

An energy transition scenario describes how energy production and consumption evolve in a specific geopolitical, macroeconomic and regulatory and competitive context consistent with the available technological options. This corresponds to a certain trend in greenhouse gas (GHG) emissions and a climate scenario and, therefore, a certain increase in temperature by the end of the century compared with pre-industrial levels. It should be noted that the resulting scenario is not deterministic with respect to carbon dioxide emissions. For each climate scenario, the IPCC also always provides both the median value for global warming in 2100 and the very likely range (i.e., the interval covered by the fifth to ninety-fifth percentiles).

The main assumptions considered in developing the Enel energy transition scenarios concern:

- the local policies and regulatory measures to combat climate change, enhance energy security and foster sustainable development, such as measures to reduce carbon dioxide emissions and the consumption of fossil fuels, to increase energy efficiency, the electrification of consumption and the share of renewable generation;
- the global macroeconomic and energy context (for example, gross domestic product, population and commodity prices), also considering international benchmarks;
- the evolution of energy production, conversion and consumption technologies, both in terms of technical operating parameters and costs.

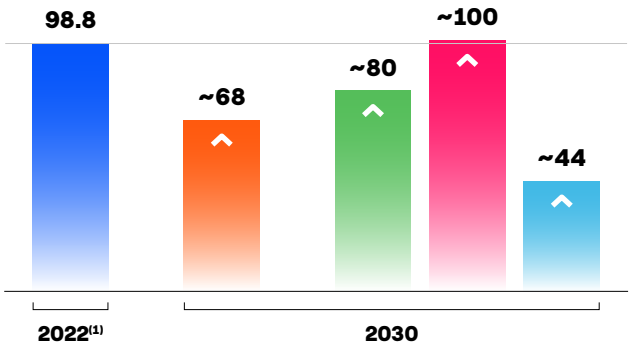
In 2022, Enel revised the framework of medium- and long-term energy transition scenarios, defining scenario narratives on the basis of three main scenario "signposts", i.e., the main drivers of uncertainty with respect to macroeconomic and energy developments: the achievement of the Paris objectives, the evolution of geopolitical tensions connected with the Russia-Ukraine conflict and the management of the COVID pandemic.
The benchmark scenario for the Group's long-term planning, called the *Paris* scenario, is therefore:

- a *Paris-Aligned* scenario calling for achievement of the objectives of the Paris Agreement, i.e., keeping the increase in the global average temperature below 2 °C compared with pre-industrial levels, with a level of climate ambition that is significantly higher than business as usual, but without necessarily assuming the global achievement of the Net Zero 2050 target, given the current global level of cumulative ambition;
- a scenario which assumes that the geopolitical tensions boosted by the Russia-Ukraine conflict will have lasting effects, resulting in an acceleration of electrification and renewables use, as well as greater use of LNG, to increase the security of supply in the new context, especially at the European level;
- characterized by low or endemic COVID, with high vaccination rates and no need for large-scale lockdowns.

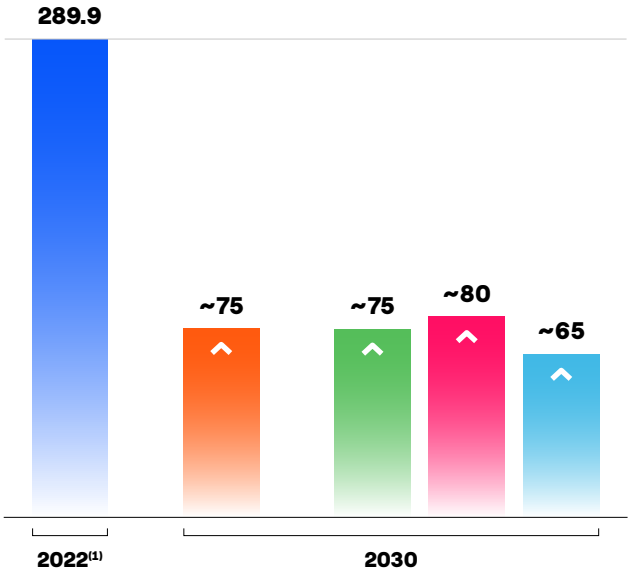
The climate ambition that characterizes the benchmark scenario assumes growing electrification of consumption and further development of renewables, thanks in part to the policies adopted to enhance energy security (e.g., REPowerEU and the Inflation Reduction Act in the United States). In this scenario, governments, businesses, organizations and the public around the world participate effectively in the common effort to mitigate greenhouse gas emissions.
As for the possibility of assuming achievement of the more challenging Paris Agreement objective, i.e., to stabilize global average temperatures to within +1.5 °C, as a benchmark for long-term planning, there remain evident uncertainties that a number of countries could remain on business-as-usual trajectories, thereby slowing the decarbonization process towards net-zero emissions by 2050.
Given this premise for the external context, the Enel Group operates a business model and has defined strategic guidelines that are in line with the maximum ambition of the Paris Agreement objectives, i.e., they are consistent with an increase of 1.5 °C in the average global temperature by 2100, as certified by the Science Based Target initiative (SBTi). Enel has set a goal for 2040 to achieve zero direct emissions (Scope 1), with totally renewable electricity generation and zero emissions connected with retail energy sales (Scope 3).

The assumptions for trends in commodities prices feeding the benchmark scenario are consistent with the external scenarios that achieve the objectives of the Paris Agreement. More specifically, we assume sustained growth in the price of CO_2 through 2030, caused by a gradual reduction in the supply of permits as demand increases, as well as a significant decrease in the price of coal due to declining demand. As for gas, we expect pricing pressures to lessen in the coming years as we see a realignment between global supply and demand. Finally, we are forecasting a gradual stabilization in oil prices, with demand expected to peak by around 2030.

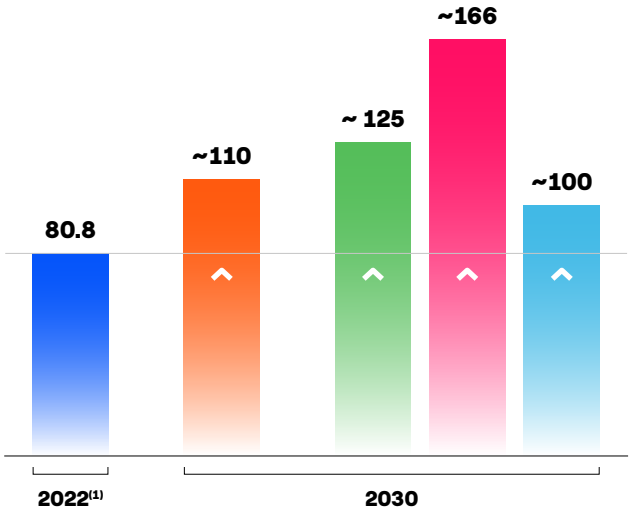
Brent ($/barrel)



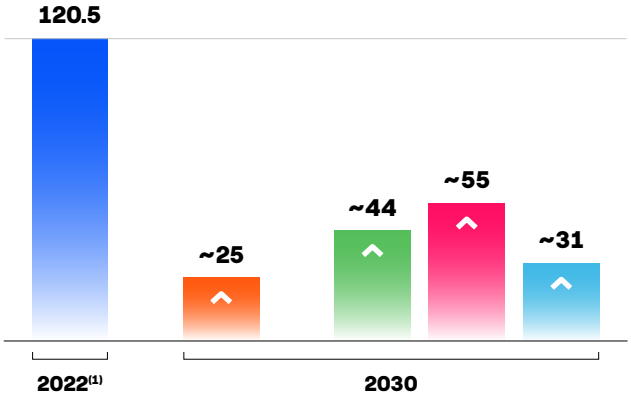
API2 ($/ton)



CO_2 EU - ETS (€/ton)



TTF (€/MWh)



Enel scenario | Average benchmark(2) | Max benchmark | Min benchmark

(1) Actual.
(2) Sources: IEA – Sustainable Development Scenario and Net Zero Scenario; BNEF, IHS green case scenario; Enerdata green scenario. N.B. The scenarios used as benchmarks have been published at various points throughout the year and may not be up to date with the latest market trends.

Alternative scenarios to the benchmark framework have been defined on the basis of the degree of climate ambition assumed at the global and local level. These comprise: a *Slower Transition* scenario, characterized by a slower transition speed, and an *Accelerated Transition* scenario, with greater ambition compared with the benchmark scenario, in particular as regards some certain characteristic features of the energy transition, such as the rate of electrification of final consumption, the penetration of green hydrogen and attitudes of final customers towards more sustainable consumption models (e.g., a modal shift in views of public/private transport). These scenarios are used for determining sensitivities in assessing investments, strategic stress tests, risk assessment and identification of business opportunities.

Local transition scenarios

Enel's benchmark scenario, the *Paris* scenario, covers all the geographical areas in which Enel operates and thus has a climate ambition that is in line with the objectives of the Paris Agreement, supported by a growing electrification of energy consumption and the development of renewables capacity.
The scenarios have been defined at the local level using two complementary approaches:

- in the main countries in which we operate, a "bottom up" approach has been employed, using models fundamental to simulating the long-term equilibrium of the entire energy system, imposing an explicit limit on the trend in CO_2 emissions for the country. The values of the scenario variables of relevance to the activities of the Group (including electricity demand, electrification rates, renewable and distributed-generation capacity, the number of electric vehicles, and the production of green hydrogen) were then calculated using dedicated models over a time horizon to 2050, with a view to minimizing costs for the system, imposing a constraint on CO_2 emissions;
- for the rest of the countries involved, the main scenario variables were determined by applying statistical analysis to internal and consensus data in relation to external scenarios aligned with the objectives of the Paris Agreement as provided by national and international accredited bodies.

The definition of internal transition scenarios was prompted by the need for greater modeling flexibility and greater geographical and operational granularity for the main variables that impact Enel's different businesses compared with the scenarios that the main external providers can provide. The latter are typically produced and published at a global or regional level, with some exceptions for particularly large countries, which only rarely correspond to the countries in which the Group is present or has an interest.

Europe, focus on Italy and Spain

Under the *Paris* scenario, European countries show a downward trend in emissions consistent with the European "Fit for 55" package thanks to a greater electrification of energy consumption supported by an increasing contribution of renewables in the energy mix.

Italy

In Italy, the *Paris* scenario, which is more ambitious than the current national plan (National Integrated Energy and Climate Plan 2020), calls for an increase in electrification to 30% by 2030 (as against 22% in 2021), with renewable energy generation meeting more than 70% of electricity demand (compared with about 55% under the Italian national plan). The *Slower Transition* scenario is constructed on the assumption that we remain substantially anchored to the provisions of the current National Integrated Energy and Climate Plan in terms of the ambition to reduce emissions, a less optimistic macroeconomic scenario than the *Paris* scenario, especially in the very first few years, and greater pressures of prices and supply of fossil fuels and commodities.
The *Accelerated Transition* scenario retains the ambition of the *Paris* scenario with regard to decarbonization while assuming a more effective review of authorization procedures for renewable plants, which produces a slight increase in the trend in installations, a more rapid reduction in the cost of green hydrogen production technologies and the consequent greater penetration of that source in hard-to-abate sectors, in place of blue and gray hydrogen (hydrogen produced from gas, respectively with and without the use of CCS technologies). In addition, the public devotes greater attention to climate change, which fosters greater "climate awareness" in our personal behavior, such as the modal shift in the transport sector (increased use of low-emission transport, e.g., public transport).

Spain

For Spain, the ambition level defined under the national plan is in line with achievement of the Paris Agreement objectives. As such, the *Paris* scenario calls for an electrification rate of 32% by 2030 (compared with 24% in 2021) and the development of renewables capacity that would bring the percentage of electricity demand met by renewable energy to over 80% (compared with 53% in 2021). By contrast, the alternative *Slower Transition* scenario assumes a delay in the implementation of policies for greater penetration of renewables and electric technologies, especially as regards private cars. The *Accelerated Transition* scenario retains the ambition of the *Paris* scenario, providing for more rapid implementation of authorization procedures for renewables. In addition, the scenario assumes greater incentives for the electrification of buildings and full implementation of the national green hydrogen strategy, which would enable the acceleration of the construction of renewable plants coupled with electrolyzers before 2030.

Latin America, focus on Brazil and Chile

Brazil

For Brazil, the *Paris* scenario, which is more ambitious than the current national plan (*Plano Decenal de Expansão de Energia 2031*, 2022) in terms of emissions reduction, would see an increase in electrification to 25% in 2030 (compared with 22% in 2021), with renewable generation meeting more than 88% of electricity demand (compared with the 82% envisaged in the national plan).

The *Slower Transition* scenario is constructed on the basis of an assumption that emissions will grow in line with the trend in the current national plan, with hydro generation expanding less than new thermal capacity (gas), and a less optimistic macroeconomic scenario compared with the *Paris* scenario, especially in the very first years.

The *Accelerated Transition* scenario goes beyond the ambition of the *Paris* scenario as regards decarbonization, assuming an acceleration in the definition of the regulatory framework for the construction of offshore wind farms, with greater exploitation of the potential of this technology, a more substantial increase in the penetration of distributed solar generation and greater development of green hydrogen production technologies.

Chile

As far as Chile is concerned, the *Paris* scenario is consistent with the Net Zero scenario defined in the government's PELP document (*Planificación Energética a Largo Plazo*) in terms of emissions reductions, and includes ambitious targets relating to the production and export of green hydrogen. Similar to the government scenario, it calls for the closure of all coal-fired power plants by 2035 and an increase in the CO_2 tax, achieving high levels of electrification of transport through a ban on the sale of conventional vehicles by 2040 and mandatory 100% electrification of the city bus fleet from 2040.

The *Slower Transition* scenario takes a more measured approach, focusing on the application of current measures and policies, which are less ambitious than those included in the *Paris* scenario.

The *Accelerated Transition* scenario achieves net-zero emissions by 2050 and, compared with the *Paris* scenario, envisages an acceleration of the electrification of all sectors of the economy, including transport, bringing forward the ban on the sale of conventional vehicles to 2035, setting more ambitious goals for the export of green hydrogen, requiring that 100% of the electricity generation mix be renewable by 2050, phasing out coal by 2030 and raising taxes on CO_2 emissions further.

Why is electrification a key lever of energy security, sustainability and affordability? The Italian case

The electrification of consumption coupled with renewable energy ("clean electrification") can generate primary energy savings of up to 70% compared with fossil alternatives, with clear benefits in terms of safety and energy spending, all while making the system more sustainable.

From the standpoint of the need to increase energy security and independence, Italy currently meets only 22.5% of its total energy requirements with national resources. The *Paris-Aligned* scenarios developed internally demonstrate that, by accelerating policies favorable to "clean electrification" in accordance with the climate objectives set out in Europe's "Fit for 55" package, it is possible to raise the energy independence index from its current level of 22.5% to about 40% in just eight years, with that rising to over 80% by 2050.

Reducing the need for primary energy by switching from conventional and fossil fuel-based technologies to electric technologies is key to achieving carbon neutrality goals. Moreover, given its greater efficiency, electricity is also cheaper for consumers: every million electric cars on the market would generate a reduction of an average of 8 Mtoe of petrol or diesel fuel and €400 million a year in energy costs for end users. Replacing 1 million gas boilers with electric heat pumps translates into savings of some 1 bcm of gas consumption, with total annual savings of €240 million for end users.[19]

(19) Calculated using the efficiencies indicated above and the average values for 2021 reported by Eurostat for retail gas and electricity prices, respectively equal to €0.0854/MWh and €0.231/MWh.
https://ec.europa.eu/eurostat/databrowser/view/nrg_pc_202/default/table?lang=en.
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The physical climate scenario

Within the framework delineated above, each scenario narrative has been developed so as to ensure consistency between the energy transition scenarios and the climate scenarios.
Under the scenarios, the role of climate change is always the most important and generates effects both in terms of transitioning the economy towards net-zero emissions and in terms of physical impacts, which may be:

- acute phenomena, namely short-lived but intense phenomena, such as flooding, hurricanes etc. with potential impacts on assets (e.g., physical losses and business interruptions);
- chronic phenomena related to structural changes in the climate, such as the rising trend in temperatures, rising sea levels etc., which may cause persistent changes in the output of generation plants and in electricity consumption profiles in the residential and commercial sectors.

The projected future behavior of these phenomena is analyzed by selecting the best data available from the output data of climate models at different resolution levels and historical data.

The Group has selected three of the global climate pathways developed by the Intergovernmental Panel on Climate Change (IPCC), which are in line with those of the IPCC's sixth Assessment Report (AR6). These scenarios are associated with emission patterns linked to a level of the Representative Concentration Pathway, each of which is connected to one of the five scenarios defined by the scientific community as Shared Socioeconomic Pathways (SSPs). The SSP scenarios include general assumptions concerning population, urbanization, etc. The three physical scenarios analyzed by the Group are as follows:

- SSP1-RCP 2.6: compatible with a range of global warming below 2 °C from pre-industrial levels (1850-1900) by 2100 (the IPCC forecasts an average of about +1.8 °C from 1850-1900). In the analyses that consider both physical and transition variables, the Group associates the SSP1-RCP 2.6 scenario with the *Paris* and *Accelerated Transition* scenarios.

- SSP2-RCP 4.5: compatible with an intermediate scenario that calls for an average temperature increase of about 2.7 °C by 2100 from pre-industrial levels. The RCP 4.5 scenario is the one that is most representative of the world's current climate and political landscape and correlated transition assumptions. This scenario forecasts global warming in line with the estimates of temperature increases that consider current policy around the world.[20] In the analyses that consider both physical and transition variables, the Group associates the SSP2-RCP 4.5 scenario with the *Slower Transition* scenario.

- SSP5-RCP 8.5: compatible with a scenario where no particular measures to combat climate change are implemented. This scenario forecasts an increase in global temperatures of about 4.4 °C from pre-industrial levels by 2100.

The Group considers RCP 8.5 to be a worst-case climate scenario used to assess the effects of physical phenomena in a context of particularly significant climate change, but it is currently deemed not very likely. This RCP 2.6 scenario is used both to assess physical phenomena and perform analyses that consider an energy transition consistent with most ambitious mitigation objectives.

The analyses carried out for the physical scenarios considered both chronic and acute phenomena. For the description of specific, complex events, the Group considers data and analyses of public bodies, universities, and private-sector entities.

The climate scenarios are global and must be analyzed at the local level in order to determine their impact in the areas of relevance to the Group. Among active partnerships, collaboration is under way with the Earth Sciences Department of the International Centre for Theoretical Physics (ICTP) in Trieste. As part of this collaboration, the ICTP provides projections for the major climate variables with a grid resolution of varying from about 12 km to 100 km and a forecast horizon running from 2020 to 2050. The main variables are temperature, rain and snowfall, and solar radiation. Compared with past analyses, current studies are based on the use of multiple regional climate models: the one of the ICTP along with five other simulations, which have been selected as being representative of the set of climate models currently available in the literature. The output of this set is representative of the average of the various climate models. This technique is usually used in the scientific community to obtain a more robust and bias-free analysis, mediating the different assumptions that could characterize the individual model.
For certain specific climatic variables, such as wind gusts, the Group also uses other providers specialized in that particular phenomenon.
In this phase of the study, future projections have been analyzed for Italy, Spain and all countries of interest to the Group in South America, Central America and North America, obtaining – thanks to the use of the set of models – a

(20) Climate Action Tracker Thermometer, estimates of global heating at 2100 considering existing policies and actions, and 2030 targets only (November 2022 update).

more highly defined representation of the physical scenario. Similarly, the Group is also analyzing data related to climate projections for Africa, Southern Asia and Southeast Asia, thereby covering all of the main geographical areas in which the Group is present at the Group level.
The ICTP is also providing science support to interpret all other climate data we gather. We are using climate scenarios for the countries of interest to the Group to allow for a uniform assessment of climate risk.
Some of these phenomena entail high levels of complexity, as they depend not only on climate trends but also on the specific characteristics of the territory and require further modeling to obtain a high-resolution representation. For this reason, in addition to the climate scenarios provided by ICTP, the Group also uses natural hazard maps. This tool makes it possible to obtain, with a high spatial resolution, recurrence intervals for a series of events, such as storms, hurricanes and floods. As described in the section "Risks and strategic opportunities associated with climate change", these maps are widely used within the Group, which already uses historical data to optimize insurance strategies. In addition, work is under way to be able to take advantage of this information developed in accordance with climate scenario projections.
Finally, the Group has acquired the tools and capabilities needed to autonomously gather and analyze the raw output published by the scientific community, so as to have a global, high-level view of the long-term trends in the climate variables of interest to us. These sources include the output from the climate and regional models CMIP6[21] and CORDEX.[22] CMIP6 is the sixth assessment of the Coupled Model Intercomparison Project (CMIP), which is a project of the World Climate Research Programme (WCRP) and of the Working Group of Coupled Modelling (WGCM), which provides raw climate data from global climate models. These are used to assess standard global measurements at a resolution of about 100x100 km. The Coordinated Regional Climate Downscaling Experiment (CORDEX) also falls within the scope of the WCRP and generates regional climate forecasts at a higher resolution.

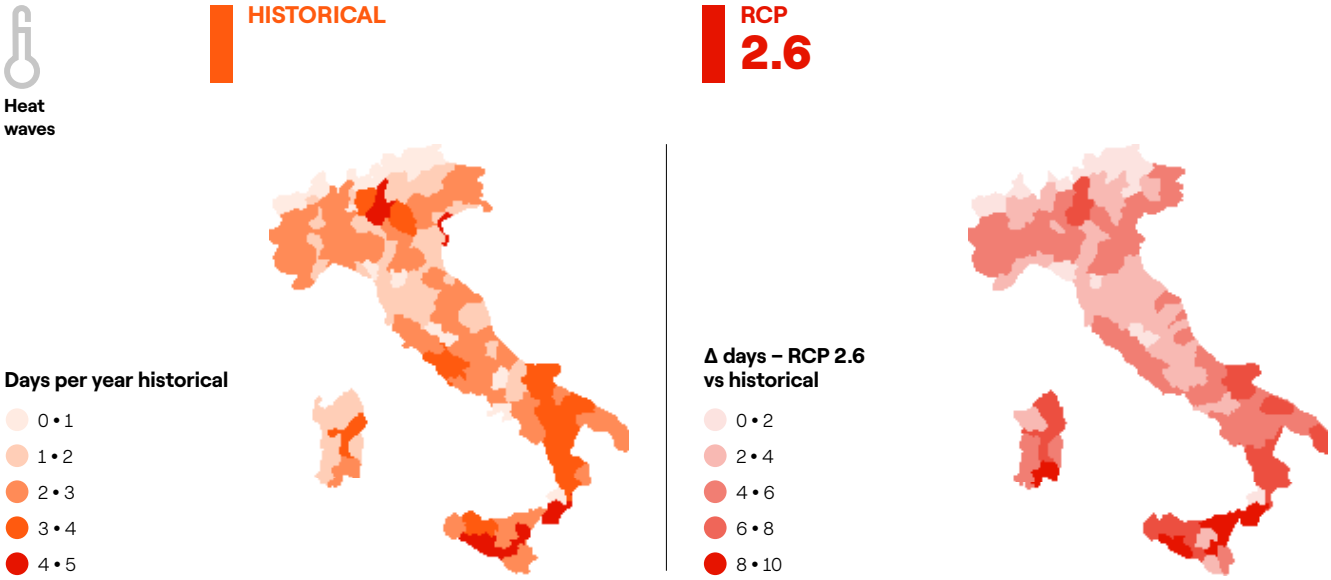
Physical scenario analysis – Integration of climate scenarios within the Open Country Risk model

In addition to using high-resolution data to analyze the impact of physical phenomena, the Group has also designed a higher-level analysis framework that enables us to obtain a country-level assessment of trends in certain global climate hazards in a manner that is consistent across all regions. More specifically, we have adopted a modular approach that will enable us to progressively upgrade our analyses by including new physical phenomena and refining both the data and our methodologies. At present, four climate phenomena are included: two related to extreme temperatures; one related to intense rainfall; and one related to drought. The possibility of introducing other phenomena such as extreme wind and sea level rise is also being evaluated. The phenomena are assigned a numerical index based on the global distribution to a resolution of about 100x100 km and are summarized in a composite index. This has enabled us to include a dimension related to climate change in the Open Country Risk model. This enables the tool to include both the aspects considered by the Country Risk models and those aspects related to the physical risks considered in the model as a cause of environmental and economic stress in a given country. The Open Country Risk model is described in greater detail in the section "Macroeconomic and geopolitical trends".

(21) https://www.wcrp-climate.org/wgcm-cmip/wgcm-cmip6.
(22) https://cordex.org/.

Physical scenario analysis – Italy

Acute phenomena: a selection of acute phenomena in Italy were analyzed, including fire risk, extreme rainfall and heat waves. Of these, the first two were characterized using standard metrics widely used in the literature. For heat waves, the standard metrics were supplemented by an *ad hoc* metric for Enel Grids, correlating extreme past phenomena that could potentially damage underground grids.[23] The results in the RCP 2.6 scenario are shown in the figure. We see the average number of days a year experiencing a heat wave tending to increase compared with historical data, with more intense heat waves in the areas that already suffer most from the phenomenon today. The situation is also worsening in the RCP 4.5 and RCP 8.5 scenarios.



Days per year by province experiencing a heat wave in the 1990-2020 period and average change in number of days in the RCP 2.6 scenario (2030-2050) with respect to historical figure indicated on the left.

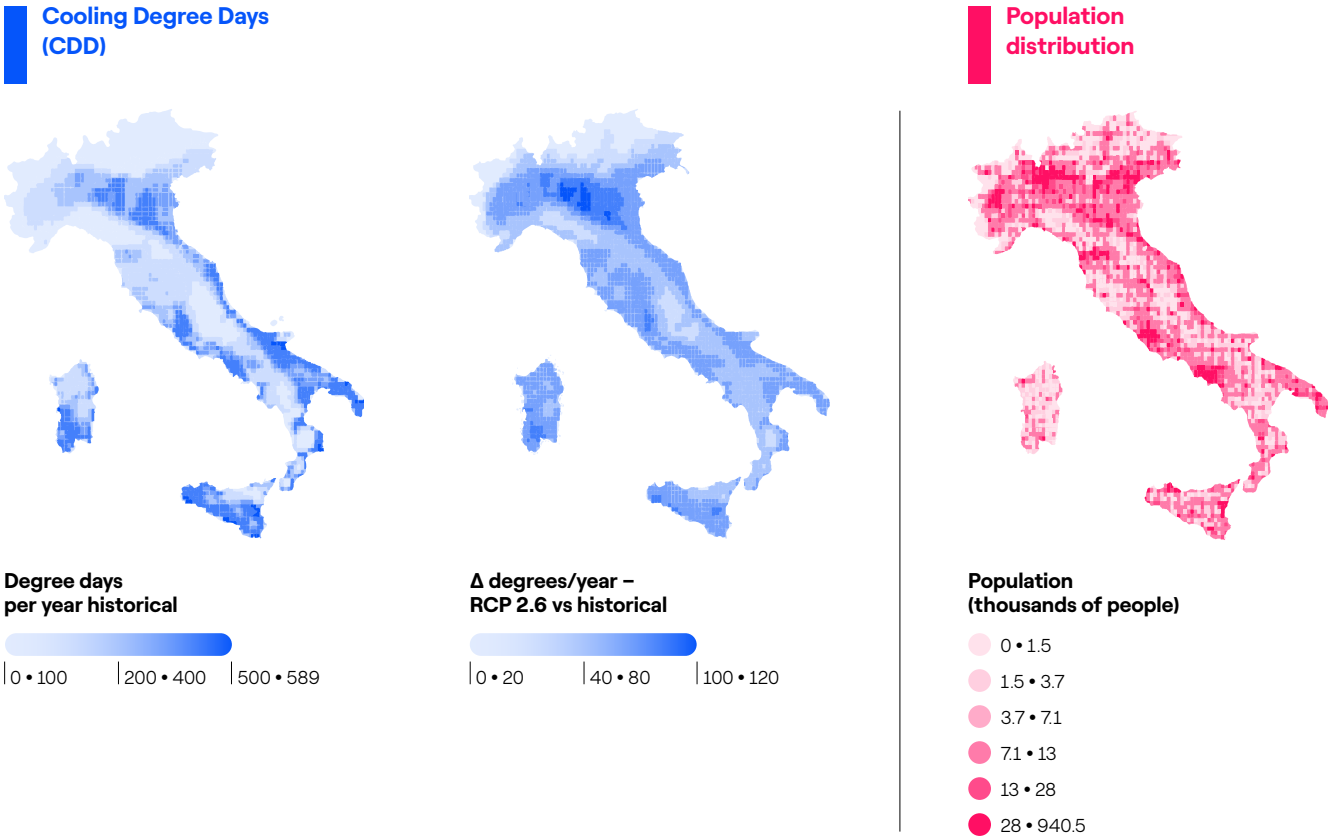
Extreme rainfall was assessed by calculating changes in daily rainfall above the ninety-fifth percentile, calculated as average millimeters per year in the periods being analyzed. In all the scenarios, in 2030-2050 extreme rain is forecast to increase, accompanied by a slight decrease in the annual total of daily rainfall excluding extreme events. The increase is the greatest in the North-east and along the Tyrrhenian coast.

As seen in previous analyses published by the Group, heat waves and fire risk will change significantly, both increasing under the various climate scenarios considered. Fire risk is described by the Fire Weather Index (FWI), an indicator widely used internationally that takes account of temperature, humidity, rainfall, and wind in order to calculate an estimate of fire risk. Figures provided by the ICTP may be used to describe the trend in fire risk in order to support the business in properly managing this risk. Studies that examine the changes in the 2030-2050 forecasts compared with 1990-2020 show that, under all scenarios, there is an increase in the number of high-risk days (index > 45) in summer. This change mainly impacts the islands and southern Italy, where the increase in high-risk days goes from about +6 to +8 days compared with historical values.

Chronic phenomena: chronic temperature changes can be analyzed to obtain information about the potential effects on the cooling and heating demand of local energy systems. As was done in 2020, the thermal requirement was measured using Heating Degree Days (HDDs), i.e., the sum, for all days of the year with a $T_{average} \leq 15$ °C, of the differences between the internal temperature (with $T_{internal}$ assumed to be 18 °C) and the average temperature, and Cooling Degree Days (CDDs), i.e., the sum, for all days of the year with $T_{average} \geq 24$ °C, of the differences between the $T_{average}$ and the $T_{internal}$ (assumed to be 21 °C), respectively, for heating and cooling requirements. The country averages have been calculated as an average over the country, weighting each geographical node by population thanks

(23) The average number of days per year experiencing the following conditions were calculated by province: at least five consecutive days with a minimum temperature above the ninety-fifth percentile of the historical distribution (1990-2020) and at least 18 °C. These five days must also have no rain and at least one must have a maximum temperature above the ninety-fifth percentile of the historical distribution (1990-2020). This metric was calculated for all of Italy at the original resolution of the climate data (~12 km x 12 km). The high-resolution data were then aggregated at the provincial level, considering events persisting in the same period over multiple pixels within the same province as a single heat wave and taking the maximum amplitude as the duration by combining the different pixels.

to the use of the Shared Socioeconomic Pathways (SSPs) associated with each RCP scenario. The figure shows CDDs calculated for Italy at high resolution for the historical data and the average variation expected in the RCP 2.6 scenario. The distribution of the population used as a weight for the calculation at the national level is also shown.[24] In general, in 2030-2050 CDDs show a rising trend, always exceeding the historical data, with increases in all the various scenarios: RCP 2.6 (+~45%), RCP 4.5 (+~80%) and CPR 8.5 (+~110%). Conversely, HDDs declined, with a fall of 8% in the RCP 2.6 scenario, 12% in SPC 4.5 and 16% in SPC 8.5 compared with the period 2000-2020.



Cooling Degree Days (CDDs) in the 1990-2020 period and the expected change in the RCP 2.6 scenario. On the right, the figure shows the population distribution (1990-2020) for the same nodes of the climate models, indicating the more heavily populated areas, which have a greater weight in calculating the metric at the country level.

With regard to total rainfall, changes in this phenomenon in the areas of interest for the Group's hydroelectric power generation have been analyzed. This analysis, which compared the 2030-2050 forecast with 1990-2020, points to no significant change, with a generalized slightly downward trend in Central and Southern Italy under the RCP 2.6 scenario.

(24) Note that population density changes in the various SSPs, while population distribution by geographical area is virtually unchanged.

Italy 2022 – Extreme heat and drought

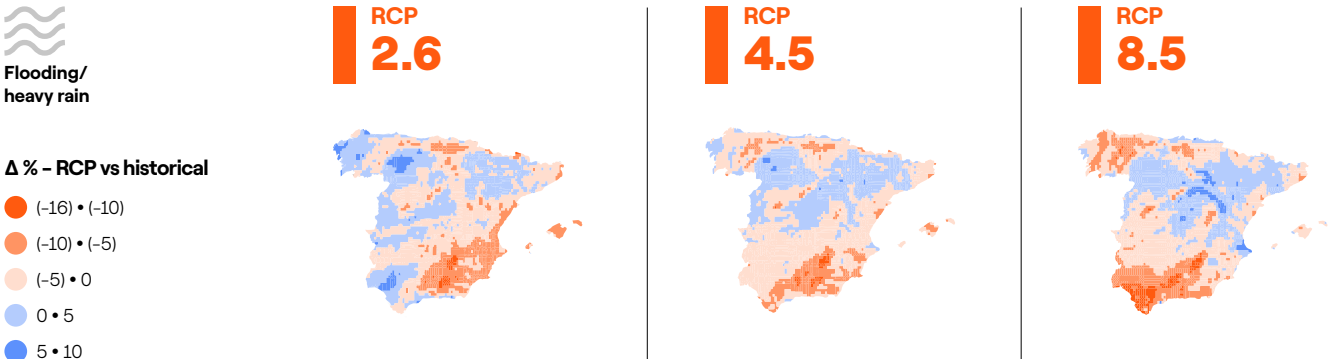
A study was conducted of the seasonal averages for temperature and precipitation to determine if and to what extent 2022 was an exceptionally dry and hot year compared with the historical average and how such a year is positioned within the climate change scenarios. The study can be divided into two phases:

1. a comparison of the seasonal temperature and precipitation averages for 2022 with the observed seasonal distributions of the years 1950-2022;[25]
2. a comparison of the 2022 seasonal temperature and precipitation averages with the seasonal distributions of the climate scenarios in the period 2030-2050.

The study found that 2022 was actually a unique year, with a winter precipitation around 1.3 mm/day lower than the seasonal average, followed by a spring that exceeded the average by 2.3 °C and a summer that exceeded the average by 3.4 °C. What we see is a year affected by prolonged drought followed by extreme heat. Among years with one season of rainfall below the fifth percentile and at least two seasons with temperatures at the extreme tail of the distribution (greater than the ninety-ninth percentile), 2022 stands alone in the historical distribution. We then looked for similar years in the distributions of the climate models (once it was ascertained that the historical distributions are comparable to those of the historical models). The probability of a year like 2022 occurring in the 2030-2050 period remains very low (2%) in the RCP 2.6 scenario, while it increases (12%) in RCP 8.5. This increase is mainly attributable to the rise in temperatures in Italy, for which the entire distribution shifts towards higher values, while the distribution of precipitation remains quite similar to historical patterns.

Physical scenario analysis – Spain

Acute phenomena: for Spain, the analysis first focused on acute rainfall, calculated as average annual millimeters of rain in the reference periods.[26] As can be seen in figure, which compares 2030-2050 with 1990-2020, this acute phenomenon will already undergo variations across most of the country in the RCP 2.6 scenario. In particular, intense rainfall will increase in the north, while it will decrease in the southeast. In the other scenarios, heavy rainfall will decrease throughout the south of the country (in RCP 8.5 this reduction also affects the northwest).

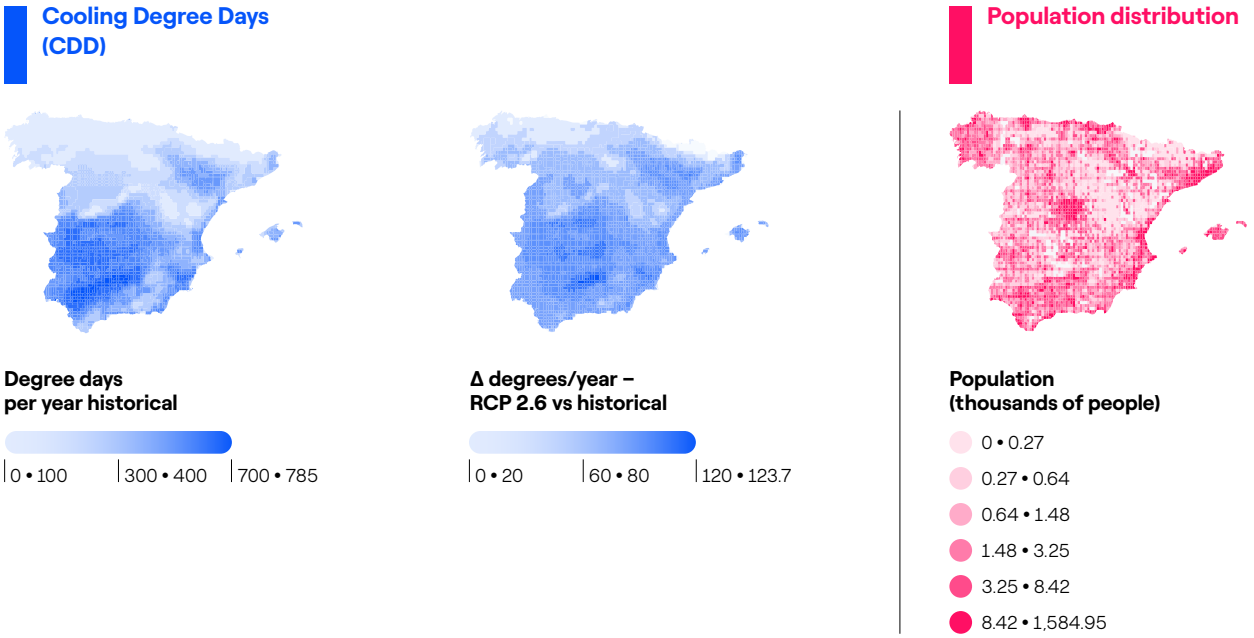


Percentage change in acute rainfall in the various RCPs (2030-2050) compared with historical values (1990-2020).

(25) The observed data used in the analysis were aggregated country-level ERA5 data from January 1950 to September 2022.
(26) Extreme rainfall is represented by the sum of daily rainfall above the ninety-fifth percentile of the historical distribution over a given period.

As regards fire risk, the area of Spain that will see the greatest increase in the number of days per year with FWI > 45 (i.e., extreme risk) compared with past trends is the central-south in all future scenarios. This increase is greater in the more extreme scenarios (RCP 8.5) than in the RCP 2.6 scenario.
As seen in previous analyses published by the Group, heat waves are expected to be more widespread geographically and more frequent in 2030-2050, particularly in the southern regions of the country.

Chronic phenomena: the analysis of heating and cooling needs has been refined and updated in the same manner as for Italy. For the period 2030-2050, compared with 1990-2020, we estimate a reduction in Heating Degree Days (HDDs) under all scenarios within a range of about -10% under RCP 2.6 to about -20% under RCP 8.5, with RCP 4.5 falling in the middle. The data also confirm the increase (+34%) in Cooling Degree Days (CDDs) under the RCP 2.6 scenario and increases of 61% and 87%, respectively, under the RCP 4.5 and RCP 8.5 scenarios.



Cooling Degree Days (CDDs) in the 1990-2020 period and the expected change in the RCP 2.6 scenario. On the right, the figure shows the population distribution (1990-2020) for the same nodes of the climate models, indicating the more heavily populated areas, which have a greater weight in calculating the metric at the country level.

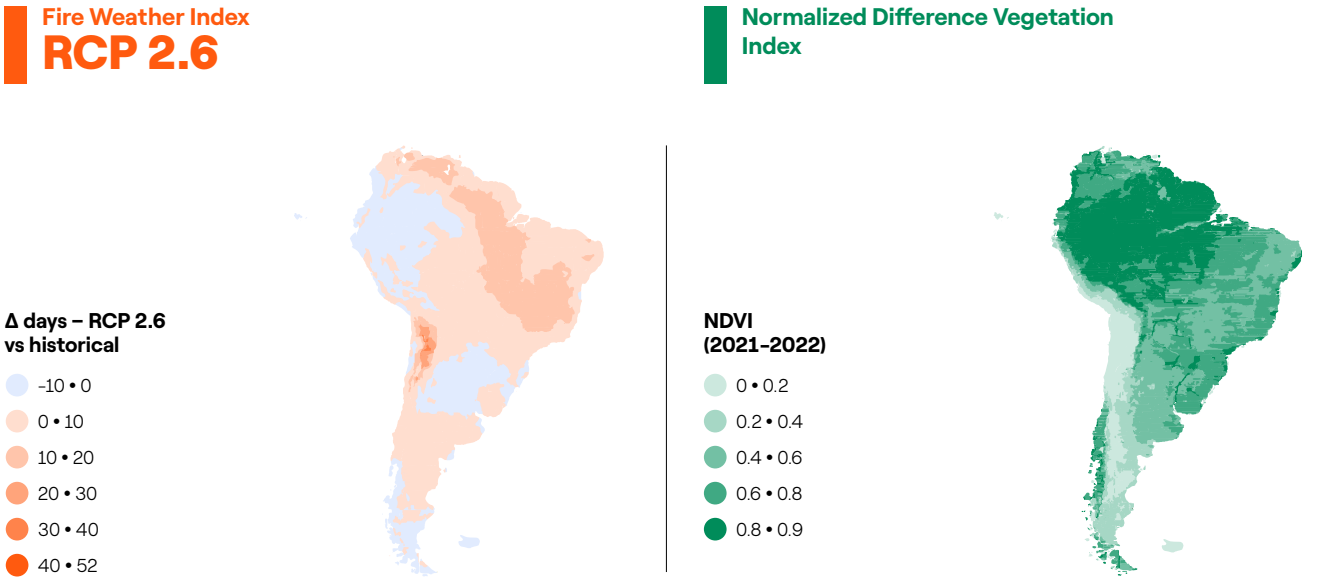
We have analyzed changes in total rainfall in the areas of interest for the Group's hydroelectric power generation. This analysis found that the figures do not change significantly when comparing the RCP 2.6 scenario (2030-2050) with the historical period (1990-2020), showing a slight generalized decline.

Physical scenario analysis – Latin America

Acute phenomena: fire risk, measured as the number of days per year with FWI > 45 (extreme risk), varies from area to area. As shown in the following figure on the left, a comparison between the RCP 2.6 scenario (2030-2050) and the historical period (1990-2020) shows the number of days at high fire risk increasing in most of Brazil and in the Atacama desert. In the remaining areas of South America, the risk remains unchanged or decreases slightly. It is interesting to note how fire risk increases primarily in areas with the lowest values for the current Normalized Difference Vegetation Index (NDVI) (as can be seen in the following figure on the right),[27] i.e., areas with little vegetation. An exception is represented by some areas of the Amazon, in central Brazil, where there is both a significant increase in the number of days at extreme fire risk and extensive veg-

(27) The map on the right in the figure is based on NASA data for the Normalized Difference Vegetation Index for the period June 2021 - June 2022. The NDVI quantifies vegetation by measuring the difference between near-infrared light (which the vegetation strongly reflects) and red light (which vegetation absorbs). This is a good indicator of vegetation growth and density. The more the NDVI increases, the more abundant and healthier the vegetation.

etation. Combining the fire risk index and vegetation data is important, as the latter can serve as fuel and increase the probability of a fire spreading.

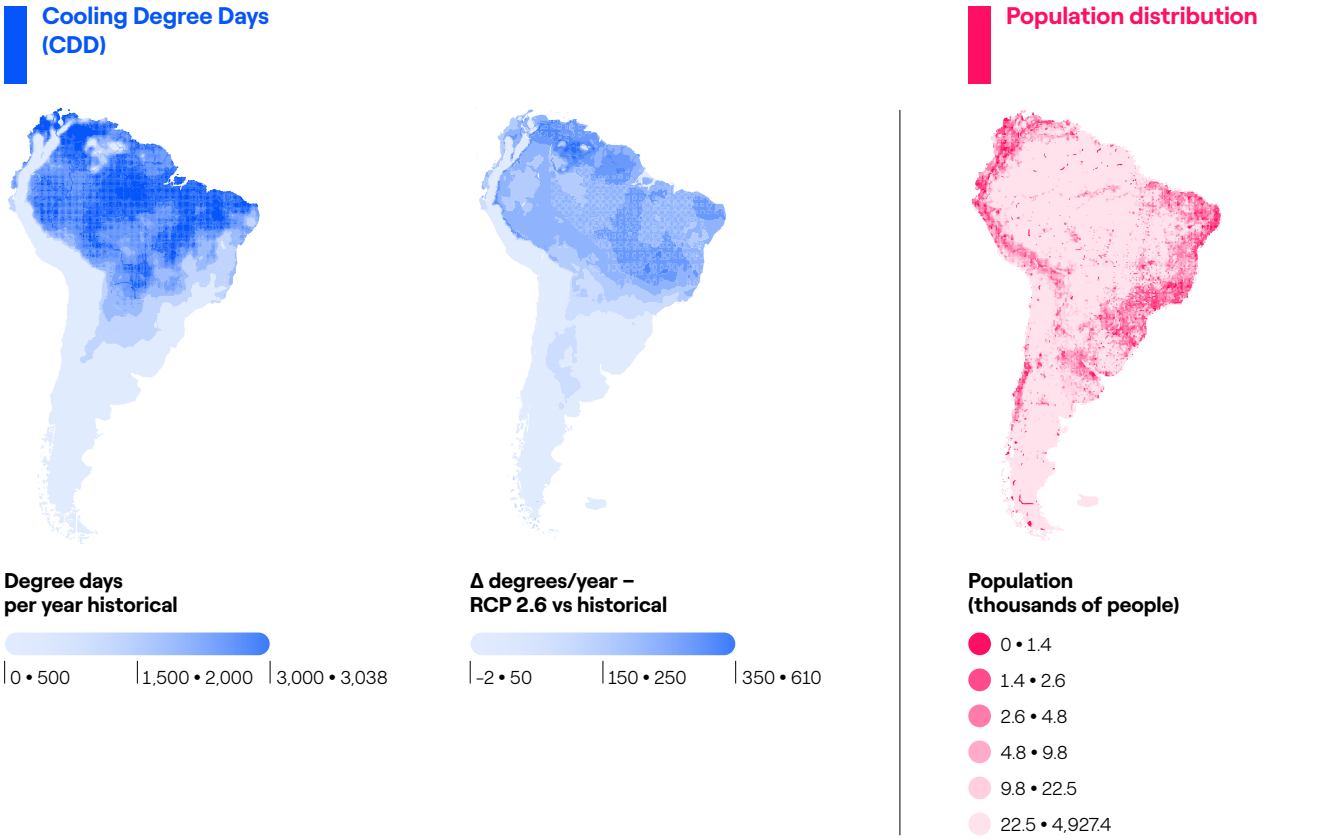


Change in the number of days with FWI > 45 between RCP 2.6 (2030-2050) and historical data (1990-2020) (left) and the NDVI for the June 2021 - June 2022 period (right).

In order to study the phenomenon of extreme temperatures, we have used the Warm Spell Duration Index (WSDI).[28] Comparing 2030-2050 with 1990-2020, the figures point to a significant increase in heat waves even under the RCP 2.6 scenario, particularly in certain areas of Brazil, in Colombia, in Peru, and in northern Chile. This increase in extreme temperatures is expected to be even more accentuated under the more extreme scenarios (RCP 8.5).
With regard to extreme rainfall, we have considered daily rainfall above the ninety-fifth percentile, as was done for Italy and Spain. Future changes in this acute phenomenon are less uniform. Under the RCP 2.6 scenario, certain areas, such as northern Brazil and northern Argentina, are expected to experience declines compared with the historical period, whereas other areas, such as western Colombia and certain areas of Brazil and Peru, are expected to see an increase in extreme rainfall.

Chronic phenomena: a study was conducted of the potential changes in heating and cooling demand connected with chronic temperature changes. Here, too, we calculated the changes in Heating Degree Days (HDDs) and Cooling Degree Days (CDDs) for 2030-2050 compared with 1990-2020 based on data from six models at a resolution of 25x25 km. The country averages have been calculated as an average over the country, weighting each geographical node by population using the Shared Socioeconomic Pathways (SSPs) associated with each RCP scenario. In each country studied, CDDs increased progressively across all scenarios: under the RCP 2.6 scenario, they increase by 35% in Chile,[29] but by only 13% and 18% in the other countries considered. Under the RCP 4.5 scenario, the increases were 113% in Chile and just over 25% for Argentina, Brazil and Peru, settling at 18% for Colombia. The increase in CDDs compared with the historical values is even more significant under the RCP 8.5 scenario. As for HDDs, the RCP 2.6 scenario points to considerable reductions in Colombia (-52%), Brazil (-21%), and Peru (-14%), with a slight decline in Chile (-5%). This trend is even more pronounced under the RCP 4.5 scenario: ~-62% in Colombia; ~-27% in Brazil; ~-20% in Peru and -8% in Chile.

(28) The WSDI considers heat waves with at least six consecutive days with a maximum daily temperature above the ninetieth percentile of the historical distribution.
(29) In Chile the percentage increase is more marked than in the other Latin American countries because the absolute values of CDDs are very low. In fact, in the historical data, CDDs are very close to zero in almost the entire country, with values of just a few degrees Celsius per year in the central area only.



Cooling Degree Days (CDDs) in the 1990-2020 period and the expected change in the RCP 2.6 scenario. On the right, the figure shows the population distribution (1990-2020) for the same nodes of the climate models, indicating the more heavily populated areas, which have a greater weight in calculating the metric at the country level.

Changes in total rainfall in the areas of interest for the Group's hydroelectric power generation have been analyzed. The analyses, which compare 2030-2050 forecasts with the historical period 1990-2020, show a downward trend in Argentina and Colombia. Brazil is projected to experience a slight increase or decrease in total rainfall under RCP 2.6 depending on the group of catchment areas basins considered. By contrast, rainfall in Peru will remain substantially unchanged in RCP 2.6. Finally, as with Argentina and Colombia, the projections for Chile also point to a reduction in total rainfall in the scenario with the lowest emissions, but this may have already manifested itself in recent years (with a real decrease on historic norms).

Drought in Chile: is climate change already here?

Over the last 15-20 years Chile has been experiencing a prolonged drought, with a water deficit of 20-40% compared with previous decades. The scientific community has carefully studied this phenomenon, commonly referred to as Mega Drought (MD).[30] Two contributory causes for a MD have been identified: natural variability, which is assumed to be the major factor, and climate change, which is estimated to be responsible for about one quarter of this phenomenon.[31]

What the coming decades will bring is not a simple question to answer. Scientific studies suggest that, while it is not possible to predict when this will occur, natural variability will likely have a positive impact on the MD and thus reverse the current trend, leading to increased precipitation. At the same time, it is thought that climate change will continue to drive drought conditions.

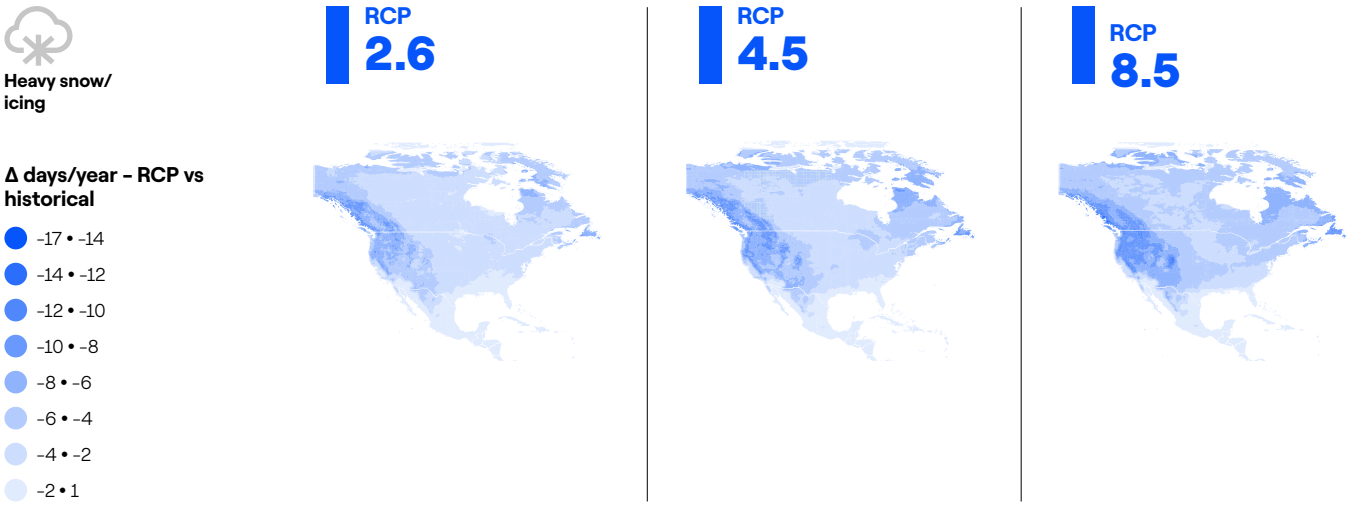
In conclusion, it is believed that in the period 2030-2050 rainfall in Chile will probably tend to increase compared with the values observed during the recent Mega Drought, falling short of the levels registered in the 2000s due to climate change and the decrease in rainfall that this would entail.

(30) Garreaud *et al.* (2019), "The Central Chile Mega Drought (2010-2018): A climate dynamics perspective".
(31) Boisier *et al.* (2015), "Anthropogenic and natural contributions to the Southeast Pacific precipitation decline and recent megadrought in central Chile".

Physical scenario analysis – North and Central America

Acute phenomena: for North America and Central America, we first assessed changes in frost days, i.e., the average number of days of frost per year,[32] in the various future scenarios (2030-2050) compared with the historic period (1990-2020).

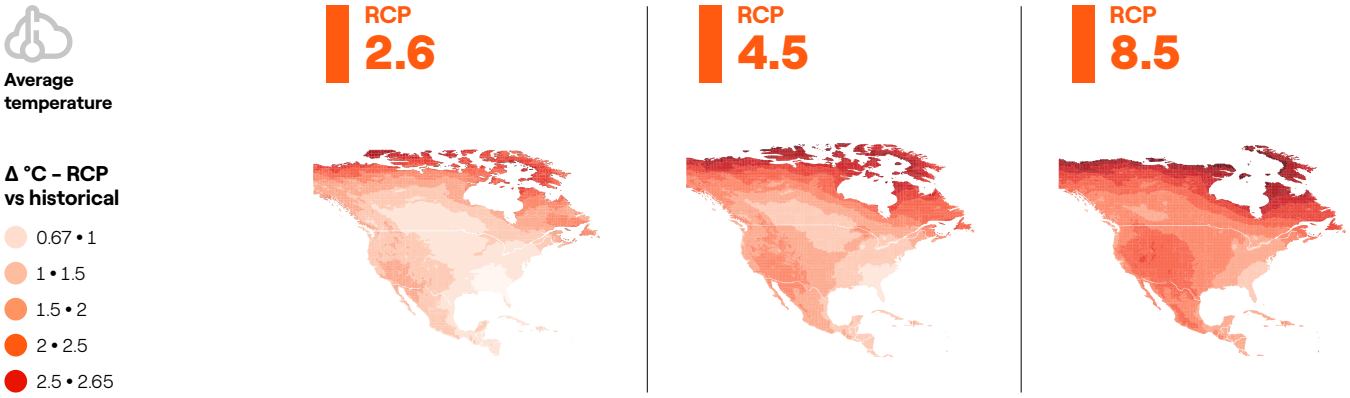
As can be seen from the maps in the figure below, frost days will primarily decrease in the western part of the macro-region, with greater variations in terms of magnitude in more extreme RCP scenarios. Note that the decrease in frequency does not rule out an increase in the intensity of this acute phenomenon, an issue the Group is currently investigating.



Change in the average number of frost days per year between the various RCPs (2030-2050) and the historical period (1990-2020).

Heat waves have been evaluated using the WSDI, as with South America. Comparing 2030-2050 with 1990-2020, we find a significant increase in days experiencing a heat wave even in the RCP 2.6 scenario, especially in Central America and along the west coast of North America. The increase in the WSDI will be even more pronounced in RCP 8.5.
The annual number of days with high fire risk, i.e., with FWI > 45, remains substantially unchanged in most of the macro-region in the RCP 2.6 scenario (2030-2050) compared with 1990-2020. In the western areas of the United States and Mexico, however, the number of high-risk days is expected to rise, with greater increases for more extreme scenarios. Finally, acute precipitation expected will increase across most of North America under the RCP 2.6 scenario compared with historical data. The magnitude of these increases varies from area to area. In Central America, intense rainfall will decrease even in RCP 2.6 in the central part of the region. In other areas, precipitation will remain unchanged or increase slightly.

Chronic phenomena: as shown in the figure below, the average annual temperature increases in all future scenarios (2030-2050) from historical levels (1990-2020). In general, the increases are greater in RCP 8.5 than in RCP 2.6. The areas that will experience the most warming are in the far north in all RCPs.



Change in average temperature between the various RCPs (2030-2050) and the historical period (1990-2020).

(32) More specifically, frost days are days on which the minimum temperature T_{min} is < 0 °C.

Comparing the various RCPs (2030-2050) and the historical model (1990-2020), expected total annual rainfall tends to decline in Central America, while in North America it will remain the same or increase depending on the area.

Overall effect of the transition and physical scenarios on electricity demand in Italy and Spain

The use of integrated energy system models makes it possible to quantify the individual service demand of a country. This level of detail therefore makes it possible to discriminate the specific effects that a change in temperature can have on energy demand. For this purpose, the *Paris*, *Slower Transition* and *Accelerated Transition* scenarios described above have been expanded to include the effect that temperature increases, measured in terms of Heating Degree Days (HDDs) and Cooling Degree Days (CDDs), have on energy demand (total, not just electricity) for residential and commercial heating and cooling. By defining a benchmark scenario consistent with achieving the Paris objectives and with Europe's commitment to reduce greenhouse gas emissions,[33] we were able to associate HDDs and CDDs consistent with the RCP 2.6 scenario with the *Paris* scenario. The same was done with the *Accelerated Transition* scenario, which, similarly to the *Paris* scenario, sees the achievement of net-zero emissions by 2050, but is characterized by a faster decline in emissions. HDDs and CDDs consistent with RCP 4.5 were instead associated with the *Slower Transition* scenario, because it corresponds to a slower decline in greenhouse gas emissions. To stress the analyses further, the latter scenario was also associated with RCP 8.5.

For Italy, as regards the separate effect of the transition, in the *Slower Transition* scenario electricity demand is approximately 8% lower on average in 2031-2050 compared with *Paris*. If we exclude the effect of electricity demand for green hydrogen production, for which the two scenarios have different levels of ambition in accordance with their different decarbonization trajectories, the change in electricity demand declines to 5%. It should be emphasized that green hydrogen is a more efficient solution from an economic and climate point of view in the *Slower Transition* scenario as well. What changes between the two scenarios is the speed of penetration into the energy matrix, with only a marginal change in the value at 2050. In the *Accelerated Transition* scenario, the slightly higher level of climate ambition of *Paris* is achieved not only through faster electrification, but also lower consumption as a result of the adoption of more "climate aware" behavior by consumers: electricity demand will increase on average in the period 2031-2050, but numerically by less than 1%.

The percentage differences between the *Slower Transition* and *Paris* scenarios for Spain are smaller than for Italy. This reflects the fact that for Spain the existing national energy plan already specifies ambitious climate objectives, so the *Slower Transition* scenario does not differ significantly from the *Paris* scenario. Consequently, less variability is expected in the evolution of the energy system and therefore of electricity demand in the 2031-2050 period. In fact, electricity demand in the *Paris* scenario is located between the *Slower Transition* – which shows a change in demand of less than 3% on average – and the *Accelerated Transition* scenario – which indicates a change in demand of more than 3% on average in the period 2031-2050. If we exclude the impact of electricity demand for hydrogen production, the delta decreases to around -2% for the *Slower Transition* scenario. Bear in mind that the level of demand for green hydrogen remains similar to *Paris* in both comparative scenarios, while the speed of penetration of the technology varies.

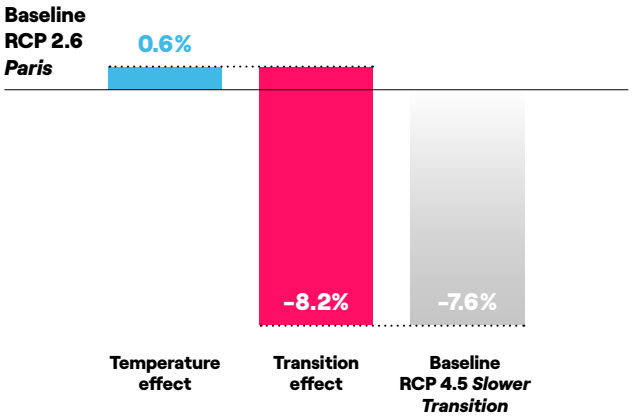
For both countries, the speed of the energy transition has a much greater impact on the level of electricity demand than the effects of the increase in temperature deriving from climate change: the analyses performed show how an increase in temperature deriving from climate change causes demand to increase by less than one percentage point for both Italy and Spain. Conversely, decarbonization and energy efficiency policies, together with technological innovation, greater social responsibility and the consequent switch from fossil to electric technologies (for example electric cars and heat pumps), will play a substantial role in the evolution of electricity demand and of the energy mix in general.

(33) European Commission - Fit for 55: https://www.consilium.europa.eu/it/policies/green-deal/eu-plan-for-a-green-transition/.

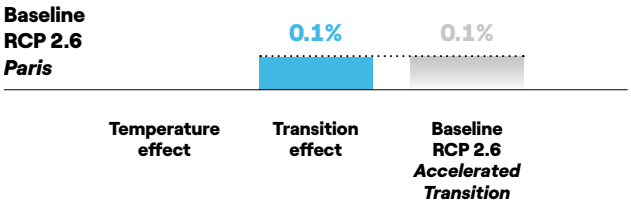
Italy - Average impact on electricity demand (2031-2050) of the three transition scenarios coupled with the associated RCP 2.6 and 4.5 scenarios

Italy

***Paris* RCP 2.6 to *Slower Transition* RCP 4.5**



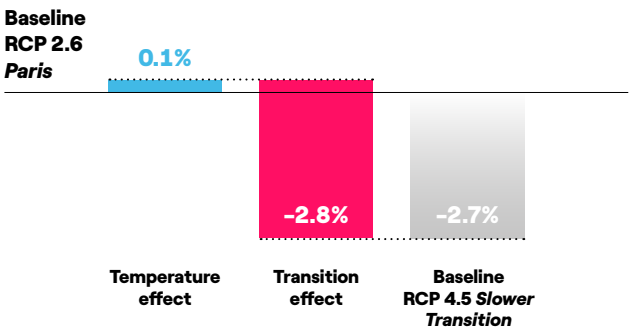
***Paris* RCP 2.6 to *Accelerated Transition* RCP 2.6**



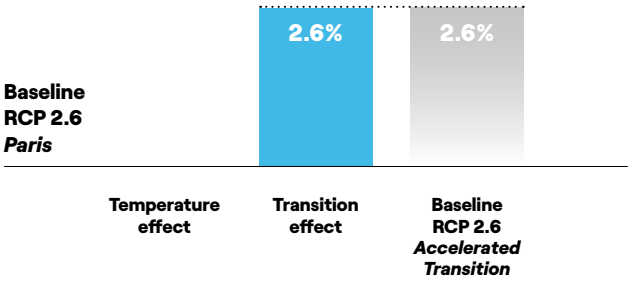
Spain - Average impact on electricity demand (2031-2050) of the three transition scenarios coupled with the associated RCP 2.6 and 4.5 scenarios

Spain

***Paris* RCP 2.6 to *Slower Transition* RCP 4.5**



***Paris* RCP 2.6 to *Accelerated Transition* RCP 2.6**



In order to further investigate the effect of temperature on the transition scenarios and at the same time expand the range of assumptions regarding climate change, a sensitivity analysis was conducted by associating the *Slower Transition* scenario to RCP 8.5 in addition to RCP 4.5. Assuming such a further increase in temperature would lead to changes in demand of +1.0% for Italy and +0.4% for Spain respectively, with a total impact of -7.2% and -2.4% with no change in the energy transition impact.

Effect of temperature and transition on electricity demand, average over specified period of temperature and transition contributions for different combinations of transition scenarios and climate pathways

		***Paris* to *Slower Transition* RCP 4.5**			***Paris* to *Slower Transition* RCP 8.5**			***Paris* to *Accelerated Transition***		
		Transition effect	**Temperature effect from RCP 2.6 to RCP 4.5**	**Total impact**	**Transition effect**	**Temperature effect from RCP 2.6 to RCP 8.5**	**Total impact**	**Transition effect**	**Temperature effect from RCP 2.6 to RCP 8.5**	**Total impact**
Italy	2023-2030	-4.6%	0.0%	-4.6%	-4.6%	0.0%	-4.6%	0.5%	0.0%	0.5%
	2031-2050	-8.2%	0.6%	-7.6%	-8.2%	1.0%	-7.2%	0.1%	0.0%	0.1%
Italy without H2V	2023-2030	-3.7%	0.0%	-3.7%	-3.7%	0.0%	-3.7%	0.4%	0.0%	0.4%
	2031-2050	-5.6%	0.8%	-4.8%	-5.6%	1.4%	-4.2%	0.1%	0.1%	0.2%
Spain	2023-2030	-3.4%	0.0%	-3.4%	-3.4%	0.0%	-3.4%	2.9%	0.0%	2.9%
	2031-2050	-2.8%	0.1%	-2.7%	-2.8%	0.4%	-2.4%	2.6%	-0.1%	2.5%
Spain without H2V	2023-2030	-3.4%	0.0%	-3.4%	-3.4%	0.0%	-3.4%	1.9%	0.0%	1.9%
	2031-2050	-1.7%	0.1%	-1.6%	-1.7%	0.5%	-1.3%	3.2%	-0.1%	3.1%

Note that in future years greater than expected electrification of heating in buildings could change both the sign and the size of the temperature effect in both countries. It is therefore necessary to monitor developments in the share of electrification of heating during the annual review.

Effect of the variation in temperatures on electricity demand in the main Latin American countries in which the Group operates

In Latin America, the impact of temperature trends, quantified through the Heating Degree Days (HDDs) and Cooling Degree Days (CDDs) metrics, was estimated using econometric forecasting models based on historical elasticity for Argentina and Colombia, as well as the use of integrated energy system models for Brazil and Chile, similar to the approach adopted for Italy and Spain, as discussed above. Econometric forecasting models based on historical elasticity were used for Argentina, Colombia and Peru.

In the case of Brazil, the alternative transition scenarios (*Paris*, *Slower Transition* and *Accelerated Transition*) obtained through an integrated energy system model have been expanded to include the effect of rising temperature on energy demand for cooling purposes in the residential and commercial sectors. HDDs and CDDs consistent with RCP 2.6 have been associated with the *Paris* and *Accelerated Transition* scenarios, while those consistent with RCP 4.5 were associated with the *Slower Transition* scenario. To stress the analyses further, the latter scenario was also associated with RCP 8.5.

As regards the transition effect considered individually, electricity demand in the *Slower Transition* scenario is approximately 19% lower on average in 2031-2050 compared with the *Paris* scenario, given the different levels of ambition of the two scenarios in both 2030 and to 2050. If we exclude the effect of electricity demand for the production of green hydrogen, the delta is reduced to 15%. In the *Accelerated Transition* scenario, the slightly higher ambition of *Paris* is achieved via faster electrification. Accordingly, the electricity demand delta in 2031-2050 averages around a positive 8%.

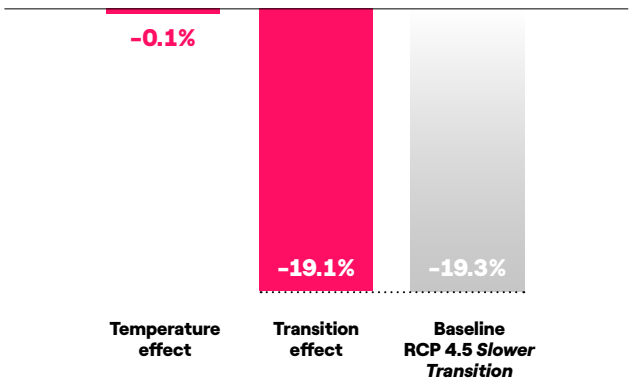
Also in this case, the speed of the energy transition has a much greater impact on the level of electricity demand than the effects of the increase in temperature deriving from climate change. The analysis shows that any increases in temperature caused by climate change have a negligible effect on electricity demand in Brazil.

Considering the integrated view, the potential effect of more ambitious transition scenarios has a more significant impact on electricity demand than the increase in temperature resulting from climate change.

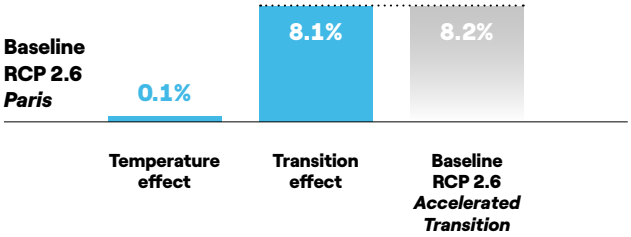
Brazil - Average impact on electricity demand (2031-2050) of the three transition scenarios coupled with the associated RCP 2.6 and 4.5 scenarios

Brazil

***Paris* RCP 2.6 to *Slower Transition* RCP 4.5**



***Paris* RCP 2.6 to *Accelerated Transition* RCP 2.6**



In order to investigate the effect of temperature on transition scenarios further and at the same time expand the range of assumptions regarding climate change, a sensitivity analysis was carried out by associating the *Slower Transition* scenario with RCP 8.5 in addition to RCP 4.5. For Brazil, an assumption of a further temperature increase produces an increase of 0.1% in demand, with a total demand impact with no change in the energy transition impact of -19%.

Effect of temperature and transition on electricity demand, average over specified period of temperature and transition contributions for different combinations of transition scenarios and climate pathways

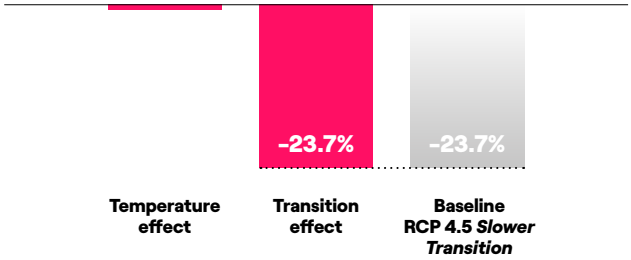
		Paris to *Slower Transition* RCP 4.5			*Paris* to *Slower Transition* RCP 8.5			*Paris* to *Accelerated Transition*		
		Transition effect	Temperature effect from RCP 2.6 to RCP 4.5	Total impact	Transition effect	Temperature effect from RCP 2.6 to RCP 4.5	Total impact	Transition effect	Temperature effect from RCP 2.6 to RCP 4.5	Total impact
Brazil	2023-2030	-1.8%	0.0%	-1.7%	-1.8%	0.1%	-1.7%	0.6%	0.1%	0.7%
	2031-2050	-19.1%	-0.1%	-19.3%	-19.1%	0.1%	-19.0%	8.1%	0.1%	8.2%
Brazil without H2V	2023-2030	-1.4%	0.0%	-1.4%	-1.4%	0.1%	-1.3%	0.6%	0.1%	0.7%
	2031-2050	-14.6%	-0.1%	-14.8%	-14.6%	0.2%	-14.5%	8.1%	0.1%	8.3%

As with Brazil, the alternative transition scenarios (*Paris*, *Slower Transition* and *Accelerated Transition*) obtained through an integrated energy system model for Chile have been expanded to include the temperature increase effect on energy demand for cooling purposes in residential and commercial sectors. HDDs and CDDs consistent with RCP 2.6 have been associated with the *Paris* and *Accelerated Transition* scenarios, while those consistent with RCP 4.5 were associated with the *Slower Transition* scenario. To stress the analyses further, the latter scenario was also associated with RCP 8.5.

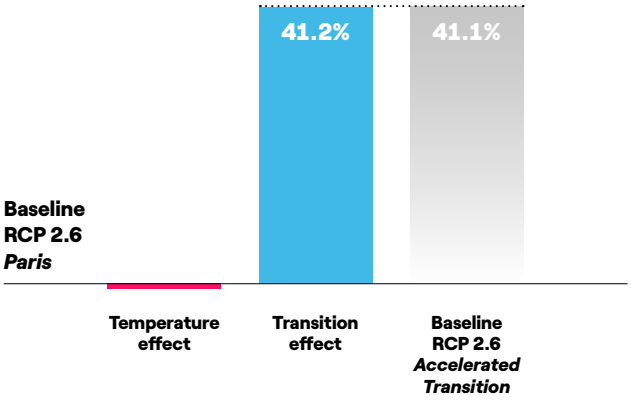
Chile - Average impact on electricity demand (2031-2050) of the three transition scenarios coupled with the associated RCP 2.6 and 4.5 scenarios

Chile

Paris RCP 2.6 to _Slower Transition_ RCP 4.5



Paris RCP 2.6 to _Accelerated Transition_ RCP 2.6



As regards the transition effect considered individually, electricity demand is approximately 24% lower on average in 2031-2050 in the *Slower Transition* scenario compared with *Paris*, given the different levels of ambition of the two scenarios. This difference is mainly due to assumptions regarding the achievement of the country's ambitious targets for green hydrogen production after 2030 set out in the document *Planificación Energética Nacional de Largo Plazo* (PELP). If the effect of electricity demand for hydrogen production – for which the two scenarios have different levels of ambition in relation to the different decarbonization trajectories – is omitted, the difference declines to 7.7%. In the *Accelerated Transition* scenario, the greater ambition compared with the *Paris* scenario energy transition is achieved through the implementation of more stringent decarbonization policies to achieve more electrification, greater penetration of green hydrogen in industry and transport and increased exports of hydrogen. This leads to an average increase of 41.2% in electricity demand over the baseline of the *Paris* scenario in 2031-2050. Excluding the effect of electricity demand connected with the production of green hydrogen, electricity demand is an average of 6.1% higher than in the *Paris* scenario in the 2031-2050 period.

Effect of temperature and transition on electricity demand, average over specified period of temperature and transition contributions for different combinations of transition scenarios and climate pathways

		Paris to *Slower Transition* RCP 4.5			*Paris* to *Accelerated Transition*		
		Transition effect	Temperature effect RCP 2.6 to RCP 4.5	Total impact	Transition effect	Temperature effect RCP 2.6 to RCP 2.6	Total impact
Chile	2023-2030	-2.3%	0.0%	-2.3%	0.8%	0.0%	0.8%
	2031-2050	-23.7%	0.0%	-23.7%	41.2%	-0.1%	41.1%
Chile without H2V	2023-2030	-2.3%	0.0%	-2.3%	0.3%	0.0%	0.3%
	2031-2050	-7.7%	0.0%	-7.7%	6.1%	0.0%	6.1%

The speed of the energy transition has a much greater impact on the level of electricity demand than the increase in temperature caused by climate change. Decarbonization policies together with technological innovation and greater social responsibility will play an active role in the evolution of the electricity sector and the energy mix in general.

The analysis shows that Argentina could experience an increase in demand due to higher temperatures, with prospective demand rising by an estimated 0.4% to 0.8% (calculated as the average of the demand forecasts for the 2030-2050 period). This estimate is highly dependent on the impact of macroeconomic factors on electricity demand in this country, leaving these forecasts subject to a significant degree of uncertainty given the volatility involved.

The same considerations can also be extended to Colombia, where despite the positive elasticity of electricity demand to temperatures, the expected rise in temperature would still have less impact than that attributable to economic growth, of between 0.1% and 0.9%. In fact, in Colombia, historical evidence still shows a strong coupling between the growth of electricity demand and GDP growth, with demand from the industrial sector accounting for around 50% of electricity consumption. Furthermore, the variability of the macroeconomic context could have repercussions on the electrification of the residential and service sectors, which represent the most immediate drivers of the increase in electricity demand in the event of an increase in temperatures.

Group strategy and Business Plan

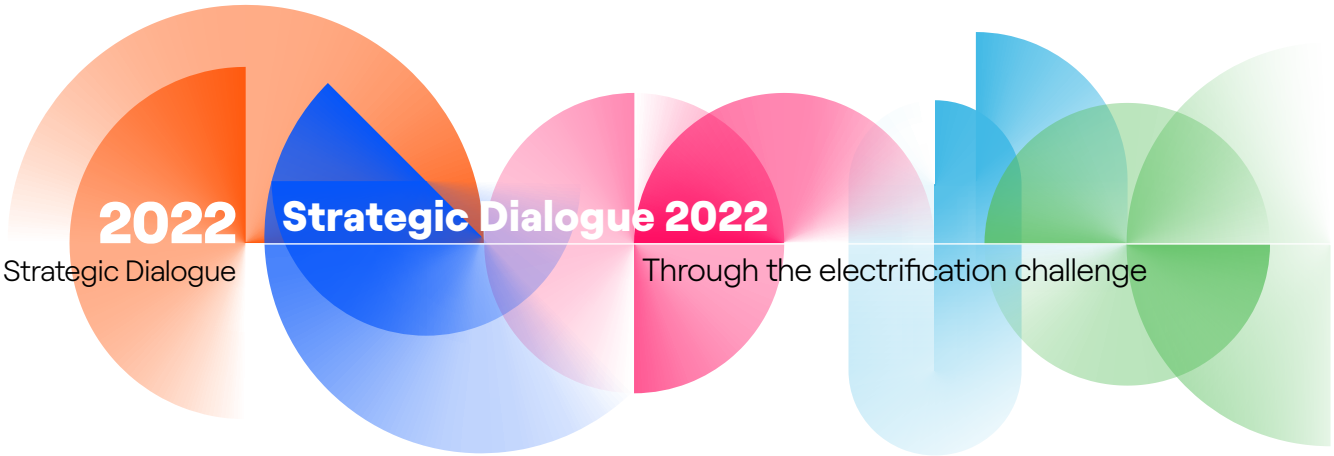
Determination of the Group's strategy is based on an assessment of options that will enable the sustainable generation of value for all stakeholders.

Fundamental to this is the assessment of the external environment and its evolution. To determine the framework in which we operate, we conduct in-depth scenario planning in order to be prepared to seize opportunities and manage future risks and uncertainties in the most robust manner possible. This analysis of what could happen in the external landscape, together with the Group's purpose and our Open Power mission, is key to defining the Group's positioning within that landscape. We then define our long-term ambitions and design the strategic options that characterize our long-term planning.

In recent years, the increasing complexity of the rapidly changing context in which we operate has made it so that the process of defining the Group's strategies has also evolved in order to capture as much of this dynamism as possible, so as to make it an enabling factor in the definition of goals.

Today, this process is organized into the following main activities:

- **Strategic Dialogue**: a continuous process of active dialogue throughout the year and across all Group functions, through which the strategic topics for the evolution and growth of the Group are identified, analyzed, discussed and addressed. This dialogue is part of a strategic design phase, where communication between executives makes a valuable contribution to developing new strategic options, with an emphasis on the need for cultural or organizational change and synergies between businesses. This process, which is coordinated at the Group level, first involves the identification of topics through consensus among senior management and approval by the CEO. The next phase of the strategic dialogue process involves the structuring of agile working groups with all the professional expertise necessary for the proper analysis of each topic, aimed at the preparation of dedicated workshops or strategic options to be discussed.



The process is centrally governed and includes milestones and deadlines that are defined based, in part, on the relative priority of the decisions to be made. In 2022, the working groups were organized around strategic priorities: "Impact of the external context", to analyze the impacts and repercussions on the business of the energy crisis and the persistent turbulence that characterized the year, "Customer centricity and digitalization" and "Resource allocation", which were addressed by defining the integrated strategy of Countries, the repositioning of the Group and all the issues discussed during Capital Markets Day. The outputs and integrated strategy plans are then discussed and approved by top management in dedicated meetings. These meetings include one

special event, the Top Team Offsite meeting, at which all senior management discusses the priority topics; the most significant conclusions are then included in the Group's long-term planning. This is then followed by the Strategic Summit, in order to discuss the annual guidelines of the new Strategic Plan with the Board of Directors. This framework enables governance of the treatment of strategic issues, while at the same time ensuring swift identification of emerging trends and the necessary cross-business involvement for a complete analysis of complex and interdependent issues in the presence of an organizational structure based on the country/business-line/service functions matrix.

- **Strategic Planning**: this process, which is driven on an ongoing basis by feedback from the Strategic Dialogue, transforms the information to be processed into quantitative models in order to establish an overview of the industrial, economic and financial evolution of the Group, supplemented by possible active portfolio management. The evaluation of strategic options over a time horizon extends beyond that used in industrial planning, with (i) the definition and the quantitative and qualitative development of alternative macroeconomic, energy and climate scenarios against which overall strategy can be assessed, and (ii) analysis based on stress testing for various factors, including the evolution of the industrial sector, technology, competitive structure, climate variables and policies.
- **Long-term positioning**: the analyses and decisions described in the previous points generate information for long-term positioning on multiple topics and the assessment of the industrial and financial ambitions and targets for the Group.
- **Analysis of ESG factors and assessment of materiality in the field of sustainability**: the method Enel uses to perform ESG and materiality analysis was developed on the basis of the guidelines set out in numerous international standards (for example, the Global Reporting Initiative - GRI, SASB, TCFD, UN Global Compact, SDG Compass, etc.), with the aim of identifying and evaluating priorities for stakeholders and integrated them into Group strategy.

The strategy of the Enel Group has proven its ability to create sustainable long-term value, fully integrating the themes of sustainability and close attention to climate change issues while simultaneously ensuring increased profitability.
The Group is among the leaders guiding the energy transition through the decarbonization of electricity generation, digitalization of distribution networks and the electrification of final consumption, which represent opportunities both to increase value creation for all and to contribute positively to more rapid achievement of the Paris Agreement goals and the Sustainable Development Goals set by the United National in the 2030 Agenda.

Strategic Plan

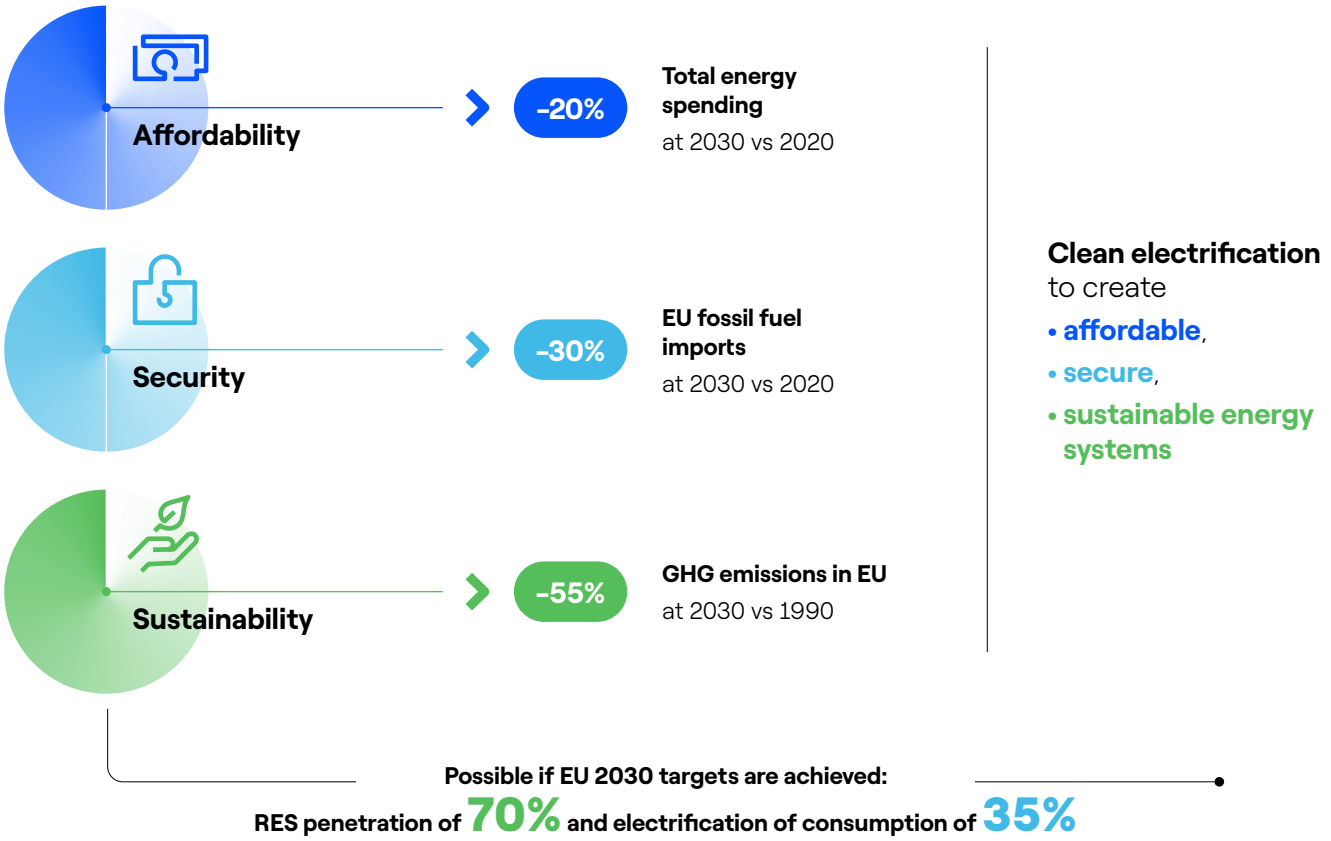
Response to the current climate

The last three years have seen events that are without precedent. The combined effect of two years of pandemic and the ongoing war at Europe's doorstep has heightened the need to accelerate digitalization and the energy transition and to reorganize and restore equilibrium to the world's supply chains.
General concerns regarding the effects of climate change have been increased by a growing number of extreme weather events, record droughts, and flooding in various parts of the world.

Governments around the world have, in general, turned to measures aimed at stimulating and shoring up their economies. In Europe, in response to the great volatility in gas prices, fiscal and regulatory measures have been introduced in many countries, to varying degrees of success, and different significant funding has been made available to help overcome or mitigate the crisis brought about by high energy prices.
In order to speed up the energy transition, we are seeing an acceleration in the implementation of energy policy and of the new market design.

The current landscape is marked by a need to achieve certain objectives that have come to be known as the "energy trilemma" of:

- affordability in terms of providing energy at reasonable prices over the long term;
- security, with regard to providing energy in a manner that has limited exposure to geopolitical tensions and that ensures greater independence to individual nations;
- sustainability, related to obtaining energy without impacting climate and ecosystems.



Source: EU Commissions (Fit for 55, REPowerEU), IEA WEO 2021, IEA WEO 2022; Net Zero report, internal elaborations.

The Group's strategy for achieving these objectives is centered around:

- decarbonization of the generation mix, including the ongoing development of renewable energy and exiting from coal- and gas-fueled power generation (by 2040);
- electrification of consumption, with incentives for new products and services for consumers while gradually exiting from the sale of gas to consumers (to be completed by 2040);
- distribution network digitalization and enhancement in response to the ongoing energy transition and in order to provide quality service to the customer.

Strategic priorities for 2023-2025

Over the course of the Plan, the Group intends to:

- focus on an integrated value chain aimed at sustainable electrification, something that is increasingly necessary in today's global energy systems, including serving about 90% of fixed-price sales in core countries with carbon-free electricity by 2025, bringing renewable energy to around 75% of the total, and achieving roughly 80% digitalization for grid customers;
- strategically reposition both businesses and geographical areas with a plan to dispose of some €21 billion in assets over the period 2022-2525 in terms of the contribution this would have to reducing the Group's net debt. Most of this Plan is expected to be completed by the end of 2023, resulting in a more agile corporate structure that is focused on the six core countries;
- ensure growth and financial stability, uniting a compound annual growth rate (CAGR) in ordinary net profit of 10% and a ratio of FFO to net debt of 28% beginning in 2023, while also maintaining a fixed DPS of €0.43 over the period 2023-2025, up from the €0.40 of 2022. In addition, the DPS for 2024 and 2025 is to be considered a sustainable minimum, not a maximum.



Acceleration of clean electrification

~90% of **sales**[1][2] covered by GHG free sources

RES accounting for **75%** of total generation[1]

~80% of customers on **smart** grids[1]

Strategic repositioning of business and geographical areas

€21 bn 2022-2025 disposal plan[3]

6 core countries

Financial growth and robustness

+10% Net income 2022-2025 CAGR

28% **FFO/ND** from 2023

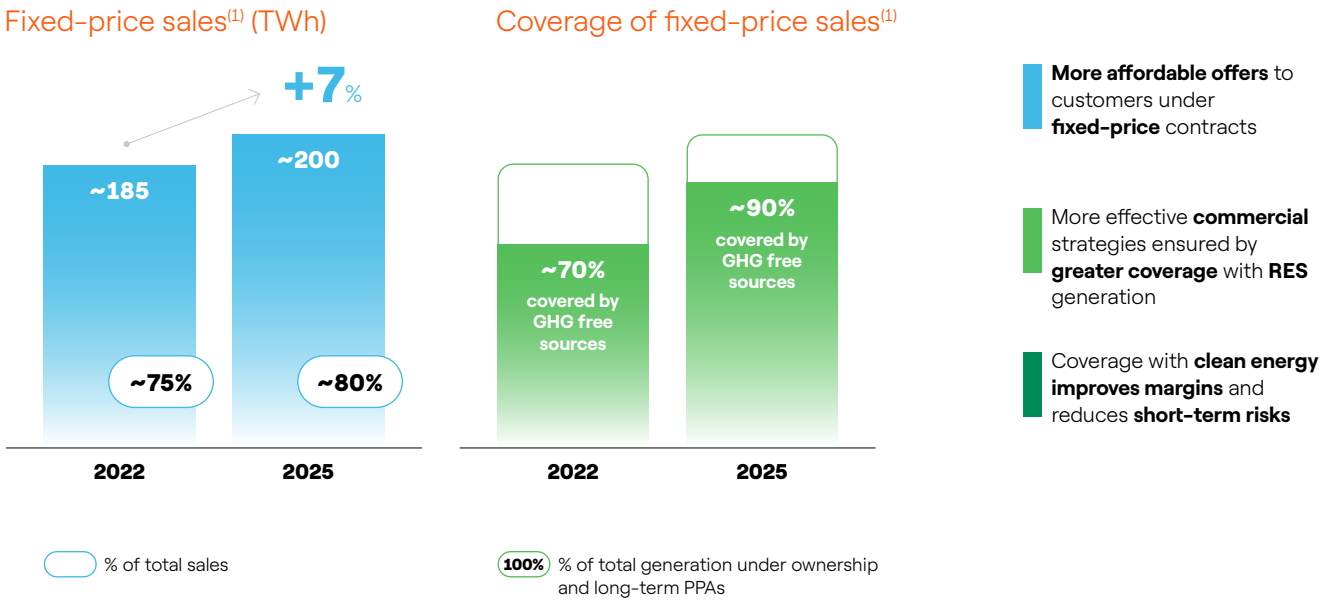
0.43 €/share Minimum DPS[4]

(1) In 2025.
(2) Fixed-price sales in core countries.
(3) Total on net debt.
(4) In 2024 and 2025.

To this end, from 2023 to 2025, the Group expects to invest a total of roughly €37 billion to implement the following strategic actions.

I. Balancing supply and demand in order to optimize the risk/return profile

By 2025, in the Group's six core countries, we expect to sell roughly 80% of total electricity volumes on fixed-price contracts, an increase of about 15 TWh (+7%) on 2022 estimates. We also expect to serve 100% of fixed-price sales with the Group's own production and long-term power purchase agreements (PPAs), with the expectation that about 90% will be covered by carbon-free sources, so as to further ensure growth in the Group's margins.



(1) Core countries.

This will enable the Group to implement a stable, visible, long-term commercial strategy that reduces the short-term risks associated with outside volatility, while promoting the transition of the Group's customers from energy from fossil fuels to sustainable electricity.

To this end, thanks to the longstanding contractual relationships with our existing customer base, the Group expects to accelerate the dissemination of high-value services and next-generation infrastructure over the next three years, and specifically:

- owned public charging points (from about 23 thousand to about 31 thousand in 2025);
- demand response (from an estimated 8.5 GW in 2022 to about 12.4 GW by 2025).

II. Decarbonization to ensure competitiveness, sustainability and security

By 2025, the Group expects to add about 21 GW in installed renewables capacity (of which about 19 GW in core countries), putting us in a strong position to achieve our decarbonization objectives in line with the Paris Agreement.

The Group expects to develop this renewables capacity with the help of a market-leading pipeline of about 455 GW.

The Group is continuing work to implement the Stewardship business model with the goal seizing additional opportunities in non-core countries, so as to maximize the creation of value globally.

Our decarbonization strategy, together with our push towards electrification, will enable the Group to once again confirm our commitment to achieving zero emissions by 2040, with targets set for all Scopes and covering both direct and indirect emissions throughout the Group's value chain. These objectives have been certified by the Science Based Target initiative (SBTi) to be in line with keeping global temperature increases below 1.5 °C from pre-industrial levels.

	2022	2025	2030	2040
Scope 1 Generation[1] (gCO_{2eq}/kWh)	229	130	72	Zero emissions
Scopes 1 & 3 Integrated Power[1] (gCO_{2eq}/kWh)	218	135	73	
Scope 3 Gas Retail[1] ($MtCO_{2eq}$)	22.9	20.9	11.4	

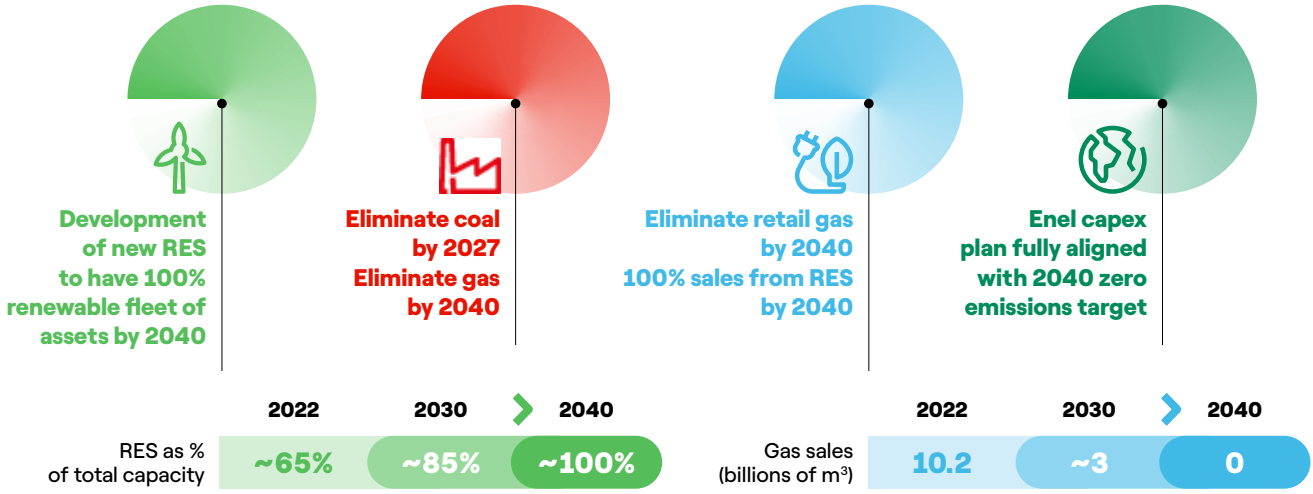
SBTi 1.5 °C certified

No use of carbon removal

SBTi 1.5 °C certification for 100% coverage of GHG emissions (Scopes 1, 2 & 3)[2]

(1) Targets do not include M&A plan.
(2) Targets for remaining Scopes 1, 2 & 3 emissions have been certified. 2030 target 10.4 $MtCO_{2eq}$; 2040 target -2.5 $MtCO_{2eq}$ (to be neutralized to achieve net zero).

The plan is based on the implementation of certain fundamental steps: (i) the expectation to abandon coal- and gas-fueled generation, replacing the thermal generation portfolio with new renewables capacity and combining renewables with storage solutions; (ii) abandoning the retail sale of gas by 2040, with all electricity sold by the Group to come from renewable sources.



III. Grid digitalization, enhancement and development to enable the transition

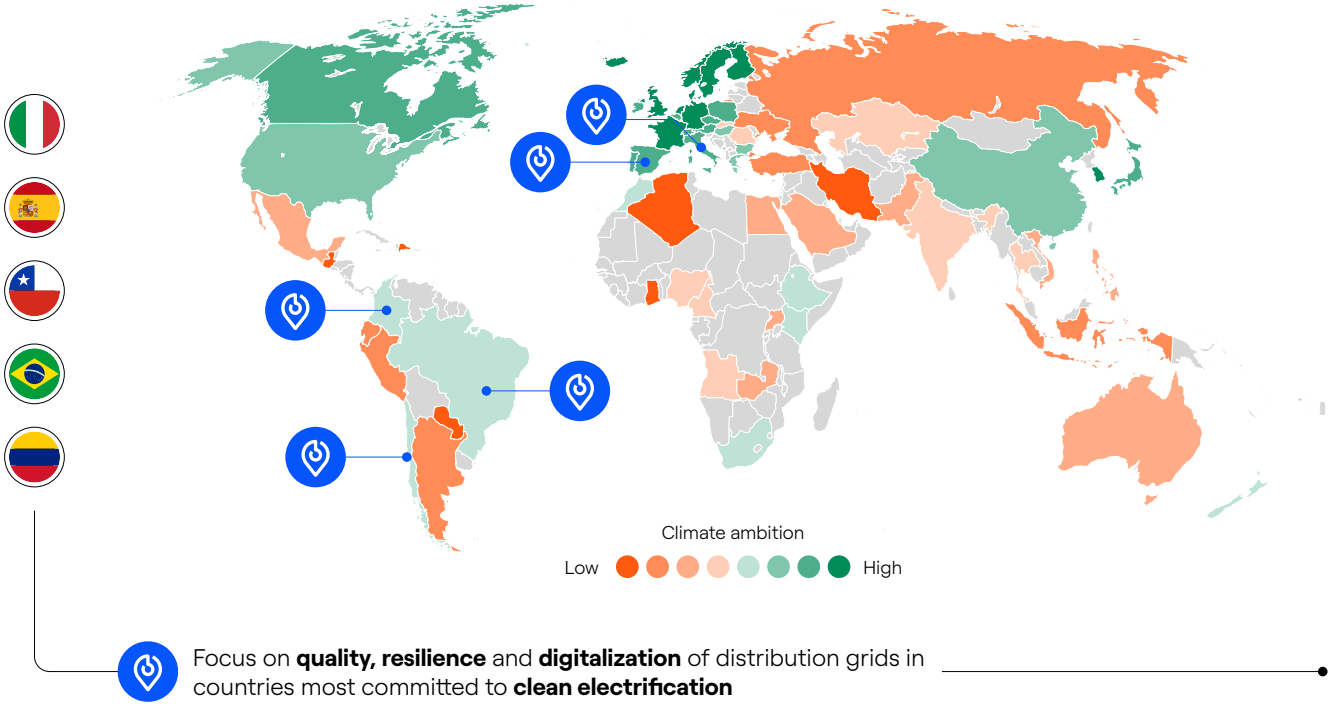
The Group's grid strategy concerns five of the six core countries, i.e., Italy, Spain, Brazil, Chile and Colombia, where our unique experience in digitalization can be used to full effect, especially in large metropolitan areas.

We expect the Group's grid investment per customer to intensify by an average of about 30% over the period 2023-2025 compared to 2020-2022.

The drivers of this growth will be:

- the need to improve quality and resilience in order to handle the increases in load, while meeting the challenges brought about by climate change;
- the ongoing digitalization of Group assets, so as to increase efficiency and reduce grid downtime to achieve a System Average Interruption Duration Index (SAIDI) of about 150 minutes by 2025 (down 13% from 2022);
- an increase in customers on the digital grid, which are expected to reach about 80% of the total by 2025 (up 20 percentage points from 2022);
- an increase in connections in order to face future increases in distributed energy and the expansion of urban grids.

Enel grids and world ranking in Green Future Index [(1)]



(1) Sources: MIT Technology Review Insights, The Green Future Index, 2021.

IV. Rationalization of the business portfolio and geographical areas

In 2022, the Group saw a marked acceleration in implementation of strategies to streamline the organization. During the year, we completed the following transactions: the sale of Enel Russia; the sale of the Fortaleza CCGT plant and Goiás distribution network in Brazil; the sale of transmission assets and crystallization of the value of the gas portfolio in Chile; and the transaction concerning Gridspertise.

On the back of this acceleration, over the period 2023-2025 the Group expects to further optimize our operations, including exiting from certain businesses and geographical areas that are no longer in line with our broader strategy. We also expect to continue implementing our Stewardship model in non-core countries. At the same time, in line with the objective of exiting from carbon-intensive businesses, the Group expects to take advantage of the current market landscape to begin the process of exiting from the gas business. This overall program of disposals is an integral part of the plan to redefine the Group's structure while maximizing value for shareholders.

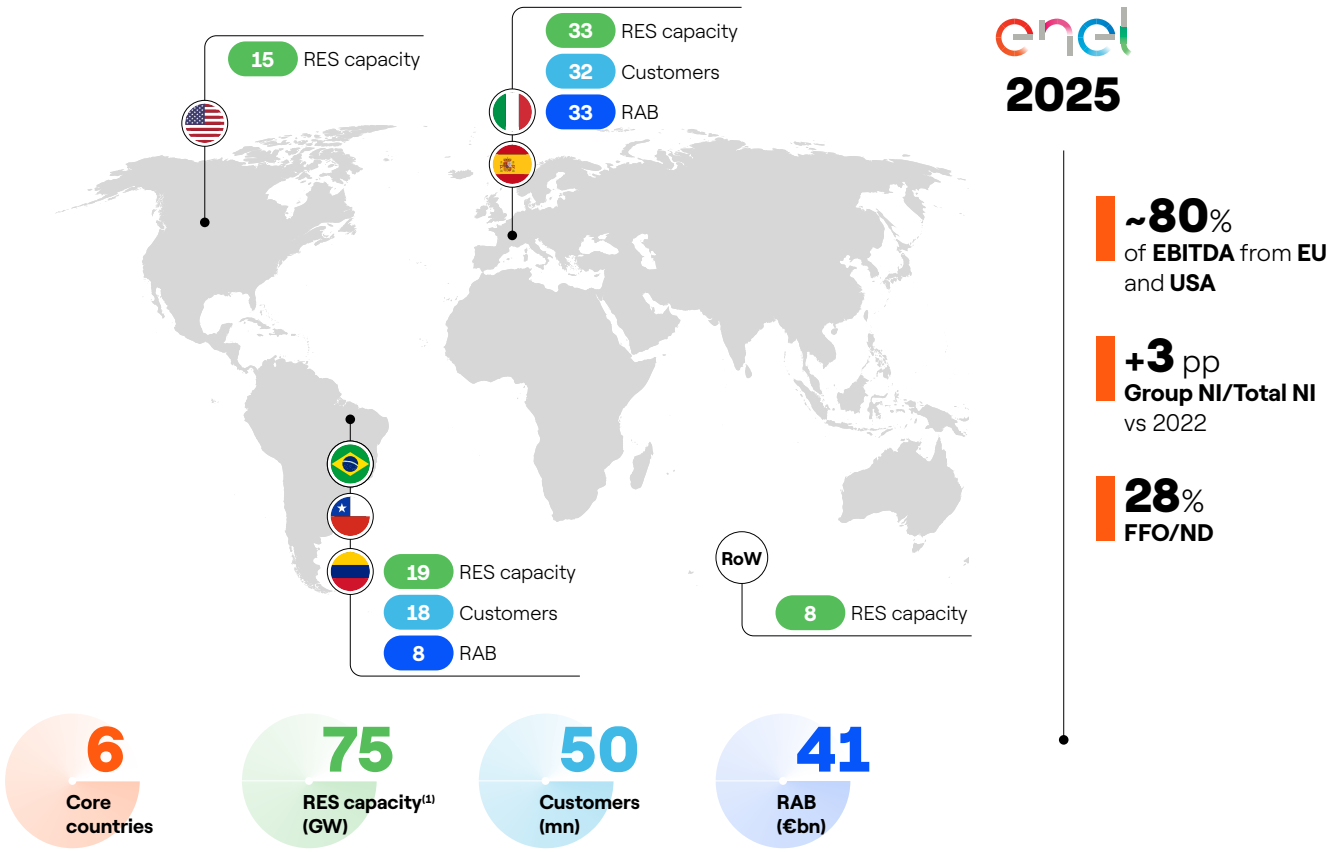
We expect 2023 to be the key year in the Group's long-term rationalization strategy. Over the course of the plan:

- we expect European operations to be concentrated in Italy and Spain, with the sale of our assets in Romania;
- in Latin America, the Group expects to exit from Peru and Argentina;
- we expect that certain geographical areas, such as Australia and Greece, will be included within the scope of the Stewardship model;
- we expect to crystallize the gas portfolio in Spain;
- we expect to sell the assets in Ceará in order to focus more on the distribution networks in larger urban areas (i.e., Rio and São Paulo);
- the value of lesser renewables assets not tied to significant customer bases will be crystallized;
- asset values are also expected to be crystallized in the United States and by Enel X Way.

The plan described above is expected to result in an optimized organization with the following effects on the Group performance:

- a positive contribution to reducing the Group's net debt by about €21 billion, which is expected to reach a peak in 2023 at above €12 billion;
- a negative impact on the Group's ordinary EBITDA of roughly €2.8 billion and on ordinary net profit of about €900 million in 2024.

By the end of the plan period, the Group expects to have a more agile organization focused on the core countries, with an expected reduction in minority interests and a significant improvement in credit metrics. By 2025, the Group expects to be managing a total of about 75 GW of renewables capacity (including 4 GW of batter energy storage systems, or BESS), equal to about 75% of total production and bringing zero-emission generation to around 83% of the total.



(1) Includes about 4 GW of BESS capacity.

Integrated strategy in the core countries

Enel's decision to enact an integrated commercial strategy centers on the opportunities that integration will bring in terms of more effective policies that embrace the entire value chain. This strategy is being applied in countries in which the Group has an integrated presence, beginning with a base of end users to whom the energy generated can be sold. We are calling these regions "core" or "Tier 1" countries, and they are: Italy, Spain, the United States, Brazil, Chile and Colombia.

Definition of an integrated strategy for these core countries called for a generalized overhaul of both our commercial approach and our infrastructures, in part to be able to define differentiated plans and execution options for the various characteristics at play from the start.

For each country, we have defined a **commercial plan** and a **sourcing plan**, which have been developed in an integrated manner and with the goal of maximizing the creation of value.

More specifically:

- the commercial plan aims to maximize sales and includes long-term commodity and beyond-commodity goals (e.g., levels of electrification, customers, churn rates, market share, etc.) by customer segment;
- the sourcing plan aims to minimize sourcing costs in accordance with the needs of the commercial plan and any other needs related to sales. The plan includes the power generation already available in the country, additional generation by plants in the pipeline (infrastructure plan), and other generation that can be acquired on the market.

In a subsequent phase, the two plans will be optimized based on integrated value, such as by revising the sales portfolio so that it is oriented more towards segments of higher rates of electrification or by optimizing the sourcing plan through greater organic growth or other strategic options.

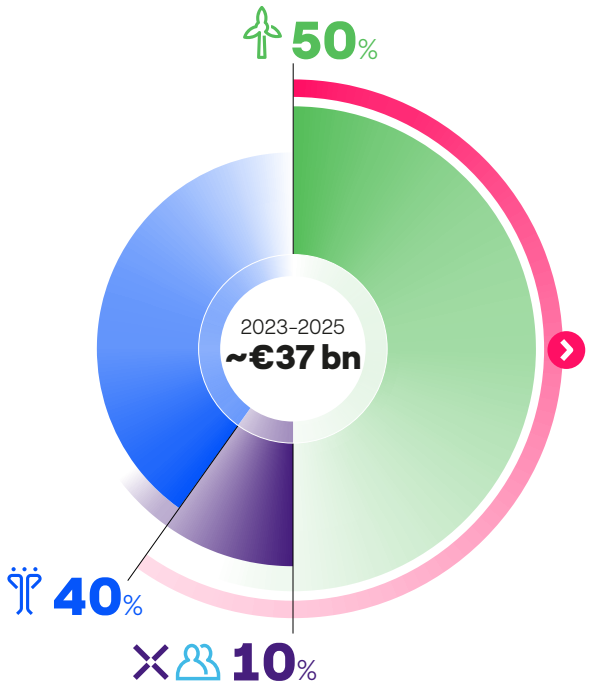
Therefore, the optimization process is iterative and will be rolled out at preset intervals throughout the year or in response to certain trigger events.

In order to ensure the efficacy and consistency of the outputs by country, central process coordination is being implemented to define the integrated strategy for each country. In particular, a central team will be providing the six core countries with a series of inputs (e.g., scenario assumptions, methodologies, models, and financial limits to be met, etc.) within which the business will identify the most effective options.

Investment plan

Investment by the Group in 2023-2025, in the amount of about €37 billion, will mainly be focused on the six core countries.

Gross capex by business



Roughly 60% of the Group's investments – 50% in power generation plus 10% in customers and advanced energy services – is expected to support the Group's integrated commercial strategy. Grids are expected to account for about 40% of total investments over the course of the Strategic Plan.

With regard to the integrated commercial strategy, the Group is expected to invest around €22 billion over the period 2023-2025. By country, nearly 90% of this investment is expected to be allocated to Italy, Spain and the United States, where the Group can take advantage of policies in support of sustainable electrification, while also taking account of favorable regulatory frameworks.

More specifically, the Group expects to accelerate the development of renewables:

- in Italy and Spain in order to allow for longer-term, fixed-price contracts, replacing the Group's thermal assets with sustainable technologies that are not affected by the volatility of commodities;
- in the United States and Latin America to take advantage of long-term PPAs, which offer high visibility on returns.

EBITDA from electricity generation and retail markets is estimated to reach around €15 billion in 2025, for a CAGR of about 20% over the course of the plan.

With regard to networks, for 2023-2025 the Group expects to invest some €15 billion, mainly in Europe (at more than 80% of the total), given the Group's balanced geographical presence and favorable regulatory climate, and so as to promote the role of networks as enablers of the energy transition.

We expect the allocation of Group capital to result in an increase in EBITDA from networks of up to €7.3 billion in 2025, from about €8.3 billion in 2022 (including the contribution of the distributors sold over the course of the plan).

Finally, with regard to the Stewardship business model, we expect the mobilization of investment by the Group and by others to total about €15 billion, including:

- about €1.3 billion in direct investment by the Group in assets that are expected to be transferred to joint ventures;
- roughly €1.1 billion in contributions of capital into joint ventures by the Group;
- investments by third parties for the remainder.

These funds will serve to add new renewables generation and new infrastructures and services in order to accelerate the transition of Group customers to electrification.

Over the next three years, we expect this model to generate some €1.5 billion in cumulative EBITDA, with an expected value of the Group's investment of €2.5-3.0 billion in 2025.

Financial targets

We expect the actions of the Strategic Plan to have an immediately visible, positive impact on the Group's net debt, which is expected to fall significantly to within a range of €51-52 billion by the end of 2023, down from €60 billion in 2022. As a result, the ratio of net debt to EBITDA is expected to fall from the estimated 3.0X of 2022 to 2.4-2.5X in 2023, remaining stable for the remainder of the plan period. In the same way, we expect the ratio of FFO to net debt to increase by 13 percentage points, from 15% in 2022 to an expected 28% in 2023, remaining stable for the remainder of the plan period.

As a result of this financial strategy, we expect the cost of debt to remain essentially stable, despite the recent increase in interest rates, at about 3.4-3.5%.

Sustainable finance will remain a key focus on the Group's financial strategy. We expect the share of sustainable finance to increase to about 70% of total gross debt by 2025, compared to 60% in 2022.

We expect the Group's ordinary EBITDA to grow to within a range of €22.2 billion to €22.8 billion in 2025, up from €19.7 billion in 2022 for a CAGR of 5%. The Group's ordinary net profit is expected to increase to €7.0-7.2 billion in 2025, up from €5.4 billion in 2022 for a CAGR of 10%.

The Group also confirms the simple, predictable dividend policy, with a DPS of €0.43 for the period 2023-2025, increasing from €0.40 in 2022, and the DPS for 2024 and 2025 is to be considered a sustainable minimum.

Financial targets

	2022	2023	2024	2025
Profit growth				
Ordinary EBITDA (€ billions)	19.7	20.4-21.0	21.4-22.0	22.2-22.8
Ordinary profit (€ billions)	5.4	6.1-6.3	6.7-6.9	7.0-7.2
Value creation				
Dividend per share (€)	0.40	0.43	0.43(1)	0.43(1)

(1) Minimum DPS.

Climate change strategy

Overall framework and policies

Climate change is the world's primary challenge of this century. In a climate such as this, and as a global player in the energy market, Enel is on the front lines playing an active role in combating climate change. This includes both helping to guide the global energy transition towards zero emissions as a mitigating lever and working to determine the best ways to adapt to the changes that are inevitable to varying degrees of frequency and intensity.

Therefore, the work Enel is doing to combat climate change represents one of the pillars of the Group's short and long-term strategy.

Mitigation efforts include all those initiatives aimed at reducing the impact that the activities of the Group and of our stakeholders have on climate change, and first and foremost those that aim to reduce the emission of greenhouse gases.

Adaptations, on the other hand, include all actions that Enel chooses to take to make assets more resilient, to increase our ability to react to extreme weather events, and to come up with business models and other strategic options targeting various needs in this constantly changing climate.

In each of these two areas, the challenges present opportunities that we will seize through Group strategy. Here at Enel, adapting to climate change also means exploring new business opportunities to come out of the changing landscape, developing new technologies, and creating value from the capabilities acquired. The mitigation of climate change involves, in part, research into innovative technologies that will enable an economy that is green by design or that, for example, simply improve performance and circularity.

The experience we gain and our study of possible climate scenarios that have been seen above also play a crucial role in guiding both areas of action. As we will discuss in the section related to climate change risks and opportunities, the Group has also established internal policies for the assessment and management of these challenges.

Our zero-emissions ambition

Being among the first signatories of the "Business Ambition for 1.5 °C" campaign promoted by the United Nations and other organizations, the Enel Group has publicly declared our commitment to developing a business model in line with the goals of the Paris Agreement (COP 21) to limit the average global temperature increase to 1.5 °C.

Enel's commitment to combating climate change reached another historical milestone in 2022, with the Group defining a decarbonization roadmap covering both direct and indirect emissions throughout the Group's value chain. This roadmap includes four targets certified by the Science Based Target initiative (SBTi) to be in line with limiting global warming to 1.5 °C.

Enel's new certified targets come on the back of our ambition declared in 2021, when we moved up our commitment to achieving zero emissions by 10 years, from 2050 to 2040.

Enel's ambition goes beyond the SBTi certified targets and aims to pave the way to becoming a zero-emission organization by 2040. Our roadmap currently calls for reducing all direct and indirect greenhouse-gas (GHG) emissions by about 99% from 2017 levels by 2040 throughout our value chain, which is well below the overall threshold set by the SBTi (of 90%). The Group aims to reduce all emissions by 100% with a view to overcoming, over the short to medium term, all exogenous factors, such as the development of new technological solutions for the supply chain over a wide scale or the implementation of certain market-based and political strategies. Enel actively collaborates with vendors, customers and policymakers to promote solutions and accelerate necessary actions.

Enel's decarbonization roadmap is centered around promoting electrification based on renewable energy, fully phasing out fossil fuels, accelerating the development of renewables, and enhancing grids and going digital. More specifically, the roadmap includes the following business milestones.

- By 2025, Enel will cover roughly 90% of all fixed-price sales with carbon-free electricity, bringing renewables to around 75% of total generation, supported in part by about 4 GW in battery storage. In order to accelerate the development of renewable energy in the core countries, for the period 2023-2025 the Group will invest €17 billion, installing 19 GW of new renewables capacity and reaching 75 GW of consolidated renewables capacity by 2025. In addition, progress in grid digitalization will increase the share of digital customers to around 80%.
- By 2027, Enel will fully phase out all coal-fired plants, converting the sites to other uses and promoting new social, economic and environmental development for local communities through a just-transition approach that leaves no one behind.
- By 2030, continuing the investment trend already undertaken in recent years in order to continue accelerating the energy transition, Enel will reach managed renewables capacity of about 130-150 GW, thereby bringing the Group's total generation capacity to a level of 85% renewables, with 100% of grid customers being fully digital.
- By 2040, generation will be 100% renewable, and the Group will have exited both gas-fueled generation and the retail sale of gas, with 100% of the electricity sold coming from renewable sources.

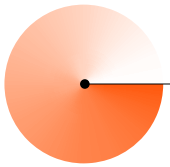
Our zero-emissions ambition

Enel is committed to achieving zero emissions by 2040 and to developing a business model that is in line with the objectives of the Paris Agreement (COP 21) to limit the average increase in global temperatures to 1.5 °C. For this reason, the Group has defined a decarbonization roadmap that covers both direct and indirect emissions throughout the value chain. This roadmap includes four targets that were certified by the Science Based Target initiative (SBTi) in December 2022 to be in line with the Net Zero Standard.

GHG target	Primary business activity	Sources of covered GHG (GHG Protocol)[1]	Time frame	GHG target	Climate scenario	Primary drivers and actions
Scope 1 GHG emission intensity related to power generation	Electricity generation	**98.2%** **of Scope 1 GHG** emissions[2]	●○○› Short term (2025)	130 gCO_{2eq}/kWh	1.5 °C[3]	• Gradual phase out of coal-fired capacity in 2023-2025 (percentage weight of coal capacity out of total consolidated capacity reduced from about 7% in 2022 to below 0.5% in 2025). • Invest €15 billion to accelerate the development of renewable energy by installing 17 GW of new renewables capacity (13 GW of which at the consolidated level) and 4 GW in BESS in 2023-2025, reaching 75 GW of renewables capacity (including 4 GW of BESS) by 2025.
			●●○› Medium term (2030)	72 gCO_{2eq}/kWh (-80% compared to 2017 base year)	1.5 °C (SBTi certified)	• Continue the process of decarbonizing electricity generation, implementing a Group-wide investment plan that will remain at the annual levels of the 2023-2025 plan, reaching a managed capacity of over 130 GW by 2030, thereby bringing total generation capacity to be made up of around 85% renewables. • Exit from coal-fired generation, which is expected to take place by 2027 globally.
			●●●› Long term (2040)	0 gCO_{2eq}/kWh (-100% compared to 2017 base year) Zero emissions	1.5 °C (SBTi certified)	• Exit from the business of thermal electricity generation, achieving a 100% renewable energy mix. • No use of carbon-removal technologies.
Scope 1 and 3 GHG emission intensity related to integrated power	Sale of electricity	**98.2%** **of Scope 1 GHG** emissions **73.4%** **of Scope 3 GHG** emissions - category 3 (Fuel and energy-related activities)	●○○› Short term (2025)	135 gCO_{2eq}/kWh	1.5 °C[3]	• Increase the percentage of renewable energy sold to customers, while increasing Group's renewables production. • Increase the share of fixed-price energy sales covered by carbon-free sources in core countries from around 70% in 2022 to about 90% by 2025, while increasing volumes of electricity sold at a fixed price from about 185 TWh in 2022 to around 200 TWh by 2025.
			●●○› Medium term (2030)	73 gCO_{2eq}/kWh (-78% compared to 2017 base year)	1.5 °C (SBTi certified)	• Increase the share of renewable energy sold to customers by increasing the Group's renewables generation, reaching a managed capacity of over 130 GW by 2030, thereby bringing total generation capacity to be made up of around 85% renewables. • Continue the strategy of balancing supply and demand and increase the share of electricity sold at a fixed price covered by carbon-free generation.
			●●●› Long term (2040)	0 gCO_{2eq}/kWh (-100% compared to 2017 base year) Zero emissions	1.5 °C (SBTi certified)	• By 2040, reach 100% of the energy sales covered by renewables. • No use of carbon-removal technologies.

GHG target	Primary business activity	Sources of covered GHG (GHG Protocol)[1]	Time frame	GHG target	Climate scenario	Primary drivers and actions
Scope 3 GHG emissions related to sale of natural gas on end-user market	Sale of gas to end users	**100%** **of Scope 3 GHG** emissions - category 11 (Use of sold products)	●○○› Short term (2025)	20.9 $MtCO_{2eq}$	n/a[4]	• Encourage customers (especially residential customers) to switch from gas to electricity by promoting efficient electricity technologies (e.g., heat pumps for home heating or induction cooktops in kitchens), increasing the electrification rate of our customers in Italy and Spain from 17% in 2022 to over 20% by 2025. • Promote services to customers that enable electrification: increase in behind-the-meter storage capacity from around 99 MW in 2022 to about 352 MW by 2025; increase in the capacity of photovoltaic panels installed at end users from around 100 MW in 2022 to roughly 300 MW by 2025; and increase in demand response capacity from around 8.4 GW in 2022 to about 12.4 GW by 2025. • Reduce the volumes of gas sold to customers from around 10.2 bcm in 2022 to about 4.3 bcm by 2025. • Optimize the gas portfolio of customers (especially industrial customers), reducing customers of the retail gas business from around 6.5 million in 2022 to roughly 4.4 million by 2025.
			●●○› Medium term (2030)	11.4 $MtCO_{2eq}$ (-55% compared to 2017 base year)	1.5 °C (SBTi certified)	• Encourage customers (especially residential customers) to switch from gas to electricity by promoting efficient electricity technologies (e.g., heat pumps for home heating or induction cooktops in kitchens), increasing the electrification rate of our customers in Italy and Spain from 17% in 2022 to over 30% by 2030. • Continue with the short-term strategic actions, while continuing to promote services to customers that enable the electrification of consumption and reaching a demand response capacity of over 20 GW by 2030. • Optimize the gas portfolio of customers (especially industrial customers), continuing to reduce the volumes of gas sold to around 3 bcm by 2030.
			●●●› Long term (2040)	0 $MtCO_{2eq}$ (-100% compared to 2017 base year) Zero emissions	1.5 °C (SBTi certified)	• Aim to achieve sale of 100% renewable energy to end users by 2040. • Exit from the sale of gas to retail customers by 2040. • No use of carbon-removal technologies.

GHG target	Primary business activity	Sources of covered GHG (GHG Protocol)[1]	Time frame	GHG target	Climate scenario	Primary drivers and actions
Additional emissions Scopes 1-2-3	• Electricity distribution (Scopes 1 and 2) • Management of vehicle fleet, buildings and other assets (Scopes 1 and 2) • Supply chain management (Scope 3) • Purchasing of fuels (Scope 3)	**0.4%** **of Scope 1 GHG** emissions **100%** **of Scope 2 GHG** emissions **28.6%** **of Scope 3 GHG** emissions - category 1 (Purchase of goods and services) for the 2030 target and 43% for the 2040 target[5] **26.6%** **of Scope 3 GHG** emissions - category 3 (Fuel and energy-related activities)	●●○› Medium term (2030)	10.4 $MtCO_{2eq}$ (-55% compared to 2017 base year)	1.5 °C (SBTi certified)	• Invest a total of €15 billion in grids over the period 2023-2025, of which 11% to increase digitalization and 47% to improve grid resilience and quality, thereby helping to reduce grid losses and related greenhouse gas emissions. Replace existing distribution network infrastructure components with SF_6-free solutions. • Electrify fleet and buildings by 2030. • Implement a circular procurement approach; increase the number of contracts that include the measurement of the carbon footprint of the products and services purchased by Enel, encouraging their reduction in a collaborative decarbonization process with our suppliers. Strengthen dialogue with raw material producers and other utilities to define shared and effective long-term decarbonization strategies. • Phase out coal-fired generation by 2027, mitigating all GHG emissions related to coal supply.
			●●●› Long term (2040)	<2.5 $MtCO_{2eq}$ (-90% compared to 2017 base year) Net-zero emissions	1.5 °C (SBTi certified)	• Promote grid digitalization and replace existing distribution network infrastructure components with SF_6-free solutions. • Implement a circular procurement approach; increase the number of contracts that include the measurement of the carbon footprint of the products and services purchased by Enel, encouraging their reduction in a collaborative decarbonization process with our suppliers. Strengthen dialogue with raw material producers and other utilities to define shared and effective long-term decarbonization strategies. • Zero out emissions associated with gas extraction, as the Group will have completely exited both the gas-fired generation of electricity and the sale of gas to end users.



Total coverage of Scopes 1-2-3 emissions in 2022

- 98.6% of Scope 1 GHG emissions (2025, 2030 and 2040 targets)
- 100% of Scope 2 GHG emissions (2030 and 2040 targets)
- 87% (2030 target) and 90% (2040 target) of Scope 3 GHG emissions[5]

(1) Percentages based on total GHG emissions in 2022.
(2) Excludes marginal Scope 1 GHG emissions not directly related to the combustion of fossil fuels in electricity generation at thermal plants, which accounted for 1.4% of total Scope 1 emissions in 2022. In any event, GHG emissions covered by all of the above targets are equal, on the whole, to 98.7% of total Scope 1 and 2 emissions in 2022, and therefore exceed the threshold of 95% required under the Science Based Target initiative.
(3) The target is in line with the path to 1.5 °C set by the SBTi for the electrical services industry (Sectoral Decarbonization Approach, or SDA), although it could not be officially validated because the SBTi does not certify targets over a time frame of less than five years from the presentation date.
(4) The target could not be officially validated because the SBTi does not certify targets over a time frame of less than five years from the presentation date. In addition, the SBTi has not defined a Sectoral Decarbonization Approach for these types of emissions, so the ambition level cannot be verified.
(5) Two different percentage limits have been set for the target for Scope 3 GHG emissions by the supply chain, as allowed under the SBTi approach, which required coverage of at least 67% of Scope 3 emissions for the 2030 target, and at least 90% for the 2040 target.

Adaptation: resiliency and response to climate change and new options for the Group (Climate Adaptation Model)

The Group implements solutions to adapt to weather and climate events in order to effectively manage both chronic and acute situations for each business line and all activities.
These adaptation solutions may concern both short-term actions and long-term decisions, such as planning for investments in response to weather events. Adaptation efforts also include procedures, policies and best practices for resiliency, response and innovation.
For new investment, we can also take action right from the design and construction phases to reduce the impact of climate risks by design (e.g., by assessing risks and vulnerabilities during the design stage) and to take account of any chronic effects (e.g., including climate scenarios in long-term estimates for renewable resources).

Once the weather and climate events have been identified, actions to maximize our capacity for adaptation may be categorized as follows.

- Response Management – Procedures to prepare the response to extreme events (e.g., acquiring short-term weather forecasts and training) and procedures to restore normal operations as quickly as possible (e.g., defining operating and organizational procedures to implement in response to critical events).
- Resiliency Measures – Actions aimed at increasing asset resiliency, such as assessing the entity of potential acute and chronic risks in order to define both design requirements and actions to take with regard to existing assets.
- New business options – Coming up with new businesses or products that are adapted to future changes in climate, so as to facilitate adaptation for both the Group and our communities and stakeholders.

In order to assess the impact of climate change for the purpose of making business and strategy decisions, and thereby aimed at implementing adaptation measures in line with the above, the Group is investing in the development of quantitative models that also make use of climate scenario data in order to assess the impact of climate change on specific assets or areas of production.
A number of these models are intellectual property as specified in the related section of this report.

Clean electrification

Electricity has emerged as a crucial vector in facilitating the transition to clean energy and the decarbonization of energy consumption. The scenarios that target the objectives of the Paris Agreement currently consider electrification rates of at least 50% by 2050 in order to limit the increase in global temperatures to 1.5 °C by the end of the century as compared to the pre-industrial era.

The electrification of consumption is, therefore, a central factor in reducing society's primary energy needs. Its intrinsic efficiency makes it an essential partner of renewable energy in order to achieve zero emissions worldwide.

Based on this assumption, the long-term strategy of the Enel Group places the following at the core of our objectives:

- a concerted push to electrify energy consumption;
- an acceleration in renewable energy to reach 85% carbon-free generation by 2030, while gradually eliminating fossil fuels and achieving a greater degree of energy independence for countries that are able to replace fossil-fuel imports with renewables;
- grid digitalization and enhancement, which will be essential in order to support such significant change in the energy system, while also enabling greater energy security and reliability.

The Group's strategic actions have the goal of increasing value for customers in the business-to-consumer (B2C), business-to-business (B2B), and business-to-government (B2G) segments by increasing the level of electrification of these customers and improving the services provided. In order to achieve UN Sustainable Development Goal (SDG) 7, i.e., to ensure access to affordable, reliable, sustainable and modern energy for all, increasing the volume of electricity sold and developing beyond-commodity services will be accompanied by a general reduction in costs. The value created by the Group by way of electrification seeks to guide our customers along the gradual process of replacing fossil fuels in the various segments of consumption.

Expanding the electric vehicle charging infrastructure is key to the mass dissemination of electric cars, so it is a necessary condition to the transition towards carbon-free mobility. This objective is shared by Enel X Way, which is further expanding its charging network and is seeking to have more than 4 million charging points by 2030.
Another key factor is the electrification of residential consumption, which Enel will be pushing by promoting heat pumps for home heating and induction cooktops for the kitchen. This will lead to an increase in the electrification rate for Enel customers from the current 17% to around

20% by 2025 and to 30% by 2030, thereby making it possible to reduce their total energy spending by 5% by 2025 and by around 20% by 2030, while also reducing their carbon footprint by 2030 thanks to a reduction in gas sales from the current 10 bcm to around 3 bcm by 2030, bringing this to zero by 2040.

Enel will also be supporting electrification through investment in infrastructure, given that the grids are the true enablers of the transition. Out of the total investment in grids over the coming years, an increasingly large part will be dedicated to increasing both the number of connections with new users and the flexibility and capability of the grid to handle an increasing share of distributed generation. Smart grids, clean energy and energy efficiency are accessible to Enel customers thanks to the innovations brought to each smart meter. At present, the Group has already installed 45 million digital meters, and we expect to reach 80 million units by 2030.

To reach these objectives by 2030, these actions must be put into practice immediately in order to have the desired effect in time. We therefore need to design a path forward that enables us to reach our long-term objectives and make a concrete contribution to solving the world's challenges through practical action and innovative solutions. The following are of particular note.

System electrification

Flagship projects

Enel X is actively involved in managing three flagship projects in three different locations of strategic importance for the Group: Sardinia (Italy), Zaragoza (Spain), and Santiago (Chile). The goal is to create testbeds of electrification and sustainability to test various business models that can be implemented quickly and with low levels of risk. The success of these projects will be key to broadening and exporting these strategies into other areas of the world. The projects in these three locations will focus on promoting greater-than-average local penetration of electricity, while also building renewables capacity in order to serve the growing energy demand, supported in part by batteries to store electricity. Electrification can thereby contribute to the decarbonization of the energy system as a whole.

The #WATTACHANGE campaign

The nexus of electrification and efficiency needs to be easy for the public to understand. All too often this concept, like others, can be confusing and only accessible to the experts. To come up with examples and other content that is easy to grasp with regard to financial savings, energy security, and the creation of jobs through system electrification, a group of clean-energy organizations, including Enel, has created a campaign specifically aimed at promoting the benefits of clean electricity for consumers in terms of efficiency, energy saving, and emission reduction. The project has been structured in two cycles, which accompanied the release of the "Fit for 55" publication in July 2021 and of the REPowerEU plan in May 2022.



Grid electrification

Grid Futurability®

Grid Futurability® is a global, customer-focused approach that Enel is adopting in order to renew, reinforce and expand our networks over the coming years. With Grid Futurability®, Enel is anticipating emerging needs related to electrification and establishing a roadmap of investment in our electricity distribution infrastructure in order to meet those needs. By combining the use of robust infrastructures and advanced technologies, Grid Futurability® seeks to provide grids that are increasingly resilient, interactive and intrinsically sustainable in the countries in which we operate, with a focus on urban areas. This approach harmonizes the short and long-term strategic needs, while maximizing benefits and stakeholder satisfaction, and reducing the carbon footprint of our grids. It calls for the strategic use of technology in order to make the best use of existing electrical grids and build fully digital smart grids.

Flexibility Labs

Enel Flexibility Labs aim to strengthen our collaboration with all stakeholders involved in the development of the distribution and electrical systems (e.g., providers of flexible services, producers of related technologies, energy communities, DSOs and TSOs). Using an open-platform grid simulator, the project makes it possible to test, in a realistic setting, behavior and events that are typical of an electrical grid, along with possible innovative solutions, so as to study this behavior in order to continue developing and improving all systems. The tests are a way to promote collaboration among the parties involved and reinforce the use of distributed energy resources, thereby contributing to the ambitions of decarbonization and electrification on the road to a net-zero future.

Open Power Grids Association

Launched by Enel Grids in May 2022, the Open Power Grids Association was created to promote a convergence on and co-design of operating standards for grid components, while maximizing the creation of shared value through sustainability and security, cost efficiency, and technical performance. The association brings together electricity distributors, components producers and suppliers, research institutes, and other stakeholders in order to co-design and develop operating specifications for electrical grids that are increasingly sustainable and respectful of the environment, with the shared goal of accelerating the energy transition.

Electrification of consumption

Electrification of our vehicle fleet

With the goal of electrifying Enel's fleet of vehicles, this project is a strategic lever in decarbonization and electrification. It will reduce the environmental impact of our vehicles and create economic value by reducing both fuel consumption and maintenance costs.

Electrification projects

Enel is involved in various international round tables and other projects promoting clean electrification. One main example is the Net Zero Carbon Cities initiative of the World Economic Forum (WEF), which aims to enable urban transformation towards clean electrification and the circular economy, using integrated energy solutions for buildings and mobility. The project has enabled Enel to play an active role in the City Sprints in São Paulo and Cagliari, which is a series of workshops that bring together local businesses and city leaders in order to define new partnerships and promote public-private partnerships. Enel's smart meter has also been included in the Toolbox of Solutions, a digital platform encompassing more than 200 best practices and case studies of clean electrification, energy efficiency, and smart infrastructure.

With regard to green hydrogen, Enel is one of the leaders in the project H2 Zero Pledges, led by the World Business Council for Sustainable Development (WBCSD) to engage companies in supporting the use and provision of hydrogen with the lowest possible carbon intensity. Enel, for example, has committed to produce solely green H2 and expects to reach 2 GW of electrolyzer capacity by 2030 (to be updated to 3 GW in 2023).

Commitment to electrification

The Enel Energy Compact

Enel is one of the companies that has been involved in the United Nations High-Level Dialogue on Energy (HLDE) right from the start. The HLDE has led to the launch of a global roadmap to set specific targets for the acceleration of the energy transition and ensure universal access to affordable, reliable, sustainable and modern energy systems by 2030.

Enel's commitment includes several key objectives in support of the Company's green electrification pillar to increase renewables capacity and demand response, to reduce GHG emissions in line with the (SBTi-certified) 1.5 °C scenario, to install new electric vehicle charging points, and to make new connections in rural and suburban areas

in the countries in which the Group operates. The commitments stated in the Energy Compact are in line with our Strategic and Sustainability Plans so as to ensure transparency and accountability on the Group's journey to clean electrification.

Sustainable investment

The Group will continue pursuing sustainability in our investment decisions, while creating shared value for all our stakeholders. The Group's investment plan is fully in line with the goal of exiting from the coal industry and achieving zero emissions by 2040 (in line with the Paris Agreement objective of limiting global warming to 1.5 °C). As a result, our investments in products or businesses of high carbon intensity will gradually fall to zero by 2040.

Roughly 94% of the Group's total investment in 2023-2025 is in line with the United Nations Sustainable Development Goals (SDGs) and directly work towards SDGs 7 ("Affordable and Clean Energy"), 9 ("Industry, Innovation and Infrastructure") and 11 ("Sustainable Cities and Communities"), all of which help to achieve SDG 13 ("Climate Action"), up from 92% of investment in 2022 aligned with those goals. The alignment of investments stated in the Group's Strategic Plan with the objectives of decarbonization and the reduction of greenhouse gases is based on a specific approach by which investment in renewables and retail power, by their nature, fall under SDG 7, investment in distribution networks fall under SDG 9, and investments by Enel X concern SDG 11. Of the above, 94% thereby excludes investment in conventional power generation (including maintenance) and in retail gas.
Furthermore, we expect that, from 82% in 2022, more than 80% of all Group investment will continue to be in line with the EU taxonomy over the period covered by the plan, given their substantial contribution to mitigating climate change.

With this model, we expect to generate an increase in GDP of roughly €70 billion through 2025 in the countries in which we operate, while also creating some 160,000 new jobs and gradually increasing wealth for lower-income households by about €12 billion over the same period in the communities affected by our business. With regard to developing countries, our Group is also contributing to the growth of local communities by way of direct investment, particularly in Latin America, which remains a key region for the Company.

Sustainable finance

Enel's path to sustainable finance has shown how important this can be in supporting the organic growth of a business. The Group's goal is to gradually refinance outstanding balances using sustainability-linked instruments.

In the years to come, Enel will continue to make use of sustainable financial instruments, confirming their central role within the Group's financial strategy, with the goal of bringing sustainable debt to about 70% of the Group's total debt by 2025, up from an estimated 60% in 2022.





Enel leading the global movement of CFOs toward the sustainable development goals

Alberto De Paoli
Enel CFO

> "With this commitment we are taking a necessary step in the path undertaken in December 2019, when a small group of CFOs began to work together with a vision to promote the integration of sustainability in business operations. We are now looking to increase awareness even further and contribute to creating the environment we need to attract ever more capital into sustainable development."

The CFO Coalition being promoted by the UN Global Compact is a body that is co-chaired by Enel's CFO, Alberto De Paoli, which aims to inspire the CFOs of large organizations to commit to the creation of long-term, sustainable shared value. This coalition has announced the commitment of the companies involved to tie nearly 50% of all their finance to sustainability, including plans to issue new financial instruments, such as the sustainability-linked bonds that Enel introduced in 2019.

The goal is to mobilize trillions of dollars of investment each year in support of the Sustainable Development Goals in areas such as sustainable infrastructure, renewable energy, water, health care, labor conditions, and more. The CFOs of our companies must also promote initiatives to create sustainable, shared value over the long term and increase awareness of the transformational impact that companies can have on financial markets, on the global economy, and on society as a whole.

Quality relationship with our stakeholders based on sustainability

The value of the relationships we build with our stakeholders is at the core of our commitment, and meeting their needs also means focusing on and supporting those who are most exposed to the transition towards a decarbonized economy. By listening to and engaging with the various categories of stakeholders, we can identify the priorities and define the Group's Sustainability Plan, in harmony with the Strategic Plan, based on specific short-, medium- and long-term objectives, so as to ensure transparency and accountability in our path to sustainable progress.

Our sustainability strategy, which centers around decarbonization and electrification, is founded in a respect for human rights, the assurance of health and safety, and a solid structure of governance.

Our commitment to human rights calls for an integrated, global approach that takes account of the needs of our stakeholders throughout the entire value chain. Safeguarding the health and safety of all who work for and with the Group is a responsibility that is shared at all levels of the organization by integrating safety into processes and training, in relations with contractors, in managing and analyzing injuries in the workplace, and in ongoing quality controls. A solid structure of governance also enables us to ensure that our stakeholders benefit from our principles of transparency, fairness and integrity.

The planet plays a fundamental role in the creation of value at Enel, and combating climate change is one of the Group's primary challenges. We have defined specific actions aimed at reducing greenhouse gas (GHG) emissions and improving air quality in the areas in which we operate, while focusing on developing our renewables capacity and gradually closing coal-fired plants.
Protecting natural capital and biodiversity and making responsible use of water resources are key to protecting natural ecosystems and to the wellness of the people who live in them, all to the benefit of generations present and future.
With regard to our customers, we are committed to ensuring high standards of service quality to the utmost satisfaction by anticipating market needs, so as to ensure reli-

able solutions and establish lasting relationships based on open dialogue, collaboration and trust, traits that concern not only the provision of electricity and/or natural gas but also, and above all, the intangible aspects of our service as perceived by the customer.
It is our goal to be able to provide simple, innovative and inclusive solutions and to anticipate customers' needs as we support them in the path to electrifying their energy consumption.

The rapid, ongoing evolution of our business has resulted in a need for new technical and professional skills and led to the natural obsolescence of others. Within this landscape, with regard to all the Group's people, Enel is constantly committed to improving the offering of training, increasing the average hours of training per employee, and promoting individual growth, career training, skills development, and performance optimization as new needs arise. In this context, the Group aims to have 40% of all training focus on upskilling and reskilling by 2025.

Enel is committed to promoting initiatives that disseminate and strengthen a culture of health, safety, wellness, and work-life balance, that ensure a workplace that is safe, inclusive and able to value diversity and individuality, all within an approach based on innovation and entrepreneurial spirit. At Enel, inclusion means caring for all aspects of diversity and valuing the talents of every individual. In today's world, it is essential to innovate, co-create, attract and draw out talent, and develop a workplace that enables every individual to always express their unique traits in order to seize new opportunities.

The Group has always been committed to gender equality, and in 2021 Enel joined the "Equal by 30" campaign of the Clean Energy Ministerial (CEM), by which various organizations from the public and private sectors commit to promoting gender equality in wages, among leadership, and in opportunities by 2030 within the clean energy sector. We have confirmed our objectives for the percentage of women managers to reach 26.9% of senior management and 34.1% of middle management by 2025.

A key factor in achieving our goals of decarbonization and electrification is the existence of a resilient, sustainable supply chain. For this reason, we work closely with our suppliers, viewing them as partners in this change and basing our relationship on mutual loyalty, transparency and collaboration. This commitment translates into concrete action in the various stages of the procurement process: in the qualification of vendors on social (human rights, health and safety) and environmental aspects; in requiring environmental certifications as part of the tender process, such as carbon footprint certification (75% in value of all procurement agreements in 2025 will include CFP certification); and in the application of rankings and/or targets for supplier carbon footprints.
With regard to the communities in which we operate, we are committed to establishing strong, lasting relationships as a fundamental part of a business model that is able to create shared value over the long term for all stakeholders. The sustainability of our strategy has received confirmation in the progress we have made in terms of our contribution to reaching the United Nations Sustainable Development Goals (SDGs) through the Group's work with our communities, particularly with regard to ensuring inclusive and equitable quality education (SDG 4), providing access to affordable, reliable, sustainable and modern energy (SDG 7), and promoting sustained, inclusive and sustainable economic growth (SDG 8). The important successes thus far have been made possible by our Creating Shared Value (CSV) strategy and model, which integrate social and environmental factors in business processes throughout the value chain, with a particular emphasis on business development, engineering and construction, procurement, and asset management and maintenance.

Innovation, digitalization and the circular economy embrace and strengthen all aspects of Enel's sustainability strategy and accelerate our path to sustainable progress.

To promote new uses of energy and new ways of managing it and making it accessible to more people in a sustainable manner, we have made innovation a key aspect of our business strategy. This open-innovation approach, which we have named Open Innovability®, involves traditional action and the development of new models and technologies based on cutting-edge innovation.
We promote open collaboration with startups, small and medium-sized enterprises (SMEs), large businesses, academia, in-house and other experts, investors, and all our partners such that the entire organization can focus on constant renewal, while ensuring the creation of long-term value.
Finally, the energy transition cannot come about without digitalization and cyber security, for which the Group is committed to disseminating the most advanced solutions and reinforcing efforts to verify them, so as to prevent cyber-attack.
The circular economy, in turn, is increasingly seen as an accelerator of growth throughout the value chain and has become an essential factor in Enel becoming a leader not only in sustainability and innovation, but in the energy transition as a whole. A circular approach makes it possible to reduce both waste and the use of finite natural resources, while maintaining the value of goods and materials. In this way, we are able to generate benefits for the environment related not only to the reduction of greenhouse gas emissions, but more generally as well to the consumption of water and other natural resources, to the production of

waste and lost biodiversity.

In 2023 in Davos, to reinforce this commitment, Enel officially presented the KPI "Economic CirculAbility©", which compares the Group's financial performance against the quantity of resources consumed by the various business activities throughout the value chain. The Group has also taken on the commitment to double this indicator by 2030 over 2020 levels.

In the words of Ernesto Ciorra, Enel's Chief Innovability© Officer, "We must work so that raw materials are not consumed, but rather used and made available again for future production cycles. In this way, we can ensure, for ourselves and for the countries in which we operate, freedom from future supplies and independence from geopolitical tensions. We must do this now, because raw materials are available today, but global demand is increasing disproportionately, in parallel with efforts to decarbonize energy generation and industrial production generally. We are the first to have taken up this commitment, and we are proud of this, because the first will have a competitive advantage in the circular economy, while the last risk not having access to dwindling materials".

Assessment of the risks and opportunities connected with the Strategic Plan

The process of defining the Group's strategies is accompanied by a careful analysis of the risks and opportunities connected with those strategies.
Identifying those risks and opportunities within the Enel Group's strategic and industrial planning process is designed to span the horizon of the Plan in an integrated manner.
Although the strategy underlying the Plan, as described above, envisages a phase of careful analysis and verification of the strategic risk factors and variables, it retains scenario assumptions regarding future events that will not necessarily occur or not occur to the extent assumed, as they depend on variables that cannot be controlled by management. Upside and downside developments may occur as time unfolds.
Before being able to approve the Strategic Plan, a quantitative analysis of the risks and opportunities associated with the Group's strategic positioning is presented annually to the Control and Risk Committee appointed by the Board of Directors. In particular, risk factors such as macroeconomic and energy variables (such as exchange rates, inflation, commodity prices and electricity demand), regulatory developments, weather and climate events and risks connected with the strategy are identified.
Based on the nature of the risk and opportunity drivers, the analytical approach that best represents their volatility is selected. In practice, we perform a deterministic analysis based on what-ifs of the possible evolution of the main market and business variables with respect to the main risk factors for the execution of the Business Plan.
The validity of the results is also monitored with ex-post analyses by risk cluster. In 2022, most of the actual upside and downside events fell well within the limits estimated by the risk models of the Strategic Plan presented at the end of 2021.
Focusing on the scenario risk analysis for the Strategic Plan, exchange rates, electricity demand and the volatility of energy and commodity prices, together with possible reviews of regulatory frameworks, represent almost all the volatility of the drivers. In particular, in addition to the US dollar the most impacting currencies are the Chilean peso, the Colombian peso and the Brazilian real. Italy and Spain represent nearly all of the Group's exposure to the impact of the volatility of energy prices and commodity price fluctuations on margins.
Examining the other risk factors, such as those connected with weather and climate events, we can see that geographical diversification significantly reduces the exposure to the risk associated with renewable resources – a highly positive factor considering the Group's positioning and the steady expansion of renewable generation. Furthermore, with regard to climate change, the risk associated with chronic effects is of little significance over the course of the three years of the plan.
The monitoring of all possible regulatory issues is crucial for assessing any upside or downside impact on the Group.

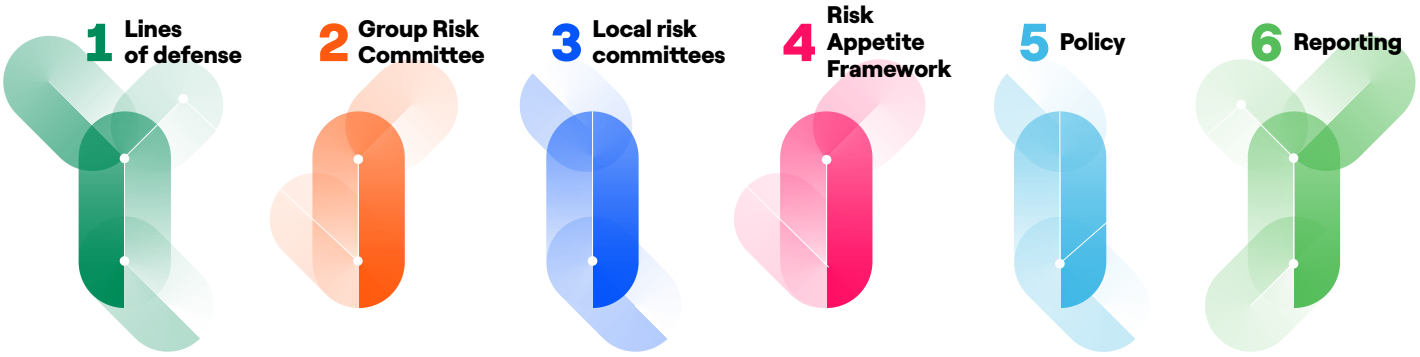
Risk management

The Enel Group risk governance model

In performing its industrial and commercial activities, the Enel Group is exposed to risks that could impact its performance and financial position if not effectively monitored, managed and mitigated.
In this regard, in line with the architecture of Enel's internal control and risk management system (ICRMS), the Group has also adopted a risk governance model based on a number of "pillars" described below, as well as a uniform taxonomy of risks (the "risk catalogue") that facilitates their management and organic representation.

The "pillars" of risk governance

Enel has adopted a reference framework for risk governance that is implemented in the real world through the establishment of specific management, monitoring, control and reporting controls for each of the risk categories identified.
The Group's risk governance model is in line with the best national and international risk management practices and is based on the following pillars:



- **Lines of defense**. The Group's arrangements are structured along three lines of defense for risk management, monitoring and control activities, in compliance with the principle of segregating roles in the main areas in respect of significant risks.

- **Group Risk Committee**. This body, set up at management level and chaired by the Chief Executive Officer, is responsible for strategic guidance and risk management supervision through:
  - analysis of the main exposures and the main risk issues faced by the Group;
  - adoption of specific risk policies applicable to Group companies, in order to identify roles and responsibilities in risk management, monitoring and control processes, in compliance with the principle of organizational separation between the units responsible for operations and those responsible for monitoring and controlling risks;
  - approval of specific operating limits, authorizing, where necessary and appropriate, exceptions to these limits for specific circumstances or needs;
  - definition of risk response strategies.

  The Group Risk Committee generally meets four times a year and can also be convened, where deemed necessary, by the Chief Executive Officer and the head of the "Risk Control" unit, which forms part of the "Administration, Finance and Control" function.

- **Integrated and widespread system of local risk committees**. The presence of specific local risk committees, organized in accordance with the main global business lines and geographical areas of Group operations and chaired by their respective top managers, provides adequate oversight of the most characteristic risks at the local level. The coordination of these committees with the Group Risk Committee facilitates appropriate agreement with Group top management of the information and mitigation strategies for the most significant exposures, as well as local implementation of the guidelines and strategies defined at Group level.

- **Risk Appetite Framework (RAF)**. The Risk Appetite Framework constitutes the reference framework for determining risk appetite and is an integrated and formalized system of elements that enable the definition and application of a single approach to the management, measurement and control of each risk. The RAF is summarized in the Risk Appetite Statement, a document that summarily describes the risk strategies identified and the indicators and/or limits applicable to each risk.

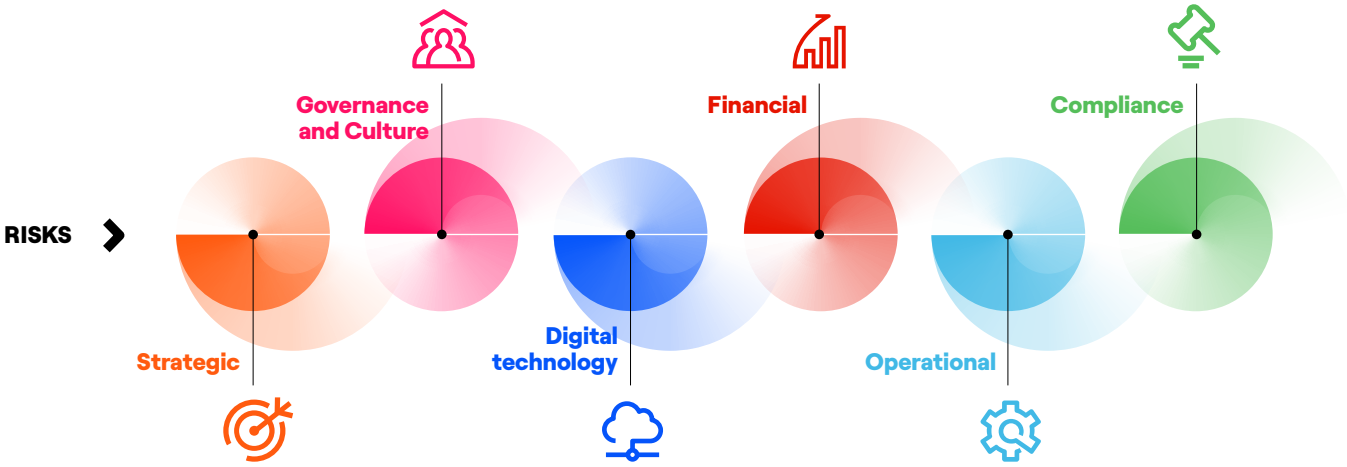
- **Risk policies**. The allocation of responsibilities, coordination mechanisms and the main control activities are represented in specific policies and organizational documents defined in accordance with specific approval procedures involving the relevant corporate structures.

- **Reporting**. Specific and regular information flows on risk exposures and metrics, broken down at Group level and by individual global business line or geographical area, allow Enel's top management and corporate bodies to have an integrated view of the Group's main risk exposures, both current and prospective.

The Group "risk catalogue"

Enel has adopted a risk catalogue that represents a point of reference at the Group level and for all corporate units involved in risk management and monitoring processes. The adoption of a common language facilitates the mapping and comprehensive representation of risks within the Group, thus facilitating the identification of the main types of risk that impact Group processes and the roles of the organizational units involved in their management.

The risk catalogue groups the types of risk into macro-categories, which include, as shown below, strategic, financial and operational risks, (non)-compliance risks, risks related to governance and culture as well as digital technology.



The following table shows the list of individual risks currently identified and classified within the aforementioned macro-categories.

Category	Risk	Definition
Strategic	Climate changes	Risk of ineffective identification, assessment and management of risks related to climate changes – caused by acute and chronic events (physical risks) and by effects of regulatory, technology and market trends arising from the transition to a lower-carbon economy (transition risks) – through strategic and operating initiatives of adaptation and mitigation of climate risks.
	Competitive landscape	Risk of ineffective identification, assessment and monitoring of evolutionary market trends that may impact Group competitive positioning, growth and profitability.
	Innovation	Risk of ineffective development, delivery and diffusion of innovative solutions caused by technology scouting inadequacy and wrong or incomplete analysis over uncertainty, complexity, sustainability, feasibility degree, market expectations, internal skills or financial commitment of innovative projects.
	Legislative and regulatory development	Risk of adverse evolution of legislative or regulatory landscape, and/or ineffective identification, assessment, management and monitoring of legislative/regulatory evolutions, communication of new compliance duties, execution of advocacy activities and internal gap analysis. Lack of a systematic assessment process on regulatory exposures coming from new strategic and business initiatives.
	Macroeconomic and geopolitical trends	Risk of ineffective identification, assessment and monitoring of global economic, financial, political and social trends and monetary, fiscal and trade policies evolutions.
	Strategic planning and capital allocation	Risk of ineffective strategic planning and capital allocation processes, caused by unreliable scenario assumptions and inability to capture emerging trends or to timely address relevant changes, that may adversely influence decision-making process.
Governance and Culture	Corporate culture and ethics	Risk of (i) inadequate integration, within business processes and activities, of the ethical principles defined by the Group, (ii) inability to put in place policies and processes to ensure the respect of diversity and equal opportunity principles and (iii) unsanctioned behaviors of employees and management, in breach with ethical values of the Group.
	Corporate governance	Risk of ineffective corporate governance frameworks/rules and/or lack of integrity and transparency within decision-making processes.
	Reputation	Risk of negatively impacting a company's and/or Group's public image and damaging its relationship of trust with shareholders.
	Stakeholders' engagement	Risk to ineffectively engage key stakeholders on Enel's strategic positioning on sustainability and financial goals due to a lack of understanding, anticipating or orienting their expectations, which might cause an incomplete integration of such expectations into Group's business strategy and sustainability planning processes, with a potential negative impact on its reputation and competitiveness.
Digital technology	Cyber security	Risk of cyber-attacks and sensitive or massive corporate and customers data stealing, ascribable to a lack of security of networks, operating systems and databases.
	Digitalization	Risk of managing ineffective business processes and supporting higher operating costs due to a lack of digitalization in terms of workflows coverage, systems integration and adoption of new technologies.
	IT effectiveness	Risk of ineffective support of IT systems to business processes and operating activities.
	Service continuity	Risk of exposure of IT/OT systems to service interruptions and data losses.

Category	Risk	Definition
Financial	Capital structure adequacy and funding access	Risk that company and/or Group debt/equity ratio or the mix between long- and short-term debt may not be adequate to (i) support financial flexibility, (ii) enable free access to wide range of funding sources and (iii) achieve cost of debt targets.
	Commodity	Risk of (i) adverse commodity market trends and/or prices volatility movements (price risk) and/or (ii) lack of demand or availability of commodities, natural resources and raw materials (volume risk).
	Credit and counterparty	Risk of (i) counterparty's inability to meet payment or delivery contractual obligations, (ii) credit deterioration or default of a counterparty, (iii) significant exposure to a single counterparty (single name concentration) or (iv) to counterparties operating in the same sector or belonging to the same geographical area (sectorial/geographical concentration).
	Foreign exchange rate	Risk of adverse variation of exchange rates, negatively affecting: (i) costs and revenue denominated in foreign currencies with respect to the time at which price conditions were defined or the investment decision was made (economic risk); (ii) revaluations or fair value adjustments of exchange rate-sensitive financial assets and liabilities (transaction risk); (iii) the consolidation of subsidiaries having different accounting currencies (translation risk).
	Interest rate	Risk of interest rates adverse fluctuations impacting on net financial expenses as well as on fair value adjustments of sensitive financial assets and liabilities.
	Liquidity	Risk of incurring into difficulties to meet short-term financial needs as a result of inability or higher costs incurred in (i) raising short-term funds (funding liquidity risk) or (ii) liquidating assets on financial markets (asset liquidity risk).
Operational	Asset protection	Risk of unauthorized accesses, thefts, misappropriation or mismanagement of equipment, plants, or other physical assets, or financial assets or energy. Risk of ineffective safeguarding activity (i.e., insurance and legal activities) on Group financial assets.
	Business interruption	Risk of partial or total interruption of business operations arising from technical failures, assets and plants malfunctions, human errors, sabotages, raw materials unavailability or adverse weather events.
	Customers' needs and satisfaction	Risk of failure of Group's products and services in achieving customers' expectations and needs in terms of quality, accessibility, sustainability and innovation.
	Environment	Risk that inappropriate working operations or machineries may adversely impact on the environment quality and ecosystems involved. Risk of a breach in complying with international, country or local environmental laws and regulations.
	Health and safety	Risk that inappropriate working environments, structures, machineries and business operations may negatively impact on health & safety conditions of employees and other stakeholders involved. Risk of a breach in complying with international, country or local laws and regulations on health and safety.
	Intellectual property	Risk of Group's intellectual property infringements or frauds.
	People and organization	Risk of inadequacy of Group's organizational structures or lack of internal skills caused by the absence or inadequacy of training programs, ineffectiveness of incentive schemes, inadequate turnover planning process or inability to define effective employees recruiting processes and retention policies.
	Process efficiency	Risk of supporting higher operating costs or time delays as well as minor revenue stream due to an inadequate management of operating processes and activities, a lack of data quality, incomplete or ineffective monitoring over internal performances and internal reporting.
	Procurement, logistics and supply chain	Risk of ineffective procurement or contract management activities, due to inadequate requirements definition or supplier qualification process, a frequent recourse to direct awarding, scouting activities shortcomings, poor monitoring over the fulfillment of contractual duties, non-application of penalties.
	Service quality management	Risk of third-party/internal service providers inability to meet the agreed required levels of service.

Category	Risk	Definition
Compliance	Accounting compliance	Risk of a breach in complying with international and national accounting laws and regulations or incorrect application and/or interpretation of international accounting standards adopted by the Group (Enel GAAP) and national accounting standards (local GAAP).
	Antitrust compliance and consumers' rights	Risk of a breach in complying with antitrust and consumers' rights laws and regulations.
	Corruption	Risk of willful misconducts or briberies carried out by persons inside or outside Group's boundaries in order to obtain an unfair or illicit advantage.
	Data protection	Risk of a breach in complying with applicable data protection and privacy laws.
	External disclosure	Risk of dissemination of reports, accounting documents, communications or other notices with wrong, inaccurate or incomplete information.
	Financial regulation compliance	Risk of a breach in complying with international or national financial laws and regulations.
	Tax compliance	Risk of a breach in complying with international or national fiscal laws and regulations.
	Compliance with other laws and regulations	Risk of a breach in complying with international, national or local laws and regulations not already specified in the other risk typologies (e.g., in electricity markets, distribution, generation, procurement, permitting, stock exchange and golden powers fields, etc.).

Strategic risks

This section provides disclosure on the following strategic risks:

- Legislative and regulatory developments
- Macroeconomic and geopolitical trends
- Risks and strategic opportunities associated with climate change
- Competitive environment

Legislative and regulatory developments

The Group operates in regulated markets and changes in the operating rules of the various systems, as well as the prescriptions and obligations characterizing them, impact the operations and performance of the Parent.
Accordingly, Enel closely monitors legislative and regulatory developments, such as:

- periodic revisions of regulation in the distribution segment;
- the liberalization of electricity markets, with special attention being paid to the acceleration provided for in Italy and expected developments in South America;
- developments in capacity payment mechanisms in the generation segment;
- regulatory measures to shield users from impact of price developments.

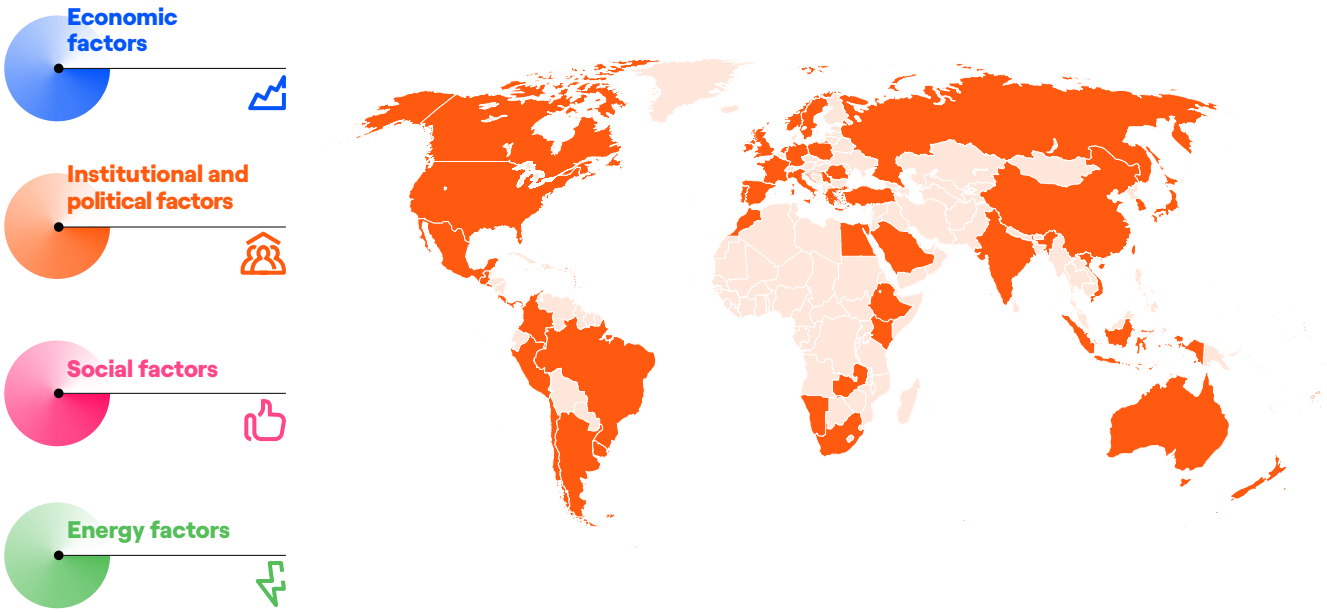
In order to manage the risks associated with these developments, Enel has intensified its relationships with local governance and regulatory bodies, adopting a transparent, collaborative and proactive approach in addressing and eliminating sources of instability in the legislative and regulatory framework.

Macroeconomic and geopolitical trends

The macroeconomic environment in 2023 will again see inflation at levels well above central bank targets in almost all economies. While inflation is expected to moderate gradually over the course of the year, some underlying inflation dynamics involving final goods and services could persist in the coming quarters. In response, central banks may delay the process of normalizing their monetary policies by further tightening financial conditions. This represents a major risk, especially in emerging markets such as Latin America, where a further generalized decline in risk appetite could trigger additional capital outflows and place greater strain in bond issues by local governments. Indeed, the fiscal space of many emerging countries had already been stretched during the pandemic crisis in order to support the economic recovery and concerns about debt sustainability in many countries have increased even more now in view of the increasingly less favorable global financial conditions. Finally, new risks could emerge if new variants of COVID-19 should spread, forcing governments to reintroduce restrictive measures on mobility and, consequently, generate new distortions in supply chains.

The considerable internationalization of the Group – which has a presence in many regions, including South America, North America and Africa – requires Enel to consider country risk, i.e., risks of a macroeconomic, financial, institutional, social or climatic nature and those specifically associated with the energy sector whose occurrence could have a significant adverse impact on both revenue flows and the value of corporate assets. Enel has adopted a quantitative Open Country Risk assessment model capable of specifically monitoring the riskiness of the countries in which it operates.

The Open Country Risk model seeks to go beyond the more conventional definition of country risk, which focuses on the ability of a government to repay the debt it has issued, to offer a broader view of the risk factors that can impact a country. The model is divided into four risk components: economic, institutional and political, social, and energy factors.



Open Country Risk is a quantitative model that extends the more conventional definition of country risk used in the existing literature by providing a more complete analysis of the risks involved, incorporating economic, financial, political, climate and energy factors.

More specifically, the Open Country Risk model has the ambition to measure the economic resilience of individual countries, defined as the balance of their position with respect to the rest of the world, the effectiveness of internal policies, the vulnerabilities of their banking and corporate system that might portend systemic crises and their attractiveness in terms of economic growth, and finally a quantification of extreme climate events as a cause of stress at the environmental and economic level (economic factors). This is accompanied by an assessment of the robustness of the country's institutions and the political context (institutional and political factors), an in-depth analysis of social phenomena, measuring the level of well-being, inclusion and social progress (social factors), and the effectiveness of the energy system and its positioning within the energy transition process, as these are all essential factors for

evaluating the sustainability of investments in the medium to long term (energy factors).
Specifically, the introduction of extreme climate events within the Open Country Risk model makes it possible to develop a uniform assessment on the evolution of certain climate hazards at the country level on a global scale.
Finally, with regard to the analysis of the energy transition process, the Open Country Risk model also includes risk and opportunity analyses designed for forecasting purposes, quantifying the actions and the paths taken by the individual countries. For example, the model incorporates various factors reflecting the weight of renewable sources in energy generation, the electrification process and the environmental sustainability of the national energy system, which together are crucial characteristics for evaluating the country's potential growth and attractiveness in the medium to long term.

Risks and strategic opportunities associated with climate change

The identification and management of risks connected with climate change and actions to seize opportunities

As discussed in previous sections, climate change and the energy transition will impact Group activities in a variety of ways.
In order to identify the main types of risk and opportunity and their impact on the business associated with them in a structured manner consistent with the Task force on Climate-related Financial Disclosures (TCFD), we have adopted a framework that explicitly represents the main relationships between scenario variables and types of risk and opportunity, specifying the strategic and operational approaches to managing them, comprising mitigation and adaptation measures.
There are two main macro-categories of risks/opportunities: those connected with developments in physical variables and those linked to the evolution of the transition scenarios. The framework described has been created with a view to ensuring overall consistency, making it possible to analyze and evaluate the impact of physical and transition phenomena within solid alternative scenarios, constructed using a quantitative and modeling approach combined with ongoing dialogue with both internal stakeholders and external authorities.
Physical risks are divided in turn between acute (i.e., extreme events) and chronic, with the former linked to extremely intense meteorological conditions and the latter to more gradual but structural changes in climate conditions. Extreme events expose the Group to the risk of prolonged unavailability of assets and infrastructure, the cost of restoring service, customer disruptions and so on. Chronic changes in climate conditions expose the Group to other risks or opportunities: for example, structural changes in temperature could cause changes in electricity demand and have an impact on output, while alterations in rainfall or wind conditions could impact the Group's business by increasing or decreasing potential electricity generation. In general, adapting to the probable changes that will occur in the future also drives activities in the field of innovation and strategic positioning: new businesses and better products could be found to live sustainably in the changed context.

The energy transition characterized by a gradual reduction of CO_2 emissions has risks and opportunities connected both with changes in the regulatory and legal context and trends in technology development and competition, electrification and customer behavior and the consequent market developments.

Consistent with the situation delineated in the climate and transition scenarios used by Enel to determine risks and opportunities, the main transition-related phenomena are beginning to emerge in relation to customer adoption of new behavior, the adoption of industrial strategies in all economic sectors and developments in regulatory policies, including tax policies. By 2030, the transition trends will become visible in response to the evolution of the context: the Enel Group has decided to guide and facilitate the transition, preparing to seize all the opportunities that may arise. As discussed previously, our strategic choices, which are already strongly oriented towards the energy transition, with more than 90% of investments directed at improving a number of the Sustainable Development Goals, enable us to incorporate risk mitigation and opportunity maximization "by design", adopting a positioning that takes account of the medium and long-term phenomena we have identified. The strategic choices are accompanied by the operating best practices adopted by the Group.

Framework of main risks and opportunities

Scenario phenomena	Time horizon	Risk & opportunity driver	Description	Management approach
Acute physical	Starting with short term (1-3 years)	Extreme events	**Risk**: especially extreme weather/climate events, which can damage assets and interrupt operations.	The Group adopts best practices to manage the restoration of service as quickly as possible. We also work to implement investments in resilience (e.g., the Italian case). With regard to risk assessment in insurance, the Group has a loss prevention program for property risk that also assesses the main exposures to natural events, supported by preventive maintenance activities and internal risk management policies. Looking forward, the assessments will also include the potential impacts of long-term trends in the most significant climate variables.
Chronic physical	Starting with long term (2030-2050)	Market	**Risk/opportunity**: increase or decrease in electricity demand under influence of temperature, whose variations can impact the business. Increase or decrease in renewables output, which may be affected by structural changes in resource availability.	The Group's geographical and technological diversification means that the impact of changes (positive and negative) in a single variable is mitigated at the global level. In order to ensure that operations always take account of weather and climate phenomena, the Group adopts a range of practices such as, for example, weather forecasting, real-time monitoring of plants and long-term climate scenarios to identify any chronic changes in renewable source availability.
Transition	Starting with short term (1-3 years)	Policy & Regulation	**Risk/opportunity**: policies on CO_2 prices and emissions, energy transition incentives and policies, revision of market design and permitting procedures, and resilience regulation.	The Group is minimizing its exposure to risks through progressive decarbonization and the focus of the business on renewables, grids and customers. The business model is designed to maximize the benefits of our integrated position in the core countries and leveraging stewardship activities, which enables us to exploit the opportunities connected with the energy transition. The Group is also actively contributing to the formation of public policies through its advocacy efforts. These activities are conducted within platforms for dialogue with stakeholders that explore ambitious national decarbonization scenarios in the various countries in which Enel operates.
Transition	Starting with medium term (2022-2030)	Market	**Risk/opportunity**: changes in the prices of commodities and energy, evolution of energy mix, changes in retail consumption, changes in competitive environment.	The Group is maximizing opportunities by adopting a strategy founded on the energy transition, focusing on the electrification of energy consumption and the development of renewables and a geographical positioning in countries in which we have an integrated presence. Considering alternative transition scenarios, the Group assesses the impact of different commodity price trends, changes in the share of renewables in the generation mix and the electrification of final consumption.
Transition	Starting with medium term (2022-2030)	Product and Services	**Opportunity**: increase in margins and greater scope for investment as a consequence of the transition in terms of greater penetration of electrical mobility, distributed generation and new technologies for the direct and indirect electrification of final consumption.	The Group is maximizing opportunities thanks to its strong positioning in new businesses and beyond-commodity services. In addition, considering alternative transition scenarios, the Group assesses the impact of different trends in the electrification of consumption.
	Starting with medium term (2022-2030)	Technology		The Group is maximizing opportunities thanks to its strong strategic positioning in new businesses and global grids. With the penetration of direct and indirect electrification technologies, considering alternative scenarios, the Group assesses the potential opportunities for scaling existing and potential businesses and for the development of new solutions linked to digitalization and resilience of power grids.

The framework illustrated above also highlights the relationships that link the physical and transition scenarios with the potential impact on the Group's business.
These effects can be assessed from the perspective of three time horizons: the short term (1-3 years), in which sensitivity analyses based on the Strategic Plan presented to investors in 2022 can be performed; the medium term (until 2029), in which it is possible to assess the effects of the energy transition; and the long term (2030-2050), in which chronic structural changes in the climate should begin to emerge.
In order to facilitate the correct identification and management of the risks and opportunities associated with climate change, a Group policy was published in 2021 that describes the common guidelines for assessing these risks and opportunities. The "Climate change risks and opportunities" policy defines a shared approach for integrating issues relating to climate change and the energy transition into the Group's processes and activities, thus informing industrial and strategic choices to improve business resilience and long-term sustainable value creation, in line with the adaptation and mitigation strategy. The main steps considered in the policy are described below.

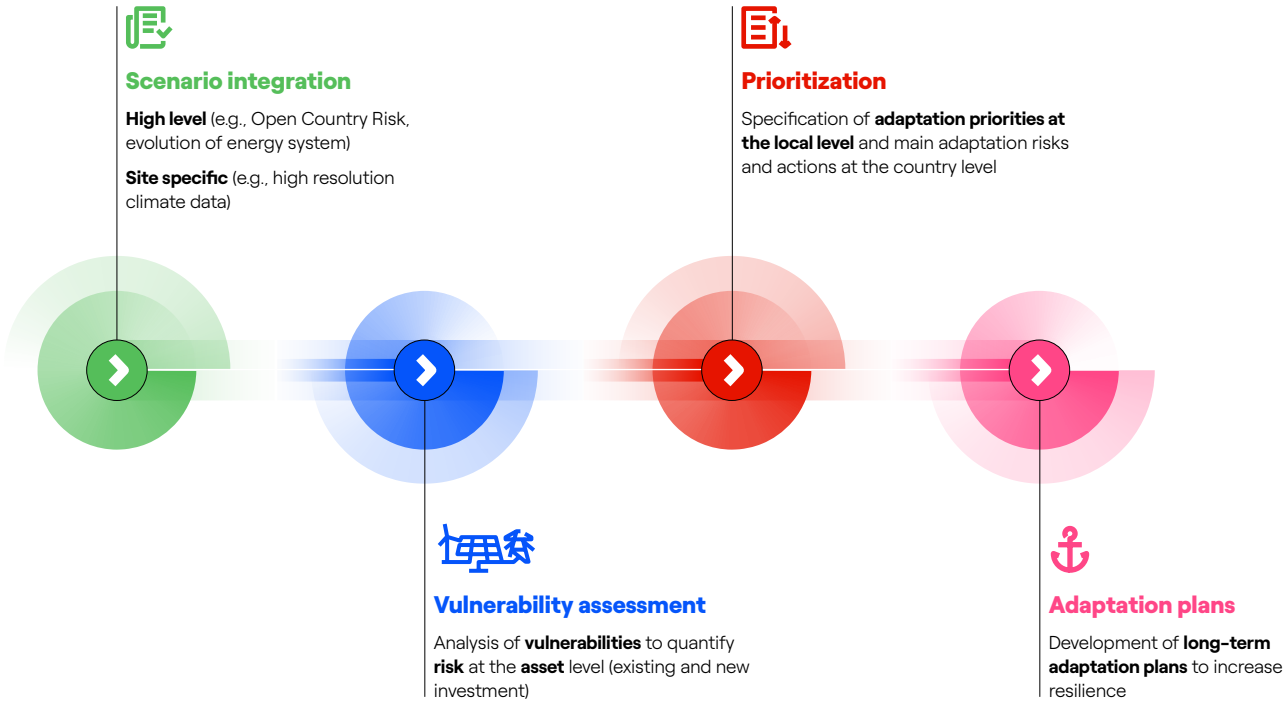
- Prioritization of phenomena and scenario analysis. These activities include the identification of physical and transition phenomena relevant to the Group and the consequent preparation of the scenarios to be considered, which are developed through the analysis and processing of data from internal and external sources. For the phenomena so identified, functions can be developed to connect the scenarios (for example, data on changes in renewable sources) to the operation of the business (for example, changes in expected potential output).
- Evaluation of impacts. This includes all the analyses and activities needed to quantify the effects at an operational, economic and financial level, consistent with the processes in which they are integrated (for example, design of new buildings, evaluation of operational performance, etc.).
- Operational and strategic actions. The information obtained from the previous activities is integrated into processes, informing the decisions of the Group and the business activities. Some examples of activities and processes that benefit from this are capital allocation, such as in the evaluation of investments in existing assets or new projects, the development of resilience plans, risk management and financing activities, engineering and business development.

The main sources of risk and opportunity identified, the best practices for the operational management of weather and climate phenomena, and the qualitative and quantitative impact assessments performed to date are discussed below. The above activities are performed on the foundation of an ongoing effort during the year to analyze, assess and manage the information produced. As declared by the TCFD, the process of disclosing information on the risks and opportunities connected with climate change will be gradual and incremental from year to year.

Enel's resilience to the energy transition and climate change

The impacts of climate change, technological evolution, the evolution of policies and changes in macroeconomic fundamentals and geopolitical and market conditions make it every more important to develop resilient business strategies, i.e., strategies both capable of withstanding external shocks, and therefore of absorbing the causes of potential crises and thriving even when external conditions change, whether slowly or rapidly, and equipped to identify new opportunities and transform them into actions. Jointly considering the factors associated with energy transition scenarios and the various climate change scenarios is therefore a prerequisite for long-term planning.
The set of transition and climatic scenarios plays a role in guiding strategic and industrial decisions, taking account, for example, of the future effects of temperature on electricity demand, the investments necessary to support the process of ever greater electrification and decarbonization, the evolution of the market environment and of consumer habits. Given that Enel's Strategic Plan concentrates more than 94% of investment on combatting climate change through the progressive expansion of generation from renewable sources and the development of infrastructure and services to guide energy systems and customers towards progressive electrification, aiming at the same time at significantly reducing the use of fossil fuels and increasing quality and efficiency, the Group's investments and activities delineate, by design, a long-term growth path that is in line with an energy transition consistent with the Paris Agreement.

The application of long-term climate scenarios enables the construction of adaptation plans for the Group's asset and business portfolio. Climate scenarios are developed starting with the identification of the most relevant physical phenomena for each business (such as heat waves, extreme rainfall, fire risk, etc.), to produce analyses that provide both high-level indicators (such as comparable country risk indices) and high-resolution data, which make it possible to study physical impacts at the single-site level. The approach applies to both the existing portfolio and new investments. More details on new investments are described in a dedicated section "Inclusion of climate change effects in the assessment of new projects". Asset vulnerability assessment makes it possible to identify priority actions to increase resilience.



Chronic and acute physical phenomena: possible impacts on our business, risks and opportunities

Taking the scenarios developed by the Intergovernmental Panel on Climate Change (IPCC) as our reference point, developments in the following physical variables and the associated operational and industrial impacts connected with potential risks and opportunities are assessed.

Chronic physical changes creating risks and opportunities

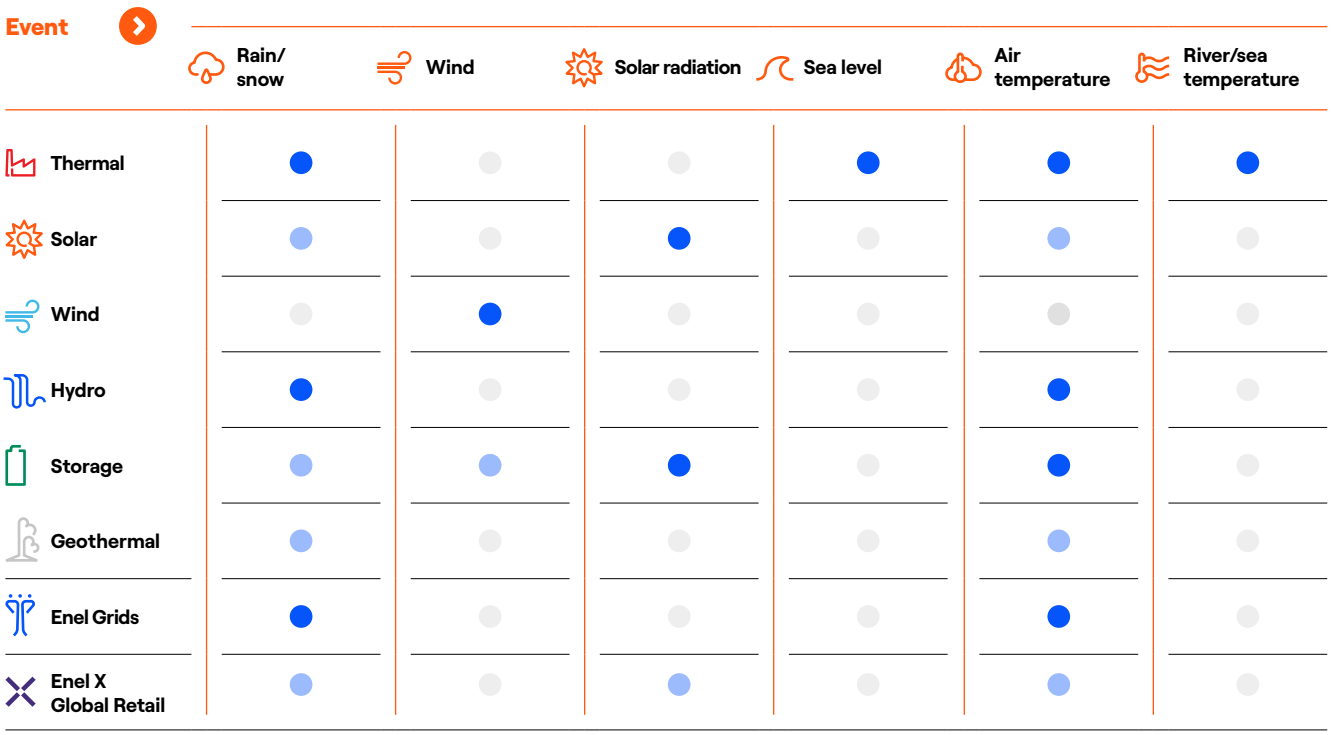
The climate scenarios developed with the International Centre for Theoretical Physics (ICTP) in Trieste do not provide definitive indications of structural changes before 2030, but structural changes could begin to emerge between 2030 and 2050. In practice, while significant meteorological variations have been recorded (e.g., the drought in Europe in 2022), it is still a challenge to establish in the short term whether some phenomena are changing structurally, or whether the average benchmark values are already changing. Instead, it is established on the longer time horizon with probability intervals.
The main impacts of chronic physical changes would be reflected in the following variables:

Variables impacted by chronic physical changes

- **Electricity demand**: variation in the average temperature level with a potential increase or reduction in electricity demand.
- **Thermal generation**: variation in the level and average temperatures of the oceans and rivers, with effects on thermal generation.
- **Hydroelectric generation**: variation in the average level of rainfall and snowfall and temperatures with a potential increase or reduction in hydro generation.
- **Solar generation**: variation in the average level of solar radiation, temperature and rainfall with a potential increase or reduction in solar generation.
- **Wind generation**: variation in the average wind level with a potential increase or reduction in wind generation.

The Group works to estimate the relationships between changes in physical variables and the change in the potential output of individual plants in the different categories of generation technology.

As part of the assessment of the effects of long-term climate change, we have identified chronic events relevant to each technology and began the analysis of the related impacts on potential output.



Scenario analysis has shown that chronic structural changes in the recent trends of physical variables will become significant beginning in 2030. However, in order to obtain an indicative estimate of the potential impacts, and include the possible early emergence of chronic effects, it is possible to test sensitivity of the Business Plan to the factors potentially influenced by the physical scenario, regardless of any direct relationship with climate variables. The current Business Plan was constructed using the information contained in the median scenarios relating to chronic phenomena, in order to also consider the possible effects of trends in climatic variables.

Analysis on the impact of chronic climate change on renewable generation

To calculate the impact of the chronic effects of climate change on the production of our assets, a series of *ad hoc* functions have been created for each renewable technology (wind, solar and hydroelectric) and plant, which associate, with each change in climatic variables (e.g., temperature, radiation, wind speed, rainfall), probable changes in terms of electrical producibility of the plants in our portfolio.

To calibrate these "link" functions, we started from the historical data of the weather-climate variables[34] and from the internal references of the observed producible energy of our plants. In this way, link functions have been obtained which respond to the specific characteristics of each renewable plant and technology.

It was therefore possible to study the chronic climate impacts for possible future projections of climate variables (RCP 2.6, 4.5 and 8.5 scenarios).

Together with the chronic phenomena, which involve average structural changes, it is necessary to study the typical volatility of the weather and therefore more short-term. Both the information derived from the variation ranges of the chronic trends projected by the climatic scenarios and the historical volatilities of the meteorological data were taken as input for the strategic planning, through analysis of the variations in electricity production (TWh) over the last 10 years.

All fluctuations, both weather and climatic, can lead to adjustments, since the production of the plants feeds the sourcing for the sale of energy to customers. In essence, reductions in terms of energy for renewable production can lead to imbalances on the sourcing side which can lead to the purchase of the missing volumes on the market to feed the commercial strategy. Conversely, greater renewable production leads to a possible reduction in the purchase of volumes on the market (or possibly higher sales).

From the analyses carried out at individual plant level and then aggregated, it has been calculated that on average

(34) Historical data from ISPRA (*Istituto Superiore per la Protezione e la Ricerca Ambientale*) and ERA5 data from ECMWF (European Centre for Medium-Range Weather Forecasts).

hydroelectric production could decline slightly in the future (with substantial differences between sites), reporting average variations in the period 2030-2050 in the RCP 2.6 scenario compared with the historical values at country level included in a range between -1% and -5%. The average changes in wind production will greatly depend on the location of the assets, with both positive and negative minor changes. Finally, the effects for solar technology will generally be positive with average increases at the country level of up to 3% in the period 2030-2050 in the RCP 2.6 scenario. These effects, aggregated at the portfolio level, highlight the effects of geographical and technological diversification that balance the different variations.

Acute physical changes creating risks and opportunities

With regard to acute physical phenomena (extreme events), the intensity and frequency of extreme physical phenomena can cause significant and unexpected physical damage to assets and generate negative externalities associated with the interruption of service.
Within climate change scenarios, the acute physical component plays a leading role in defining the risks to which the Group is exposed, due both to the broad geographical diversification of its asset portfolio and the primary importance of renewable resources in electricity generation.
Acute physical phenomena, in different cases such as wind storms, floods, heat waves, cold snaps, etc., are characterized by considerable intensity and a frequency of occurrence that, while not high in the short term, is clearly trending upwards in medium and long-term climate scenarios.
Therefore, the Group, for the reasons described above, is already managing the risk associated with extreme events in the short term. At the same time, the methodology is also being extended to longer time horizons (up to 2050) in accordance with the climate change scenarios that have been developed (RCP 8.5, 4.5 and 2.6).

Acute event risk assessment methodology

In order to quantify the risk deriving from extreme events, the Group uses a consolidated catastrophic risk analysis approach, which is adopted in the insurance sector and in the IPCC reports.[35] Through its insurance business units and the captive insurance company Enel Insurance NV, the Group manages the various phases of assessing the risks connected with natural disasters: from assessment and quantification to the corresponding insurance coverage to minimize impacts.

The methodology is applicable to all extreme events that can be analyzed, such as wind storms, heat waves, tropical cyclones, flooding, etc. In all of these types of natural disasters, three independent factors can be identified, as briefly described below.

- The event probability (hazard), i.e., the theoretical frequency of the event over a specific time frame: the recurrence interval. In other words, a catastrophic event that has, for example, a recurrence interval of 250 years has a probability of occurrence in any given year of 0.4%. This information, which is necessary for assessing the level of frequency of the event, is then associated with the geographical distribution of Group assets.

  For this purpose, the Group adopts the hazard map tool, which associates the estimated frequency associated with an extreme event, for the different types of natural disasters, with each geographical point of the global map. This information, organized in geo-referenced databases, are obtained from global reinsurance companies, weather consulting firms or academic institutions.

- Vulnerability, which indicates in percentage terms how much value would be lost upon the occurrence of a given catastrophic event. In more specific terms, reference can be made to the damage to material assets, the impact on the continuity of electricity generation and/or distribution or the provision of electrical services to end users.

  The Group, especially in the case of damage to its assets, conducts and promotes specific vulnerability analyses for each technology in its portfolio: solar, wind and hydroelectric generation plants, transmission and distribution grids, primary and secondary substations, etc. These analyses are naturally focused on the extreme events that most impact the different types of technologies. This produces a sort of matrix that associates the significantly impacted type of asset with the individual natural catastrophic events.

- Exposure is the set of economic values present in the Group's portfolio that could be materially impacted in the presence of catastrophic natural events. Again, the dimensions of the analyses are specific for the different production technologies, distribution assets and services to end users.

(35) L. Wilson, "Industrial Safety and Risk Management", University of Alberta Press, Alberta 2003.
T. Bernold, "Industrial Risk Management", Elsevier Science Ltd, Amsterdam, 1990.
H. Kumamoto and E.J. Henley, "Probabilistic Risk Assessment and Management for Engineers and Scientists", IEEE Press, 1996.
Nasim Uddin, Alfredo H.S. Ang (eds.), "Quantitative risk assessment (QRA) for natural hazards", ASCE, Germany, 2012.
UNISDR, "Global Assessment Report on Disaster Risk Reduction: Revealing Risk, Redefining Development", UNISDR, Geneva, 2011.
IPCC, "Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation - A Special Report of Working Groups I-II of the Intergovernmental Panel on Climate Change (IPCC)", Cambridge University Press, Cambridge, 2012.

The three factors described above (hazard, vulnerability and exposure) constitute the fundamental elements of any assessment of the risk associated with extreme events. In this sense, the Group, with respect to climate change scenarios, differentiates its risk analyses in accordance with the specificities of the various associated time horizons. The following table summarizes the scheme adopted for the assessment of the impacts deriving from acute physical phenomena.

Time horizon	Hazard	Vulnerability	Exposure
Short term (1-3 years)	Hazard maps based on historical data and meteorological models	Vulnerability, being linked to the type of extreme event, to the specifics of the type of damage and to the technical requirements of the technology in question, is essentially independent of time horizons	Group values in the short term
Long term (to 2050 and/or 2100)	Hazard maps and specific studies for the different RCP climate scenarios of the IPCC		Group values in the long term

In the case of the vulnerability of assets within the portfolio, therefore, a priority table of the impacts of the main extreme events on the various technologies was defined in collaboration with the relevant global business lines of the Group.

Priority

● High ● Low ○ Not relevant

Event	Heat waves	Flooding/ heavy precipitation	Heavy snow/ icing	Hail	Windstorm	Wildfire	Lightning
Thermal	●	●	○	○	●	●	Under assessment
Solar	●	●	●	●	●	●	Under assessment
Wind	●	●	●	●	●	●	Under assessment
Hydro	●	●	●	○	●	○	●
Storage	●	●	●	●	●	●	Under assessment
Geothermal	○	○	○	○	○	●	Under assessment
Enel Grids	●	●	●	●	●	●	●
Enel X Global Retail	●	●	●	●	●	●	Under assessment

Managing the risk of extreme events in the short term

Over the short term (1-3 years) the Group, in addition to risk assessment and quantification, takes actions to reduce the impacts that the business may suffer following catastrophic extreme events. Two main types of action can be distinguished: obtaining effective insurance coverage and climate adaptation activities, preventing losses that could be caused by extreme events.

The general characteristics of these actions are illustrated below and, naturally, in the case of adaptation activities for damage prevention and mitigation, specific reference will be made to the Group's Generation and Enel Grids Global Business Lines.

Impact of acute physical events on the Group

The Enel Group has a well-diversified portfolio in terms of its generation technologies, geographical distribution and asset scale and, consequently, the portfolio's exposure to

natural risks is also diversified. The Group implements various risk mitigation measures, which, as described below, include both insurance coverage and other management and operational arrangements to further lower the Company's risk profile.
The empirical evidence indicates negligible repercussions from these risks, as shown by the data for the last five years.

Considering the most significant events, defined as events with a gross impact of more than €10 million, the cumulative gross impact amounts to about €130 million, which represents less than 0.06% of the value of the Group's insured assets as at 2022 (about €224 billion), most of which was recovered through insurance reimbursements.

Acute Events Risk Index (AERI)

The Group has developed a climate change index called Acute Events Risk Index (AERI)[36] to provide a high-level indication of changes in risk attributable to climate change for acute phenomena. In particular, the results show the share of installed capacity that, based on climate projections (RCP 2.6), will be located in areas characterized by a risk class that will vary depending on the expected increase in the hazard attributable to climate change in the 2030-2050 period compared with the historical period.

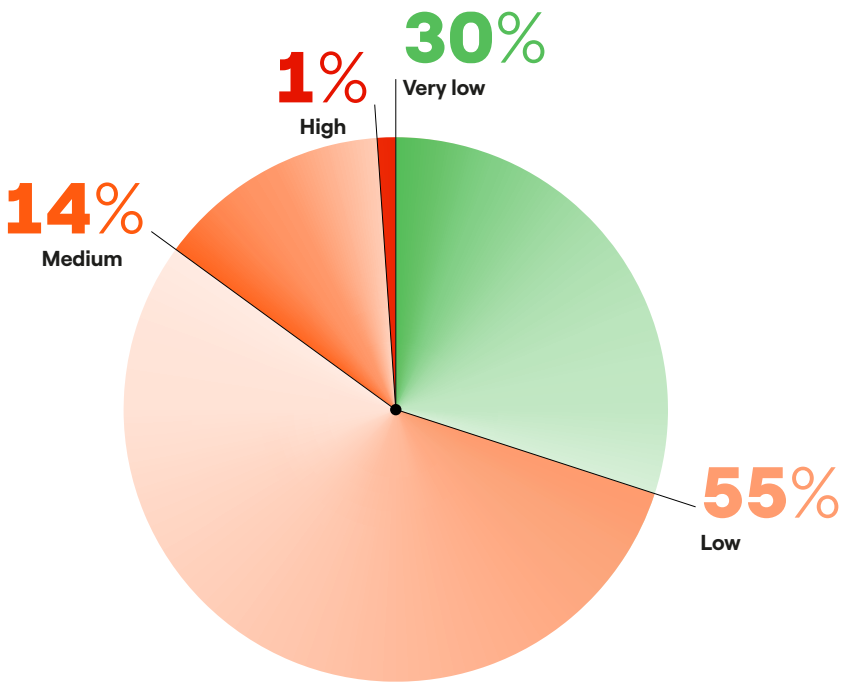
The index considers the Group's hydroelectric, solar and wind plants (Enel Green Power and Enel X), using climate metrics and the approach followed for the preliminary screening, which will also be described later, in order to identify assets that will be exposed to more intense climate change effects. The objective of this evaluation is to define the priorities for the detailed analyses necessary for the identification of adaptation actions. It is important to specify that this index offers a summary representation of a screening performed for each plant and relevant physical phenomenon, against which priorities will be evaluated for more detailed analyses.

In particular, the relevant physical phenomena are considered for each plant, with respect to which the level of future climate change is calculated and a risk class (high, medium, low, very low) is assigned to each asset using an appropriate weighting system. At this point it is possible to aggregate the results and arrive at the Group AERI value broken down by each risk category.

As shown in the figure below, in the RCP 2.6 scenario, only 1% of the total analyzed capacity[37] of the Enel Group is located in areas classified as at high risk from climate change: for these plants, a detailed analysis is a priority in order to identify possible adaptation measures. By comparison, 15% will be located in medium-risk areas. This means that the asset situation must be analyzed on a rolling basis to evaluate whether to proceed with more in-depth analyses using higher resolution data in order to determine the need for adaptation with respect to specific phenomena. Finally, the remaining installed capacity (84%) is associated with a low or very low risk: plants in these categories are not expected to be exposed to substantial climate change impacts in the RCP 2.6 scenario. For these, therefore, the criteria and actions already implemented remain adequate and any detailed studies will have a lower priority. The analyses will in any case be updated and refined on an ongoing basis to ensure monitoring of expected climate change effects on all plants.

(36) The AERI evaluates the percentage of capacity at risk in the long term (2030-2050) compared with the historical period. It is thereby assumed that the Group's plants are resilient to phenomena observed in the recent past.
(37) Plants currently being analyzed are those with COD up to 2022 for solar facilities and up to COD 2021 for other technologies.

Acute Events Risk Index (AERI) at Group level for the RCP 2.6 scenario



Insurance in the Enel Group

Each year, the Group develops global insurance programs for its businesses in the various countries in which it operates. The two main programs, in terms of coverage and volumes, are the following:

- the Property Program ("Property Damage and Business Interruption Insurance Program") for material damage to assets and the resulting business interruption. Accordingly, in addition to the costs of rebuilding assets (or parts thereof), the financial losses due to the stoppage of electricity generation and/or distribution are also covered, within the limits and conditions defined in the policies;
- the Liability Program ("General & Environmental Liability Insurance Program"), which insures against losses caused to third parties, including the impact that extreme events may have on the Group's assets and business.

Based on effective risk assessment, it is possible to specify appropriate limits and insurance conditions within the policies, and this also applies in the case of extreme natural events linked to climate change. In fact, in the latter case, the impacts on the business can be significant but, as has happened in the past in various locations around the world, the Group has demonstrated a high degree of resilience, thanks to the ample insurance coverage limits, thanks in part to the Group's solid reinsurance capabilities through the captive company Enel Insurance NV.

The presence of this effective insurance coverage does not make the actions that the Group takes in the preventive maintenance of its generation and distribution assets any less important. In fact, while on the one hand the effects of these activities are immediately reflected in the mitigation of the impacts of extreme events, on the other hand they are a necessary prerequisite for optimizing risk financing and minimizing the cost of the Group's global insurance coverage programs, including the risk associated with catastrophic natural events. This adaptive strategy takes the form of management strategies and actions that go beyond insurance alone and change with the surrounding conditions. For example, the Group has managed to sterilize much of the strong upward trend in premiums on the insurance markets through changes to its risk retention policies for assets, as well as through internal risk transfer policies that reward the business lines that are most virtuous in terms of risk mitigation. From this perspective, the method and the information extracted from the ex-post analysis of events play a crucial role in determining the processes and practices to be deployed in mitigating such events in the future.

Within the Property Program, Enel Insurance NV offers a Premium Refund mechanism for business lines connected with losses and the achievement of the Group's SDG objectives, contributing to the virtuous circle linked to the Group's adaptation to the challenges of climate change.

Climate change adaptation in the Enel Group

The Group implements climate change adaptation solutions using an overall approach that, as described in the "Climate change strategy" section, assesses potential impacts in order to appropriately calibrate the necessary adaptation measures to enhance our ability to respond to adverse events (Response Management) and to enhance the resilience of the business (Resiliency Measures), thereby reducing the risk of future negative impacts of adverse events. Furthermore, the skills and tools developed to analyze the effects of climate change will be used to create value through the creation of new business options that offer solutions to facilitate the adaptation of communities and all stakeholders.

The adaptation solutions can involve both policy actions and best practices implemented in the short term, and long-term decisions.

For new investments, in line with the general approach, it is also possible to take early action in the design and construction phase to reduce the impact of climate risks "by design", for example by taking account in the design stage of climate scenarios and asset vulnerability analyses for specific phenomena in order to implement resilient solutions.

The following table provides a high-level summary of the type of actions that Enel implements to effectively manage adverse events and to increase resilience to weather phenomena and their evolution under the impetus of climate change. In the following sections, certain activities are described in greater detail.

Business lines	A. Resiliency Measures – Enhancing asset resilience	B. Response Management – Adverse event management
Enel Green Power and Thermal Generation	**Existing assets** 1. Guidelines for hydraulic risk assessment and design 2. Lessons-learned feedback from O&M to E&C and BD **New construction** In addition to actions for existing assets: 1. Climate change risk assessments (CCRA) included in environmental impact documentation (pilot)	**Existing assets** 1. Critical incident and event management 2. Site-specific emergency management plans and procedures 3. Specific tools for forecasting imminent extreme events
Enel Grids	**Existing assets and new construction** 1. Guidelines for developing grid resilience enhancement plans (e.g., the "Network Resilience Enhancement Plan" of e-distribuzione)	**Existing assets** 1. Strategies and guidelines for Risk Prevention, Readiness, Response and Recovery actions for the distribution grid 2. Global guidelines for emergency and critical event management 3. Risk prevention and preparation measures for fires involving electrical installations (lines, transformers, etc.)
Enel X Global Retail	**Existing assets** 1. Preliminary analysis of the impacts of medium/long-term climate change	**Existing assets** 1. Enel X Critical Event Management

How Enel ensures the resilience of generation

With regard to generation, over time the Group has implemented targeted measures at specific sites and established *ad hoc* management activities and processes.

Measures implemented for specific sites in recent years include:

- improving cooling water management systems for certain plants in order to counter the problems caused by the decline in water levels on rivers, such as the Po river in Italy;
- installing fogging systems to improve the flow of inlet air and offset the reduction in power output caused by the increase in ambient temperature in CCGTs;
- installing drainage pumps, raising embankments, periodic cleaning of canals and interventions to consolidate land adjacent to plants to prevent landslides in order to mitigate flood risks;
- periodic site-specific reassessments for hydro plants of flood scenarios using numerical simulations. The scenarios developed are managed with mitigation actions and interventions for civil works, dams and water inlets.

The Group adopts a series of best practices to manage the impact of weather events on power generation, such as:

Group practices for managing weather events in generation operations

- Weather forecasting both to monitor renewable resource availability and detect extreme events, with warning systems to ensure the protection of people and assets.
- Hydrological simulations, land surveys (including with the use of drones), monitoring any vulnerabilities through digital GISs (Geographic Information Systems) and satellite measurements.
- Advanced monitoring of over 100,000 parameters (with over 160 million historical measurements) for dams and hydroelectric works.
- Real-time remote monitoring of generation plants.
- Safe rooms in plants in areas exposed to tornadoes and hurricanes, such as the wind farms in Oklahoma in the United States.
- Adoption of specific guidelines for performing hydrological and hydraulic studies from the earliest development stages, aimed at assessing the risks inside plants and in the areas outside plants, with application in the design phase of drainage and mitigation systems in compliance with the principle of hydraulic invariance.
- Verification of potential climate trends for the main project parameters in order to take them into account in the sizing of systems for relevant projects (for example, assessments of the temperature of the coolant source in order to ensure greater flexibility in cooling in new CCGTs) and civil engineering works (for example, rainfall assessments for designs of drainage systems at solar plants).
- Estimation of extreme wind speeds using updated databases containing the logs and historical trajectories of hurricanes and tropical storms, enabling the selection of the wind turbine technology best suited to the emerging conditions.

Main areas:

Maintenance

O&M Operation

Dams and Hydraulic infrastructure Safety

Critical Event Management

In addition, in order to ensure rapid response to adverse events, the Group has adopted specific emergency management procedures with protocols for real-time communication and management of all activities to restore operations rapidly and standard checklists for damage assessment and the safe return to service for all plants as rapidly as possible. One solution to minimize the impacts of climate phenomena is represented by the lessons-learned feedback process, which is implemented by the technical functions. It is governed by the existing operating model and influences future projects.

Analyzing future climate impacts to identify adaptation needs

In the Generation business line we mapped globally relevant phenomena to perform analyses of acute and chronic climate risks in order to estimate the medium/long-term impact on the Group's generation plants.

In particular, the analysis of acute events was performed in two phases, involving:

- preliminary screening of the hazard and exposure for all hydro, wind and solar plants with the aim of clustering the existing plant portfolio on the basis of the degree of vulnerability and identifying plants with a greater risk level, from which to select one or two for the determination of possible adaptation actions;
- detailed analysis of plants with a greater risk priority, enabling the future identification of possible adaptation actions and measures to prevent output losses.

The detailed analysis was conducted to take account of the possible increase in the frequency and intensity of extreme events and consequently identify assets exposed to the related phenomenon.

The detailed analysis of the pilot sites identified a small number of assets at high risk in the long term for the entire set of phenomena considered.

Heavy rainfall

- In 2022, analysis work was performed for a significant number of plants, which highlighted a high correlation between the geo-morphology of the site and the impact of the phenomenon on the asset, confirming the need for a specific site analysis, especially for those assets most exposed to the phenomenon involved (the most exposed technologies included photovoltaics while the greatest exposures at the geographical level were found in Latin America).
- More extensive studies made it possible to identify possible structural adaptation measures to lower the level of hydraulic risk to an acceptable threshold. Their implementation will require a cost-benefit analysis. Such structural adaptation interventions can, for example, involve the construction of hydraulic mitigation works (mainly embankments, riverbed reprofiling, adaptation of drainage channels, expansion and lamination tanks) or raising of the components at risk with earth moving works or increasing the length of the support structures in the case of photovoltaic panels.

Heat waves

- In 2022, impact of heat waves on photovoltaic systems was studied in depth. This critical event is characterized by the persistence of high temperatures for multiple days with no rainfall.
- Despite the increase in the frequency and intensity of this climate phenomenon, no significant impacts were registered on this asset, with just a reduction in the performance of the inverter due to derating in certain periods of the year in specific locations.

Windstorms

- With regard to windstorm risk, despite scenarios showing an increase in such events, the impact analysis shows a high level of resilience by design, especially for the wind farms analyzed.
- The implementation of any adaptation measures will require specific site assessments based on a cost-benefit analysis, considering the limited impact of the phenomenon on Enel Green Power plants.

Wildfires

- With regard to fire risk, the business line conducted a study to identify the areas at greatest risk. In order to prevent fires outright and/or reduce response times, a number of possible adaptation measures were identified for adoption in the design or operational phase of plants. These include additional removal of vegetation around the project area, the creation of firebreaks, additional coordination with local authorities on how to respond in the event of a fire.

The methodologies developed will be progressively refined with the aim of also applying them to the design and development of new Enel Green Power plants.
These studies will make it possible to quantify the need for adaptation in terms of Risk Prevention (for example, the adoption of an adaptive design) and Event Management and management of residual risk.

Grid resilience lies at the heart of Enel's strategy

The Enel Grids Business Line, following the Group guidelines mentioned above ("Climate change risks and opportunities"), has issued a specific policy (Climate Change Risk Assessment) that provides general criteria, methodological tools and requirements for identifying, analyzing and assessing climate change risks in respect of the assets managed and the activities conducted, in order to monitor the risk and the actions to be implemented to mitigate its impacts.

In the Enel Grids Business Line the Enel Group has adopted an approach in recent years called "4R" to cope with extreme climate events. A specific policy (which seeks to implement an innovative strategy to ensure the resilience of the distribution grid) has been developed to define the measures to be taken both in preparation for an emergency within the network and for the prompt restoration of service once climate events have caused damage to assets and/or outages. The 4R strategy is divided into four phases:

1. Risk prevention: this includes actions that make it possible to reduce the probability of losing network components because of an event and/or to minimize its effects, i.e., interventions aimed both at increasing the robustness of the infrastructure and maintenance interventions. The choice of technical solutions to enhance resilience is guided by a catalogue that identifies the most appropriate response for each climate event and geographical area.
2. Readiness: this includes all measures aimed at increasing the speed with which a potentially critical event can be identified, ensuring coordination with Civil Protection authorities and local institutions and preparing the necessary resources once a grid disruption has occurred.
3. Response: this represents the phase in which the operational capacity to cope with an emergency upon the occurrence of an extreme event is assessed. It is directly related to the ability to mobilize operational resources in the field and the capacity to remotely restore power supply through resilient backup systems.
4. Recovery: this is the last phase, in which the goal is to return the grid to ordinary operating conditions as soon as possible in cases where an extreme weather event has caused service interruptions despite the increased resilience measures taken previously.

Following this approach, the business line has prepared various policies for specific actions to address the various aspects and risks associated with climate change. In particular:

Guidelines for Readiness Response and Recovery actions during emergencies

This policy covers the last three phases of the 4R approach, indicating guidelines and measures to improve preparation strategies, mitigate the impact of total blackouts and, finally, restore service to as many customers as possible in the shortest time possible.

Guideline for Network Resilience Enhancement Plan

This policy seeks to identify the most impactful extraordinary climate events on the network, to evaluate the specific KPIs of the AS-IS network and to improve them based on proposed interventions in order to be able to evaluate the order of priority. In this manner, actions are selected that, when implemented, will minimize the impact on the grid of particularly critical extreme events in a given area/region. The policy therefore covers the first two phases of the 4R approach, suggesting measures regarding risk prevention and readiness.

In Italy, this policy has been translated into the Resilience Plan that e-distribuzione has prepared each year since 2017, which represents an addendum to the Development Plan for *ad hoc* investments over a 3-year time horizon to reduce the impact of extreme events in certain critical areas, namely heat waves, icing and windstorms (with the associated risk of falling trees). In 2017-2021, some €672 million were invested and about €262 million will be invested in the following three-year period, as specified in the addendum to the 2022-2024 Plan. To address these risks, investments include the targeted replacement of uninsulated lines with insulated conductors, the undergrounding of cables in some cases or solutions involving routes to restore power that are not vulnerable to the above phenomena.

As in Italy, similar issues are being explored in other countries, both in Europe and South America, in order to prepare an *ad hoc* investment planning process to enhance the resilience of grids to extreme events, taking due account of the distinctive characteristics of each territory.

Measures for Risk Prevention and Preparation in case of wildfires affecting the electrical installations

This policy is dedicated to addressing the risk of wildfires, outlining an integrated approach to emergency management measures applied in the case of forest fires, whether they are of external origin or, in rare cases, are caused by the grid itself and could potentially threaten Enel plant. The document provides guidelines to be implemented in the various territories involved to identify areas/plant at risk, define specific prevention measures (e.g., evaluation of specific maintenance plans and any upgrades) and, in the event of a fire, manage the emergency optimally in order to limit its impact and restore service as soon as possible.

Support actions

These include the implementation of systems for weather forecasting, monitoring the status of the grid and evaluating the impact of critical climate phenomena on the grid, the preparation of operational plans and the organization of specific exercises. Particularly important in this regard are advance agreements for the mobilization of extraordinary resources to respond to emergencies, comprising both internal personnel and contractors. For example, in Italy, in addition to having installed and placed in operation three experimental stations to observe and investigate ice formation on MV lines, IoT sensor trials were launched to monitor on above-ground lines in areas that are highly exposed to snow and wind (Project Newman).

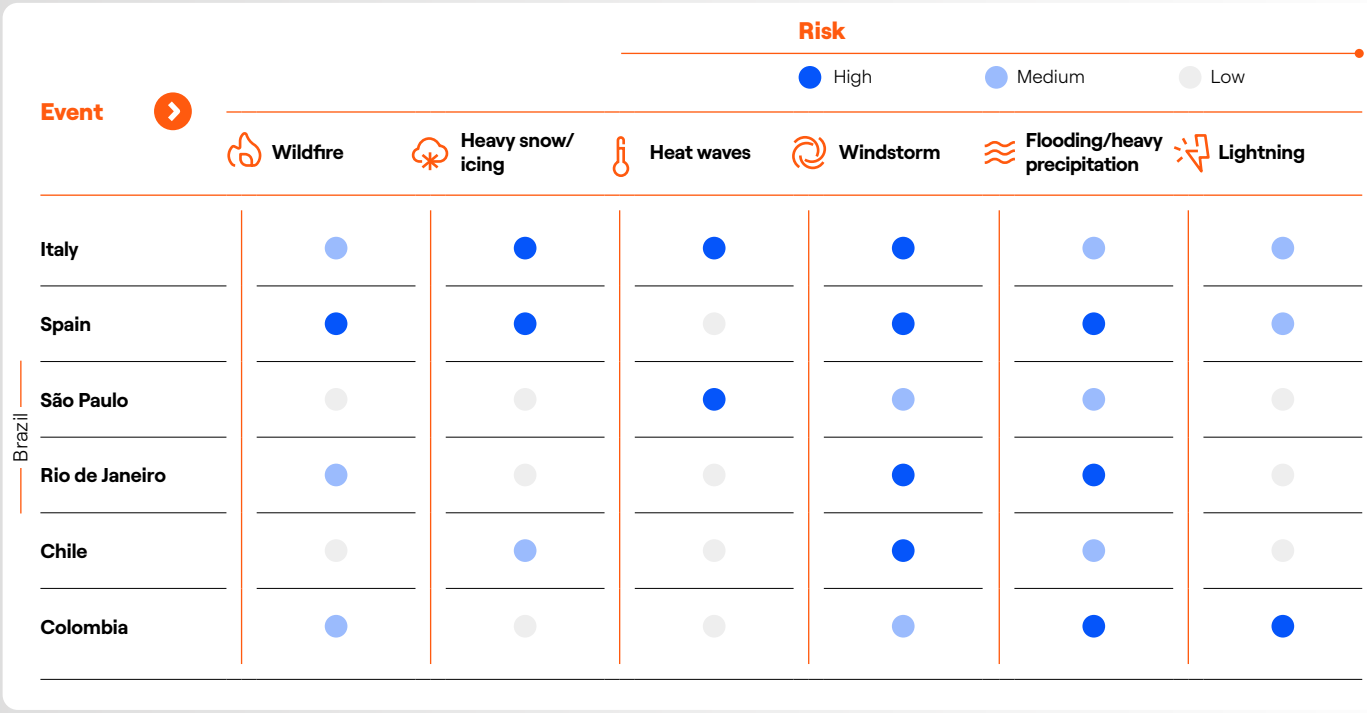
Enel Grids is making a significant contribution to the drafting of the initial industry publications on the importance of resilience and adaptation to climate change and possible actions, including the report issued by Eurelectric-EPRI[38] in December 2022 entitled "The Coming Storm: building electricity resilience to extreme weather".

With a view to ensuring continuous improvement, Enel Grids also performs scouting activities, directly contacting startups and industry experts or using challenges proposed by the Enel Group's Innovability function, in order to identify innovative technological solutions to support climate impact and adaptation measures to increase the resilience of the grid.

Analyzing future climate impacts to identify adaptation measures

Beginning with the mapping of key phenomena at the global level, Enel Grids monitors trends in the most critical threats in the various countries in which the Group operates in order to estimate their future impact on the grid in the medium and long term. To do this, it is first necessary to perform a preliminary assessment of the impacts on the grid (including associated failures) of the extreme weather events that have occurred in the past. The mapping that associates the most critical acute events to each core country is shown in the figure below. This enables the identification of priority analyses to identify any adaptation measures.

(38) EPRI: Electric Power Research Institute.



Starting from these assessments, detailed studies were then conducted in 2022 for specific phenomena and geographical areas. Here are some examples:

Heavy rainfall/wind storms

- In 2022, an analysis was conducted to investigate the phenomenon of explosive cyclogenesis (the product of a combination of intense wind and rain) in Spain, with projections of events up to 2050, evaluating the possible future impacts on grid assets. The initial findings suggest that the trend is substantially in line with the historical observed record, with the exception of the coastal areas of Catalonia, where a possible intensification of events is expected.
- Again in 2022, studies were also carried out in Colombia on the impact of rainfall in both the Bogotà and Cundinamarca areas, evaluating the possible scenarios up to 2050. The in-depth studies carried out show a substantial persistence over time of the negative effects associated with this phenomenon. On the basis of these initial results, the planned response measures mainly regard waterproofing secondary substations in urban areas, to avert flood risk, and strengthening aerial infrastructures to limit the consequences of the direct impact of rainfall.

Heat waves

- In 2022 heat waves in Italy were investigated further on the basis of the initial results in 2020. This critical event is characterized by the persistence of high temperatures over a period of several days in correspondence with the absence of precipitation which, by hindering the dissipation of heat from underground cables, causes an anomalous increase in the risk of multiple failures on grids, especially in urban areas and in summer tourist locales. The analyses performed have highlighted how this climate phenomenon will intensify in the coming decades by 10-40% by 2050 (depending on the climate scenario), requiring adequate adaptation actions as already laid out in the expanding commitment envisaged both by the Resilience Plan indicated above and from participation in the tender of the NRRP (National Recovery and Resilience Plan) for the funds (€350 million) allocated for increasing the resilience of infrastructure.

Wildfires

- With regard to fire risk, the business line, consistent with the above policy, is preparing an update of the policy on fire risk prevention, applying an index that evaluates the fire risk of areas based on topological and environmental characteristics (FWI: Fire Weather Index) as a support tool, with projections of scenarios to 2050 on developments in the phenomenon. So far, each country has conducted a study to identify the areas at greatest risk of forest fires. Today, the study also draws on GIS (Geographic Information System) mapping for more precise identification of grids in different environments (protected natural areas, forests, habitats). This makes it possible to adopt even more effective construction or maintenance design measures to prevent fire risk.

Adaptation activities – Enel X Global Retail

In order to address extreme climate events, the Enel X Global Retail Business Line has begun work to estimate the potential impacts of physical phenomena in order to develop actions to adapt to climate change, identifying the risks and opportunities for priority countries/assets.

An impact analysis was carried out for owned assets, which represent a minority share of the total asset portfolio. At the same time, potential risks and possible resilience solutions are being assessed for business-to-business and business-to-government customers.

The work on adaptation focused on defining a methodology for assessing the vulnerability of Enel X Global Retail assets by extending the studies developed by Enel Green Power and Thermal Generation and Enel Grids for the assessment and management of acute meteorological events for solar (Distributed Energy PV) and for public lighting.

For solar, a preliminary climate risk screening was carried out in the countries/assets identified as priorities for certain acute events such as extreme winds, heavy rainfall/floods and fire risk. From the work performed so far and from the findings of the preliminary screening for solar energy, no critical issues have emerged concerning climate impacts on the identified assets. The analysis will be extended to sites for new facilities. For public lighting assets, the correlation analysis between data regarding historical losses/faults recorded so far and acute climatic events is being refined.

Inclusion of climate change effects in the assessment of new projects

Many activities connected with the evaluation and implementation of new projects can benefit from general and site-specific climate analyses, which the Group is beginning to integrate with those already considered in the evaluation of new projects. For example:

- preliminary studies: in this phase, climate data can serve as a preliminary screening tool, with the analysis of specific climate phenomena, such as those discussed previously in the analysis of physical scenarios, and synthetic indicators such as the Climate Risk Index, integrated into the Open Country Risk model. These data provide a preliminary measure of the most relevant phenomena in an area among those identified as being relevant for each technology;
- estimation of expected output: the climate scenarios will be progressively integrated to enable the evaluation of how climate change will modify the availability of renewable sources at the specific site. In the in-depth development of the preliminary analyses on potential output, the approach applied for now to selected pilot sites is described and then scaled up over the entire generation portfolio;
- environmental impact analysis: the Group has begun to integrate a Climate Change Risk Assessment into project documentation. This contains a representation of the main physical phenomena and their expected change in the area;
- resilient design: as noted, the development of resilient assets by design is a key climate change adaptation activity. The Group is working to progressively consider analyses based on climate data, such as the increase in the frequency and intensity of acute events. The latter will integrate existing analyses based on historical data already in use, in order to increase the resilience of future assets, including all necessary adaptation actions over the useful life of a project.

Transition phenomena: repercussions on our business, risks and opportunities

With regard to the risks and opportunities associated with transition variables, we use the different reference scenarios in combination with the elements that make up the risk identification process (e.g., competitive context, long-term vision of the industry, materiality analysis, technological evolution, etc.) to identify the drivers of potential risks and opportunities. Priority is given to the most material phenomena. The main risks and opportunities identified within this framework are described below.

Policy & Regulation

Limits on emissions and carbon pricing

Laws and regulations that introduce more stringent emission limits by government action (non-market driven) and market-based mechanisms.

- **Opportunities**: command & control regulations and market-based mechanisms strengthening CO_2 price signals to foster investment in carbon-free technologies.
- **Risks**: lack of a coordinated approach among the various actors and policymakers involved and limited effectiveness of the policy instruments, with an impact on the speed of the trend towards electrification and decarbonization in the various sectors, compared with a decisive Group strategy focused on the energy transition.

Policies and regulation for accelerating the transition and energy security

Introduction of policies, regulatory frameworks and revision of market design features incentivizing the energy transition, consequently guiding the energy system towards the use of renewable energy resources as the mainstream approach in the energy mixes of countries, greater electrification of energy consumption, energy efficiency, flexibility of the electrical system and upgrading of infrastructure.

- **Opportunities**: creation of a more favorable framework for investment in renewable energy, thanks also to the development of long-term markets (PPAs, CfDs) in electricity technologies and distribution grids in line with Group strategy.
- **Risks**: slow administrative authorization processes, and ineffective market design and regulatory frameworks in core countries can reduce asset profitability and limit growth opportunities.

Resilience and adaption regulation

To improve standards or introduce *ad hoc* mechanisms to incentivize investments in resilience in the context of the evolution of climate change.

- **Opportunities**: benefits from investments that reduce the risk of impact on service quality, losses on corporate assets and service continuity for customers and communities.
- **Risks**: in the case of especially severe extreme events with a greater-than-expected impact, there is a risk that recovery could be slower than planned, with an associated reputational risk.

Financial measures for the energy transition

Development of policies and financial instruments that encourage the energy transition, which should be capable of supporting an investment framework and a long-term, credible and stable positioning of policymakers. Introduction of rules and/or public and private financial instruments (e.g., funds, mechanisms, taxonomies, benchmarks) aimed at integrating sustainability into financial markets and public finance instruments.

- **Opportunities**: the creation of new markets and sustainable finance products consistent with the investment framework, activating greater public resources for decarbonization and access to financial resources in line with energy transition objectives and the related impact on costs and on finance charges; introduction of subsidized support tools (funds and calls) for the transition.
- **Risks**: actions and instruments are not sufficient to drive an acceleration of energy transition, uncertainty or slowdown in the introduction of new instruments and rules due to the deterioration in the public finances.

Market

Changes in market dynamics, such as those related to the volatility of commodity prices, can influence the behavior of operators, policymakers and customers.

Commodity prices dynamics

- **Opportunities**: acceleration of clean electrification as a solution to reduce energy costs and exposure to commodity volatility. Increased propensity of customers to switch from conventional fossil fuel technologies to efficient electric technologies.
- **Risks**: "disorderly" energy transition caused by the introduction of potentially distortive measures.

Market dynamics

Propensity of final customers to adopt more sustainable technologies, thanks to greater awareness of the risks of climate change and greater regulatory pressure.

- **Opportunities**: positive effects associated with the growth in electricity demand and the greater room for renewables, thanks in part to greater demand for long-term contracts (PPAs).

Technology

Penetration of new technologies supporting the transition

Gradual penetration of new technologies such as electric vehicles, storage, demand response and electrolyzers for the production of green hydrogen. Large-scale adoption of digital technologies to transform operating models and "platform" business models.

- **Opportunities**: investments in developing technology solutions supporting the flexibility of the electrical system. Additional boost to renewables for the production of green hydrogen.
- **Risks**: slowdowns and interruptions in the supply chain for raw materials and semiconductors could lead to delays in procurement and/or increase costs, potentially slowing the penetration of renewables, storage and electric vehicles.

Products and Services

Electrification of residential energy consumption and industrial processes

With the gradual electrification of end uses, the penetration of products with lower costs and a smaller impact in terms of local emissions and greater efficiency in the residential and industrial sectors will expand (for example, the use of heat pumps).

- **Opportunities**: increase in electricity consumption against a background of declining energy consumption thanks to the greater efficiency of electricity. Greater opportunities to provide beyond-commodity services and the opportunity to reduce customers' energy costs and carbon footprint. Greater investments in grids to support the electrification of consumption.
- **Risks**: additional competition in this market segment. Dependence on adequate development of electricity grids, which are essential to deliver increasing loads and service continuity.

Electric mobility

Use of more efficient and effective modes of transportation from the point of view of climate change, with a special focus on the development of electric mobility and charging infrastructure; electrification of industrial energy users.

- **Opportunities**: positive effects of the increase in electricity demand and greater margins connected with the penetration of electric transportation and associated beyond-commodity services.
- **Risks**: additional competition in this market segment.

The Group has already taken strategic actions to mitigate potential risks and exploit the opportunities offered by the energy transition. Thanks to our industrial and financial strategy incorporating ESG factors, an integrated approach shaped by sustainability and innovation makes it possible to create long-term shared value.
A strategy focused on complete decarbonization and the energy transition makes the Group resilient to the risks associated with the introduction of more ambitious policies for emissions reductions and maximizes opportunities for the development of renewable generation, infrastructure and enabling technologies, thanks in part to our geographical positioning in countries with an integrated presence and leveraging assets operated under our Stewardship model.

To quantify the risks and opportunities engendered by the energy transition, the transition scenarios described in the section "Enel's energy transition scenarios" have been considered. The effects of the *Slower Transition* and *Accelerated Transition* on the variables that can most impact the business were then identified, in particular electricity demand influenced by developments in the electrification of consumption – and hence the penetration of electrical technologies – and the power generation mix. These considerations offer ideas for determining what the Group's strategic positioning for resource allocation could be.

Enel's benchmark scenario – the *Paris* scenario – envisages a greater ambition for decarbonization and energy efficiency, supported by increasing the electrification of final energy consumption and the development of renewables capacity. The dynamics of the energy transition could bring greater opportunities for the Group. In particular, on the retail electricity market, the progressive electrification of final consumption – in particular in transportation and

the residential segment – will lead to a significant increase in electricity consumption to the detriment of other more polluting forms of energy. Likewise, the gradual increase in the renewables share of the energy mix should lead to a reduction in the wholesale price of electricity in the medium to long term. This impact is limited, however, considering an unchanged market design based on system marginal prices in the medium term. Any alternative market structures could induce different effects.
With regard to the financial impact of changes in transition scenarios, the Group analyzed the impact of the *Slower Transition* and *Accelerated Transition* scenarios on 2030 results in terms of EBITDA compared with the benchmark *Paris* scenario.

With regard to the electrification of consumption, however, the *Slower Transition* scenario envisages lower penetration rates for the most efficient electrical technologies, in particular electric vehicles and heat pumps, producing a decrease in electricity demand compared with the *Paris* scenario, which would have a limited impact on the commodity and beyond-commodity retail business. At the same time, the decline in electricity demand would leave less room for growth in renewables, with an impact on the generation business.
The *Accelerated Transition* scenario assumes a more rapid reduction in the costs of green hydrogen production technologies. This translates into greater penetration for this energy source, displacing blue and gray hydrogen, with a consequent additive effect on national electricity demand and the installation of renewables capacity compared with the *Paris* scenario.

All of the scenarios, but especially the *Paris* and the *Accelerated Transition* scenarios, will entail a considerable increase in the complexities that will have to be managed by grids in the various geographical areas. In fact, we expect a significant increase in distributed generation and other resources, such as storage systems, the greater penetration of electric mobility with the related charging infrastructures, as well as the growing rate of electrification of consumption and the appearance of new actors with new modes of consumption.
These developments will lead to the decentralization of power withdrawal/injection points, an increase in electricity demand and the average power required, and strong variability of energy flows, requiring dynamic and flexible management of the grid. The Group, therefore, expects that in this scenario incremental investments will be needed to ensure connections and adequate levels of quality and resilience, encouraging the adoption of innovative operating models. These investments must be accompanied by consistent policy and regulatory scenarios to ensure adequate financial returns within the Enel Grids Business Line.



Time horizon
Short (2022-2024)
Medium (until 2030)
Long (2030-2050)

Upside Downside

Category	Time horizon	Main drivers	Scenario	Quantification - range < €100 mn	Quantification - range €100-300 mn	Quantification - range > €300 mn	Mitigation Actions
Market	Medium	Electrification trend and unit consumption	**Accelerated**: increase in average unit consumption thanks to greater electrification. It already includes effects connected with greater efficiency. Positive impact from increased revenues, partly offset by rise in sourcing costs	●			
			Slower: decrease in average unit consumption as a result of reduced electrification. Negative impact linked to decrease in revenues, partly offset by decline in sourcing costs		●		*Adoption of measures to increase CB in order to offset negative margins*
Products and Services	Medium	Green hydrogen development scenarios	**Accelerated**: impacts connected to increased volumes associated with an expansion of indirect penetration of electrification through green hydrogen (with potential increase in growth capacity)		●		
			Slower: impacts connected to decreased volumes associated with reduction in indirect penetration of electrification through green hydrogen	●			
Products and Services	Medium	Development of electric mobility/ photovoltaics	**Accelerated**: change in margins as a function of greater penetration of EV and distributed generation	●			
			Slower: change in margins as a function of decreased penetration of EV and distributed generation		●		*Mitigation in strategy of offering "packages" of services*

Note: The estimated transition impacts are based on current coverage levels.

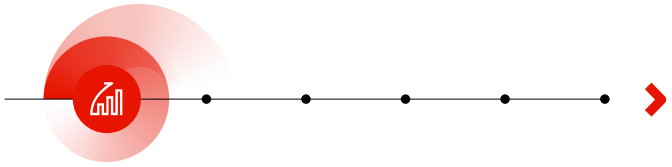
Competitive environment

As seen in previous sections, the analysis of the competitive environment is one of the key elements of the analysis of the context in which the Group operates and defines its business ambitions.
The risks associated with evolutionary developments in the market are also mitigated by the periodic monitoring of the comparative performance at an industrial and financial level of our competitors.
The assessment activity is carried out using a framework designed to (i) identify the most relevant competitors and peers; (ii) analyze their results, the main business drivers, strategic and industrial objectives; and (iii) understand their current and prospective positioning.
The process of identifying our peer group is periodically updated to ensure timely collection of information, KPIs and reporting elements useful for the Group's positioning and strategic planning activities.
In particular, a comparative assessment of the strategic and industrial plans of competitors is particularly relevant for assessing potential risks deriving from possible changes in the competitive context and, above all, providing economic and industrial benchmarks to help improve the Group's performance.

Financial risks

As part of its operations, Enel is exposed to a variety of financial risks that, if not appropriately mitigated, can directly impact our performance.

In line with the Group's risk catalogue, these risks include the following:



- Interest rate
- Commodity
- Currency
- Credit and counterparty
- Liquidity

The internal control and risk management system (ICRMS) provides for the specification of policies that establish the roles and responsibilities for risk management, monitoring and control processes, ensuring compliance with the principle of organizational separation of units responsible for operations and those in charge of monitoring and managing risk.
The financial risk governance system also defines a system of operating limits at the Group and individual Region and Country levels for each risk, which are monitored periodically by risk management units. For the Group, the system of limits constitutes a decision-making tool to achieve its objectives.
For further information on the management of financial risks, please see note 49 of the consolidated financial statements.

Interest rate

The Group is exposed to the risk that changes in the level of interest rates could produce unexpected changes in net financial expense or financial assets and liabilities measured at fair value.
The exposure to interest rate risk derives mainly from the variability of the terms of financing, in the case of new debt, and from the variability of the cash flows in respect of interest on floating-rate debt.
The interest rate risk management policy seeks to contain financial expense and its volatility by optimizing the Group's portfolio of financial liabilities and using OTC derivatives.
Risk control through specific processes, risk indicators and operating limits enables us to limit possible adverse financial impacts and, at the same time, to optimize the structure of debt with an adequate degree of flexibility.

Commodity

Enel operates in energy markets and for this reason is exposed to the risk of incurring losses as a result of an increase in the volatility of the prices of energy commodities, such as power, gas and fuel, and other commodities, such as minerals and metals (price risk), or owing to a lack of demand or energy commodity shortages (volume risk).
If not managed effectively, these risks can have a significant impact on results.
To mitigate this exposure, the Group has developed a strategy of stabilizing margins by contracting for supplies of fuel and materials and the delivery of electricity to end users or wholesalers in advance.

Enel has also implemented a formal procedure that provides for the measurement of the residual commodity risk, the specification of a ceiling for maximum acceptable risk and the implementation of a hedging strategy using derivatives on regulated markets and over-the-counter (OTC) markets. The commodity risk control process limits the impact of unexpected changes in market prices on margins and, at the same time, ensures an adequate margin of flexibility that makes it possible to seize short-term opportunities.
In order to mitigate the risk of interruptions in the supply of fuel and raw materials, the Group has diversified fuel sources, using suppliers from different geographical areas.

In 2022, the complex global economic crisis – triggered by the COVID-19 pandemic – continues in the wake of the Russia-Ukraine conflict and climate change, sparking increases in the volatility of prices of energy commodities and other raw materials. In the last quarter, the risks recorded by Enel exceeded the limits estimated in 2021 for the year 2022 for energy commodities, which were contained thanks to careful and timely mitigation measures, the geographical diversification of our business and supply channels in order to reduce dependence on Russian gas. Finally, the adoption of global and local strategies, such as flexibility in contractual clauses and proxy hedging techniques (in the event that hedging derivatives are not available on the market or are not sufficiently liquid), has made it possible to optimize results even in a highly dynamic market context.

Currency

In view of their geographical diversification, access to international markets for the issuance of debt instruments and transactions in commodities, Group companies are exposed to the risk that changes in exchange rates between the presentation currency and other currencies could generate unexpected changes in the performance and financial aggregates in their respective financial statements.
Given the current structure of Enel, the exposure to currency risk is mainly linked to the US dollar and is attributable to:

- cash flows in respect of the purchase or sale of fuel or electricity;
- cash flows in respect of investments, dividends from foreign subsidiaries or the purchase or sale of equity investments;
- cash flows connected with commercial relationships;
- financial assets and liabilities.

The possible impacts of exchange rate risk are reflected in:

- costs and revenue denominated in foreign currencies with respect to the time at which pricing conditions were defined or the investment decision was made (economic risk);
- revaluations or adjustments to fair value of financial assets and liabilities sensitive to exchange rates (transaction risk);
- the consolidation of subsidiaries with different currencies of account (translation risk).

The currency risk management policy is based on systematically hedging the exposures of the Group companies, with the exception of translation risk.
Appropriate operational processes ensure the definition and implementation of appropriate hedging strategies, which typically employ financial derivatives obtained on OTC markets.
Risk control through specific processes and indicators enables us to limit possible adverse financial impacts and, at the same time, to optimize the management of cash flows on the managed portfolios.
During the year, currency risk was managed through compliance with the risk management policies, encountering no difficulties in accessing the derivatives market.

Credit and counterparty

The Group's commercial, commodity and financial transactions expose it to credit risk, i.e., the possibility that a deterioration in the creditworthiness of counterparties or the failure to discharge contractual payment obligations could lead to the interruption of incoming cash flows and an increase in collection costs (settlement risk) as well as lower revenue flows due to the replacement of the original transactions with similar transactions negotiated on unfavorable market conditions (replacement risk). Other risks include the reputational and financial risks associated with significant exposures to a single counterparty or groups of related customers, or to counterparties operating in the same sector or in the same geographical area.

The exposure to credit risk is attributable to the following types of operations:

- the sale and distribution of electricity and gas in free and regulated markets and the supply of goods and services (trade receivables);
- trading activities that involve the physical exchange of assets or transactions in financial instruments with commodity underlyings (the commodity portfolio);
- trading in derivatives, bank deposits and, more generally, financial instruments (the financial portfolio).

The policy for managing credit risk associated with commercial activities and transactions in commodities provides for a preliminary assessment of the creditworthiness of counterparties and the adoption of mitigation instruments, such as obtaining guarantees.
The control process based on specific risk indicators and, where possible, limits ensures that the economic and financial impacts associated with a possible deterioration in credit standing are contained within sustainable levels. At the same time, this approach preserves the necessary flexibility to optimize portfolio management.
In addition, the Group undertakes transactions to factor receivables without recourse, which results in the complete derecognition of the corresponding assets involved in the factoring.
Finally, with regard to financial and commodity transactions, risk mitigation is pursued through the diversification of the portfolio (giving preference to counterparties with a high credit rating) and the adoption of specific standardized contractual frameworks that contain risk mitigation clauses (e.g., netting arrangements) and possibly the exchange of cash collateral.
Despite the deterioration in the collection status of certain customer segments, which was taken into consideration in determining impairment of trade receivables, the Group's portfolio has so far demonstrated resilience to the macroeconomic context and current price scenario. This reflects the expansion of digital collection channels and a solid diversification of commercial customers.

Liquidity

Enel's liquidity risk management policy is designed to maintain sufficient liquidity to meet expected commitments over a given time horizon without resorting to additional sources of financing, also retaining a prudential liquidity reserve, sufficient to meet any unexpected commitments. Furthermore, in order to meet its medium and long-term commitments, Enel pursues a borrowing strategy that provides for a diversified structure of funding sources, which it uses to meet its financial needs, and a balanced maturity profile.

Liquidity risk is the risk that the Group, while solvent, would not be able to discharge its obligations in a timely manner or would only be able to do so on unfavorable terms or in the presence of constraints on disinvestment from assets with consequent capital losses, owing to situations of tension or systemic crises (credit crunches, sovereign debt crises, etc.) or changes in the perception of Group riskiness by the market.

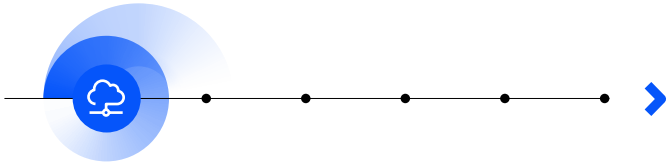
Among the factors that define the risk perceived by the market, the credit rating assigned to Enel by rating agencies plays a decisive role, since it influences its ability to access sources of financing and the related financial terms of that financing. A deterioration in the credit rating could therefore restrict access to the capital market and/or increase the cost of funding, with consequent negative effects on the financial position, financial performance and cash flows of the Group.
In 2022, Enel's risk profile only changed compared with December 2021 for Fitch, whose rating went from "A-" with a stable outlook to "BBB+" with a stable outlook. Enel's rating remained "BBB+" with a stable outlook for Standard & Poor's and "Baa1" with a stable outlook for Moody's.

In order to manage liquidity efficiently, treasury activities have largely been centralized at the holding company level, meeting liquidity requirements primarily by drawing on the cash generated by ordinary operations and managing any cash surpluses appropriately.

The increase in gas prices in 2022 following the Russia-Ukraine conflict had an impact on the margins on commodity derivatives, which reached unprecedented levels. At the end of the year, the liquidity risk index monitored for the Group was well within the limits set for 2022, demonstrating the Group's resilience even under severe liquidity conditions caused by extraordinary and unforeseeable events.

Digital technology risks

The risks discussed in this section are as follows:



- Cyber security
- Digitalization, IT effectiveness and service continuity

Cyber security

The speed of technological developments that constantly generate new challenges, the ever-increasing frequency and intensity of cyber-attacks and the attraction of critical infrastructures and strategic industrial sectors as targets underscore the potential risk that, in extreme cases, the normal operations of companies could grind to a halt. Cyber-attacks have evolved dramatically in recent years: their number has grown exponentially, as has their complexity and impact, making it increasingly difficult to promptly identify the source of threats. In the case of the Enel Group, this exposure reflects the many environments in which it operates (data, industry and people), a circumstance that accompanies the intrinsic complexity and interconnection of the resources that over the years have been increasingly integrated into the Group's daily operating processes.

The Group has adopted a holistic governance approach to cyber security that is applied to all the sectors of IT (Information Technology), OT (Operational Technology) and IoT (Internet of Things). The framework is based on the commitment of top management, on global strategic management, on the involvement of all business areas as well as of the units involved in the design and implementation of our systems. The Group leverages the best technologies available on the market while also acting on the human factor through initiatives to increase awareness and understanding of cyber security, which represents the first line of corporate defense. In addition, the framework incorporates regulatory requirements for information security, as well as the execution of extensive tests (in IT, OT and IoT environments) to identify and remove identified vulnerabilities. In addition, the Group has developed an IT risk management methodology founded on "risk-based" and "cyber security by design" approaches, thus integrating the analysis of business risks into all strategic decisions and integrating security requirements over the entire life cycle of solutions and services. Enel has also created its own Cyber Emergency Readiness Team (CERT) in order to proactively respond to any IT security incidents.
Finally, back in 2019, the Group also took out an insurance policy for cyber security risks in order to mitigate those risks with other tools in addition to technical countermeasures.

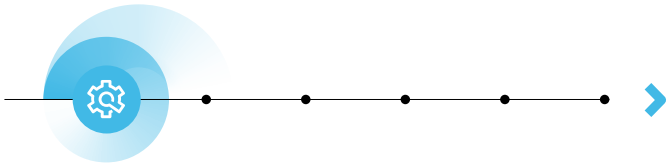
Digitalization, IT effectiveness and service continuity

The Group is carrying out a complete digital transformation of how it manages the entire energy value chain, developing new business models and digitizing its business processes, integrating systems and adopting new technologies. A consequence of this digital transformation is that the Group is increasingly exposed to risks related to the functioning of the IT systems, which are integrated across the Company with impacts on processes and operations, which could expose IT and OT systems to service interruptions or data losses.

These risks are managed using a series of internal measures developed by the Group to guide the digital transformation. It has set up an internal control system that introduces control points along the entire IT value chain, enabling us to prevent the emergence of risks engendered by such issues as the creation of services that do not meet business needs, the failure to adopt adequate security measures and service interruptions. The internal control system oversees both the activities performed in-house and those outsourced to external associates and service providers. Furthermore, Enel is promoting the dissemination of a digital culture and digital skills within the Group in order to successfully guide the digital transformation and minimize the associated risks.

Operational risks

The risks discussed in this section are as follows:



- Health and safety
- Environment
- Procurement, logistics and supply chain
- People and organization

Health and safety

The main health and safety risks to which Enel personnel and contractors are exposed are associated with operations at the Group's sites and assets. The violation of the laws, regulations and procedures governing health and safety, work environments, management of corporate structures, assets and processes, which could have an adverse impact on the health of employees, workers or stakeholders, can give rise to the risk of incurring administrative or judicial penalties and related economic, financial and reputational impacts.

The main operational health and safety risks are assessed for each site or company asset.

At Group level, analysis of the main events that have occurred in the last three years shows that, in terms of probability of occurrence, mechanical incidents (falls, collisions, crushing and cuts) are the most common, while the most severe in terms of potential associated impact are electrical incidents (possibly fatal injuries).

In addition, in relation to the presence of the Group in different areas of the world, employees and contractors could be exposed to health risks connected with potential emerging infectious diseases of a pandemic and potentially pandemic nature, which could have an impact on their health and well-being.

Enel has adopted a Declaration of Commitment to Health and Safety, signed by the Group's top management.

In implementing the policy, each Group business line has its own Occupational Health and Safety Management System compliant with the international standard UNI ISO 45001, which is based on the identification of hazards, the qualitative and quantitative assessment of risks, the planning and implementation of prevention and protection measures, the verification of the effectiveness of the prevention and protection measures and any corrective actions. The Enel Group has defined a structured health management system, based on prevention and protection measures, which also plays a role in the development of a corporate culture aimed at promoting the psycho-physical health and organizational well-being of workers, as well as helping to balance personal and professional life.

This system also considers the rigor employed in the selection and management of contractors and suppliers and the promotion of their involvement in programs for continuous improvement of safety performance.

Furthermore, with regard to emergencies in relation to risks connected with the ongoing pandemic, a specific unit has been set up within the P&O department of the Parent with liaisons in each business line and country in order to ensure emergency management in every Group organization. In particular, this organizational structure and the related management processes make it possible to direct, integrate and monitor, both at Group and Country level, all the prevention, protection and intervention actions aimed at protecting the health of employees and contractors, also in relation to exogenous health risk factors that may not be strictly related to work activities.

Environment

Recent years have seen the continuation of the growth in the sensitivity of the entire community to risks connected with development models that impact the quality of the environment and ecosystems with the exploitation of scarce natural resources (including raw materials and water).

In some cases, the synergistic effects between these impacts, such as global warming and the increasing exploitation and degradation of water resources, have increased the risk of environmental emergencies in the most sensitive areas of the planet, with the risk of sparking competition among different uses of water resources such as industrial, agricultural and civil uses.

In response to these needs, authorities have imposed increasingly restrictive environmental regulations, placing ever more stringent constraints on the development of new industrial initiatives and, in the most impactful industries, incentivizing or requiring the elimination of technol-

ogies no longer considered sustainable.
Our international commitment in the mitigation of impacts on biodiversity is also growing. Already present in Europe in the Green Deal, in 2022 this was sanctioned by the Global Biodiversity Framework approved at COP 15 in Montreal.
In this context, companies in every sector, and above all industry leaders, are ever more aware that environmental risks are economic risks. As a result, they are called upon to increase their commitment and accountability for developing and adopting innovative and sustainable technical solutions and development models.
Enel has made the effective prevention and minimization of environmental impacts and risks a foundational element of each project across its entire life cycle.
The adoption of ISO 14001-certified environmental management systems across the entire Group ensures the implementation of structured policies and procedures to identify and manage the environmental risks and opportunities associated with all corporate activities. A structured control plan combined with improvement actions and objectives inspired by the best environmental practices, with requirements exceeding those for simple environmental regulatory compliance, mitigate the risk of impacts on the environment, reputational damage and litigation. Also contributing are the multitude of actions to achieve the challenging environmental improvement objectives set by Enel, such as those regarding atmospheric emissions, waste production and water consumption, especially in areas with high water stress and impacts on habitats and species.
The risk of water scarcity is directly mitigated by Enel's development strategy, which is based on the growth of generation from renewable sources that are essentially not dependent on the availability of water for their operation. Special attention is also devoted to assets in areas with a high level of water stress, in order to develop technological solutions to reduce consumption. Ongoing collaboration with local river basin management authorities enables us to adopt the most effective shared strategies for the sustainable management of hydroelectric generation assets.

Finally, effective action is being taken for ecosystems to protect, restore and conserve biodiversity in species and natural habitats, respecting the mitigation hierarchy (avoid, minimize, restore and offset) as well as appropriate terrestrial, marine and river monitoring to verify the effectiveness of the measures adopted.
Enel takes an active part in the international engagement with influential stakeholders and networks (e.g., Business for Nature, Taskforce on Nature-related Financial Disclosures, World Business Council for Sustainable Development and Science Based Targets for Nature) on issues concerning nature and biodiversity.

Procurement, logistics and supply chain

The purchasing processes of Global Procurement and the associated governance documents form a structured system of rules and control points that make it possible to combine the achievement of economic business objectives with full compliance with the fundamental principles set out in the Code of Ethics, the Enel Global Compliance Program, the Zero-Tolerance-of-Corruption Plan and the Human Rights Policy, without renouncing the promotion of initiatives for sustainable economic development.
These principles have been incorporated into the organizational processes and controls that Enel has voluntarily decided to adopt in order to establish relationships of trust with all its stakeholders, as well as define stable and constructive relationships that are not based exclusively on ensuring financial competitiveness but also take account of best practices in essential areas for the Group, such as the avoidance of child labor, occupational health and safety and environmental responsibility. Thanks to the greater interaction and integration with the outside world and with the different parts of the corporate organization, the procurement process has assumed an increasingly central role in the creation of value. Global Procurement contributes to a resilient and sustainable supply chain, thinking from a circular economy perspective and fostering innovation, sharing the Group's values and objectives with suppliers who thereby become enablers of the achievement of Enel's targets.
More specifically, bonus factors have been introduced in tenders in order to engender virtuous behavior on the part of our suppliers. For example, the environmental impact of any customer is strongly influenced by the impact of its upstream supply chain, and that is why Global Procurement pushes its suppliers to objectively measure their carbon footprint and improve their performance.

From the point of view of the procurement process, the various Procurement Units almost systematically adopt the tender mechanism, thus ensuring maximum competition and equal access opportunities for all operators who are in possession of the technical, economic/financial and environmental requirements, security, human, legal and ethical rights. Procurement with direct assignment and without a competitive procedure can only take place in exceptional cases, duly motivated, in compliance with current legislation on the matter.
Furthermore, the single global supplier qualification system for the entire Enel Group, even before the procurement process begins, verifies that potential suppliers who intend to participate in procurement procedures are aligned with the Company's strategic vision and expectations in all

the areas and requirements cited earlier and that they have adopted the same values.

With regard to the risk governance system, Global Procurement is focused on the application of metrics that indicate the level of risk before and after the mitigation action, in order to implement precautionary measures to reduce uncertainty to a tolerable level or mitigate any impacts in all business, technological and geographical areas. The effectiveness of supply chain risk management is monitored through specific indicators – including the probability of insolvency, the concentration of contracts with individual suppliers or industrial groups, the supplier's dependence on Enel, a performance indicator for the correctness of conduct during the tender, quality, punctuality and sustainability in the execution of the contract, country risk, etc. – for which thresholds have been specified to guide the definition of the procurement, negotiation and tender award strategy, enabling informed choices of risk and potential benefit (savings).

The actions taken to counter the impact of the COVID-19 emergency have focused in differentiating supply sources to avoid interruptions in the supply chain and the remote performance of activities that would ordinarily require physical interaction between Enel and the supplier (e.g., inspections at the company). Furthermore, to counter the consequences of the geopolitical situation in Ukraine, which has increased market volatility and further stressed the supply chain, already strained during the COVID-19 pandemic, Global Procurement constantly monitors activities related to the supply/logistics chain, with the active participation of our suppliers, through a specific contractual monitoring obligation, to mitigate the risks of market shortages, logistical problems and business interruptions.

People and organization

Enel has placed sustainability at the center of its strategy as the heart of its business model in order to contribute to the achievement of the Sustainable Development Goals of the United Nations 2030 Agenda. The Group has incorporated sustainability into different geographical, economic and social contexts with the aim of guiding the Just Transition, essential for the future of the planet, accelerating the decarbonization of its energy mix through the growth of renewables and increasing electrification of consumption. The profound social, economic and cultural transformations we are experiencing, from the energy transition to the processes of digitalization and technological innovation, also have a profound effect on the world of work, renewing its paradigms and imposing major cultural and organizational changes, which require new professional qualifications and skills.
In order to deal with change, it is essential to act inclusively, placing the Person at the center in his or her social and work dimension, with adequate tools to cope with this epochal transformation.
Organizations must increasingly move towards new agile and flexible work and business models that are sustainable along the entire value chain. It is also essential to adopt policies to enhance the diversity and talents of each person, understanding that the contribution of the individual represents an essential element for the creation of widespread and shared value.

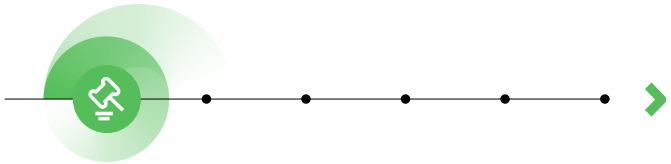
Recognition of the value of the person in his or her uniqueness, constant listening, empathy, sharing, passion, involvement, are some of the keywords that guide our way of working and experiencing the Company, in a path that moves from Me to get to We.

The centrality of people and the management of human capital take on a key role in the energy transition, acting as an enabling factor and representing the priorities to which specific objectives are linked. The primary of these are: the development of digital skills and competences; the promotion of reskilling and upskilling for our people (continuous, personalized, flexible, accessible and transversal) in order to ensure long life employability; the sharing of industry best practices and training aimed also at those who work with our people, both suppliers and contractors; the appropriate widespread involvement of the corporate purpose, which ensures the achievement of results while guaranteeing greater satisfaction for people understood as motivation and well-being; the development of systems for evaluating the working environment and performance; the dissemination of diversity and inclusion policies to all countries in which the Group operates, as well as instilling an inclusive organizational culture based on the principles of non-discrimination and equal opportunity, key drivers for attracting and retaining talent.
The Group is involved in enhancing the resilience and flexibility of organizational models through the simplification and digitalization of processes in order to enable the effectiveness and autonomy of individuals and teams by strengthening people empowerment processes and fostering an entrepreneurial approach through a "courteous" leadership model that values people's talents, attitudes and aspirations in affirming the We. The hybrid working method, which combines in-office and remote work in flexible proportions that take into account everyone's needs, as well as the use of innovative and flexible organizational models, are tools aimed precisely at supporting this evolution of organizational culture on the basis of trust and

responsibility rather than hierarchy and control.
In line with this strategy, social dialogue is also evolving towards a model that increasingly strengthens the centrality of the person. For example, Enel and the trade unions have signed a "Charter of the Person", an innovative protocol centered on the well-being, involvement, motivation and participation of the individual, whose principles have also been welcomed and implemented in the other countries in which the Group operates.
The commitment is also aimed at creating figures within the organization who, as "ambassadors", promote the adoption of shared models and conduct focused on the sustainability of relationships.

Compliance risks

The risks discussed in this section are as follows:



- Personal data protection

Risks connected with the protection of personal data

In the era of the digitalization and globalization of markets, Enel's business strategy has focused on accelerating the transformation towards a business model based on a digital platform, using a data-driven and customer-centric approach along the entire value chain.
The Group, which is present in more than 40 countries, has the largest customer base in the public services sector (about 67 million customers), and currently employs more than 65,000 people. Consequently, the Group's new business model requires the management of an increasingly large and growing volume of personal data in order to achieve the financial and business results envisaged in the 2023-2025 Strategic Plan.
This exposes Enel to the risks connected with the protection of personal data (an issue that must also take account of the substantial growth in privacy legislation in most of the countries in which Enel operates). These risks may result in the loss of confidentiality, integrity or availability of the personal information of our customers, employees and others (e.g., suppliers), with the risk of incurring fines determined on the basis of global turnover, the prohibition of the use of certain processes and consequent financial losses and reputational harm.

In order to manage and mitigate this risk, Enel has adopted a model for the global governance of personal data, with the appointment of personnel responsible for privacy issues at all levels (including the appointment of Data Protection Officers at the global and country levels) and digital compliance tools to map applications and processes and manage risks with an impact on protecting personal data, in compliance with specific local regulations in this field.



REPORT ON OPERATIONS

4.

Group Performance

Ordinay EBITDA of €19.7 billion and ordinary profit of €5.4 billion

Integrated management of the business guaranteed results that exceeded expectations, despite the challenging market context, and represented the main growth driver of the Group in the period.

Investments of €14 billion to accelerate the energy transition

44.5% in Enel Green Power and 38.7% in Enel Grids. 81.9% of the Group's investments relate to activities aligned with the criteria of the European taxonomy.

A 63% ratio between sustainable funding and debt

In line with its Sustainability-Linked Financing Framework, the Group is increasingly active in the development of sustainable finance tools with KPIs linked to the achievement of Sustainable Development Goals (SDGs).

Definition of performance indicators

In order to present the results of the Group and the Parent and analyze their financial structure, Enel has prepared separate reclassified schedules that differ from the schedules envisaged under the IFRS-EU adopted by the Group and by Enel SpA and contained in the consolidated financial statements and separate financial statements, respectively. These reclassified schedules contain different performance indicators from those obtained directly from the consolidated financial statements and separate financial statements, which management believes are useful in monitoring the performance of the Group and the Parent and representative of the financial performance and position of our business.

With regard to those indicators, on April 29, 2021, CONSOB issued warning notice no. 5/2021, which gives force to the Guidelines issued on March 4, 2021, by the European Securities and Markets Authority (ESMA) on disclosure requirements under Regulation (EU) 2017/1129 (the Prospectus Regulation), which took effect on May 5, 2021 and replace the references to the CESR Recommendations and those contained in Communication no. DEM/6064293 of July 28, 2006 regarding the net financial position.
The Guidelines update the previous CESR Recommendations (ESMA/2013/319, in the revised version of March 20, 2013) with the exception of those concerning the special issuers referred to in Annex no. 29 of Delegated Regulation (EU) 2019/980, which were not converted into Guidelines and remain applicable.
The Guidelines are intended to promote the usefulness and transparency of alternative performance indicators included in regulated information or prospectuses within the scope of application of Directive 2003/71/EC in order to improve their comparability, reliability and comprehensibility.
In line with the regulations cited above, the criteria used to construct these indicators are the following.

Gross operating profit: an operating performance indicator, calculated as "Operating profit" plus "Depreciation, amortization and impairment losses".

Ordinary gross operating profit: defined as "Gross operating profit" from core businesses connected with the Ownership and Stewardship business models plus the ordinary gross operating profit of discontinued operations. It does not include costs connected with corporate restructurings and costs directly attributable to the COVID-19 pandemic.

Ordinary operating profit: defined as "Operating profit" from core businesses connected with the Ownership and Stewardship business models plus the ordinary operating profit of discontinued operations.
It is calculated by adjusting "Operating profit" for the effects of transactions not connected with core operations referred to with regard to ordinary gross operating profit and excluding significant impairment losses on assets and/or groups of assets following impairment testing (including reversals of impairment losses) or classification under "Assets held for sale".

Group ordinary profit: it is defined as "Group profit" generated by Enel's core business connected with the Ownership and Stewardship business models.
It is equal to "Group profit" adjusted primarily by the solidarity tax on energy companies for 2022 provided for under Law 51 of May 20, 2022 and the solidarity tax provided for by Law 197 of December 29, 2022, as well as the items discussed under "Ordinary operating profit", net of any tax effects and non-controlling interests.

Low-carbon ordinary EBITDA: it is the ordinary gross operating profit of the set of products, services and technologies included in the following business lines: Enel Green Power, Enel Grids, Enel X and End-user Markets (excluding gas).

Net non-current assets: calculated as the difference between "Non-current assets" and "Non-current liabilities" with the exception of:

- "Deferred tax assets";
- "Securities" and "Other financial assets" included in "Other non-current financial assets";
- "Long-term borrowings";

- "Employee benefits";
- "Provisions for risks and charges (non-current portion)";
- "Deferred tax liabilities".

Net working capital: calculated as the difference between "Current assets" and "Current liabilities" with the exception of:

- "Current portion of long-term loan assets", "Factoring receivables", "Securities", "Cash collateral" and "Other financial assets" included in "Other current financial assets";
- "Cash and cash equivalents";
- "Short-term borrowings" and the "Current portion of long-term borrowings";
- "Provisions for risks and charges (current portion)";
- "Other financial liabilities" included in "Other current liabilities".

Net assets held for sale: calculated as the algebraic sum of "Assets held for sale" and "Liabilities included in disposal groups classified as held for sale".

Net capital employed: calculated as the sum of "Net non-current assets" and "Net current assets", "Provisions for risks and charges", "Deferred tax liabilities" and "Deferred tax assets", as well as "Net assets held for sale".

Net financial debt: a financial structure indicator, determined by:

- "Long-term borrowings", "Short-term borrowings" and "Current portion of long-term borrowings", taking account of "Long- and short-term financial borrowings" included respectively in "Other non-current financial liabilities" and "Other current financial liabilities";
- net of "Cash and cash equivalents";
- net of the "Current portion of long-term loan assets", "Current securities" and "Other financial assets" included in "Other current financial assets";
- net of "Non-current securities" and "Non-current financial assets" included in "Other non-current financial assets";
- net of "Cash flow hedge derivative assets on exchange rates connected to loans" and "Fair value hedge derivative assets on exchange rates connected to loans";
- "Cash flow hedge derivative liabilities on exchange rates connected to loans" and "Fair value hedge derivative liabilities on exchange rates connected to loans".

More generally, the net financial debt of the Enel Group is reported in accordance with Guideline 39, issued on March 4, 2021 by ESMA, applicable as from May 5, 2021, and with the above warning notice no. 5/2021 issued by CONSOB on April 29, 2021.

Main changes in the consolidation scope

In the two periods under review, the consolidation scope changed as a result of a number of transactions. For more information, please see note 8 "Main acquisitions and disposals in the year" of the consolidated financial statements.

Performance of the Group



Italy: Interactive Power Plants

**Interactive Power Plants is an immersive experience in the realm of the green energy of Enel Green Power in Italy.
An interactive journey in the heart of the world of energy: power plants.**

Performance of the Group

227.8 TWh
NET ELECTRICITY GENERATION
of which **112.4 TWh** of renewable generation

63.4%
NET EFFICIENT INSTALLED RENEWABLES CAPACITY
for a total of **53.6 GW**

2.0 million km
ELECTRICITY DISTRIBUTION AND TRANSMISSION GRID

45.8 million
END USERS WITH ACTIVE SMART METERS[1]
63% of end users are digitalized

66.8 million
RETAIL CUSTOMERS
of which **27.9 million** on the free market

22,617 no.
PUBLIC CHARGING POINTS[2]
+20.1% on 2021[3]

(1) Of which 25.2 million second-generation smart meters in 2022 and 23.5 million in 2021.
(2) Please note that the number of charging points including those managed by joint ventures rises to 23,122 in 2022 and 18,344 in 2021.
(3) The figures for 2021 reflect more accurate calculations.

The following is a description of the Group's operating and environmental performance.

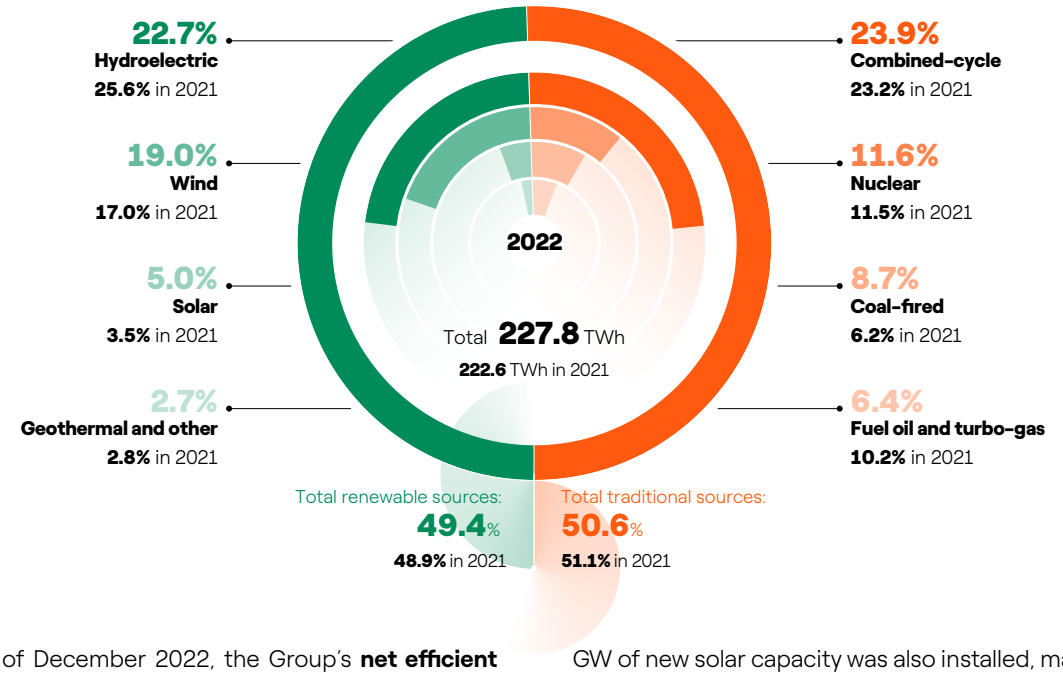
Operations

SDG		2022	2021	Change
	Net electricity generation (TWh)	227.8	222.6	5.2
	of which:			
7	*- renewable (TWh)*	*112.4*	*108.8*	*3.6*
	Total net efficient installed capacity (GW)	84.6	87.1	(2.5)
7	Net efficient installed renewables capacity (GW)	53.6[1]	50.1	3.5
7	Net efficient installed renewables capacity (%)	63.4%	57.5%	5.9%
7	Additional efficient installed renewables capacity (GW)	4.96	5.18	(0.22)
9	Electricity transported on Enel's distribution grid (TWh)[2]	507.7	510.6	(2.9)
9	End users with active smart meters (no.)[2] [3]	45,824,963	45,169,318	655,645
9	Electricity distribution and transmission grid (km)	2,024,038	2,233,368	(209,330)
	End users (no.)	72,655,170	75,178,777	(2,523,607)
	Electricity sold by Enel (TWh)	321.1	309.4	11.7
	Gas sold to end users (billions of m^3)	10.2	9.9	0.3
	Retail customers (no.)	66,784,895	69,342,818	(2,557,923)
	- of which free market	*27,864,392*	*24,839,600*	*3,024,792*
11	Demand response capacity (MW)	8,476	7,713	763
11	Public charging points (no.)[2] [4]	22,617	18,069	4,548
11	Storage (MW)	760	375	385

(1) Including managed renewable energy capacity and batteries in 2022, installed renewable capacity amounted to 59 GW or 66% of total capacity.
(2) The figures for 2021 reflect more accurate calculations.
(3) Of which 25.2 million second-generation smart meters in 2022 and 23.5 million in 2021.
(4) Please note that the number of charging points including those managed by joint ventures rises to 23,122 in 2022 and 18,344 in 2021.

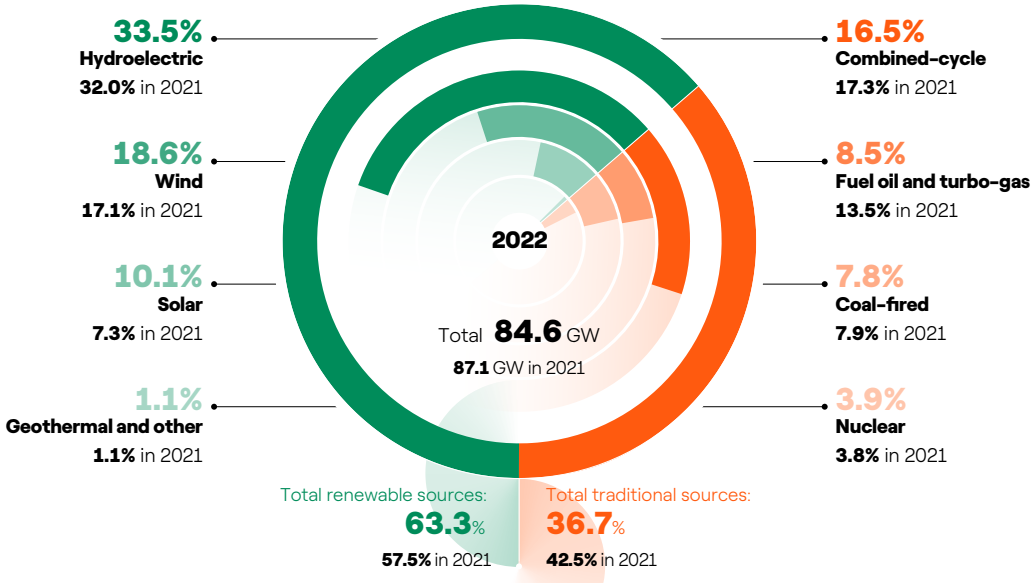
Net electricity generated by Enel in 2022 increased by 5.2 TWh (2.3%) from 2021. This rise mainly reflects an increase in wind generation (+5.5 TWh), mainly in Brazil and North America, a larger contribution from coal plants (+5.9 TWh) in Italy, and an increase in production by combined-cycle plants (+2.7 TWh), above all in Spain and Chile. It should also be noted that, in 2022, the companies in Russia were fully deconsolidated, which resulted in a reduction of 11.2 TWh in power generation related solely to oil, gas and combined-cycle sources.

Net electricity generation by source (2022)



By the end of December 2022, the Group's **net efficient installed capacity** totaled 84.6 GW, a decrease of 2.5 GW from 2021. In 2022, 1.8 GW of new wind capacity was installed, mainly in North America, Brazil and Spain, and 2.6 GW of new solar capacity was also installed, mainly in Chile, the United States, Spain and India. As already mentioned in relation to net electricity generated, all the companies in Russa have been deconsolidated for a total of 5.3 GW.

Net efficient installed capacity by source (2022)



At the end of December 2022, the Group's **net efficient installed renewables capacity** reached 53.6 GW, an increase of 3.5 GW compared with 2021, and represents 63.4% of total net efficient installed capacity.

Electricity distribution and access, ecosystems and platforms

		2022	2021	Change	
Electricity transported on Enel's distribution grid	TWh	507.7	510.6[1]	(2.9)	-0.6%
SAIDI	average minutes	230.7	243.3	(12.6)	-5.2%
SAIFI	average number	2.6	2.8	(0.2)	-7.1%
End users with active smart meters[2]	no.	45,824,963	45,169,318[1]	655,645	1.5%
Digitalized end users	%	63%	60%		
Electricity sold by Enel	TWh	321.1	309.4	11.7	3.8%
- of which free market	TWh	*198.3*	*176.0*	*22.3*	
Retail customers	no.	66,784,895	69,342,818	(2,557,923)	-3.7%
- of which free market	no.	*27,864,392*	*24,839,600*	*3,024,792*	
Public charging points[3]	no.	22,617	18,069[1]	4,548	20.1%
Demand response capacity	MW	8,476	7,713	763	9.9%

(1) The figures for 2021 reflect more accurate calculations.
(2) Of which 25.2 million second-generation meters in 2022 and 23.5 million in 2021.
(3) Please note that the number of charging points including those managed by joint ventures rises to 23,122 in 2022 and 18,344 in 2021.

Electricity transported on Enel's distribution grid totaled 507.7 TWh in 2022, down 2.9 TWh (-0.6%) from 2021, attributable essentially to Italy (-6.5 TWh), which more than offset increases in Brazil (+1.4 TWh), Argentina (+0.8 TWh), Chile (+0.7 TWh) and Spain (+0.6 TWh).
The number of **Enel end users with active smart meters** in 2022 increased by 655,645, mainly in Italy (+146,490), Spain (+103,134) and Brazil (+83,272).

Our mission is to deliver quality, accessible and reliable service through an efficient and digitalized electricity grid, which enables a more sustainable lifestyle for all our customers thanks to the use of electricity. As a distribution system operator (DSO), our Group has embraced the challenges of the energy transition to develop the grid of the future: "smart", modern, flexible and digital. Enel works with renewed focus on achieving the highest levels of service, taking advantage of advanced digitalization of our grid for greater efficiency in terms of resource costs and superior quality in the customer experience as it concerns electrification.
This ongoing cultural evolution is at the core of our ambition to become the world's best grid operator. To support this ambitious transformation, we have launched Grid Futurability®, a global, customer-focused approach that Enel is adopting in order to renew, reinforce and expand our networks over the coming years. Within the scope of the Grid Futurability® plan and in line with the Group's strategy, Enel has begun working in concert with a range of actors on the value chain with the goal of coordinating our path to zero emissions by actively engaging with our main stakeholders (e.g., industry associations, universities and research centers, other DSOs, vendors, contractors, etc.), so as to create a fully decarbonized grid for the future.
Sustainable infrastructures are key to achieving the goals of our "Zero Ambition" plan. In 2022, Enel overhauled the value chain by applying the concept of "sustainable by design" and redesigned production processes and asset decommissioning with the goal of reducing the consumption of raw materials, maximizing economic value, and reducing environmental impact.
The grid also represents a "mine of materials" that, when suitably regenerated, can be used as inputs in the production of new assets or new products in other production chains. Using an approach known as "grid mining", the entire value chain of assets is being analyzed in order to recover valuable materials/devices from obsolete grid infrastructures, with the aim of minimizing the environmental impact and the consumption of resources by maximizing the positive social aspects, with a view to creating long-term value.
Going beyond the more traditional technological investments, Enel takes account of the varied needs of customers in both rural and urban environments to identify priorities and undertake the renewal, strengthening and expansion of grids in the coming years through circular-economy solutions and processes, but above all to rethink the integration of grids with territories and communities.
Enel has been tasked with promoting access to an electrical service that is sustainable, reliable and safe, while ensuring this service reaches as many customers as possible, including those who are the most vulnerable and at greatest risk. Universal access to energy is one of the primary driving forces in combating poverty and ensuring

sustainable economic growth over the long term. In this regard, as of December 31, 2022, some 690,000 people in rural and suburban areas can now benefit from new grid connections.
Work is also ongoing in relation to Gridspertise, a new industrial and commercial company that provides distribution system operators (DSOs) and other energy-industry players with services that are innovative, flexible, sustainable and integrated. The company is positioned as a reliable partner that can help drive the digital transformation of power grids throughout the industry as part of the energy transition.

Electricity sold by Enel in 2022 came to 321.1 TWh, increasing by 11.7 TWh (+3.8%) compared with the previous year. Quantities increased mainly in Italy (+4.4 TWh) and Latin America (+7.2 TWh), mainly in Chile (+3.1 TWh) and Brazil (+2.4 TWh). In addition, **gas sold** by Enel in 2022 totaled 10.2 billion cubic meters, an increase of 0.3 billion cubic meters compared with the previous year.

Enel's leadership position has been gained thanks to the attention we place on the customer in providing quality services: aspects that concern more than just the provision of electricity and/or natural gas, extending, above all, to intangible aspects of our service that relate to the perception and satisfaction of our customers.
Through our products for both the residential and business markets, Enel provides dedicated offers with a lower environmental impact and a concentration on the most vulnerable segments of the population. In fact, all the countries in which the Group operates provide forms of support (often linked to government initiatives) which assist these segments of the population in paying their electricity and gas bills, so as to give everyone equal access to electricity.
Enel is committed to ensuring high levels of service quality and maximum customer satisfaction by anticipating market needs, so as to provide reliable answers and establish lasting relationships based on trust, collaboration and dialogue. In recent years, we have introduced new payment methods and enhanced the digital channels, and our customers have been given the means to monitor their consumption and improve energy efficiency. It is our goal at Enel to make customers aware of the important role they play in the energy transition, which is why we are committed to recognizing the contribution of every individual who chooses to reduce their impact on our planet by adopting good habits of renewable energy use, recycling and reuse, sharing, and reducing waste.

In 2022, digital customers, i.e., those who have signed up via web or app, accounted for 37% of all Enel customers.

Enel is also continuing its efforts to expand digitalization and the development of new services. Enel X Global Retail continues to lead the development of innovative technologies that make clean electricity increasingly accessible and common in the home, in business and in government, while also accelerating service digitalization in order to increase the efficiency of energy use.
In 2022, we launched the Enel X Way Business Line dedicated to electric mobility and, more pointedly, to expanding the infrastructure for electric vehicle charging in order to meet the needs of a rapidly growing marketplace, while also developing advanced charging technologies and flexible solutions aimed at improving the customer experience and supporting electrification in transport for consumers, businesses and cities.

Public charging points of Enel in 2022 amount to 22,617, an increase of 4,548 on 2021, mainly in Italy and Spain.

Fighting climate change and protecting and leveraging natural capital

233 gCO_{2eq}/kWh

DIRECT GREENHOUSE GAS EMISSIONS – SCOPE 1 – SPECIFIC[1]

+1.7% on 2021

45.2 million m^3

TOTAL WATER CONSUMPTION

+3.0% on 2021

61.0%

ZERO-EMISSIONS GENERATION

(% of total)

€13,900 million

ORDINARY EBITDA FROM LOW-CARBON PRODUCTS, SERVICES AND TECHNOLOGIES[2]

€13,351 million

CAPEX ON LOW-CARBON PRODUCTS, SERVICES AND TECHNOLOGIES[3]

(1) Specific emissions are calculated considering total direct emissions (Scope 1) as a ratio of total renewable, nuclear and thermal generation (including the contribution of heat and excluding generation for pumping).
(2) The figure for 2021 has been restated to reflect the change in the gas margin due to a change in the control model.
(3) The figure for 2021 has been restated to reflect the inclusion of Retail Latam in Enel Grids (I&N).

Main climate change indicators

		2022	2021	Change	
Direct greenhouse gas emissions - Scope 1	(million t_{eq})	53.1	51.6	1.5	2.9%
Indirect greenhouse gas emissions - Scope 2 - location based[1]	(million t_{eq})	4.0	3.8	0.2	5.3%
Indirect greenhouse gas emissions - Scope 2 - market based[1]	(million t_{eq})	6.1	6.1	-	-
Indirect greenhouse gas emissions - Scope 3[2]	(million t_{eq})	75.8	70.5	5.3	7.5%
- of which emissions connected with gas sales	(million t_{eq})	*22.9*	*22.3*	*0.6*	*2.7%*
Specific direct greenhouse gas emissions - Scope 1[3]	(gCO_{2eq}/kWh)	233	229	4	1.7%
Intensity of GHG Scope 1 emissions with respect to electricity generation[4]	(gCO_{2eq}/kWh)	229	225	4	1.8%
Intensity of GHG Scope 1 and 3 emissions with respect to integrated power[4]	(gCO_{2eq}/kWh)	218	203	15	7.4%
Specific emissions of SO_2	(g/kWh)	0.07	0.07	-	-
Specific emissions of NO_x	(g/kWh)	0.32	0.35	(0.03)	-8.6%
Specific emissions of particulates	(g/kWh)	0.005	0.005	-	-
Zero-emissions generation as percentage of total	(%)	61.0	60.3	0.7	1.2%
Total direct fuel consumption	(Mtoe)	26.5	26.3	0.2	0.8%
Average efficiency of thermal plants[5]	(%)	42.8	42.9	-0.1	-0.2%
Water withdrawals in water-stressed areas[6]	(%)	19.3	23.0	-3.7	-16.1%
Total specific freshwater withdrawals	(l/kWh_{eq})	0.23	0.25	(0.02)	-8.0%
Reference price of CO_2	(€/ton)	78.17	53.24	24.93	46.8%
Ordinary EBITDA for low-carbon products, services and technologies[7]	(millions of €)	13,900	17,298	(3,398)	-19.6%
Capex for low-carbon products, services and technologies[8]	(millions of €)	13,351	12,305	1,046	8.5%
Ratio of capex for low-carbon products, services and technologies to total[8]	(%)	92.1	93.9	-1.8	-1.9%

(1) The figure for 2021 has been calculated more accurately following a change in the calculation method used for indirect emissions (Scope 2) connected with water pumping for power generation, in line with the new SBTi certification.
(2) The figure for 2021 has been calculated more accurately, reflecting the change in the method used for calculating emissions connected with grid works.
(3) Specific emissions are calculated considering total direct emissions (Scope 1) as a ratio of total renewable, nuclear and thermal generation (including the contribution of heat and excluding generation for pumping). The figure for 2021 has been calculated more accurately following the change in calculation method referred to in note 1, which also involves the exclusion of generation for pumping from specific direct emissions, in line with the new SBTi certification.
(4) KPI corresponding to the new target certified by SBTi in 2022.
(5) Average efficiency is calculated for plant assets and weighted by output.
(6) Overall withdrawals of process and closed-cycle cooling water for 2021 were recalculated following the refinement in 2022 of the calculation methods for withdrawals of cooling water for a number of nuclear plants in Spain.
(7) The figure for 2021 has been restated to reflect the change in the gas margin due to a change in the control model.
(8) The figure for 2021 has been restated to reflect the inclusion of Retail Latam in Enel Grids (I&N).

Enel's commitment to combating climate change reached a new historic milestone in 2022 with the definition of a decarbonization roadmap, which covers both direct and indirect emissions across the entire value chain of the Group, composed of four targets certified by the Science Based Target initiative (SBTi), in line with limiting global warming to below 1.5 °C.
Enel's new certified targets follow up on the ambition set by the Company in 2021, when it brought forward its commitment to zero emissions by 10 years, from 2050 to 2040.

Direct emissions of CO_2 equivalent (Scope 1) amounted to 53.1 million tons, an increase of 2.9% compared with 2021. This increase is due to the growing demand for electricity compared with the previous year, with a greater thermal generation offsetting the reduction in hydroelectric output for the year.
Electricity generated by Enel in 2022 from zero-emission sources amounted to 61.0% of total production, a slight increase compared with 2021, reflecting the increase in the contribution from solar and wind sources.

The reduction of the environmental impacts associated with the operation of our plants is a strategic objective for us, pursued through the application of the best available technologies and best international practices.
In particular, as regards the emissions of atmospheric pollutants in connection with thermal generation, in 2022 there was a slight decrease in NO_x emissions, both in absolute and specific terms, reflecting lower overall generation from gas and CCGT plants. Emissions of SO_2 and dust are in line with 2021. The specific emissions of SO_2 amounted to 0.07 g/kWh_{eq} (unchanged from 2021), those of NO_x came to 0.32 g/kWh_{eq} (-9% compared to 2021, when they came to 0.35 g/kWh_{eq}) and those of dust came to 0.005 g/kWh_{eq}, unchanged from 2021.

Protection and development of natural capital

The protection of natural capital and combating climate change are strategic factors that are integrated into planning and in business management and development, so as to promote the sustainable economic development of the communities in which we operate, and are determinant factors in consolidating the Company's leadership in energy markets.
As an energy company, our operations depend on natural resources but, at the same time, have an impact on such resources. This is why we integrate assessments of risks and opportunities into Group governance and into our decision-making processes in line with the international Taskforce on Nature-related Financial Disclosures (TNFD) frameworks by setting specific targets over time.
The decarbonization of our energy mix, along with our objectives to reduce our impact on nature, to reclaim habitats, and to share the benefits of ecosystem services with our communities, are cornerstones of our sustainability strategy.



Responsible water resource management

		2022	2021(1)	Change	
Total withdrawals	(millions of m^3)	76.0	73.1	2.9	4.0%
Water withdrawals in water-stressed areas	(%)	19.3	23.0	-3.7	-16.1%
Total specific freshwater withdrawals	(l/kWh_{eq})	0.23	0.25	(0.02)	-8.0%
Total water consumption	(millions of m^3)	45.2	43.9	1.3	3.0%
Water consumption in water-stressed areas	(%)	20.6	24.0	-3.4	-14.2%

(1) Overall withdrawals of process and closed-cycle cooling water for 2021 were recalculated following the refinement in 2022 of the calculation methods for withdrawals of cooling water for a number of nuclear plants in Spain.

Water is an essential part of electricity generation, particularly in the generation of thermal and nuclear power, although the gradual shift to renewables, notably solar and wind, is reducing our overall water needs. The water needed in electricity generation is obtained from "non-scarce" (i.e., seawater) and scarce (i.e., surface and underground freshwater and civil-use water) sources. Beginning in 2022, Enel renewed and revitalize its commitment to preserving water resources, adopting a new more challenging target for the reduction of specific withdrawals of freshwater. In 2022, specific freshwater withdrawals totaled 0.23 l/kWh_{eq}, a slight decrease from 2021 (0.25 l/kWh_{eq}).

Enel constantly monitors all generation sites located in areas at risk of water scarcity (water-stressed areas) in order to ensure the most efficient management of the resource. In particular, for production sites that have been identified as "critical"[39], i.e., in a water-stressed area where freshwater is withdrawn for process needs, water management methods are analyzed in order to minimize consumption and maximize withdrawals from non-scarce sources (i.e., seawater and industrial or waste water).

About 13.3% of the Enel Group's total electricity output uses fresh water in water-stressed areas.

Enel's commitment to biodiversity

Enel has extensive experience in managing and preserving biodiversity in and around our production sites in an ever-increasing number of countries. In 2019, Enel adopted Group guidelines that establish the principles and procedures for managing our impact on biodiversity throughout the entire life cycle of our plants, from development and operations to decommissioning.

The identification of potential impacts on biodiversity and nature is essential in order to determine the most effective strategies for avoiding, minimizing, correcting, or offsetting associated effects, in line with the mitigation hierarchy. In the same way, identifying all that depends on biodiversity and natural capital enables us to identify the best strategies to reduce any consequent risks for the Company.

In 2022, we pursued 200 projects to safeguard species and natural habitats in and around operational plants, 80 of which were developed in partnership with government, non-governmental organizations, and universities, for a total investment of €11.9 million. These projects were carried out throughout the world. Examples of measures to mitigate our impact on biodiversity, in application of related policies, may be found in the Sustainability section of Enel.com at the following address: https://www.enel.com/investors/sustainability/strategy-sustainable-progress/biodiversity.

Also in 2022, we carried out a further 63 projects related to plants under construction, mainly in Brazil, Chile, Spain and North America, aimed at protecting and monitoring the indigenous species affected, for a total investment of over €6.4 million.

(39) Mapped in line with GRI criteria in relation to the "(baseline) water stress" conditions specified in the World Resources Institute Aqueduct Water Risk Atlas.

Group performance

€19,918 million

GROSS OPERATING PROFIT

€ 17,233 million in 2021[1]

€11,193 million

OPERATING PROFIT

+48.2% on 2021[1]

€1,682 million

GROUP PROFIT

€3,189 million in 2021

€19,683 million

ORDINARY GROSS OPERATING PROFIT

of which 56.7% eligible and aligned with European taxonomy

€12,129 milion

ORDINARY OPERATING PROFIT

of which 18.4% from Enel Green Power

€5,391 milion

GROUP ORDINARY PROFIT

€5,593 million in 2021

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Millions of euro	Ordinary income statement[1]				Income statement			
	2022	2021	Change		2022	2021[2]	Change	
Revenue	143,009	88,006	55,003	62.5%	140,517	85,719	54,798	63.9%
Costs	125,692	71,318	54,374	76.2%	122,964	71,009	51,955	73.2%
Net results from commodity contracts	2,366	2,522	(156)	-6.2%	2,365	2,523	(158)	-6.3%
Gross operating profit	**19,683**	**19,210**	**473**	**2.5%**	**19,918**	**17,233**	**2,685**	**15.6%**
Depreciation, amortization and impairment losses	7,554	6,975	579	8.3%	8,725	9,682	(957)	-9.9%
Operating profit/(loss)	**12,129**	**12,235**	**(106)**	**-0.9%**	**11,193**	**7,551**	**3,642**	**48.2%**
Financial income	8,305	5,420	2,885	53.2%	8,287	5,403	2,884	53.4%
Financial expense	10,812	8,247	2,565	31.1%	10,743	8,147	2,596	31.9%
Net financial expense	**(2,507)**	**(2,827)**	**320**	**11.3%**	**(2,456)**	**(2,744)**	**288**	**10.5%**
Share of profit/(loss) of equity-accounted investments	**27**	**102**	**(75)**	**-73.5%**	**4**	**571**	**(567)**	**-99.3%**
Pre-tax profit/(loss)	**9,649**	**9,510**	**139**	**1.5%**	**8,741**	**5,378**	**3,363**	**62.5%**
Income taxes	2,622	2,831	(209)	-7.4%	3,523	1,620	1,903	-
Profit/(Loss) from continuing operations	**7,027**	**6,679**	**348**	**5.2%**	**5,218**	**3,758**	**1,460**	**38.9%**
Profit/(Loss) from discontinued operations	**-**	**-**	**-**	**-**	**(2,298)**	**99**	**(2,397)**	**-**
Profit for the year (owners of the Parent and non-controlling interests)	**7,027**	**6,679**	**348**	**5.2%**	**2,920**	**3,857**	**(937)**	**-24.3%**
Attributable to owners of the Parent	5,391	5,593	(202)	-3.6%	1,682	3,189	(1,507)	-47.3%
Attributable to non-controlling interests	1,636	1,086	550	50.6%	1,238	668	570	85.3%

(1) The ordinary income statement does not include non-recurring items. The summary of results presents a reconciliation of reported figures with ordinary figures for the following aggregates: gross operating profit, operating profit, and profit for the year (attributable to owners of the Parent).
(2) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Revenue

Millions of euro	2022	2021[(1)]	Change	
Sale of electricity	69,340	45,053	24,287	53.9%
Transport of electricity	11,096	10,606	490	4.6%
Fees from network operators	979	800	179	22.4%
Transfers from institutional market operators	1,667	833	834	-
Sale of gas	8,970	4,744	4,226	89.1%
Transport of gas	80	599	(519)	-86.6%
Sale of fuels	5,605	1,791	3,814	-
Fees for connection to electricity and gas networks	826	769	57	7.4%
Revenue from construction contracts	1,672	1,268	404	31.9%
Sale of commodities with physical settlement and fair value gain/(loss) on contracts settled in the period	32,987	13,422	19,565	-
Sale of value-added services	1,384	1,092	292	26.7%
Other income	5,911	4,742	1,169	24.7%
Total	**140,517**	**85,719**	**54,798**	**63.9%**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Revenue increased by €54,798 million in 2022, up 63.9%, from the €85,719 million recognized in 2021. Within a context of higher average prices, this change is mainly attributable to greater volumes of energy generated and traded, greater quantities sold (particularly in Italy and Spain), rate adjustments in Brazil, greater electricity distributed in Latin America, and positive currency effects.
Revenue for 2022 includes the extraordinary gain on the sale of the transmission assets in Chile, in the amount of €1,051 million, and the ordinary gains on the partial sale of the interest held in Ufinet (€220 million) and Gridspertise (for a total of €520 million) and on the sale of a number of companies to Mooney Group SpA (€67 million). In turn, 2021 revenue included the ordinary gain of €1,763 million on the sale of the interest held in Open Fiber SpA.

Costs

Millions of euro	2022	2021[(1)]	Change	
Electricity purchases	46,955	27,404	19,551	71.3%
Consumption of fuel for electricity generation	9,286	4,050	5,236	-
Fuel for trading and gas for sale to end users	40,742	16,414	24,328	-
Materials	3,534	3,410	124	3.6%
Personnel expenses	4,571	5,140	(569)	-11.1%
Services, leases and rentals	16,606	15,663	943	6.0%
Other operating expenses	4,685	1,969	2,716	-
Capitalized costs	(3,415)	(3,041)	(374)	-12.3%
Total	**122,964**	**71,009**	**51,955**	**73.2%**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Costs increased primarily as a result of increased provisioning of energy commodities in relation to the increase in volumes produced and the increase in average prices applied (€49,115 million).
A negative impact also came from the sale of Celg Distribuição SA - Celg-D (Enel Goiás) and CGT Fortaleza in Brazil in the total amount of €349 million.

Net results from commodity contracts

Net results from commodity contracts in 2022 decreased by €158 million compared with the previous year, due mainly to fluctuations in market prices.

Ordinary gross operating profit/(loss)

The table below presents gross operating profit/(loss) by business line.

Millions of euro	2022	2021	Change	
Thermal Generation and Trading	6,094	1,702	4,392	-
Enel Green Power	3,779	4,815	(1,036)	-21.5%
Enel Grids	8,276	7,663	613	8.0%
End-user Markets	1,122	3,086	(1,964)	-63.6%
Enel X[1]	673	356	317	89.0%
Holding, Services and Other[1]	(261)	1,588	(1,849)	-
Total	**19,683**	**19,210**	**473**	**2.5%**

(1) The 2021 figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way, which are shown under "Holding, Services and Other".

Ordinary gross operating profit totaled €19,683 million, an increase of €473 million from 2021. Excluding the effects of Stewardship management, which entailed the recognition of a gain in 2021 on the sale of the equity interest held in Open Fiber SpA (€1,763 million) and the gains in 2022 on the partial sale of interests in Ufinet and Gridspertise and on the sale of a number of companies to Mooney Group SpA (for a total of €807 million), ordinary gross operating profit increased by €1,429 million on 2021. This performance was achieved thanks to the trends in integrated margin (€1,422 million) as a result of the combination of the businesses Thermal Generation and Trading, Enel Green Power, End-user Markets and Enel X, along with the performance of Enel Grids.

More specifically, the improvement in the margin attributable to thermal generation and trading offset the significant decrease in hydroelectric generation related to the poor water conditions in Italy and Spain, and made it possible to absorb the negative change in Europe's end-user markets connected with increased provisioning costs that were not fully transferred onto the customer. The increase in ordinary gross operating profit also reflects the trend in grids, mainly in Latin America, due to rate adjustments and trends in exchange rates.

Gross operating profit/(loss)

Millions of euro	2022						
	Thermal Generation and Trading	Enel Green Power	Enel Grids	End-user Markets	Enel X	Holding, Services and Other	Total
Ordinary gross operating profit/(loss)	**6,094**	**3,779**	**8,276**	**1,122**	**673**	**(261)**	**19,683**
Non-ordinary mergers & acquisitions	(137)	-	839	-	-	-	702
Energy transition and digitalization costs	(212)	(51)	(23)	(2)	(1)	(8)	(297)
Discontinued operations	(42)	(246)	38	125	(20)	8	(137)
COVID-19 costs	(6)	(5)	(16)	(2)	-	(4)	(33)
Gross operating profit/(loss)	**5,697**	**3,477**	**9,114**	**1,243**	**652**	**(265)**	**19,918**

Millions of euro	2021[1]						
	Thermal Generation and Trading	Enel Green Power	Enel Grids	End-user Markets	Enel X[2]	Holding, Services and Other[2]	Total
Ordinary gross operating profit/(loss)	**1,702**	**4,815**	**7,663**	**3,086**	**356**	**1,588**	**19,210**
Energy transition and digitalization costs	(795)	(47)	(423)	(94)	(15)	(216)	(1,590)
Discontinued operations	(86)	(191)	(110)	43	(15)	25	(334)
COVID-19 costs	(8)	(7)	(30)	(2)	-	(6)	(53)
Gross operating profit/(loss)	**813**	**4,570**	**7,100**	**3,033**	**326**	**1,391**	**17,233**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.
(2) The figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way, which are shown under "Holding, Services and Other".

Within the scope of the plan to decommission certain investments abroad as no longer of strategic importance, the company Enel Transmisión Chile and, in Brazil, the thermal generation company CGT Fortaleza and distribution company Celg Distribuição SA - Celg-D (Enel Goiás) were sold in 2022. These divestments resulted in the recognition of a gain of €1,051 million on Enel Transmisión Chile and losses on Enel Goiás (€208 million) and CGT Fortaleza (€135 million).

Ordinary operating profit/(loss)

Millions of euro	2022	2021	Change	
Thermal Generation and Trading	5,253	729	4,524	-
Enel Green Power	2,230	3,480	(1,250)	-35.9%
Enel Grids	5,254	4,813	441	9.2%
End-user Markets	(435)	1,753	(2,188)	-
Enel X[1]	362	120	242	-
Holding, Services and Other[1]	(535)	1,340	(1,875)	-
Total	**12,129**	**12,235**	**(106)**	**-0.9%**

(1) The figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way, which are shown under "Holding, Services and Other".

Ordinary operating profit/(loss) in 2022 decreased by €106 million as a result of the factors described above in relation to ordinary gross operating profit/(loss) and of the increase in depreciation and amortization recognized during the year within the scope of distribution and renewable energy operations, above all in Latin America.

Operating profit/(loss)

Millions of euro	2022						
	Thermal Generation and Trading	Enel Green Power	Enel Grids	End-user Markets	Enel X	Holding, Services and Other	Total
Ordinary operating profit/(loss)	**5,253**	**2,230**	**5,254**	**(435)**	**362**	**(535)**	**12,129**
Non-ordinary mergers & acquisitions	(500)	–	12	–	–	–	(488)
Energy transition and digitalization costs and impairment losses	(287)	(51)	(23)	(2)	(1)	(8)	(372)
Discontinued operations	(28)	(193)	120	151	(17)	9	42
COVID-19 costs	(6)	(5)	(16)	(2)	–	(4)	(33)
Other changes	(47)	(11)	(15)	(12)	–	–	(85)
Operating profit/(loss)	**4,385**	**1,970**	**5,332**	**(300)**	**344**	**(538)**	**11,193**

Millions of euro	2021[1]						
	Thermal Generation and Trading	Enel Green Power	Enel Grids	End-user Markets	Enel X[2]	Holding, Services and Other[2]	Total
Ordinary operating profit/(loss)	**729**	**3,480**	**4,813**	**1,753**	**120**	**1,340**	**12,235**
Energy transition and digitalization costs and impairment losses	(1,819)	(47)	(423)	(94)	(15)	(216)	(2,614)
Write-downs of generation plants in Spain – non-peninsular territories, Mexico and Australia	(1,488)	(185)	–	–	–	–	(1,673)
Other impairment losses	–	(159)	(12)	–	1	(45)	(215)
Discontinued operations	(56)	(131)	(22)	66	(12)	26	(129)
COVID-19 costs	(8)	(7)	(30)	(2)	–	(6)	(53)
Operating profit/(loss)	**(2,642)**	**2,951**	**4,326**	**1,723**	**94**	**1,099**	**7,551**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.
(2) The figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way, which are shown under "Holding, Services and Other".

In addition to the factors described in relation to gross operating profit above, the most significant recurring items of note include:

- the adjustments related to the Argentine companies Enel Generación Costanera SA and Central Dock Sud, for which negotiations are under way for their sale and consequent classification among assets held for sale;
- the charges and adjustments for the energy transition and digitalization, which mainly include the related provision in Italy, the write-downs of various plants in Chile, and the impairment of the Cartagena plant in Colombia;
- discontinued operations, classified in accordance with IFRS 5, under "profit/(loss) from discontinued operations" of the results of assets held in Romania and Greece, which for ordinary purposes are classified in the appropriate items for continuing operations;
- other changes, which mainly include the write-down of certain projects in Spain related to the peninsular and non-peninsular regions and the adjustment of the Funac receivable.

Profit/(Loss) from discontinued operations

Profit/(Loss) from discontinued operations reports the effects of classifying under discontinued operations the companies in Russia, Romania and Greece in accordance with "IFRS 5 - Non-current assets held for sale and discontinued operations". More specifically, the figures include the effects of the sale of the Russian companies with a total negative impact on earnings of €1,551 million, due to the release of the currency translation reserve in the amount of €1,054 million and the write-down of €497 million, as well as the adjustment of €696 million to the net assets of the Romanian companies to bring them to their estimated realizable value based on negotiations under way with the counterparty. It should be noted that the 2021 figures have been adjusted solely for the purposes of like-for-like comparison with 2022. For more information, see note 6 to the consolidated financial statements.

Group ordinary profit

Group ordinary profit in 2022 came to €5,391 million, as compared with the €5,593 million for the same period of the previous year.
This reduction in ordinary profit was compounded by the negative impact of the increase in non-controlling interests, which was partially offset by greater efficiency in financial operations related to liability management in previous periods, as well as by a reduction in the tax burden.

Group profit

Group profit in 2022 came to €1,682 million (€3,189 million in 2021), a decrease of €1,507 million compared with 2021. The table below provides a reconciliation of Group profit with Group ordinary profit, indicating the non-recurring items and their respective impact on performance, net of the associated tax effects and non-controlling interests.

Millions of euro	2022	2021
Group ordinary profit	**5,391**	**5,593**
Impairment losses of companies classified as discontinued operations	(1,992)	-
Solidarity taxes under Decree Law 21/2022 and Law 197/2022	(724)	-
Non-ordinary mergers & acquisitions	(716)	-
Energy transition and digitalization costs and impairment losses	(189)	(1,839)
COVID-19 costs	(23)	(36)
Write-down of certain assets related to the sale of the investment in Slovenské elektrárne	(18)	540
Other changes	(47)	(42)
Write-downs of generation plant assets	-	(1,027)
Group profit	**1,682**	**3,189**

Note the impact on Group profit of the contributions to the mechanism to shield users against electricity price increases (€121 million) and the solidarity levy introduced in Italy respectively with Decree Law 21/2022 and Law 197/2022 (€603 million).

Statement on the alignment of Enel's business with the European taxonomy

Financial metrics calculation process

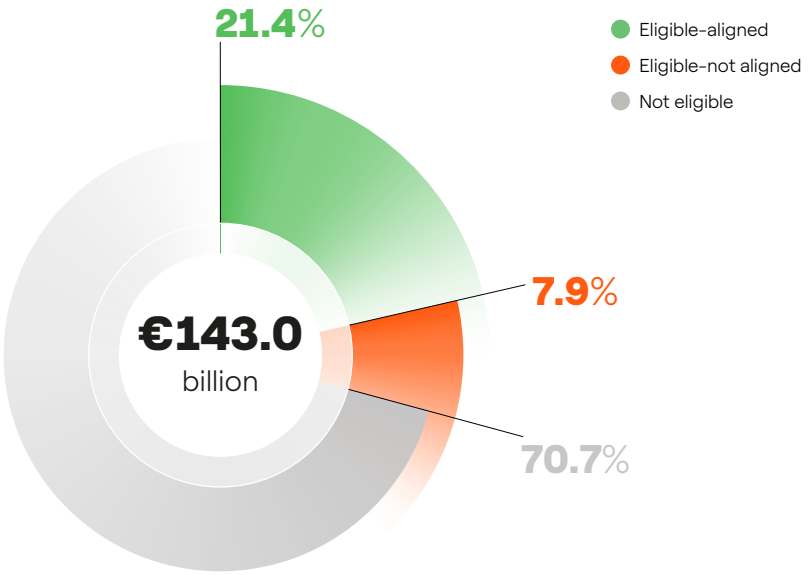
As described in the section "European Union taxonomy", Enel performed a specific implementation process to classify all its economic activities along its value chain in accordance with the following three categories: eligible-aligned, eligible-not aligned and not eligible.
The calculation of the financial metrics associated with each economic activity was performed using a specific process during which the following criteria were implemented and the following considerations were made.

- The three financial metrics required under the European taxonomy regulation: turnover (revenue), capital expenditure (capex) and operating expenditure (opex or ordinary operating expenses) were calculated in accordance with the eligibility analysis described in the section "European Union taxonomy".
- Although not expressly requested, Enel also performed an assessment for ordinary gross operating profit, believing that this metric best represents the actual financial performance of integrated utilities such as Enel.
- The financial information was collected from the accounting system used by the Enel Group or from the management systems used by the corporate business lines. However, some exceptions were also made to provide a more detailed representation of the figures or to exclude certain specific activities from the overall eligibility-alignment calculation (such as not-aligned hydroelectric generation or infrastructure considered eligible-not aligned among eligible-aligned distribution systems). For example, the following proxies were used:
  - hydroelectric: eligible-not aligned hydroelectric plants were excluded considering their output multiplied by average unit revenue for 2021 and 2022. This approach was also extended to capital expenditure, ordinary operating expenses and ordinary gross operating profit;
  - distribution: new connections between a substation or network and a generation plant whose greenhouse gas intensity exceeds the threshold of 100 gCO_{2eq}/kWh have been excluded considering their power (in MW) multiplied by average revenue (thousands of euro/MW) for 2021 and 2022. This approach was only applied to revenue and capital expenditure.
- The aggregate financial data in the reporting refer to "segment" values and include items concerning third parties and inter-segment transactions.
- The financial metrics have been reported treating all sales of electricity and gas as not eligible.
- 2021 figures have been restated to take account of the following methodological changes:
  - electricity generation from gaseous fossil fuels: considered eligible-not aligned following application of the criteria established in the Complementary Delegated Act (previously reported as not eligible);
  - electricity transmission and distribution: the eligibility of the distribution activity in Colombia was redefined to take account of updated information from the national electrical system related to new renewables capacity built over the last five years, which changed the status from eligible-aligned to eligible-not aligned. In addition, minor adjustments were made to criteria to identify the infrastructure dedicated to creating a direct connection or expanding an existing direct connection between a substation or a grid and a power generation plant with an intensity of greenhouse gases in excess of 100 gCO_{eq}/kWh measured based over the life cycle;
  - retail sale of electricity: considered to not be eligible (previously declared to be eligible) in that the activity is not explicitly mentioned in the Climate Delegated Act;
  - Enel X Global Retail: combined heat and power (CHP) from gaseous fossil fuels within the scope of distributed energy is now considered eligible-not aligned following application of the criteria established in the Complementary Delegated Act (previously considered not eligible);
  - capital expenditure: taking account of recognized costs based on "IFRS 16 - Leasing", paragraph 53(h), as required by the Commission Delegated Regulation (EU) 2012/2178.
- Total revenue, capital expenditure, ordinary gross operating profit, and operating expenses in absolute terms correspond to the revenue, investments, ordinary gross operating profit, and operating expenses of each specific activity. The levels of the individual KPIs correspond to each individual economic activity out of the total revenue/capital expenditure/ordinary gross operating profit of the Group (with the exception of ordinary operating expenses, the total of which refers solely to the type of costs required by the taxonomy). The share of revenue/capital expenditure/ordinary gross operating profit/ordinary operating expenses of each individual economic activity contributes to the climate change mitigation goal. This is the only EU taxonomy objective reported in the table, as the alignment analysis was performed only for this objective as it is more relevant than the climate change adaptation objective and the criteria for the other environmental objectives are not yet available. During the 2022 Capital Markets Day, Enel announced 80% alignment of capex for the period 2023-2025 for the Group's contribution to climate change mitigation.

Overall performance

In 2022, the level of alignment of our economic activities with the EU taxonomy, due to their substantial contribution to the climate change mitigation objective, respecting the principle of not harming other environmental objectives (DNSH) and ensuring the minimum social safeguards, is reported below.

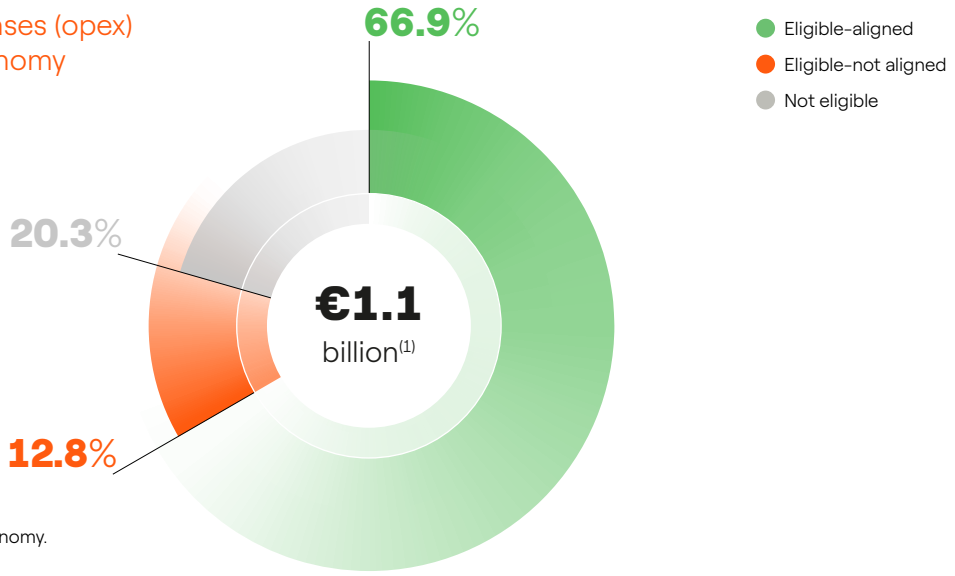
Turnover (Revenue) under the European taxonomy



In 2022, 21.4% of turnover (revenue) was generated by business activities aligned with the EU taxonomy, compared with 33.9% in 2021.(1) Revenue in 2022 increased sharply in absolute terms compared with 2021. This increase was seen most in businesses not aligned with the taxonomy, such as electricity generation from gases and other not eligible activities, such as the trading and sales of electricity and gas and coal-fired electricity generation, due mainly to rising prices and an increase in thermal generation.
As a result, aligned revenue decreased by 12%.

(1) The 2021 figures were recalculated on the basis of the methodological changes noted in the section "Financial metrics calculation process".

Ordinary operating expenses (opex) under the European taxonomy

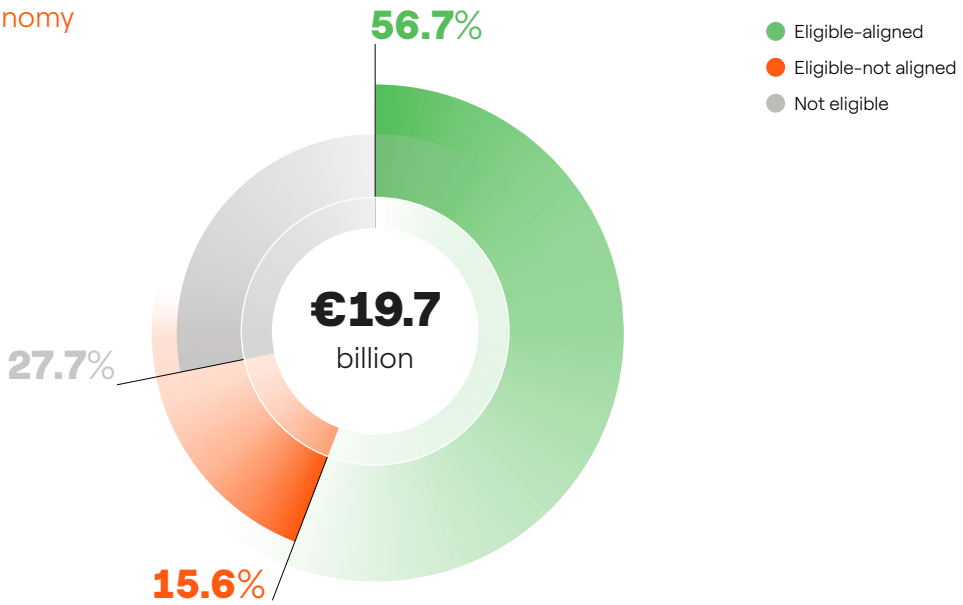


(1) Only expenses required by the taxonomy.

In 2022, 66.9% of operating expenses (opex) were generated by business activities aligned with the EU taxonomy, compared with 60.8% in 2021.(1)
The percentage of opex for taxonomy-eligible/aligned activities increased in 2022 compared with 2021 due mainly to the increase in maintenance costs incurred in the production of renewable energy and in taxonomy-aligned distribution activities.

(1) The 2021 figures were recalculated on the basis of the methodological changes noted in the section "Financial metrics calculation process".

Ordinary gross operating profit (EBITDA) under the European taxonomy

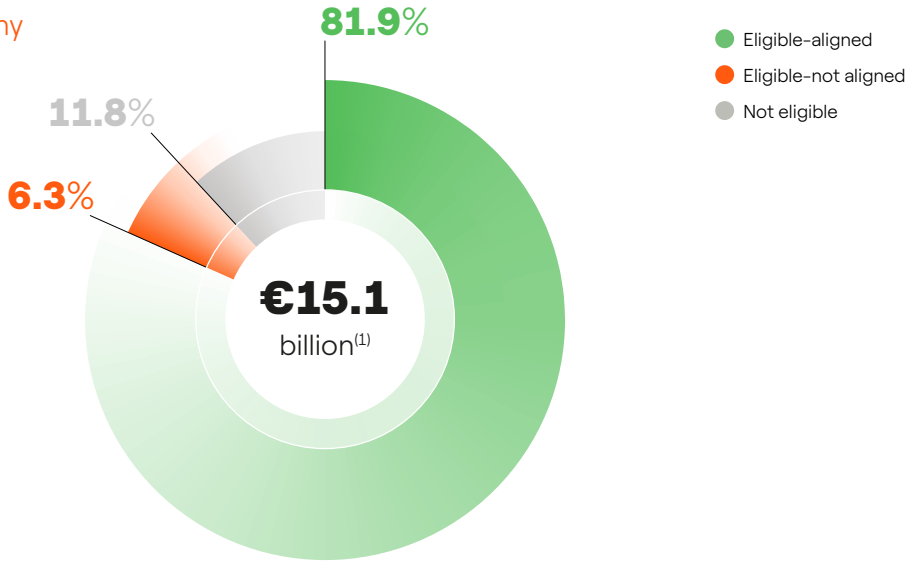


In 2022, 56.7% of ordinary gross operating profit (EBITDA) was generated by business activities aligned with the EU taxonomy, compared with 63.9% in 2021.(1)

The percentage of EBITDA of taxonomy-eligible/aligned activities decreased from 2021 to 2022 due mainly to the changes in revenue (see details above).

(1) The 2021 figures were recalculated on the basis of the methodological changes noted in the section "Financial metrics calculation process".

Capital expenditure (capex) under the European taxonomy



(1) Also includes €0.6 billion in respect of increases in assets associated with lease transactions and €0.2 billion in respect of units classified as held for sale.

In 2022, 81.9% of capital expenditure (capex) was generated by business activities aligned with the EU taxonomy, compared with 82.0% in 2021.(1)

Actual capex for 2022 for taxonomy-eligible and aligned activities is 4.5% higher than the figure as planned for 2022 in the 2022-2024 Strategic Plan for those activities. This difference is mainly attributable to greater capex in absolute terms in eligible and aligned activities compared with the plan (more than €0.5 billion) and in part to the adjustments made to the accounting process of the EU taxonomy, such as the integration of costs recognized in accordance with "IFRS 16 - Leasing", paragraph 53(h), which were not taken into account for the 2022-2024 Strategic Plan.

(1) The 2021 figures were recalculated on the basis of the methodological changes noted in the section "Financial metrics calculation process".

Overall performance from the point of view of the activity of electricity sales

The EU taxonomy Climate Delegated Act does not explicitly include the segment related to the retail sale of electricity (code NACE D35.1.4) on the assumption that it does not make a substantial contribution to the mitigation of climate change. Nonetheless, the retail sale of electricity is a fundamental segment of the energy value chain. Excluding this activity from the definition of a sustainable energy system is an obstacle to the key role played by the liberalization of the EU market and, ultimately, to the efforts and value of decarbonized end-user consumption.

Furthermore, electrification, promoted by way of renewable energy, is the most efficient and cost-effective solution to dealing with climate change in that it is clean, accessible and high yield, in addition to being the only way to achieve a truly clean energy system. However, sustainable electrification of the end uses of energy calls not only for clean technologies of energy production, but also for the companies conducting the retail sale of energy to offer renewable energy to the end user in order to meet their energy needs.

For these reasons, Enel believes that the EU taxonomy should explicitly consider the retail sale of electricity to be an eligible activity for which alignment should be based on the same criteria available for the activity of electricity generation. In this way, the sale of electricity to end users would be connected to the source of production, thereby incentivizing resellers to sell electricity from sustainable sources.

Within this context, the role of integrated utilities is even more relevant. Although they operate in the production and retail sale of electricity with different companies within the same group, these utilities manage the activity model with a more global, unified view of the entire energy value chain.

Provided below is a presentation of overall figures as if the retail sale of electricity were taxonomy-eligible and determining alignment by applying the same criteria as for electricity generation. We have based these figures on the mechanisms of the guarantees of origin available in Italy and Spain, in that they provide consumers with transparency concerning the percentage of electricity sold by resellers whose production sources are actually renewable, thereby meeting existing criteria of the EU taxonomy related to the activity of electricity generation.

As a result, revenue from the sale of electricity has been measured based on the quantity of retail sales of energy by the companies of the Group in Italy and Spain using the guarantees of origin (based on figures provided by the national authorities) and applying average per-unit revenue. This approach has also been taken for capex, opex and ordinary gross operating profit (EBITDA). To avoid double counting, eligible revenue by segment is shown net of intersegment transactions (between Enel Green Power, Enel Grids, and Retail).

Results of retail electricity sales	Units	2022	2021
Ordinary gross operating profit (EBITDA)			
- Eligible-aligned	%	57.6	67.0
- Eligible-not aligned	%	19.2	18.5
- Not eligible	%	23.2	14.5
Total	millions of euro	**19,683**	**19,210**
Turnover (Revenue)			
- Eligible-aligned	%	30.2	40.4
- Eligible-not aligned	%	34.2	35.5
- Not eligible	%	35.6	24.1
Total	millions of euro	**143,009**	**88,006**
Capex (Capital expenditure)			
- Eligible-aligned	%	83.0	82.7
- Eligible-not aligned	%	9.2	9.6
- Not eligible	%	7.8	7.7
Total	millions of euro	**15,088**	**13,831**
Operating expenses (Opex)			
- Eligible-aligned	%	66.9	61.1
- Eligible-not aligned	%	14.2	15.7
- Not eligible	%	18.9	23.2
Total	millions of euro	**1,050**	**1,029**

Breakdown of results

The following tables are presented in accordance with Article 8 of Regulation (EU) 852/2020. Accordingly, they consider retail electricity sales as not eligible.

Turnover (Revenue) under the European taxonomy

				Substantial contribution criteria						DNSH criteria ("Do No Significant Harm")									Category[8]	
Economic activities	Taxonomy Code	Absolute Turnover "revenue"[1] 2022	Proportion of Turnover "revenue"[2] 2022	Climate change mitigation[3]	Climate change adaptation[4]	Water and marine resources[4]	Circular economy[4]	Pollution[4]	Biodiversity and ecosystems[4]	Climate change mitigation[5]	Climate change adaptation[6]	Water and marine resources[6]	Circular economy[6]	Pollution[6]	Biodiversity and ecosystems[6]	Minimum safeguards[7]	Taxonomy-aligned proportion of Turnover "revenue"[10] 2022	Taxonomy-aligned proportion of Turnover "revenue"[10] 2021	Enabling activity	Transitional activity
		millions of euro	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A.1 Environmentally sustainable activities (taxonomy-aligned)																				
Electricity generation from wind power	4.3	3,375	2.4	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	Y	n.a.	Y	Y	2.4	2.7		
Electricity generation using solar photovoltaic technology	4.1	1,020	0.7	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	Y	n.a.	Y	Y	0.7	0.9		
Electricity generation from hydropower	4.5	4,298	3.0	99.5	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	n.a.	n.a.	Y	Y	3.0	6.8		
Electricity generation from geothermal	4.6	624	0.4	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	n.a.	n.a.	Y	Y	0.4	0.4		
Storage of electricity	4.10	0	0.0	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	Y	n.a.	Y	Y	0.0	0.0		
Transmission and distribution of electricity	4.9	19,873	13.9	91.9	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	Y	Y	Y	Y	13.9	21.9	E	
Installation, maintenance and repair of energy efficiency equipment (Enel X - Smart Lighting)	7.3 d	307	0.2	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	0.2	0.3		
Urban and suburban transport, road passenger transport (Enel X - e-Bus)	6.3 a	135	0.1	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	Y	Y	n.a.	Y	0.1	0.1		
Installation, maintenance and repair of energy efficiency equipment (Enel X - Energy Efficiency)	7.3 a-e	20	0.0	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	0.0	0.0		
7.3 Installation, maintenance and repair of energy efficiency equipment 7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings 7.6 Installation, maintenance and repair of renewable energy technologies (Enel X - Home/Vivi Meglio Unifamiliare)	7.3 a-e; 7.5 a; 7.6 a	458	0.3	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	0.3	0.4		
Professional services related to energy performance of buildings (Enel X - Customer Insight)	9.3	72	0.1	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	n.a.	n.a.	Y	0.1	0.1		

A.1. TAXONOMY ELIGIBLE-ALIGNED ACTIVITIES

					Substantial contribution criteria						DNSH criteria ("Do No Significant Harm")									Category[8]	
Economic activities	Taxonomy Code	Absolute Turnover "revenue"[10] 2022	Proportion of Turnover "revenue"[10] 2022		Climate change mitigation[3]	Climate change adaptation[4]	Water and marine resources[4]	Circular economy[4]	Pollution[4]	Biodiversity and ecosystems[4]	Climate change mitigation[5]	Climate change adaptation[5]	Water and marine resources[6]	Circular economy[6]	Pollution[6]	Biodiversity and ecosystems[6]	Minimum safeguards[7]	Taxonomy-aligned proportion of Turnover "revenue"[10] 2022	Taxonomy-aligned proportion of Turnover "revenue"[10] 2021	Enabling activity	Transitional activity
		millions of euro	%		%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A.1. TAXONOMY ELIGIBLE-ALIGNED ACTIVITIES																					
Individual renovation measures consisting in installation, maintenance or repair of energy efficiency equipment (Enel X - Condominium)	7.3 (a-e)	106	0.1		100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	n.a.	n.a.	Y	0.1	0.1		
7.3 Installation, maintenance and repair of energy efficiency equipment 7.6 Installation, maintenance and repair of renewable energy technologies (Enel X - Distributed Energy)	7.3 d, e; 7.6 a	132	0.1		100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	0.1	0.1		
Installation, maintenance and repair of renewable energy technologies (Enel X - Battery Energy Storage)	7.6 f	31	0.0		100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	n.a.	n.a.	Y	0.0	0.0		
6.13 Infrastructure for personal mobility 7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) (e-Mobility)	6.13; 7.4	185	0.1		100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	Y	Y	Y	Y	0.1	0.1		
Turnover of environmentally sustainable activities (taxonomy-aligned) (A.1)		**30,636**	**21.4**		**94.5**	**0.0**	**n.a.**	**n.a.**	**n.a.**	**n.a.**								**21.4**	**33.9**		
A.2. TAXONOMY ELIGIBLE-NOT ALIGNED ACTIVITIES																					
A.2 Taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned activities)																					
Electricity generation from hydropower	4.5	20	0.0															0.0	0.0		
Transmission and distribution of electricity (Argentina, Colombia and new connections between a substation and power plant >100gCO_{2eq}/kWh)	4.9	1,754	1.3															1.3	1.5		
Electricity generation from fossil gaseous fuels (CCGT)[9]	4.29	9,506	6.6															6.6	5.9		
Turnover of taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned activities) (A.2)		**11,280**	**7.9**															**7.9**	**7.4**		
Total (A.1 + A.2)		**41,916**	**29.3**															**29.3**	**41.3**		

Economic activities	Taxonomy Code	Absolute Turnover "revenue"[1] 2022	Proportion of Turnover "revenue"[2] 2022	Substantial contribution criteria: Climate change mitigation[3]	Substantial contribution criteria: Climate change adaptation[4]	Substantial contribution criteria: Water and marine resources[4]	Substantial contribution criteria: Circular economy[4]	Substantial contribution criteria: Pollution[4]	Substantial contribution criteria: Biodiversity and ecosystems[4]	DNSH criteria ("Do No Significant Harm"): Climate change mitigation[5]	DNSH criteria ("Do No Significant Harm"): Climate change adaptation[6]	DNSH criteria ("Do No Significant Harm"): Water and marine resources[6]	DNSH criteria ("Do No Significant Harm"): Circular economy[6]	DNSH criteria ("Do No Significant Harm"): Pollution[6]	DNSH criteria ("Do No Significant Harm"): Biodiversity and ecosystems[6]	Minimum safeguards[7]	Taxonomy-aligned proportion of Turnover "revenue"[2] 2022	Taxonomy-aligned proportion of Turnover "revenue"[2] 2021	Category[8]: Enabling activity	Category[8]: Transitional activity
		millions of euro	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
B. Taxonomy-not-eligible activities																				
Electricity generation from coal	n.a.	6,500	4.5																	
Electricity generation from nuclear	n.a.	1,572	1.1																	
Electricity generation from fuel-oil and OCGT[10]	n.a.	2,162	1.5																	
Enel X (only activities non elegible)	n.a.	951	0.7																	
Trading activities (Energy sales - wholesale)	n.a.	56,969	39.8																	
Market (Gas sales - end customer)	n.a.	12,049	8.4																	
Market (Power sales - end customer)	n.a.	50,763	35.5																	
Services, Holding & Others	n.a.	2,062	1.5																	
Elisions and adjustments	n.a.	-31,935	-22.3																	
Turnover of taxonomy-not-eligible activities (B)		**101,093**	**70.7**																	
Total (A + B)		**143,009**	**100.0**																	

(1) **Absolute turnover "revenue"**: it refers to the absolute amount of turnover from each single economic activity, allocated according to its eligibility condition. If the same activity is reported both in A.1 and A.2 or B, the figure reported in each single field reflects the proportion of the activity that satisfies the eligibility conditions established in A.1, A.2 or B respectively.
(2) **Proportion of turnover "revenue"**: the proportion of the turnover of each single economic activity from total Group turnover.
(3) **Climate change mitigation**: it refers to the proportion of turnover from each economic activity that contributes to climate change mitigation.
(4) **Not applicable objectives**: no substantial contribution criteria have been defined for this objective before the release of the 2022 Sustainability Report.
(5) **DNSH - Climate change mitigation**: it is not applicable as the analysis of total substantial contribution criteria has been performed for climate change mitigation objective exclusively.
(6) **DNSH**: It details whether the DNSH criteria for each environmental objective is met in each single economic activity that has been reported (yes/no), while if no specific criteria have to be verified (n.a., not applicable).
(7) **Minimum safeguards**: it details whether the minimum safeguards are met in each single economic activity that has been reported.
(8) **Category**: it details whether the activity provides a direct contribution to climate mitigation or it is an enabling or transitional activity.
(9) Includes CHP (Combined Heat and Power) activity of €41 million in 2022.
(10) **Electricity generation from fuel-oil and OCGT**: it refers to thermal power plants that use fuel-oil and/or gas (OCGT), for which a breakdown by technology is not available.

Capital expenditure (capex) under the European taxonomy

Economic activities	Taxonomy Code	Absolute Capex "capital expenditure"[1][2] 2022	Proportion of Capex "capital expenditure"[1][2] 2022	Substantial contribution criteria: Climate change mitigation[3]	Climate change adaptation[4]	Water and marine resources[4]	Circular economy[4]	Pollution[4]	Biodiversity and ecosystems[4]	DNSH criteria ("Do No Significant Harm"): Climate change mitigation[5]	Climate change adaptation[5]	Water and marine resources[5]	Circular economy[5]	Pollution[5]	Biodiversity and ecosystems[5]	Minimum safeguards[7]	Taxonomy-aligned proportion of Capex "capital expenditure"[1][2] 2022	Taxonomy-aligned proportion of Capex "capital expenditure"[1][2] 2021	Category[8]: Enabling activity	Category[8]: Transitional activity
		millions of euro	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A.1 Environmentally sustainable activities (taxonomy-aligned)																				
Electricity generation from wind power	4.3	2,221	14.7	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	Y	n.a.	Y	Y	14.7	21.5		
Electricity generation using solar photovoltaic technology	4.1	3,011	20.0	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	Y	n.a.	Y	Y	20.0	14.4		
Electricity generation from hydropower	4.5	431	2.9	99.1	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	n.a.	n.a.	Y	Y	2.9	3.0		
Electricity generation from geothermal	4.6	125	0.8	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	n.a.	n.a.	Y	Y	0.8	0.9		
Storage of electricity	4.10	528	3.5	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	Y	n.a.	Y	Y	3.5	1.1		
Transmission and distribution of electricity	4.9	5,234	34.7	93.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	Y	Y	Y	Y	34.7	35.4	E	
Installation, maintenance and repair of energy efficiency equipment (Enel X - Smart Lighting)	7.3 d	84	0.5	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	0.5	0.4		
Urban and suburban transport, road passenger transport (Enel X - e-Bus)	6.3 a	1	0.0	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	Y	Y	n.a.	Y	0.0	0.0		
Installation, maintenance and repair of energy efficiency equipment (Enel X - Energy Efficiency)	7.3 a-e	9	0.1	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	0.1	0.0		
7.3 Installation, maintenance and repair of energy efficiency equipment 7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings 7.6 Installation, maintenance and repair of renewable energy technologies (Enel X - Home/Vivi Meglio Unifamiliare)	7.3 a-e; 7.5 a; 7.6 a	71	0.5	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	0.5	0.4		
Professional services related to energy performance of buildings (Enel X - Customer Insight)	9.3	5	0.0	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	n.a.	n.a.	Y	0.0	0.0		
Individual renovation measures consisting in installation, maintenance or repair of energy efficiency equipment (Enel X - Condominium)	7.3 (a-e)	25	0.2	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	0.2	0.2		

A.1. TAXONOMY ELIGIBLE-ALIGNED ACTIVITIES

				Substantial contribution criteria						DNSH criteria ("Do No Significant Harm")									Category[8]	
Economic activities	Taxonomy Code	Absolute Capex "capital expenditure"[10] 2022	Proportion of Capex "capital expenditure"[12] 2022	Climate change mitigation[3]	Climate change adaptation[4]	Water and marine resources[4]	Circular economy[4]	Pollution[4]	Biodiversity and ecosystems[4]	Climate change mitigation[5]	Climate change adaptation[6]	Water and marine resources[6]	Circular economy[6]	Pollution[6]	Biodiversity and ecosystems[6]	Minimum safeguards[7]	Taxonomy-aligned proportion of Capex "capital expenditure"[12] 2022	Taxonomy-aligned proportion of Capex "capital expenditure"[12] 2021	Enabling activity	Transitional activity
		millions of euro	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A.1. TAXONOMY ELIGIBLE-ALIGNED ACTIVITIES																				
7.3 Installation, maintenance and repair of energy efficiency equipment 7.6 Installation, maintenance and repair of renewable energy technologies (Enel X - Distributed Energy)	7.3 d, e; 7.6 a	21	0.1	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	0.1	0.1		
Installation, maintenance and repair of renewable energy technologies (Enel X - Battery Energy Storage)	7.6 f	54	0.4	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	n.a.	n.a.	Y	0.4	0.3		
6.13 Infrastructure for personal mobility 7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) (e-Mobility)	6.13; 7.4	113	0.7	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	Y	Y	Y	Y	0.7	0.6		
Additions to right-of-use assets (IFRS 16 par. 53 point h)	n.a.	418	2.8	71.5	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	Y	Y	Y	Y	2.8	3.7		
Capex of environmentally sustainable activities (taxonomy-aligned) (A.1)		**12,351**	**81.9**	**95.6**	**0.0**	**n.a.**	**n.a.**	**n.a.**	**n.a.**								**81.9**	**82.0**		
A.2. TAXONOMY ELIGIBLE-NOT ALIGNED ACTIVITIES																				
A.2 Taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned activities)																				
Electricity generation from hydropower	4.5	4	0.0														0.0	0.0		
Transmission and distribution of electricity (Argentina, Colombia and new connections between a substation and power plant >100gCO_{2eq}/kWh)	4.9	393	2.6														2.6	2.9		
Electricity generation from fossil gaseous fuels (CCGT)	4.29	393	2.6														2.6	2.1		
Additions to right-of-use assets (IFRS 16 par. 53 point h)	n.a.	166	1.1														1.1	1.5		
Capex of taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned activities) (A.2)		**956**	**6.3**														**6.3**	**6.5**		
Total (A.1 + A.2)		**13,307**	**88.2**														**88.2**	**88.5**		

B. TAXONOMY-NOT-ELIGIBLE ACTIVITIES

Economic activities	Taxonomy Code	Absolute Capex "capital expenditure"[1] 2022	Proportion of Capex "capital expenditure"[2] 2022	Substantial contribution criteria: Climate change mitigation[3]	Substantial contribution criteria: Climate change adaptation[4]	Substantial contribution criteria: Water and marine resources[4]	Substantial contribution criteria: Circular economy[4]	Substantial contribution criteria: Pollution[4]	Substantial contribution criteria: Biodiversity and ecosystems[4]	DNSH criteria ("Do No Significant Harm"): Climate change mitigation[5]	DNSH criteria ("Do No Significant Harm"): Climate change adaptation[5]	DNSH criteria ("Do No Significant Harm"): Water and marine resources[5]	DNSH criteria ("Do No Significant Harm"): Circular economy[5]	DNSH criteria ("Do No Significant Harm"): Pollution[5]	DNSH criteria ("Do No Significant Harm"): Biodiversity and ecosystems[5]	Minimum safeguards[7]	Taxonomy-aligned proportion of Capex "capital expenditure"[2] 2022	Taxonomy-aligned proportion of Capex "capital expenditure"[2] 2021	Category[8]: Enabling activity	Category[8]: Transitional activity
		millions of euro	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
B. Taxonomy-not-eligible activities																				
Electricity generation from coal	n.a.	32	0.2																	
Electricity generation from nuclear	n.a.	142	0.9																	
Electricity generation from fuel-oil and OCGT[9]	n.a.	238	1.6																	
Enel X (only not eligible activities)	n.a.	103	0.6																	
Trading activities (Energy sales - wholesale)	n.a.	163	1.1																	
Market (Gas sales - end customer)	n.a.	118	0.8																	
Market (Power sales - end customer)	n.a.	603	4.0																	
Services, Holding & Others	n.a.	219	1.5																	
Elisions and adjustments	n.a.	162	1.1																	
Additions to right-of-use assets (IFRS 16 par. 53 point h)	n.a.	1	0.0																	
Capex of taxonomy not eligible activities (B)		**1,781**	**11.8**																	
Total (A + B)		**15,088**	**100.0**																	

(1) **Absolute Capex "capital expenditure"**: it refers to the absolute amount of Capex from each single economic activity, allocated according to its eligibility condition. If the same activity is reported both in A.1 and A.2 or B, the figure reported in each single field reflects the proportion of the activity that satisfies the eligibility conditions established in A.1, A.2 or B respectively.
(2) **Proportion of Capex "capital expenditure"**: the proportion of the Capex of each single economic activity from total Group Capex.
(3) **Climate change mitigation**: it refers to the proportion of Capex from each economic activity that contributes to climate change mitigation.
(4) **Not applicable objectives**: no substantial contribution criteria have been defined for this objective before the release of the 2022 Sustainability Report.
(5) **DNSH - Climate change mitigation**: it is not applicable as the analysis of total substantial contribution criteria has been performed for climate change mitigation objective exclusively.
(6) **DNSH**: it details whether the DNSH criteria for each environmental objective is met in each single economic activity that has been reported (yes/no), while if no specific criteria have to be verified (n.a., not applicable).
(7) **Minimum safeguards**: it details whether the minimum safeguards are met in each single economic activity that has been reported.
(8) **Category**: it details whether the activity provides a direct contribution to climate mitigation or it is an enabling or transitional activity.
(9) **Electricity generation from fuel-oil and OCGT**: it refers to thermal power plants that use fuel-oil and/or gas (OCGT), for which a breakdown by technology is not available.

Operating expenses (opex) under the European taxonomy

Economic activities	Taxonomy Code	Absolute Opex[1] 2022	Proportion of Opex[2] 2022	Substantial contribution criteria: Climate change mitigation[3]	Climate change adaptation[4]	Water and marine resources[4]	Circular economy[4]	Pollution[4]	Biodiversity and ecosystems[4]	DNSH criteria ("Do No Significant Harm"): Climate change mitigation[5]	Climate change adaptation[6]	Water and marine resources[6]	Circular economy[6]	Pollution[6]	Biodiversity and ecosystems[6]	Minimum safeguards[7]	Taxonomy-aligned proportion of Opex[2] 2022	Taxonomy-aligned proportion of Opex[2] 2021	Category[8]: Enabling activity	Category[8]: Transitional activity
		millions of euro	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A.1 Environmentally sustainable activities (taxonomy-aligned)																				
Electricity generation from wind power	4.3	76	7.2	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	Y	n.a.	Y	Y	7.2	6.0		
Electricity generation using solar photovoltaic technology	4.1	41	3.9	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	Y	n.a.	Y	Y	3.9	2.6		
Electricity generation from hydropower	4.5	135	12.9	99.3	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	n.a.	n.a.	Y	Y	12.9	11.3		
Electricity generation from geothermal	4.6	4	0.4	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	n.a.	n.a.	Y	Y	0.4	0.4		
Storage of electricity	4.10	0	0.0	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	Y	n.a.	Y	Y	0.0	0.0		
Transmission and distribution of electricity	4.9	439	41.8	91.5	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	Y	Y	Y	Y	41.8	40.2	E	
Installation, maintenance and repair of energy efficiency equipment (Enel X - Smart Lighting)	7.3 d	1	0.1	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	0.1	0.1		
Urban and suburban transport, road passenger transport (Enel X - e-Bus)	6.3 a	0	0.0	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	Y	Y	n.a.	Y	0.0	0.0		
Installation, maintenance and repair of energy efficiency equipment (Enel X - Energy Efficiency)	7.3 a-e	0	0.0	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	0.0	0.0		
7.3 Installation, maintenance and repair of energy efficiency equipment 7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings 7.6 Installation, maintenance and repair of renewable energy technologies (Enel X - Home/Vivi Meglio Unifamiliare)	7.3 a-e; 7.5 a; 7.6 a	1	0.1	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	0.1	0.1		
Professional services related to energy performance of buildings (Enel X - Customer Insight)	9.3	1	0.1	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	n.a.	n.a.	Y	0.1	0.1		

A.1. TAXONOMY ELIGIBLE-ALIGNED ACTIVITIES

					Substantial contribution criteria						DNSH criteria ("Do No Significant Harm")									Category[8]	
Economic activities	Taxonomy Code	Absolute Opex[1] 2022	Proportion of Opex[2] 2022	Climate change mitigation[3]	Climate change adaptation[4]	Water and marine resources[4]	Circular economy[4]	Pollution[4]	Biodiversity and ecosystems[4]	Climate change mitigation[5]	Climate change adaptation[6]	Water and marine resources[6]	Circular economy[6]	Pollution[6]	Biodiversity and ecosystems[6]	Minimum safeguards[7]	Taxonomy-aligned proportion of Opex[2] 2022	Taxonomy-aligned proportion of Opex[2] 2021	Enabling activity	Transitional activity
		millions of euro	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A.1. TAXONOMY ELIGIBLE-ALIGNED ACTIVITIES																				
Individual renovation measures consisting in installation, maintenance or repair of energy efficiency equipment (Enel X - Condominium)	7.3 (a-e)	1	0.1	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	n.a.	n.a.	Y	0.1	0.0		
7.3 Installation, maintenance and repair of energy efficiency equipment 7.6 Installation, maintenance and repair of renewable energy technologies (Enel X - Distributed Energy)	7.3 d, e; 7.6 a	0	0.0	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	0.0	0.0		
Installation, maintenance and repair of renewable energy technologies (Enel X - Battery Energy Storage)	7.6 f	0	0.0	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	n.a.	n.a.	Y	0.0	0.0		
6.13 Infrastructure for personal mobility 7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) (e-Mobility)	6.13; 7.4	3	0.3	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	Y	Y	Y	Y	0.3	0.0		
Opex of environmentally sustainable activities (taxonomy-aligned) (A.1)		**702**	**66.9**	**94.4**	**0.0**	**n.a.**	**n.a.**	**n.a.**	**n.a.**								**66.9**	**60.8**		
A.2. TAXONOMY ELIGIBLE-NOT ALIGNED ACTIVITIES																				
A.2 Taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned activities)																				
Electricity generation from hydropower	4.5	1	0.0														0.0	0.1		
Transmission and distribution of electricity (Argentina, Colombia and new connections between a substation and power plant >100gCO_{2eq}/kWh)	4.9	41	3.9														3.9	3.9		
Electricity generation from fossil gaseous fuels (CCGT)[9]	4.29	93	8.9														8.9	10.7		
Opex of taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned activities) (A.2)		**135**	**12.8**														**12.8**	**14.7**		
Total (A.1 + A.2)		**837**	**79.7**														**79.7**	**75.5**		

Economic activities	Taxonomy Code	Absolute Opex[1] 2022	Proportion of Opex[2] 2022	Substantial contribution criteria: Climate change mitigation[3]	Substantial contribution criteria: Climate change adaptation[4]	Substantial contribution criteria: Water and marine resources[4]	Substantial contribution criteria: Circular economy[4]	Substantial contribution criteria: Pollution[4]	Substantial contribution criteria: Biodiversity and ecosystems[4]	DNSH criteria ("Do No Significant Harm"): Climate change mitigation[5]	DNSH criteria ("Do No Significant Harm"): Climate change adaptation[6]	DNSH criteria ("Do No Significant Harm"): Water and marine resources[6]	DNSH criteria ("Do No Significant Harm"): Circular economy[6]	DNSH criteria ("Do No Significant Harm"): Pollution[6]	DNSH criteria ("Do No Significant Harm"): Biodiversity and ecosystems[6]	Minimum safeguards[7]	Taxonomy-aligned proportion of Opex[2] 2022	Taxonomy-aligned proportion of Opex[2] 2021	Category[8]: Enabling activity	Category[8]: Transitional activity
		millions of euro	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
B. Taxonomy-not-eligible activities																				
Electricity generation from coal	n.a.	36	3.4																	
Electricity generation from nuclear	n.a.	87	8.3																	
Electricity generation from fuel-oil and OCGT[10]	n.a.	21	2.0																	
Enel X (only activities non elegible)	n.a.	4	0.4																	
Trading activities (Energy sales - wholesale)	n.a.	4	0.4																	
Market (Gas Sales - end customer)	n.a.	3	0.3																	
Market (Power Sales - end customer)	n.a.	13	1.2																	
Services, Holding & Others	n.a.	45	4.3																	
Elisions and adjustments	n.a.	0	0.0																	
Opex of Taxonomy-non-elegible activities (B)		**213**	**20.3**																	
Total (A + B)		**1,050**	**100.0**																	

(1) **Absolute Opex**: it refers to the absolute amount of Opex from each single economic activity, allocated according to its eligibility condition. If the same activity is reported both in A.1 and A.2 or B, the figure reported in each single field reflects the proportion of the activity that satisfies the eligibility conditions established in A.1, A.2 or B respectively.
(2) **Proportion of Opex**: the proportion of the Opex of each single economic activity from total Group Opex.
(3) **Climate change mitigation**: it refers to the proportion of Opex from each economic activity that contributes to climate change mitigation.
(4) **Not applicable objectives**: no substantial contribution criteria have been defined for this objective before the release of the 2022 Sustainability Report.
(5) **DNSH - Climate change mitigation**: it is not applicable as the analysis of total substantial contribution criteria has been performed for climate change mitigation objective exclusively.
(6) **DNSH**: it details whether the DNSH criteria for each environmental objective is met in each single economic activity that has been reported (yes/no), while if no specific criteria have to be verified (n.a., not applicable).
(7) **Minimum safeguards**: it details whether the minimum safeguards are met in each single economic activity that has been reported.
(8) **Category**: it details whether the activity provides a direct contribution to climate mitigation or it is an enabling or transitional activity.
(9) Includes CHP (Combined Heat and Power) activity of €0.09 million in 2022.
(10) **Electricity generation from fuel-oil and OCGT**: it refers to thermal power plants that use fuel-oil and/or gas (OCGT), for which a breakdown by technology is not available.

Ordinary gross operating profit (EBITDA) under the European taxonomy

A.1. TAXONOMY ELIGIBLE-ALIGNED ACTIVITIES

Economic activities	Taxonomy Code	Ordinary gross operating profit (EBITDA)[1] 2022	Proportion of ordinary gross operating profit (EBITDA)[2] 2022	Substantial contribution criteria: Climate change mitigation[3]	Substantial contribution criteria: Climate change adaptation[4]	Substantial contribution criteria: Water and marine resources[4]	Substantial contribution criteria: Circular economy[4]	Substantial contribution criteria: Pollution[4]	Substantial contribution criteria: Biodiversity and ecosystems[4]	DNSH criteria ("Do No Significant Harm"): Climate change mitigation[5]	DNSH criteria ("Do No Significant Harm"): Climate change adaptation[5]	DNSH criteria ("Do No Significant Harm"): Water and marine resources[5]	DNSH criteria ("Do No Significant Harm"): Circular economy[5]	DNSH criteria ("Do No Significant Harm"): Pollution[5]	DNSH criteria ("Do No Significant Harm"): Biodiversity and ecosystems[5]	Minimum safeguards[7]	Taxonomy-aligned proportion of ordinary gross operating profit (EBITDA)[2] 2022	Taxonomy-aligned proportion of ordinary gross operating profit (EBITDA)[2] 2021	Category[8]: Enabling activity	Category[8]: Transitional activity
		millions of euro	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A.1 Environmentally sustainable activities (taxonomy-aligned)																				
Electricity generation from wind power	4.3	2,094	10.6	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	Y	n.a.	Y	Y	10.6	7.3		
Electricity generation using solar photovoltaic technology	4.1	591	3.0	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	Y	n.a.	Y	Y	3.0	2.0		
Electricity generation from hydropower	4.5	1,178	6.0	99.4	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	n.a.	n.a.	Y	Y	6.0	14.4		
Electricity generation from geothermal	4.6	-139	-0.7	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	n.a.	n.a.	Y	Y	-0.7	1.2		
Storage of electricity	4.10	0	0.0	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	Y	n.a.	Y	Y	0.0	0.0		
Transmission and distribution of electricity	4.9	7,137	36.3	92.5	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	Y	Y	Y	Y	36.3	37.6	E	
Installation, maintenance and repair of energy efficiency equipment (Enel X - Smart Lighting)	7.3 d	91	0.5	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	0.5	0.4		
Urban and suburban transport, road passenger transport (Enel X - e-Bus)	6.3 a	37	0.2	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	Y	Y	n.a.	Y	0.2	0.1		
Installation, maintenance and repair of energy efficiency equipment (Enel X - Energy Efficiency)	7.3 a-e	1	0.0	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	0.0	0.0		
7.3 Installation, maintenance and repair of energy efficiency equipment 7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings 7.6 Installation, maintenance and repair of renewable energy technologies (Enel X - Home/Vivi Meglio Unifamiliare)	7.3 a-e; 7.5 a; 7.6 a	202	1.0	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	1.0	0.6		
Professional services related to energy performance of buildings (Enel X - Customer Insight)	9.3	7	0.0	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	n.a.	n.a.	Y	0.0	0.1		
Individual renovation measures consisting in installation, maintenance or repair of energy efficiency equipment (Enel X - Condominium)	7.3 (a-e)	46	0.2	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	n.a.	n.a.	Y	0.2	0.5		

				Substantial contribution criteria						DNSH criteria ("Do No Significant Harm")									Category[8]	
Economic activities	Taxonomy Code	Ordinary gross operating profit (EBITDA)[1] 2022	Proportion of ordinary gross operating profit (EBITDA)[2] 2022	Climate change mitigation[3]	Climate change adaptation[4]	Water and marine resources[4]	Circular economy[4]	Pollution[4]	Biodiversity and ecosystems[4]	Climate change mitigation[5]	Climate change adaptation[6]	Water and marine resources[6]	Circular economy[6]	Pollution[6]	Biodiversity and ecosystems[6]	Minimum safeguards[7]	Taxonomy-aligned proportion of ordinary gross operating profit (EBITDA)[2] 2022	Taxonomy-aligned proportion of ordinary gross operating profit (EBITDA)[2] 2021	Enabling activity	Transitional activity
		millions of euro	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A.1. TAXONOMY ELIGIBLE-ALIGNED ACTIVITIES																				
7.3 Installation, maintenance and repair of energy efficiency equipment 7.6 Installation, maintenance and repair of renewable energy technologies (Enel X - Distributed Energy)	7.3 d, e; 7.6 a	12	0.1	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	Y	n.a.	Y	0.1	0.0		
Installation, maintenance and repair of renewable energy technologies (Enel X - Battery Energy Storage)	7.6 f	2	0.0	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	n.a.	n.a.	n.a.	n.a.	Y	0.0	0.0		
6.13 Infrastructure for personal mobility 7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) (e-Mobility)	6.13; 7.4	-94	-0.5	100.0	0.0	n.a.	n.a.	n.a.	n.a.	n.a.	Y	Y	Y	Y	Y	Y	-0.5	-0.3		
Ordinary EBITDA of environmentally sustainable activities (Taxonomy-aligned) (A.1)		**11,165**	**56.7**	**95.0**	**0.0**	**n.a.**	**n.a.**	**n.a.**	**n.a.**								**56.7**	**63.9**		
A.2. TAXONOMY ELIGIBLE-NOT ALIGNED ACTIVITIES																				
A.2 Taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned activities)																				
Electricity generation from hydropower	4.5	-7	0.0														0.0	0.1		
Transmission and distribution of electricity (Argentina, Colombia and new connections between a substation and power plant >100gCO_{2eq}/kWh)	4.9	576	2.9														2.9	2.0		
Electricity generation from fossil gaseous fuels (CCGT)[9]	4.29	2,492	12.7														12.7	6.1		
Ordinary EBITDA of taxonomy-eligible but not evironmentally sustainable activities (not taxonomy-aligned activities) (A.2)		**3,061**	**15.6**														**15.6**	**8.2**		
Total (A.1 + A.2)		**14,226**	**72.3**														**72.3**	**72.1**		

B. TAXONOMY-NOT-ELIGIBLE ACTIVITIES

Economic activities	Taxonomy Code	Ordinary gross operating profit (EBITDA)[1] 2022	Proportion of ordinary gross operating profit (EBITDA)[2] 2022	Substantial contribution criteria: Climate change mitigation[3]	Climate change adaptation[4]	Water and marine resources[4]	Circular economy[4]	Pollution[4]	Biodiversity and ecosystems[4]	DNSH criteria ("Do No Significant Harm"): Climate change mitigation[5]	Climate change adaptation[5]	Water and marine resources[5]	Circular economy[5]	Pollution[5]	Biodiversity and ecosystems[5]	Minimum safeguards[7]	Taxonomy-aligned proportion of ordinary gross operating profit (EBITDA)[2] 2022	Taxonomy-aligned proportion of ordinary gross operating profit (EBITDA)[2] 2021	Category[8]: Enabling activity	Category[8]: Transitional activity
		millions of euro	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
B. Taxonomy-not-eligible activities																				
Electricity generation from coal	n.a.	1,297	6.6																	
Electricity generation from nuclear	n.a.	651	3.3																	
Electricity generation from fuel-oil and OCGT[10]	n.a.	-415	-2.1																	
Enel X (only activities not eligible)	n.a.	273	1.4																	
Trading activities (Energy sales - wholesale)	n.a.	2,282	11.6																	
Market (Gas sales - end customer)	n.a.	151	0.8																	
Market (Power sales - end customer)	n.a.	885	4.5																	
Services, Holding & Others	n.a.	-167	-0.9																	
Elisions and adjustments	n.a.	500	2.5																	
Ordinary EBITDA of taxonomy-not-eligible activities (B)		**5,457**	**27.7**																	
Total (A + B)		**19,683**	**100.0**																	

(1) **Ordinary gross operating profit (EBITDA)**: it refers to the absolute amount of EBITDA from each single economic activity, allocated according to its eligibility condition. If the same activity is reported both in A.1 and A.2 or B, the figure reported in each single field reflects the proportion of the activity that satisfies the eligibility conditions established in A.1, A.2 or B respectively.
(2) **Proportion of ordinary gross operating profit (EBITDA)**: the proportion of the EBITDA of each single economic activity from total Group EBITDA.
(3) **Climate change mitigation**: it refers to the proportion of EBITDA from each economic activity that contributes to climate change mitigation.
(4) **Not applicable objectives**: no substantial contribution criteria have been defined for this objective before the release of the 2022 Sustainability Report.
(5) **DNSH - Climate change mitigation**: it is not applicable as the analysis of total substantial contribution criteria has been performed for climate change mitigation objective exclusively.
(6) **DNSH**: it details whether the DNSH criteria for each environmental objective is met in each single economic activity that has been reported (yes/no), while if no specific criteria have to be verified (n.a., not applicable).
(7) **Minimum safeguards**: it details whether the minimum safeguards are met in each single economic activity that has been reported.
(8) **Category**: it details whether the activity provides a direct contribution to climate mitigation or it is an enabling or transitional activity.
(9) Includes CHP (Combined Heat and Power) activity of €1 million in 2022.
(10) **Electricity generation from fuel-oil and OCGT**: it refers to thermal power plants that use fuel-oil and/or gas (OCGT), for which a breakdown by technology is not available.

The following data are reported in accordance with Commission Delegated Regulation (EU) 2022/1214 of March 9, 2022, amending Delegated Regulation (EU) 2021/2139 as regards economic activities in certain energy sectors and Delegated Regulation (EU) 2021/2178 regarding disclosures of information specific to those economic activities.

Template 1 – Nuclear and fossil gas related activities

Nuclear energy related activities		
1	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	No
2	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	No
3	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	Yes
Fossil gas related activities		
4	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	Yes
5	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	No
6	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	No

As indicated in the table above, the only applicable activities for Enel concern the safe operation of existing nuclear plants and the operation of electricity generation plants that use gaseous fossil fuels. The first activity is 100% not eligible, while the second is 100% eligible-not aligned. Consequently, the following tables refer to templates 4 and 5 in the annex to the Complementary Delegated Act. The remaining templates in the Delegated Act are not applicable to Enel's business model. In addition, the information relates only to the climate change mitigation goal due to lack of sufficient data to complete the climate change adaptation goal compliance analysis.

Template 4 – Taxonomy-eligible but not taxonomy-aligned economic activities

Turnover (Revenue) under European taxonomy

	Climate mitigation	
Economic activities	**Amount in millions of euro**	**%**
Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	9,506	6.6
Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	**1,774**	**1.2**
Total amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI	**11,280**	**7.8**

Capex (Capital expenditure) under European taxonomy

	Climate mitigation	
Economic activities	**Amount in millions of euro**	**%**
Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	393	2.6
Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	**563**	**3.7**
Total amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI	**956**	**6.3**

Operating expenses (Opex) under European taxonomy

	Climate mitigation	
Economic activities	**Amount in millions of euro**	**%**
Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	93	8.9
Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	**42**	**4.0**
Total amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI	**135**	**12.9**

Ordinary gross operating profit (EBITDA) under European taxonomy

	Climate mitigation	
Economic activities	**Amount in millions of euro**	**%**
Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	2,492	12.7
Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	**569**	**2.9**
Total amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI	**3,061**	**15.6**

Template 5 – Taxonomy-not eligible economic activities

Turnover (Revenue) under European taxonomy

	Climate mitigation	
Economic activities	**Amount (in millions of euro)**	**%**
Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-not eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	1,572	1.1
Amount and proportion of other taxonomy-not eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	**99,521**	**69.6**
Total amount and proportion of taxonomy-not eligible economic activities in the denominator of the applicable KPI	**101,093**	**70.7**

Capex (Capital expenditure) under European taxonomy

Economic activities	Climate mitigation	
	Amount in millions of euro	%
Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-not-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	142	0.9
Amount and proportion of other taxonomy-not-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	**1,639**	**10.9**
Total amount and proportion of taxonomy-not-eligible economic activities in the denominator of the applicable KPI	**1,781**	**11.8**

Operating expenses (Opex) under European taxonomy

Economic activities	Climate mitigation	
	Amount in millions of euro	%
Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-not-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	87	8.3
Amount and proportion of other taxonomy-not-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	**126**	**12.0**
Total amount and proportion of taxonomy-not-eligible economic activities in the denominator of the applicable KPI	**213**	**20.3**

Ordinary gross operating profit (EBITDA) under European taxonomy

Economic activities	Climate mitigation	
	Amount in millions of euro	%
Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-not-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	651	3.3
Amount and proportion of other taxonomy-not-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	**4,806**	**24.4**
Total amount and proportion of taxonomy-not-eligible economic activities in the denominator of the applicable KPI	**5,457**	**27.7**

It should be noted that EU taxonomy reporting pursuant to the EU regulation and the Delegated Act is given in full in the 2022 Sustainability Report - Non-Financial Statement pursuant to Regulation (EU) 2020/852.

Value generated and distributed for stakeholders

Millions of euro	2022	2021[1]
Economic value generated directly	**140,821**	**85,865**
Economic value distributed directly		
Operating expenses	114,384	62,063
Personnel expenses and benefits	3,646	4,296
Payments to providers of capital (shareholders and lenders)	7,691	7,409
Payments to government[2]	6,027	4,916
	131,748	**78,684**
Economic value retained	**9,073**	**7,181**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

(2) The amount includes "total tax borne", which is costs for taxes borne by the Group. For more information, see the 2022 Sustainability Report and the Consolidated Non-Financial Statement. The figure for 2021 has been adjusted on the basis of more accurate information.

The economic value generated and distributed directly by Enel provides a good indication of how the Group has created wealth for all stakeholders. The increase in value generated directly and in operating expenses reflects the rise in average prices and volumes handled of energy commodities, especially gas and electricity.

Payments to providers of capital essentially increased in reflection of interest expense connected with the rise in interest rates following the restrictive monetary policy stances adopted to counter rising inflationary pressures.

Analysis of the Group's financial position and structure

€102,150 million
NET CAPITAL EMPLOYED
€94,035 million in 2021

€60,068 million
NET FINANCIAL DEBT[1]
+16.2% on 2021

63.0%
SUSTAINABLE FINANCING
on total gross debt
€89,418 million

€14,347 million
TOTAL CAPITAL EXPENDITURE
81.9% eligible and aligned with European taxonomy

(1) For the sake of clarity, and to take account of the hedging of currency risk, the Group has decided to include the fair value of the cash flow hedge and fair value hedge derivatives used to hedge the currency risk on financing in the measurement of net financial debt. As a result, net financial debt at December 31, 2021 has been restated for the purpose of comparison.

Net capital employed and funding

Millions of euro	at Dec. 31, 2022	at Dec. 31, 2021	Change	
Net non-current assets:				
- property, plant and equipment and intangible assets	106,135	102,733	3,402	3.3%
- goodwill	13,742	13,821	(79)	-0.6%
- equity-accounted investments	1,281	704	577	82.0%
- other net non-current assets/(liabilities)	(5,139)	(4,742)	(397)	-8.4%
Total net non-current assets	**116,019**	**112,516**	**3,503**	**3.1%**
Net working capital:				
- trade receivables	16,605	16,076	529	3.3%
- inventories	4,853	3,109	1,744	56.1%
- net receivables due from institutional market operators	(1,083)	(762)	(321)	-42.1%
- other net current assets/(liabilities)	(11,193)	(10,953)	(240)	-2.2%
- trade payables	(17,641)	(16,959)	(682)	-4.0%
Total net working capital	**(8,459)**	**(9,489)**	**1,030**	**10.9%**
Gross capital employed	**107,560**	**103,027**	**4,533**	**4.4%**
Provisions:				
- employee benefits	(2,202)	(2,724)	522	19.2%
- provisions for risks and charges and net deferred taxes	(5,997)	(6,548)	551	8.4%
Total provisions	**(8,199)**	**(9,272)**	**1,073**	**11.6%**
Net assets held for sale	**2,789**	**280**	**2,509**	**-**
Net capital employed	**102,150**	**94,035**	**8,115**	**8.6%**
Total equity	**42,082**	**42,342**	**(260)**	**-0.6%**
Net financial debt[1]	**60,068**	**51,693**	**8,375**	**16.2%**

(1) For the sake of clarity, and to take account of the hedging of currency risk, the Group has decided to include the fair value of the cash flow hedge and fair value hedge derivatives used to hedge the currency risk on financing in the measurement of net financial debt. As a result, net financial debt at December 31, 2021 has been restated for the purpose of comparison.

Property, plant and equipment and intangible assets increased essentially as a result of investments during the period (€13,173 million), the acquisition of ERG Hydro, and positive trends in exchange rates. These effects were partially offset by the change in consolidated companies mainly in relation to the sales of Enel Transmisión Chile, Enel Russia, Celg Distribuição SA - Celg-D (Enel Goiás), CGT Fortaleza, and a number of companies in Australia, as well as the classification of operations in Romania and Greece as discontinued and of the assets related to the Argentine companies Enel Generación Costanera SA and Central Dock Sud SA as held for sale.

Goodwill decreased mainly as a result of the aforementioned sales and classifications to held for sale and discontinued operations. These effects were partially offset by the positive trends in exchange rates.

Equity-accounted investments increased due, above all, to the changes in consolidated companies related to: the partial sale and loss of controlling interest in Gridspertise and partial sale of EGP South Africa; the Mooney transaction, which resulted in the recognition of a new equity-accounted joint venture; and value adjustments to the investment in Slovenské elektrárne. These effects were partially offset by the sale of Ufinet.

Net working capital increased mainly as a result of inventories of gas and of other commodities generally, which reflects the increase in prices in 2022.

Net assets held for sale increased primarily due to the classification of the Romanian and Greek companies as discontinued operations and the held for sale classification of the Argentine companies Enel Generación Costanera SA and Central Dock Sud SA.

Net capital employed came to €102,150 million as at December 31, 2022, and was covered by €42,082 million in equity attributable to owners of the Parent and minority interests and €60,068 million in net financial debt. With regard to net debt, the debt-to-equity ratio as at December 31, 2022 was 1.43 (compared with 1.22 as at December 31, 2021).

Net financial debt

The following schedule shows the composition of and changes in net financial debt:

Millions of euro				
	at Dec. 31, 2022	**at Dec. 31, 2021**	**Change**	
Long-term debt:				
- bank borrowings	15,261	12,579	2,682	21.3%
- bonds	50,079	39,099	10,980	28.1%
- other borrowings[1]	2,851	2,942	(91)	-3.1%
Long-term debt	*68,191*	*54,620*	*13,571*	*24.8%*
Long-term financial assets and securities	(4,213)	(2,692)	(1,521)	-56.5%
Net long-term debt	**63,978**	**51,928**	**12,050**	**23.2%**
Short-term debt				
Bank borrowings:				
- current portion of long-term bank borrowings	890	989	(99)	-10.0%
- other short-term bank borrowings	1,320	1,329	(9)	-0.7%
Short-term bank borrowings	*2,210*	*2,318*	*(108)*	*-4.7%*
Bonds (current portion)	1,612	2,700	(1,088)	-40.3%
Other borrowings (current portion)	333	342	(9)	-2.6%
Commercial paper	13,838	10,708	3,130	29.2%
Cash collateral on derivatives and other financing	1,513	918	595	64.8%
Other short-term financial borrowings[2]	1,721	363	1,358	-
Other short-term debt	*19,017*	*15,031*	*3,986*	*26.5%*
Long-term loan assets (short-term portion)	(2,838)	(1,538)	(1,300)	-84.5%
Loan assets - cash collateral	(8,319)	(6,485)	(1,834)	-28.3%
Other short-term financial assets	(2,266)	(356)	(1,910)	-
Cash and cash equivalents with banks and short-term securities	(11,119)	(8,946)	(2,173)	-24.3%
Cash and cash equivalents and short-term financial assets	*(24,542)*	*(17,325)*	*(7,217)*	*-41.7%*
Net short-term debt	**(3,315)**	**24**	**(3,339)**	**-**
Net exchange rate derivatives connected with borrowings	(595)	(259)	(336)	-
NET FINANCIAL DEBT[3]	**60,068**	**51,693**	**8,375**	**16.2%**
Net financial debt connected with net assets held for sale	**892**	**699**	**193**	**27.6%**

(1) Includes other non-current financial borrowings included under other non-current financial liabilities.
(2) Includes current borrowings included under other current financial liabilities.
(3) In order to improve the comparability of the figures, it was necessary to recalculate net financial debt at December 31, 2021 in accordance with the new representation of net financial debt by the Enel Group.

Net financial debt, in the amount of €60,068 million at December 31, 2022, increased by €8,375 million from the €51,693 million of December 31, 2021, due mainly to: (i) funding needs for investments in the period (€14,503 million, including €156 million reclassified as available for sale), including contract assets; (ii) the payment of dividends totaling €5,024 million, including coupons paid to holders of hybrid bonds in the amount of €123 million; (iii) the acquisition of ERG Hydro totaling €1,196 million, net of cash acquired; (iv) adverse exchange rate trends in the amount of €1,054 million; and (v) an increase of €445 million in lease liabilities.
Cash flows generated by operating activities, the sale of a number of equity investments that were no longer of strategic importance, and the reclassification of a number of investments as available for sale or discontinued operations (mainly in Romania and Greece) partially offset the funding needs related to the situations described above.

It should be noted that, in order to improve the reporting of net financial debt, the Group has elected to include the fair value of the cross currency swaps used to hedge borrowings in a foreign currency with third parties.

Gross financial debt as at December 31, 2022 came to €89,418 million, up €17,449 million from the previous year.

Gross financial debt

Millions of euro	at Dec. 31, 2022			at Dec. 31, 2021		
	Gross long-term debt	Gross short-term debt	Gross debt	Gross long-term debt	Gross short-term debt	Gross debt
Gross financial debt	71,026	18,392	89,418	58,651	13,318	71,969
of which:						
- sustainable financing	*42,561*	*13,977*	*56,538*	*28,973*	*10,474*	*39,447*
Sustainable financing/Total gross debt (%)			63%			55%

More specifically, **gross long-term financial debt** (including the short-term portion), in the amount of €71,026 million, includes €42,561 million in sustainable financing and is structured as follows:

- bonds in the amount of €51,691 million, of which €29,661 million in sustainable bonds, up €9,892 million compared with December 31, 2021. The change in bonds is mainly attributable to the following sustainability-linked issues in 2022:
  - a multi-tranche issue in January by Enel Finance International for a total value of €2,750 million;
  - an issue in April by Enel Finance International in the amount of £750 million (equal to €845 million at December 31, 2022);
  - a multi-tranche issue in June by Enel Finance International for a total value of $3,500 million (equal to €3,279 million at December 31, 2022);
  - an issue in September by Enel Finance International for a total value of €1,000 million;
  - a multi-tranche issue in October by Enel Finance International in the amount of $1,000 million (equal to €937 million at December 31, 2022);
  - a multi-tranche issue in October by Enel Finance International in the amount of $3,000 million (equal to €2,811 million at December 31, 2022);
- bank borrowings in the amount of €16,151 million, €12,900 million of which related to sustainable financing. These borrowings increased by €9,892 million compared with the previous year due mainly to the use of new financing that was only partially offset by repayments made during the period. Of note among these new bank borrowings are:
  - a sustainability-linked loan granted by EKF and Citi to Enel Finance America, drawn in the amount of $430 million at December 31, 2022 (equal to €403 million at December 31, 2022);
  - financing linked to sustainability goals granted by the European Investment Bank to various companies of the Group for a total value of €1,294 million;
- other borrowings in the amount of €3,184 million, an increase of €100 million from the previous year.

Gross short-term financial debt increased by €5,074 million compared with December 31, 2021, to €18,392 million. It mainly includes commercial paper of €13,838 million, all of which connected with sustainability goals.

Cash and cash equivalents and short-term financial assets, in the amount of €28,755 million, increased by €8,738 million compared with the end of 2021 due mainly to the increase in current account balances and short-term securities (€2,173 million), other short-term receivables (€1,910 million), and financial receivables for cash collateral (€1,834 million).

Net exchange rate derivatives connected with borrowings, amounting to €595 million at December 31, 2022, regard the fair value of cross currency swaps hedging loans denominated in foreign currency with third parties. For more information on the classification of such derivatives, see note 51 "Derivatives and hedge accounting" in the notes to the consolidated financial statements.

Sustainable finance

At Enel, sustainable finance is a key lever in creating value. The new sustainability-linked bond issues, together with all the sustainable financing arranged in 2022, have enabled us, by year end, to achieve a ratio of sustainable finance to total gross debt for the Group of 63%.

Sustainable finance includes public and private funds directed towards sustainable investments, thereby working to reach sustainable development goals.

In 2020, Enel was the world's first company to include a mechanism in its funding agreements that links the cost of financing to achieving one or more of the sustainability targets specified in the Sustainability-Linked Financing Framework, a document that extends the sustainability-linked approach to all instruments of financial debt. It establishes a set of indicators, targets and principles that govern the development of sustainable finance throughout the Group, linking our financial strategy to our sustainability objectives. The Sustainability-Linked Financing Framework is updated annually in line with the objectives defined in the Group's Strategic Plan.

The latest framework moves up the target for reducing "Scope 1 GHG emissions Intensity relating to Power Generation (gCO_{2eq}/kWh)" by 100% from 2050 to 2040.[40]

It should also be noted that, within the scope of actions aimed at reaching SDG 7 and SDG 13 and the EU Environmental Objective of Climate Change Mitigation, three new indicators were added in February 2023 (i.e., "Scopes 1 and 3 GHG emissions Intensity relating to Integrated Power (gCO_{2eq}/kWh)", "Absolute Scope 3 GHG emissions relating to Gas Retail ($MtCO_{2eq}$)", and "Proportion of CAPEX aligned to the EU Taxonomy (%)").

Therefore, the Group's financial instruments and transactions can have an interest rate or other structural or financing terms that are linked to achieving goals related to reducing direct and indirect greenhouse gas emissions (SDG 13 "Climate Action"), to increases in renewables capacity (SDG 7 "Affordable and Clean Energy"), or to the percentage of capital expenditure within a given period in activities that qualify as environmentally sustainable in accordance with the criteria defined under Article 3 of the EU taxonomy regulation (2020/852).

Shown below are the KPIs and targets included in the latest update of Enel's Sustainability-Linked Financing Framework, published in February 2023.

	Actual values	Target					
	2022	2022	2023	2024	2025	2030	2040
Scope 1 GHG emissions Intensity relating to Power Generation (gCO_{2eq}/kWh)	229		148	140	130	72	0
Scope 1 and 3 GHG emissions Intensity relating to Integrated Power (gCO_{2eq}/kWh)	218				135	73	0
Absolute Scope 3 GHG emissions relating to Gas Retail ($MtCO_{2eq}$)	22.9				20.9	11.4	0
Renewable Installed Capacity Percentage (%)[41]	63.1%	60%	65%	66%	76%	85%	100%
Proportion of CAPEX aligned to the EU Taxonomy (%)	81.9%		>80%				

These indicators are periodically verified by an external body, and Enel publishes the figures in the annual financial and sustainability reports.

In 2022, installed renewables capacity accounted for 63.1% of the total, thereby surpassing the target for a minimum threshold of 60%. In particular, this includes the achievement of the targets contained in the first sustainability-linked bonds issued by Enel Finance International in 2020 on the GBP market.

In 2022, the Group continued pursuing a development strategy oriented towards sustainable finance with structured transactions amounting to the equivalent of more than €23 billion.

More specifically, the Group, through its financial subsidiaries Enel Finance International and, for the first time, Enel Finance America, issued sustainability-linked bonds in a variety of markets and currencies in the amount of about €12.1 billion.[42]

In May 2022, Enel and Enel Finance International increased the amount of the current Sustainability-Linked Revolving Credit Facility, the world's largest sustainable credit facility linked to SDG 13, from €10 billion to €13.5 billion.

(40) Note that in previous versions the KPI "Scope 1 GHG emissions Intensity relating to Power Generation (gCO_{2eq}/kWh)" was referred to as "Direct Greenhouse Gas Emissions Amount (Scope 1)".

(41) The calculation excludes 531.1 MW of capacity connected with plants acquired by the Group, in accordance with the contractual terms of the individual instruments.

(42) In June 2022, Enel Finance International carried out a multi-tranche bond issue on the USD market, one of which was, for the first time for an energy multinational, linked to the Group's goal of achieving zero "Scope 1 GHG emissions Intensity relating to Power Generation" by 2040.

In April 2022, Enel Finance International renewed the commercial paper program linked to the KPI for "Scope 1 GHG emissions Intensity relating to Power Generation" less than or equal to 148 gCO_{2eq}/kWh by 2023 or less than or equal to 140 gCO_{2eq}/kWh by 2024 and increased it from €6 billion to €8 billion.
In addition, Enel has signed agreements with multiple financial counterparties for sustainable guarantees and derivatives, both of which are linked to the Group's ability to reach its sustainability goals in subsequent years.
Finally, in February 2023, Enel Finance International launched a sustainability-linked bond in two tranches for a total of €1.5 billion. For the first time in the world, this new issue united an indicator connected with the EU taxonomy with another connected with the United Nations Sustainable Development Goals (SDGs), while also including targets for full decarbonization.

In the area of public finance, the Group supports the economic recovery plan and intends to become a strategic partner in the implementation of the Green Deal and the Recovery Plan at both the European and national levels. The goal is to drive a sustainable, rapid and effective recovery through a broad pipeline of shovel-ready projects focused on decarbonization, electricity grids and electrification, aimed at accelerating the green and digital transition of the European economy with a significant impact in terms of GDP, employment and reduction of CO_2 emissions, in full alignment with the European taxonomy.

To this end, the Group has identified potential initiatives for about €4.3 billion in investment over the period 2023-2030, with relative impact by way of both the Ownership and the Stewardship models. These initiatives focus on green hydrogen, renewables and storage, revitalization of the photovoltaic manufacturing industry, smart grids, grid resilience and charging infrastructure for electric mobility. The Group has also promoted partnerships with public and private entities, both with a view to the decarbonization and electrification of energy consumption through the expansion of electric bus fleets, the transition to green ports and the promotion of energy efficiency in public buildings.
Furthermore, in the context of subsidized loans from international and national financial institutions, the Group is leading an innovation process aimed at accelerating the mobilization of capital to support sustainable growth through the use of sustainability-linked financial instruments.
More specifically, in 2022, the Group received subsidized loans totaling €1.8 billion that, following the path taken in our private-sector financing, include sustainability-linked mechanisms connected with SDG 13. Some of the main transactions include the first sustainability-linked financing agreement between Denmark's Export Credit Agency EKF and Enel Finance America for a total of $800 million.

In the coming years, Enel will continue to make use of sustainable finance tools, with the aim of achieving a ratio between sustainable borrowing and the Group's total debt of about 70% by 2025.

Participation in international round tables to promote sustainable finance

Enel continues to focus on sustainable finance, and we have strengthened our commitment towards our key stakeholders around the world by co-chairing the CFO Coalition for the SDGs of the UN Global Compact and by participating in the UN's Global Investors for Sustainable Development (GISD) Alliance.
After launching the Principles on Integrated SDG Investments and Finance, the CFO Coalition turned its focus to an analysis of the targets set by companies for the SDGs and related indicators, company case studies for the implementation of the SDG Investments and Finance strategy, and the development of profiles by sector. Within this context, the CFOs invested more than $110 billion to support the SDGs, thereby increasing SDG finance by 55% over the previous year. In addition, an advisory board has been established. Enel is a member of this board, which will work to provide industry and regional capabilities, to help coordinate cooperation between the CFOs and the broader sustainable-finance community on specific issues, and to provide recommendations and contacts for recruiting new coalition members.

Also of note are the results achieved by the collaboration with the GISD Alliance, such as the update to the Model Mandate, which serves as a guide for asset owners to ensure that management and sustainability goals are fully reflected in the agreement with the managers of those assets. Furthermore, given that Enel is a member of the GISD Alliance, we have contributed to the joint statement of the Alliance in response to the public consultation launched by the International Sustainability Standards Board (ISSB) with regard to sustainability reporting.
Also notable is the work that has been done in Europe by way of our stakeholder CSR Europe. In this regard, in conjunction with the European SDG Summit 2022, Enel participated in the following round tables: "The Role of Double Materiality in Sustainability Reporting" on how double materiality is integrated into the CSRD and in what way companies can implement it; and "The Challenge of Circularity in the Green Transition" on the circular economy and the energy transition.

Cash flows

For more information, please see note 46 to the consolidated financial statements.

Capital expenditure

Millions of euro				
	2022	2021[1]	Change	
Thermal Generation and Trading	990	822	168	20.4%
Enel Green Power	6,386	5,662	724	12.8%
Enel Grids	5,547	5,296	251	4.7%
End-user Markets	721	643	78	12.1%
Enel X	371	285	86	30.2%
Holding, Services and Other	332	289	43	14.9%
Total[2]	**14,347**	**12,997**	**1,350**	**10.4%**

(1) The 2021 figures have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way included under "Holding, Services and Other".
(2) The figure does not include €156 million regarding units classified as held for sale (€111 million in 2021).

Capital expenditure increased by €1,350 million on the previous year.
In line with the Paris Agreement on the reduction of CO_2 emissions, and guided by energy efficiency and energy transition goals, the Enel Group has invested, above all, in renewable energy. More specifically, the increase primarily concerned Italy (€415 million), Canada (€189 million), Peru (€159 million), Spain (€120 million), Chile (€63 million), Australia (€40 million), Colombia (€13 million), and Brazil (€24 million, due in part to currency effects). These increases were only partially offset by decreased capital expenditure in India (€102 million), South Africa (€71 million), Mexico (€21 million), Panama (€12 million), and Guatemala (€7 million).
In response to increasingly volatile weather events and so as to invest in grid resilience, investment in electricity distribution also increased.
The greatest investments in distribution came in Italy (€160 million), Brazil (€157 million) – mainly for grid maintenance and reliability improvements – and Peru (€16 million). These factors were only partly offset by a decrease in capital expenditure in Spain, Chile and Colombia.

Capital expenditure increased in the End-user Markets Business Line, particularly in Italy (€33 million) and Spain (€52 million), attributable essentially to the digitalization of customer-management processes.
The increase in capital expenditure by Enel X came mainly in Italy (€27 million) in the e-City and e-Home businesses, in North America (€25 million) and Australia (€9 million) due to increased investment in battery energy storage for the execution of new projects, in Brazil (€11 million) as the combined effect of increased expenditure for the Smart Lighting, e-Home and Distributed Energy businesses (with new photovoltaic projects launched), in Peru (€12 million) in the Public Lighting business, in Colombia (€7 million) following the launch of new projects in the Distributed Energy business (photovoltaics), and in Spain (€5 million) in the e-Home business.
The growth of capital expenditure in Thermal Generation and Trading (€168 million), especially in Italy and Latin America, is attributable to the conversion of a number of plants from coal to gas in order to lower CO_2 emissions.

Performance by primary segment (Business Line) and secondary segment (Geographical Area)

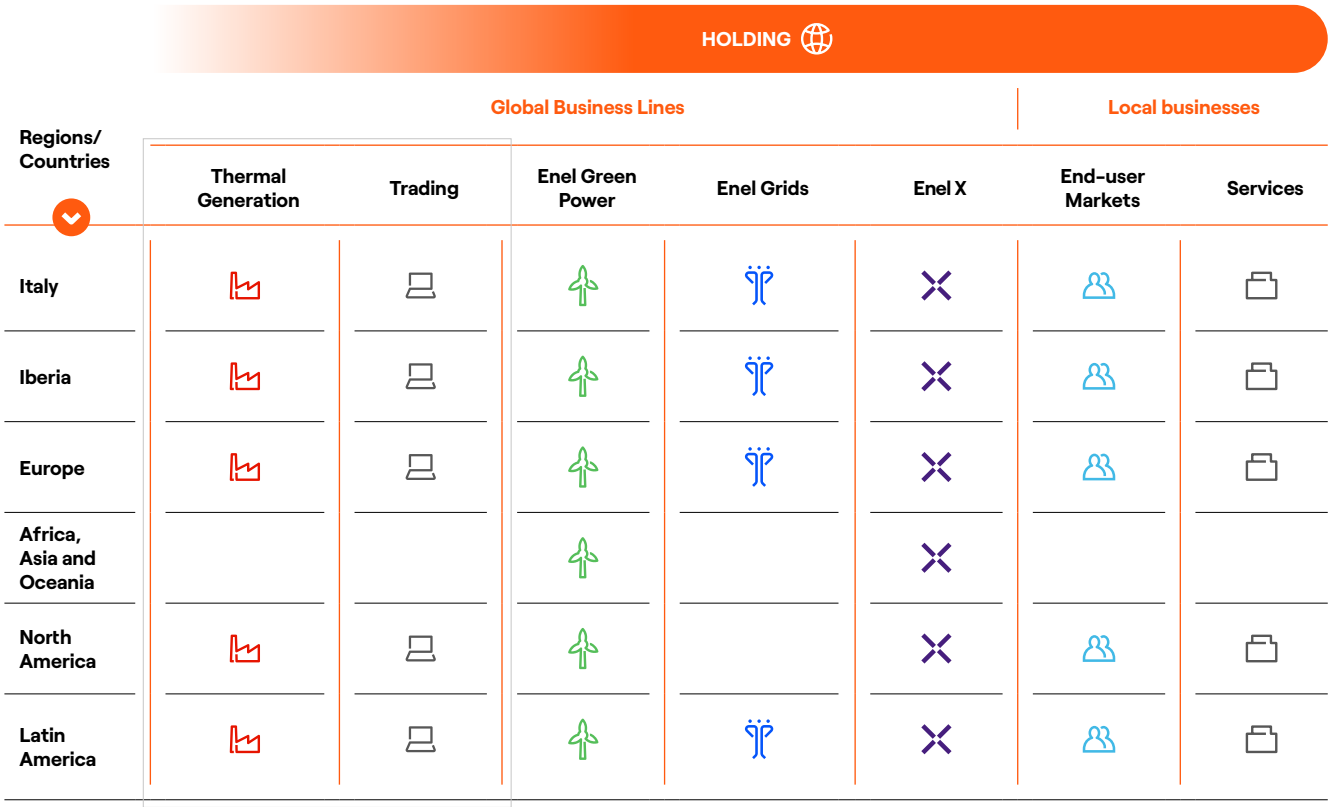
The representation of performance by business line presented here is based on the approach used by management in monitoring Group performance for the two periods under review, taking account of the operational model adopted as described above.

With regard to disclosures for operating segments, as management reports on performance by business line, the Group has therefore adopted the following reporting sectors:

- primary segment: business line;
- secondary segment: geographical area.

The business line is therefore the main discriminant in the analyses performed and decisions taken by the management of the Enel Group, and is fully consistent with the internal reporting prepared for these purposes since the results are measured and evaluated first and foremost for each business line and only thereafter are they broken down by country.

The following chart outlines these organizational arrangements.



The organization continues to be based on matrix of business lines (Thermal Generation and Trading, Enel Green Power, Enel Grids, End-user Markets, Enel X, Services and Holding/Other) and geographical areas (Italy, Iberia, Europe, Latin America, North America, Africa, Asia and Oceania, Central/Holding).

Performance by primary segment (Business Line) in 2022 and 2021

Results for 2022[1]

Millions of euro	Thermal Generation and Trading	Enel Green Power	Enel Grids	End-user Markets	Enel X	Holding, Services and Other	Reporting segment total	Eliminations and adjustments	Total
Revenue and other income from third parties	53,239	6,669	19,806	58,478	2,143	182	140,517	-	140,517
Revenue and other income from transactions with other segments	23,096	2,498	3,226	3,674	66	2,053	34,613	(34,613)	-
Total revenue	**76,335**	**9,167**	**23,032**	**62,152**	**2,209**	**2,235**	**175,130**	**(34,613)**	**140,517**
Net results from commodity contracts	551	183	-	1,608	(13)	(5)	2,324	41	2,365
Gross operating profit/(loss)	**5,697**	**3,477**	**9,114**	**1,243**	**652**	**(273)**	**19,910**	**8**	**19,918**
Depreciation, amortization and impairment losses	1,312	1,507	3,782	1,543	308	273	8,725	-	8,725
Operating profit/(loss)	**4,385**	**1,970**	**5,332**	**(300)**	**344**	**(546)**	**11,185**	**8**	**11,193**
Capital expenditure	**990[2]**	**6,386[3]**	**5,547[4]**	**721**	**371[5]**	**332**	**14,347**	**-**	**14,347**

(1) Segment revenue includes both revenue from third parties and revenue from transactions with other segments.
(2) The figure does not include €2 million classified as available for sale or discontinued operations.
(3) The figure does not include €42 million classified as available for sale or discontinued operations.
(4) The figure does not include €110 million classified as available for sale or discontinued operations.
(5) The figure does not include €2 million classified as available for sale or discontinued operations.

Results for 2021[1] [2] [3]

Millions of euro	Thermal Generation and Trading	Enel Green Power	Enel Grids	End-user Markets	Enel X	Holding, Services and Other	Reporting segment total	Eliminations and adjustments	Total
Revenue and other income from third parties	22,334	7,011	16,994	36,097	1,372	1,911	85,719	-	85,719
Revenue and other income from transactions with other segments	10,269	2,161	3,248	1,302	56	2,101	19,137	(19,137)	-
Total revenue	**32,603**	**9,172**	**20,242**	**37,399**	**1,428**	**4,012**	**104,856**	**(19,137)**	**85,719**
Net results from commodity contracts	537	(55)	-	2,006	-	(3)	2,485	38	2,523
Gross operating profit/(loss)	**813**	**4,570**	**7,100**	**3,033**	**326**	**1,360**	**17,202**	**31**	**17,233**
Depreciation, amortization and impairment losses	3,455	1,619	2,774	1,310	232	292	9,682	-	9,682
Operating profit/(loss)	**(2,642)**	**2,951**	**4,326**	**1,723**	**94**	**1,068**	**7,520**	**31**	**7,551**
Capital expenditure	**822**	**5,662[4]**	**5,296**	**643**	**285**	**289**	**12,997**	**-**	**12,997**

(1) Segment revenue includes both revenue from third parties and revenue from transactions with other segments.
(2) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.
(3) The figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way, which are shown under "Holding, Services and Other".
(4) The figure does not include €111 million classified as available for sale or discontinued operations.

In addition to the above, the Group also monitors performance by geographical area, classifying results by region/country. In the table below, ordinary gross operating profit is shown for the two periods under review with the goal of providing a view of performance not only by division/business line, but also by geographical area.

It should be noted that ordinary gross operating profit excludes non-recurring items. For a reconciliation with gross operating profit, please see the section "Group Performance".

Ordinary gross operating profit[1] [2]

Millions of euro	Thermal Generation and Trading			Enel Green Power			Enel Grids		
	2022	2021	Change	2022	2021	Change	2022	2021	Change
Italy	**2,735**	**464**	**2,271**	**(562)**	**1,184**	**(1,746)**	**3,707**	**3,836**	**(129)**
Iberia	**2,583**	**844**	**1,739**	**631**	**840**	**(209)**	**1,621**	**1,877**	**(256)**
Latin America	**737**	**350**	**387**	**2,372**	**1,809**	**563**	**2,445**	**1,810**	**635**
Argentina	*76*	*97*	*(21)*	*21*	*24*	*(3)*	*88*	*3*	*85*
Brazil	*81*	*132*	*(51)*	*506*	*334*	*172*	*1,489*	*1,120*	*369*
Chile	*399*	*(49)*	*448*	*798*	*536*	*262*	*168*	*144*	*24*
Colombia	*29*	*58*	*(29)*	*674*	*601*	*73*	*487*	*385*	*102*
Peru	*154*	*114*	*40*	*203*	*141*	*62*	*213*	*158*	*55*
Panama	*(2)*	*(2)*	*-*	*102*	*127*	*(25)*	*-*	*-*	*-*
Other countries	*-*	*-*	*-*	*68*	*46*	*22*	*-*	*-*	*-*
Europe	**45**	**81**	**(36)**	**244**	**177**	**67**	**(61)**	**96**	**(157)**
Romania	*(8)*	*(2)*	*(6)*	*140*	*82*	*58*	*(61)*	*96*	*(157)*
Russia	*53*	*83*	*(30)*	*18*	*5*	*13*	*-*	*-*	*-*
Other countries	*-*	*-*	*-*	*86*	*90*	*(4)*	*-*	*-*	*-*
North America	**(20)**	**(39)**	**19**	**988**	**699**	**289**	**-**	**-**	**-**
United States and Canada	*(19)*	*(35)*	*16*	*907*	*627*	*280*	*-*	*-*	*-*
Mexico	*(1)*	*(4)*	*3*	*81*	*72*	*9*	*-*	*-*	*-*
Africa, Asia and Oceania	**-**	**-**	**-**	**93**	**110**	**(17)**	**-**	**-**	**-**
South Africa	*-*	*-*	*-*	*73*	*82*	*(9)*	*-*	*-*	*-*
India	*-*	*-*	*-*	*17*	*3*	*14*	*-*	*-*	*-*
Other countries	*-*	*-*	*-*	*3*	*25*	*(22)*	*-*	*-*	*-*
Other	**14**	**2**	**12**	**13**	**(4)**	**17**	**564**	**44**	**520**
Total	**6,094**	**1,702**	**4,392**	**3,779**	**4,815**	**(1,036)**	**8,276**	**7,663**	**613**

(1) Ordinary gross operating profit does not include non-recurring items. For a reconciliation with gross operating profit, see the section "Group Performance".
(2) The figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way, which are shown under "Holding, Services and Other".

End-user Markets			Enel X			Holding, Services and Other			Total		
2022	2021	Change	2022	2021	Change	2022	2021	Change	2022	2021	Change
448	**2,311**	**(1,863)**	**122**	**153**	**(31)**	**50**	**34**	**16**	**6,500**	**7,982**	**(1,482)**
356	**547**	**(191)**	**76**	**62**	**14**	**(20)**	**21**	**(41)**	**5,247**	**4,191**	**1,056**
435	**263**	**172**	**127**	**94**	**33**	**(119)**	**(79)**	**(40)**	**5,997**	**4,247**	**1,750**
30	*12*	*18*	*5*	*5*	*-*	*(3)*	*(3)*	*-*	*217*	*138*	*79*
233	*136*	*97*	*4*	*1*	*3*	*(23)*	*(18)*	*(5)*	*2,290*	*1,705*	*585*
67	*44*	*23*	*18*	*21*	*(3)*	*(93)*	*(57)*	*(36)*	*1,357*	*639*	*718*
77	*49*	*28*	*74*	*50*	*24*	*-*	*-*	*-*	*1,341*	*1,143*	*198*
28	*22*	*6*	*26*	*17*	*9*	*-*	*(1)*	*1*	*624*	*451*	*173*
-	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*100*	*125*	*(25)*
-	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*68*	*46*	*22*
(126)	**(41)**	**(85)**	**50**	**19**	**31**	**(5)**	**5**	**(10)**	**147**	**337**	**(190)**
(126)	*(41)*	*(85)*	*17*	*11*	*6*	*(1)*	*7*	*(8)*	*(39)*	*153*	*(192)*
-	*-*	*-*	*1*	*-*	*1*	*-*	*-*	*-*	*72*	*88*	*(16)*
-	*-*	*-*	*32*	*8*	*24*	*(4)*	*(2)*	*(2)*	*114*	*96*	*18*
4	**6**	**(2)**	**(6)**	**36**	**(42)**	**(24)**	**(15)**	**(9)**	**942**	**687**	**255**
-	*-*	*-*	*(6)*	*36*	*(42)*	*(24)*	*(15)*	*(9)*	*858*	*613*	*245*
4	*6*	*(2)*	*-*	*-*	*-*	*-*	*-*	*-*	*84*	*74*	*10*
-	**-**	**-**	**(7)**	**2**	**(9)**	**(3)**	**(2)**	**(1)**	**83**	**110**	**(27)**
-	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*73*	*82*	*(9)*
-	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*17*	*3*	*14*
-	*-*	*-*	*(7)*	*2*	*(9)*	*(3)*	*(2)*	*(1)*	*(7)*	*25*	*(32)*
5	**-**	**5**	**311**	**(10)**	**321**	**(140)**	**1,624**	**(1,764)**	**767**	**1,656**	**(889)**
1,122	**3,086**	**(1,964)**	**673**	**356**	**317**	**(261)**	**1,588**	**(1,849)**	**19,683**	**19,210**	**473**

Thermal Generation and Trading



Mauro, Piombino, Livorno, Elba Island representative, Enel Green Power and Thermal Generation Italy - Former Piombino thermoelectric plant, site undergoing redevelopment as part of the energy transition process.

Thermal Generation and Trading

31 GW
NET EFFICIENT INSTALLED CAPACITY
-4.6% from coal-fired plants on 2021

115.3 TWh
NET ELECTRICITY GENERATION
+42.3% from coal-fired plants on 2021

€6,094 million
ORDINARY GROSS OPERATING PROFIT
€1,702 million in 2021

Operations

Net electricity generation

Millions of kWh

	2022	2021	Change	
Coal-fired plants	19,722	13,858	5,864	42.3%
Fuel-oil and turbo-gas plants	14,652	22,709	(8,057)	-35.5%
Combined-cycle plants	54,436	51,718	2,718	5.3%
Nuclear plants	26,508	25,504	1,004	3.9%
Total net generation	**115,318**	**113,789**	**1,529**	**1.3%**
- of which Italy	*30,149*	*23,808*	*6,341*	*26.6%*
- of which Iberia	*52,674*	*44,799*	*7,875*	*17.6%*
- of which Latin America	*22,439*	*23,934*	*(1,495)*	*-6.2%*
- of which Europe	*10,056*	*21,248*	*(11,192)*	*-52.7%*

The increase in thermal generation is essentially attributable to:

- a 2,718 million kWh increase in combined-cycle generation, mainly in Iberia;
- a 5,864 million kWh increase in coal-fired generation due mainly to the need to offset poor water conditions in Italy and Spain as a result of adverse weather conditions, which heavily penalized hydroelectric generation in 2022.

The increase was partially offset by lower combined-cycle generation in Argentina, by a decrease in coal-fired generation in Latin America, and by a decrease both in fuel-oil and turbo-gas generation and in combined-cycle generation in Europe as a result of the sale of the entire equity interest held in PJSC Enel Russia.

Net efficient generation capacity

MW

	2022	2021	Change	
Coal-fired plants	6,590	6,910	(320)	-4.6%
Fuel-oil and turbo-gas plants	7,204	11,715	(4,511)	-38.5%
Combined-cycle plants	13,895	15,039	(1,144)	-7.6%
Nuclear plants	3,328	3,328	-	-
Total	**31,017**	**36,992**	**(5,975)**	**-16.2%**
- of which Italy	*11,569*	*11,569*	-	-
- of which Iberia	*12,751*	*12,751*	-	-
- of which Latin America	*6,697*	*7,396*	*(699)*	*-9.5%*
- of which Europe	-	*5,276*	*(5,276)*	-

Net efficient generation capacity for thermal power plants at December 31, 2022 came to 31,017 MW, a decrease of 5,975 MW from 2021 due mainly to the sale of CGT Fortaleza in Brazil, the decommissioning of the Bocamina II plant in Chile, and the sale of the entire equity interest held in PJSC Enel Russia.

Performance

Millions of euro

	2022	2021	Change	
Revenue	76,335	32,603[1]	43,732	-
Gross operating profit/(loss)	5,697	813[1]	4,884	-
Ordinary gross operating profit/(loss)	6,094	1,702	4,392	-
Operating profit/(loss)	4,385	(2,642)[1]	7,027	-
Ordinary operating profit/(loss)	5,253	729	4,524	-
Capital expenditure	990[2]	822	168	20.4%

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.
(2) The figure does not include €2 million regarding units classified as held for sale or discontinued operations.

The following table provides a breakdown of revenue for Thermal Generation and Trading from conventional thermal and nuclear generation.

Revenue from thermal and nuclear generation

Millions of euro

	2022	2021
Revenue[1] [2]		
Revenue from thermal generation	24,155	12,952
- of which coal-fired generation	*6,500*	*1,904*
Revenue from nuclear generation	1,570	1,403
Revenue from thermal generation as a percentage of total revenue	17.2%	15.1%
- of which revenue from coal-fired generation as a percentage of total revenue	*4.6%*	*2.2%*
Revenue from nuclear generation as a percentage of total revenue	1.1%	1.6%

(1) The revenue analyzed refers to that for the segment and include transactions with third parties and the intersegment transactions of each segment with the others.
(2) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

The following tables show a breakdown of performance by geographical area in 2022.

Revenue[(1)]

Millions of euro

	2022	2021	Change	
Italy	55,389	22,816	32,573	-
Iberia	17,488	8,344	9,144	-
Latin America	3,858	2,390	1,468	61.4%
- of which Argentina	*145*	*165*	*(20)*	*-12.1%*
- of which Brazil	*959*	*957*	*2*	*0.2%*
- of which Chile	*2,268*	*899*	*1,369*	-
- of which Colombia	*218*	*186*	*32*	*17.2%*
- of which Peru	*268*	*183*	*85*	*46.4%*
- of which other countries	-	-	-	-
North America	218	100	118	-
Europe	14	(3)	17	-
- of which Romania	*14*	*(3)*	*17*	-
- of which Russia	-	-	-	-
Other	106	122	(16)	-13.1%
Eliminations and adjustments	(738)	(1,166)	428	36.7%
Total	**76,335**	**32,603**	**43,732**	**-**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Revenue for 2022, in the amount of €76,335 million, increased by €43,732 million over 2021. The change is mainly attributable to:

- Italy, primarily for the increase in sales of electricity and gas, which reflects the increase in commodity prices, particularly for gas, and the increase in thermal generation to offset the reduction in hydroelectric generation due to the low levels of rainfall in the year, as well as the strategies to optimize the sale of energy commodities;
- Spain, for the increase in electricity sales due to greater volumes sold and to increases in average prices, as well as for the remuneration of the added costs related to electricity generation in non-peninsular territories, in the amount of €1,578 million, an increase of €1,013 million from 2021, in accordance with the Order TED/1315/2022 of December 23, 2022.

Ordinary gross operating profit/(loss)

Millions of euro

	2022	2021	Change	
Italy	2,735	464	2,271	-
Iberia	2,583	844	1,739	-
Latin America	737	350	387	-
- of which Argentina	*76*	*97*	*(21)*	*-21.6%*
- of which Brazil	*81*	*132*	*(51)*	*-38.6%*
- of which Chile	*399*	*(49)*	*448*	-
- of which Colombia	*29*	*58*	*(29)*	*-50.0%*
- of which Peru	*154*	*114*	*40*	*35.1%*
- of which other countries	*(2)*	*(2)*	-	-
North America	(20)	(39)	19	48.7%
Europe	45	81	(36)	-44.4%
- of which Romania	*(8)*	*(2)*	*(6)*	-
- of which Russia	*53*	*83*	*(30)*	*-36.1%*
Other	14	2	12	-
Total	**6,094**	**1,702**	**4,392**	**-**

Ordinary gross operating profit increased by €4,392 million in 2022 due mainly to the increase in thermal generation as a result of poor water conditions during the period, combined with rising average prices on sales in Italy and Spain, along with the optimal management of strategies to hedge commodity price risk in Italy.

Gross operating profit came to €5,697 million, up €4,884 million from the €813 million in 2021. Extraordinary items recognized in 2022 concerned:

- charges for digitalization and the energy transition (€212 million), mainly related to adjustments in the value of fuel inventories at the Bocamina II coal-fired plant in Chile and the provision recognized by Enel Produzione against charges connected with the conversion of a number of plants;
- the loss on the sale of CGT Fortaleza in Brazil (€135 million) and transaction costs (€2 million);
- the classification of a number of companies, mainly in Russia, as discontinued operations (€42 million).

Extraordinary items for 2021 showed an increase in expense of €889 million.

Ordinary operating profit/(loss)

Millions of euro

	2022	2021	Change	
Italy	2,591	265	2,326	-
Iberia	2,068	271	1,797	-
Latin America	571	180	391	-
- of which Argentina	*4*	*27*	*(23)*	*-85.2%*
- of which Brazil	*75*	*120*	*(45)*	*-37.5%*
- of which Chile	*361*	*(91)*	*452*	-
- of which Colombia	*12*	*41*	*(29)*	*-70.7%*
- of which Peru	*122*	*86*	*36*	*41.9%*
- of which other countries	*(3)*	*(3)*	-	-
North America	(20)	(39)	19	48.7%
Europe	31	52	(21)	-40.4%
- of which Romania	*(8)*	*(2)*	*(6)*	-
- of which Russia	*39*	*54*	*(15)*	*-27.8%*
Other	12	-	12	-
Total	**5,253**	**729**	**4,524**	**-**

The increase in **ordinary operating profit** essentially reflects the factors discussed in the comments on ordinary gross operating profit, taking account of a decrease in depreciation, amortization and impairment losses of €132 million compared with the previous year.

Operating profit for 2022, in the amount of €4,385 million (operating loss of €2,642 million in 2021), reflects the following factors in addition to those described above in relation to ordinary operating profit and gross operating profit:

- adjustments in the value of net assets classified as available for sale in Argentina related to Costanera and Dock Sud in the amount of €174 million and €116 million, respectively;
- adjustments related to the sale of CGT Fortaleza in Brazil in the amount of €73 million;
- adjustments in the value of plants related to Sociedad Portuaria Central Cartagena in Colombia, in the amount of €64 million, in connection with the end of commercial operations to take place in November 2023;
- the write-down of certain coal-fired plants in Italy in the amount of €10 million;
- impairment losses on a number of projects in Spain in the amount of €45 million.

Extraordinary items for 2021 showed an increase in expense of €3,371 million.

Capital expenditure

Millions of euro

	2022	2021	Change	
Italy	408	303	105	34.7%
Iberia	272	334	(62)	-18.6%
Latin America	289	143	146	-
North America	7	8	(1)	-12.5%
Europe	14	34	(20)	-58.8%
Total	**990**[(1)]	**822**	**168**	**20.4%**

(1) The figure does not include €2 million regarding units classified as held for sale or discontinued operations

The €168 million increase in **capital expenditure** is mainly attributable to Italy and Latin America, essentially in relation to the conversion of a number of plants within the scope of the energy transition.

Enel Green Power



Davide, Shift Manager, Enel Green Power and Thermal Generation Italy - 3SUN Gigafactory, Catania, one of the largest PV manufacturing plants in Europe.

Enel Green Power

53.6 GW
NET EFFICIENT INSTALLED CAPACITY
63.4%
of total Group capacity

112.4 TWh
NET ELECTRICITY GENERATION
+43.1%
from solar plants on 2021

€3,779 million
ORDINARY GROSS OPERATING PROFIT
€4,815 million
in 2021

€6,386 million(1)
CAPITAL EXPENDITURE
+12.8%
on 2021

(1) The figure does not include €42 million regarding units classified as held for sale or discontinued operations.

Operations

Net electricity generation

Millions of kWh

	2022	2021	Change	
Hydroelectric	51,728	57,001	(5,273)	-9.3%
Geothermal	6,117	6,086	31	0.5%
Wind	43,255	37,791	5,464	14.5%
Solar	11,306	7,899	3,407	43.1%
Other sources	43	40	3	7.5%
Total net generation	**112,449**	**108,817**	**3,632**	**3.3%**
- of which Italy	*18,311*	*24,157*	*(5,846)*	*-24.2%*
- of which Iberia	*12,041*	*12,794*	*(753)*	*-5.9%*
- of which Latin America	*53,154*	*46,441*	*6,713*	*14.5%*
- of which Europe	*2,458*	*2,488*	*(30)*	*-1.2%*
- of which North America	*23,385*	*20,356*	*3,029*	*14.9%*
- of which Africa, Asia and Oceania(1)	*3,100*	*2,581*	*519*	*20.1%*

(1) The 2021 figures reflect a more accurate calculation of electricity generated.

Net power generation in 2022 increased from 2021 due to greater wind and solar generation, which was partially offset by decreases in hydroelectric generation.
The most significant changes in wind generation were seen in Brazil (+3,032 million kWh) and the United States (+2,421 million kWh). Solar generation increased mainly in Chile (+925 million kWh), Iberia (+778 million kWh), the United States (+782 million kWh), Brazil (+553 million kWh), and India (+218 million kWh).

Hydroelectric generation decreased sharply due to less favorable water conditions in Italy (-5,689 million kWh) and Iberia (-1,645 million kWh), which was to a minimal extent offset by increased generation in Latin America (+2,093 million kWh).

Net efficient generation capacity

MW

	2022	2021	Change	
Hydroelectric	28,355	27,847	508	1.8%
Geothermal	931	915	16	1.7%
Wind	15,735	14,903	832	5.6%
Solar	8,534	6,395	2,139	33.4%
Other sources	6	6	-	-
Total net efficient generation capacity	**53,561**	**50,066**	**3,495**	**7.0%**
- of which Italy	*14,683*	*14,040*	*643*	*4.6%*
- of which Iberia	*9,293*	*8,390*	*903*	*10.8%*
- of which Latin America	*17,827*	*16,506*	*1,321*	*8.0%*
- of which Europe	*1,020*	*1,248*	*(228)*	*-18.3%*
- of which North America	*9,532*	*7,941*	*1,591*	*20.0%*
- of which Africa, Asia and Oceania	*1,206*	*1,941*	*(735)*	*-37.9%*

The increase in net efficient generation capacity is mainly due to the construction of new solar plants (+2.1 GW), primarily in Chile, Colombia, the United States and Iberia, and new wind farms (+0.83 GW), mainly in Brazil and the United States, as well as to the acquisition of new hydroelectric plants in Italy.

We also decommissioned hydroelectric plants in Chile (-0.04 GW) and sold a number of renewable energy companies in South Africa, which resulted in a decrease in wind capacity (-0.74 GW).

Performance

Millions of euro

	2022	2021	Change	
Revenue	9,167	9,172[1]	(5)	-0.1%
Gross operating profit/(loss)	3,477	4,570[1]	(1,093)	-23.9%
Ordinary gross operating profit/(loss)	3,779	4,815	(1,036)	-21.5%
Operating profit/(loss)	1,970	2,951[1]	(981)	-33.2%
Ordinary operating profit/(loss)	2,230	3,480	(1,250)	-35.9%
Capital expenditure	6,386[2]	5,662[3]	724	12.8%

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.
(2) The figure does not include €42 million regarding units classified as held for sale or discontinued operations.
(3) The figure does not include €111 million regarding units classified as held for sale or discontinued operations.

The following tables show a breakdown of performance by geographical area in 2022.

Revenue[(1)]

Millions of euro

	2022	2021	Change	
Italy	2,149	2,725	(576)	-21.1%
Iberia	935	900	35	3.9%
Latin America	4,164	4,235	(71)	-1.7%
- of which Argentina	*35*	*37*	*(2)*	*-5.4%*
- of which Brazil	*739*	*1,551*	*(812)*	*-52.4%*
- of which Chile	*2,076*	*1,375*	*701*	*51.0%*
- of which Colombia	*822*	*884*	*(62)*	*-7.0%*
- of which Peru	*201*	*141*	*60*	*42.6%*
- of which Panama	*178*	*153*	*25*	*16.3%*
- of which other countries	*113*	*94*	*19*	*20.2%*
North America	1,702	1,147	555	48.4%
- of which United States and Canada	*1,424*	*971*	*453*	*46.7%*
- of which Mexico	*282*	*176*	*106*	*60.2%*
- area eliminations	*(4)*			
Europe	40	1	39	-
- of which Romania	*28*	-	*28*	-
- of which Russia	*11*	-	*11*	-
- of which Greece	-	-	-	-
- of which other countries	*1*	*1*	-	-
Africa, Asia and Oceania	196	175	21	12.0%
Other	288	264	24	9.1%
Eliminations and adjustments	(307)	(275)	(32)	-11.6%
Total	**9,167**	**9,172**	**(5)**	**-0.1%**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Revenue is essentially in line with the previous year. The decreases in sales in Italy due to poor water conditions and in Brazil due to a reduction in prices were mainly offset by increased quantities sold at higher average prices in Chile and North America.

Ordinary gross operating profit/(loss)

Millions of euro

	2022	2021	Change	
Italy	(562)	1,184	(1,746)	-
Iberia	631	840	(209)	-24.9%
Latin America	2,372	1,809	563	31.1%
- of which Argentina	*21*	*24*	*(3)*	*-12.5%*
- of which Brazil	*506*	*334*	*172*	*51.5%*
- of which Chile	*798*	*536*	*262*	*48.9%*
- of which Colombia	*674*	*601*	*73*	*12.1%*
- of which Peru	*203*	*141*	*62*	*44.0%*
- of which Panama	*102*	*127*	*(25)*	*-19.7%*
- of which other countries	*68*	*46*	*22*	*47.8%*
North America	988	699	289	41.3%
- of which United States and Canada	*907*	*627*	*280*	*44.7%*
- of which Mexico	*81*	*72*	*9*	*12.5%*
Europe	244	177	67	37.9%
- of which Romania	*140*	*82*	*58*	*70.7%*
- of which Russia	*18*	*5*	*13*	-
- of which Greece	*88*	*95*	*(7)*	*-7.4%*
- of which other countries	*(2)*	*(5)*	*3*	*60.0%*
Africa, Asia and Oceania	93	110	(17)	-15.5%
Other	13	(4)	17	-
Total	**3,779**	**4,815**	**(1,036)**	**-21.5%**

The reduction in the **ordinary gross operating profit** during 2022 is substantially attributable to the effects of poor water conditions recorded above all in Italy and Spain, which caused a sharp contraction in hydroelectric generation as well as higher procurement costs on the spot electricity market to meet contractual obligations.
The greater solar and wind generation in Chile, Brazil and North America as new plants came online was partially offset by the negative factors described above.

Gross operating profit, in the amount of €3,477 million (€4,570 million in 2021), reflects: costs (€5 million) incurred as a result of the COVID-19 pandemic for workplace sterilization, personal protective equipment, and donations; the classification of a number of companies as discontinued operations (€246 million); and the write-down of a number of projects in Chile (€51 million).

Ordinary operating profit/(loss)

Millions of euro

	2022	2021	Change	
Italy	(874)	902	(1,776)	-
Iberia	373	609	(236)	-38.8%
Latin America	1,942	1,448	494	34.1%
- of which Argentina	*14*	*18*	*(4)*	*-22.2%*
- of which Brazil	*378*	*253*	*125*	*49.4%*
- of which Chile	*625*	*378*	*247*	*65.3%*
- of which Colombia	*625*	*553*	*72*	*13.0%*
- of which Peru	*168*	*107*	*61*	*57.0%*
- of which Panama	*83*	*112*	*(29)*	*-25.9%*
- of which other countries	*49*	*27*	*22*	*81.5%*
North America	594	382	212	55.5%
- of which United States and Canada	*541*	*334*	*207*	*62.0%*
- of which Mexico	*53*	*48*	*5*	*10.4%*
Europe	190	114	76	66.7%
- of which Romania	*123*	*61*	*62*	-
- of which Russia	*14*	*(1)*	*15*	-
- of which Greece	*55*	*61*	*(6)*	*-9.8%*
- of which other countries	*(2)*	*(7)*	*5*	*71.4%*
Africa, Asia and Oceania	18	46	(28)	-60.9%
Other	(13)	(21)	8	38.1%
Total	**2,230**	**3,480**	**(1,250)**	**-35.9%**

Ordinary operating profit in 2022 decreased by €1,250 million from 2021, including €1,549 million in depreciation, amortization and impairment losses (€1,335 million in 2021). Depreciation in particular increased by €185 million compared with 2021, due to new plants that became operational.

Operating profit for 2022, in the amount of €1,970 million (€2,951 million in 2021), essentially reflects the same factors described in relation to ordinary operating profit.

Capital expenditure

Millions of euro

	2022	2021	Change	
Italy	821	406	415	-
Iberia	833	713	120	16.8%
Latin America	2,106	1,864	242	13.0%
North America	2,408	2,238	170	7.6%
Europe	51	204	(153)	-75.0%
Africa, Asia and Oceania	149	207	(58)	-28.0%
Other	18	30	(12)	-40.0%
Total	**6,386[1]**	**5,662[2]**	**724**	**12.8%**

(1) The figure does not include €42 million regarding units classified as held for sale or discontinued operations.
(2) The figure does not include €111 million regarding units classified as held for sale or discontinued operations.

Capital expenditure increased by €724 million in 2022 compared with the same figure for the previous year. In particular, the change was attributable to:

- an increase of €415 million in Italy, mainly for solar plants and batteries;
- an increase of €242 million in Latin America, mainly for solar plants in Colombia, Chile and Peru and for wind farms in Peru;
- an increase of €170 million in North America, mainly related to photovoltaic plants and storage systems in the United States;
- an increase of €120 million in capital expenditure in Iberia, attributable mainly to solar plants;
- a decrease in capital expenditure on wind farms in Europe;
- a decrease of €58 million in Africa, Asia and Oceania due mainly to a reduction in capital expenditure on wind farms in India, which was partially offset by an increase in capital expenditure on wind farms in Australia.

Enel Grids



Enel Grids

507.7 TWh
ELECTRICITY TRANSPORTED ON ENEL´S DISTRIBUTION GRID
510.6 TWh in 2021(1)

€8,276 million
ORDINARY GROSS OPERATING PROFIT
€7,663 million in 2021

€5,547 million(2)
CAPITAL EXPENDITURE
38.7% of total Group capital expenditure

(1) The figures for 2021 reflect more accurate calculations.
(2) The figure does not include €110 million regarding units classified as held for sale or discontinued operations.

Operations

Electricity distribution and transmission grids

Millions of kWh

	2022	2021	Change	
Electricity transported on Enel's distribution grid(1)	507,660	510,560	(2,900)	-0.6%
- of which Italy(1)	*220,379*	*226,923*	*(6,544)*	*-2.9%*
- of which Iberia(1)	*131,813*	*131,184*	*629*	*0.5%*
- of which Latin America	*139,921*	*136,407*	*3,514*	*2.6%*
- of which Europe(1)	*15,547*	*16,046*	*(499)*	*-3.1%*
End users with active smart meters (no.)(1)	45,824,963	45,169,318	655,645	1.5%

(1) The figure for 2021 has been restated.

In 2022, electricity transported on the grid decreased (by 0.6%), mainly attributable to:

- Italy (-2.9%), where there was a decline in demand for electricity distributed to low, medium, high and very high voltage customers; energy distributed to other distributors also decreased slightly from the previous year;
- Europe (-3.1%), with a decrease in electricity distributed in Romania, attributable mostly to residential customers.

This decrease was partially mitigated by Latin America (2.6%), where volumes distributed increased mainly in Argentina, Chile, Colombia, Peru, and Brazil.

Average frequency of interruptions per customer

	2022	2021	Change	
SAIFI (average no.)				
Italy	*1.6*	*1.8*	*(0.2)*	*-11.1%*
Iberia	*1.3*	*1.4*	*(0.1)*	*-7.1%*
Argentina	*5.3*	*4.9*	*0.4*	*8.2%*
Brazil	*4.5*	*4.8*	*(0.3)*	*-6.3%*
Chile	*1.6*	*1.5*	*0.1*	*6.7%*
Colombia	*3.9*	*5.2*	*(1.3)*	*-25.0%*
Peru	*2.9*	*2.3*	*0.6*	*26.1%*
Romania	*2.7*	*2.9*	*(0.2)*	*-6.9%*

Average duration of interruptions per customer

	2022	2021	Change	
SAIDI (average minutes)				
Italy	*41.9*	*42.9*	*(1.0)*	*-2.3%*
Iberia[1]	*64.4*	*70.1*	*(5.7)*	*-8.1%*
Argentina	*892.0*	*797.3*	*94.7*	*11.9%*
Brazil	*547.3*	*607.9*	*(60.6)*	*-10.0%*
Chile	*159.0*	*152.3*	*6.7*	*4.4%*
Colombia	*320.0*	*401.4*	*(81.4)*	*-20.3%*
Peru	*607.7*	*413.9*	*193.8*	*46.8%*
Romania	*92.0*	*109.7*	*(17.7)*	*-16.1%*

(1) The figures for 2021 reflect more accurate calculations.

As shown in the tables above, service quality has improved in nearly all geographical areas, although the SAIDI in Argentina remains high due, in particular, to failures in the high-voltage systems not managed by the Group. In addition, interruptions increased in Peru due to maintenance work and adverse climate events.

Grid losses

	2022	2021	Change	
Grid losses (average %)				
Italy	*4.7*	*4.7*	*-*	*-*
Iberia	*7.0*	*7.1*	*(0.1)*	*-1.4%*
Argentina	*17.1*	*18.0*	*(0.9)*	*-5.0%*
Brazil	*13.5*	*13.1*	*0.4*	*3.1%*
Chile	*5.1*	*5.2*	*(0.1)*	*-1.9%*
Colombia	*7.5*	*7.5*	*-*	*-*
Peru	*8.2*	*8.5*	*(0.3)*	*-3.5%*
Romania	*8.5*	*8.7*	*(0.2)*	*-2.3%*

Performance

Millions of euro	2022	2021	Change	
Revenue	23,032	20,242[1]	2,790	13.8%
Gross operating profit/(loss)	9,114	7,100[1]	2,014	28.4%
Ordinary gross operating profit/(loss)	8,276	7,663	613	8.0%
Operating profit/(loss)	5,332	4,326[1]	1,006	23.3%
Ordinary operating profit/(loss)	5,254	4,813	441	9.2%
Capital expenditure	5,547[2]	5,296	251	4.7%

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.
(2) The figure does not include €110 million regarding units classified as held for sale or discontinued operations.

The following tables shows a breakdown of performance by geographical area in 2022.

Revenue[1]

Millions of euro	2022	2021	Change	
Italy	6,963	7,326	(363)	-5.0%
Iberia	2,258	2,489	(231)	-9.3%
Latin America	12,956	10,366	2,590	25.0%
- of which Argentina	*1,000*	*688*	*312*	*45.3%*
- of which Brazil	*7,762*	*7,109*	*653*	*9.2%*
- of which Chile	*2,562*	*1,262*	*1,300*	-
- of which Colombia	*753*	*630*	*123*	*19.5%*
- of which Peru	*879*	*677*	*202*	*29.8%*
Europe	(8)	-	(8)	-
Other	1,273	590	683	-
Eliminations and adjustments	(410)	(529)	119	22.5%
Total[1]	**23,032**	**20,242**	**2,790**	**13.8%**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

The increase in **revenue** is mainly attributable to rate adjustments connected with the increase in inflation and the positive effect of exchange rate developments in Latin America, in particular Brazil. These effects were partially offset by certain adverse rate developments in Italy and Spain. In Spain, by way of Ministerial Decree TED/749/2022 of July 27, 2022, rate remunerations for the years 2017, 2018 and 2019 were retroactively changed (-€180 million).

Ordinary gross operating profit/(loss)

Millions of euro

	2022	2021	Change	
Italy	3,707	3,836	(129)	-3.4%
Iberia	1,621	1,877	(256)	-13.6%
Latin America	2,445	1,810	635	35.1%
- of which Argentina	*88*	*3*	*85*	*-*
- of which Brazil	*1,489*	*1,120*	*369*	*32.9%*
- of which Chile	*168*	*144*	*24*	*16.7%*
- of which Colombia	*487*	*385*	*102*	*26.5%*
- of which Peru	*213*	*158*	*55*	*34.8%*
Europe	(61)	96	(157)	-
Other	564	44	520	-
Total	**8,276**	**7,663**	**613**	**8.0%**

The increase in **ordinary gross operating profit** is essentially attributable to the increase in Latin America for certain rate adjustments and fluctuations in exchange rates. This trend was only partially offset by failure to index and revise rates to mitigate the impact on customers of rising commodity prices, particularly in Spain, Italy and Romania.

Gross operating profit came to €9,114 million, up €2,014 million from the €7,100 million posted in 2021. More specifically, in addition to the positive effects described in relation to ordinary gross operating profit, there was a gain of €1,051 million recognized by Enel Transmisión Chile and a reduction in provisions in 2022 in relation to restructuring for digitalization and the energy transition compared with 2021 (€23 million in 2022 compared with €423 million in 2021), effects which were partially offset by the recognition of a loss on the sale of Celg Distribuição SA - Celg-D (Enel Goiás) of €208 million and associated transaction costs (€4 million).

Ordinary operating profit/(loss)

Millions of euro

	2022	2021	Change	
Italy	2,357	2,500	(143)	-5.7%
Iberia	815	1,094	(279)	-25.5%
Latin America	1,671	1,175	496	42.2%
- of which Argentina	*52*	*(25)*	*77*	*-*
- of which Brazil	*975*	*708*	*267*	*37.7%*
- of which Chile	*109*	*95*	*14*	*14.7%*
- of which Colombia	*391*	*297*	*94*	*31.6%*
- of which Peru	*144*	*100*	*44*	*44.0%*
Europe	(143)	6	(149)	-
Other	554	38	516	-
Total	**5,254**	**4,813**	**441**	**9.2%**

The increase in **ordinary operating profit** in 2022 essentially reflects the factors described in relation to ordinary gross operating profit, as well as an increase in depreciation and amortization due to investments made.

In addition to the effects described in relation to gross operating profit and to ordinary operating profit, **operating profit** for 2022, in the amount of €5,332 million (€4,326 million in 2021), reflects the adjustment to the value of net assets related to the sale of Celg Distribuição SA - Celg-D (Enel Goiás) in Brazil in the amount of €827 million.

Capital expenditure

Millions of euro

	2022	2021	Change	
Italy	2,714	2,554	160	6.3%
Iberia	860	874	(14)	-1.6%
Latin America	1,809	1,663	146	8.8%
Europe	140	192	(52)	-27.1%
Other	24	13	11	84.6%
Total	**5,547**(1)	**5,296**	**251**	**4.7%**

(1) The figure does not include €110 million regarding units classified as held for sale or discontinued operations.

Capital expenditure increased year on year by €251 million. This increase is mainly attributable to:

- Latin America, and particularly Brazil, due to increased investment on distribution lines and substations;
- Italy, for an increase in new customer connections and investments to improve service quality (e-grid and DSO 4.0 projects).

End-user Markets



Barbara, Channel manager Spazio Enel Partner Emilia-Romagna and Marche - Spazio Enel Partner, Cingoli, Province of Macerata.

End-user Markets

321.1 TWh
ELECTRICITY SOLD
309.4 TWh in 2021

€1,122 million
ORDINARY GROSS OPERATING PROFIT
€3,086 million in 2021

66.8 million
RETAIL CUSTOMERS
of which **27.9** million in the free market

Operations

Electricity sales

Millions of kWh

	2022	2021	Change	
Free market	198,254	175,958	22,296	12.7%
Regulated market	122,854	133,467	(10,613)	-8.0%
Total	**321,108**	**309,425**	**11,683**	**3.8%**
- of which Italy	*97,195*	*92,768*	*4,427*	*4.8%*
- of which Iberia	*79,003*	*79,457*	*(454)*	*-0.6%*
- of which Latin America	*135,094*	*127,906*	*7,188*	*5.6%*
- of which Europe	*9,816*	*9,294*	*522*	*5.6%*

The greater volumes of electricity sold in 2022 refer, in particular, to the free market (+22.3 TWh) in Italy (+12.8 TWh) in both business-to-business (B2B) and business-to-consumer (B2C) segments, in Latin America (+6.7 TWh) and in Spain (+2.0 TWh). Conversely, the regulated market saw declining volumes (-10.6 TWh), mainly in Italy (-8.3 TWh) and Spain (-2.5 TWh) in both the B2B and B2C segments due, primarily, to a reduction in the number of customers compared with 2021.

Natural gas sales

Millions of m^3

	2022	2021	Change	
Business to consumer	3,910	3,731	179	4.8%
Business to business	6,333	6,142	191	3.1%
Total	**10,243**	**9,873**	**370**	**3.7%**
- of which Italy	*4,726*	*4,353*	*373*	*8.6%*
- of which Iberia	*4,909*	*5,180*	*(271)*	*-5.2%*
- of which Latin America	*342*	*160*	*182*	*-*
- of which Europe	*266*	*180*	*86*	*47.8%*

The increase in volumes sold primarily in Italy and Latin America in 2022 was partly offset by the reduction in consumption in Spain. Both the B2B and B2C segments posted greater sales volumes compared with 2021.

Performance

Millions of euro				
	2022	2021	Change	
Revenue	62,152	37,399[1]	24,753	66.2%
Gross operating profit/(loss)	1,243	3,033[1]	(1,790)	-59.0%
Ordinary gross operating profit/(loss)	1,122	3,086	(1,964)	-63.6%
Operating profit/(loss)	(300)	1,723[1]	(2,023)	-
Ordinary operating profit/(loss)	(435)	1,753	(2,188)	-
Capital expenditure	721	643	78	12.1%

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

The following tables show a breakdown of performance by geographical area in 2022.

Revenue[1]

Millions of euro				
	2022	2021	Change	
Italy	32,666	19,818	12,848	64.8%
Iberia	27,764	16,177	11,587	71.6%
Latin America	1,687	1,393	294	21.1%
- of which Argentina	*-*	*2*	*(2)*	*-*
- of which Brazil	*507*	*349*	*158*	*45.3%*
- of which Chile	*114*	*93*	*21*	*22.6%*
- of which Colombia	*807*	*760*	*47*	*6.2%*
- of which Peru	*259*	*189*	*70*	*37.0%*
North America	9	7	2	28.6%
Europe	-	-	-	-
Other	26	4	22	-
Eliminations and adjustments	-	-	-	-
Total	**62,152**	**37,399**	**24,753**	**66.2%**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Revenue for 2022 increased by 66.2% over the previous year, due mainly to greater revenue on electricity sales (up €17,825 million) and gas sales (up €6,228 million) as a result of greater volumes and sales prices in Italy and Spain.

Ordinary gross operating profit/(loss)

Millions of euro				
	2022	2021	Change	
Italy	448	2,311	(1,863)	-80.6%
Iberia	356	547	(191)	-34.9%
Latin America	435	263	172	65.4%
- of which Argentina	*30*	*12*	*18*	*-*
- of which Brazil	*233*	*136*	*97*	*71.3%*
- of which Chile	*67*	*44*	*23*	*52.3%*
- of which Colombia	*77*	*49*	*28*	*57.1%*
- of which Peru	*28*	*22*	*6*	*27.3%*
North America	4	6	(2)	-33.3%
Europe	(126)	(41)	(85)	-
Other	5	-	5	-
Total	**1,122**	**3,086**	**(1,964)**	**-63.6%**

The decrease in **ordinary gross operating profit** for 2022 is essentially attributable to:

- a decrease of €1,863 million in Italy, essentially due to a €1,857 million reduction in the free market. This change was primarily due to increased costs for the purchase and transport of electricity as a result of an increase in quantities purchased and the cost of sourcing;
- a reduction of €191 million in Spain, where the greater quantities sold on the free market called for energy to be procured on the spot market in a context of rising average prices, taking account of the lower contribution of hydroelectric generation in the overall energy mix.

These negative effects were only partially offset by the increase of €172 million in the margin in Latin America, especially in Brazil, Colombia, Chile and Argentina following rate adjustments and an increase in quantities sold.

Gross operating profit amounted to €1,243 million (€3,033 million in 2021). In addition to reflecting the effects of the factors noted for ordinary gross operating profit, this is also attributable to non-recurring items in respect of charges provisioned for restructuring plans for the energy transition and digitalization (€2 million), costs incurred in responding to the COVID-19 pandemic for workplace sanitization, personal protective equipment and donations (€2 million) and the classification under "Profit/(Loss) from discontinued operations" of the revenue and cost items associated with the assets held in Romania, as they met the requirements established by IFRS 5 for their classification as "discontinued operations", with a positive impact of €125 million.

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Ordinary operating profit/(loss)

Millions of euro

	2022	2021	Change	
Italy	(546)	1,508	(2,054)	-
Iberia	76	345	(269)	-78.0%
Latin America	178	(41)	219	-
- of which Argentina	*14*	*4*	*10*	-
- of which Brazil	*39*	*(113)*	*152*	-
- of which Chile	*44*	*20*	*24*	-
- of which Colombia	*57*	*31*	*26*	*83.9%*
- of which Peru	*24*	*17*	*7*	*41.2%*
North America	3	5	(2)	-40.0%
Europe	(151)	(64)	(87)	-
Other	5	-	5	-
Total	**(435)**	**1,753**	**(2,188)**	**-**

Ordinary operating profit reflects the factors noted earlier for ordinary gross operating profit, as well as an increase in depreciation and amortization of €101 million, mainly regarding amortization of intangibles and an increase in the impairment of trade receivables of €123 million mainly in Italy and Spain.

The **operating loss** for 2022, a loss of €300 million (a profit of €1,723 million in 2021), essentially reflects the factors described above in relation to gross operating profit and the increase in depreciation, amortization and impairment losses and in the impairment of trade receivables in Italy and Spain described above.

Capital expenditure

Millions of euro

	2022	2021	Change	
Italy	460	427	33	7.7%
Iberia	248	196	52	26.5%
Europe	13	20	(7)	-35.0%
Total	**721**	**643**	**78**	**12.1%**

The increase in **capital expenditure**, mainly in Italy and Spain, is essentially attributable to the digitalization of customer-management processes.

Enel X



Alessandro, Enel X Store, Corso Francia, Rome - Urban area for recharging electric vehicles and smart solutions for home energy efficiency.

Enel X

3,023 thousand
LIGHTING POINTS
2,821 thousand in 2021

8.5 GW
DEMAND RESPONSE
7.7 GW in 2021

€673 million
ORDINARY GROSS OPERATING PROFIT
€356 million in 2021

+30.2 %
CAPITAL EXPENDITURE ON 2021
for a total of
€371 million(1) in 2022

(1) The figure does not include €2 million regarding units classified as held for sale or discontinued operations.

Operations

	2022	2021	Change	
Demand response capacity (MW)	8,476	7,713	763	9.9%
Lighting points (thousands)	3,023	2,821	202	7.2%
Storage (MW)	760	375	385	-

Demand response capacity increased mainly in North America (+541 MW) and in Japan (+282 MW). Lighting points increased primarily in Italy, Brazil and Chile, while storage increased due essentially to the installation of new batteries at renewable energy plants in North America.

Performance(1)

Millions of euro

	2022	2021	Change	
Revenue	2,209	1,428(2)	781	54.7%
Gross operating profit/(loss)	652	326(2)	326	-
Ordinary gross operating profit/(loss)	673	356	317	89.0%
Operating profit/(loss)	344	94(2)	250	-
Ordinary operating profit/(loss)	362	120	242	-
Capital expenditure	371(3)	285	86	30.2%

(1) The 2021 figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way, which are shown under "Holding, Services and Other".
(2) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.
(3) The figure does not include €2 million regarding units classified as held for sale or discontinued operations.

The following tables shows a breakdown of performance by geographical area in 2022.

Revenue[1] [2]

Millions of euro

	2022	2021	Change	
Italy	742	504	238	47.2%
Iberia	365	266	99	37.2%
Latin America	373	271	102	37.6%
- of which Argentina	*15*	*11*	*4*	*36.4%*
- of which Brazil	*30*	*22*	*8*	*36.4%*
- of which Chile	*74*	*64*	*10*	*15.6%*
- of which Colombia	*193*	*127*	*66*	*52.0%*
- of which Peru	*61*	*47*	*14*	*29.8%*
North America	247	243	4	1.6%
Europe	83	50	33	66.0%
Africa, Asia and Oceania	70	67	3	4.5%
Other	484	144	340	-
Eliminations and adjustments	(155)	(117)	(38)	-32.5%
Total	**2,209**	**1,428**	**781**	**54.7%**

(1) The 2021 figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way, which are shown under "Holding, Services and Other".
(2) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Revenue for 2022 increased by 54.7% year on year, with the greatest gains coming:

- as a result of the partial sale of the equity interest held in Ufinet (€220 million) and the sale by Enel X Srl of a number of companies to Mooney Group SpA (€67 million);
- in Italy due to an increase in the sale and installation of energy efficiency systems, primarily attributable to the e-Home, Demand Response, and e-City businesses;
- in Colombia, for activities related to the e-Bus project;
- in Spain, mainly within the e-Home business.

Ordinary gross operating profit[1]

Millions of euro

	2022	2021	Change	
Italy	122	153	(31)	-20.3%
Iberia	76	62	14	22.6%
Latin America	127	94	33	35.1%
- of which Argentina	*5*	*5*	-	-
- of which Brazil	*4*	*1*	*3*	-
- of which Chile	*18*	*21*	*(3)*	*-14.3%*
- of which Colombia	*74*	*50*	*24*	*48.0%*
- of which Peru	*26*	*17*	*9*	*52.9%*
North America	(6)	36	(42)	-
Europe	50	19	31	-
Africa, Asia and Oceania	(7)	2	(9)	-
Other	311	(10)	321	-
Total	**673**	**356**	**317**	**89.0%**

(1) The 2021 figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way, which are shown under "Holding, Services and Other".

Ordinary gross operating profit increased mainly as a result, as described above, of the gains on the partial sale of the equity interest held in Ufinet and the sale by Enel X Srl of a number of companies to Mooney Group SpA.

Gross operating profit came to €652 million (€326 million in 2021). The change of €21 million compared with ordinary gross operating profit concerns the provisions set aside for the restructuring plans for the energy transition and digitalization and the classification under "Profit/(Loss) from discontinued operations" of the revenue and cost items associated with the assets held in Romania, as they met the requirements established by IFRS 5 for their classification as "discontinued operations".

Ordinary operating profit[(1)]

Millions of euro

	2022	2021	Change	
Italy	(39)	46	(85)	-
Iberia	28	16	12	75.0%
Latin America	103	75	28	37.3%
- of which Argentina	*5*	*5*	*-*	*-*
- of which Brazil	*4*	*1*	*3*	*-*
- of which Chile	*18*	*20*	*(2)*	*-10.0%*
- of which Colombia	*58*	*39*	*19*	*48.7%*
- of which Peru	*18*	*10*	*8*	*80.0%*
North America	(50)	-	(50)	-
Europe	45	15	30	-
Africa, Asia and Oceania	(12)	(1)	(11)	-
Other	287	(31)	318	-
Total	**362**	**120**	**242**	**-**

(1) The 2021 figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way, which are shown under "Holding, Services and Other".

Ordinary operating profit includes depreciation, amortization and impairment losses in the amount of €311 million (€236 million in 2021). The increase in depreciation, amortization and impairment losses is essentially attributable to an increase in amortization of intangibles and impairment of trade receivables.

Operating profit for 2022, in the amount of €344 million (€94 million in 2021), reflects the factors described above in relation to gross operating profit.

Capital expenditure[(1)]

Millions of euro

	2022	2021	Change	
Italy	96	69	27	39.1%
Iberia	45	40	5	12.5%
Latin America	77	46	31	67.4%
North America	67	42	25	59.5%
Europe	5	4	1	25.0%
Africa, Asia and Oceania	15	10	5	50.0%
Other	66	74	(8)	-10.8%
Total	**371[(2)]**	**285**	**86**	**30.2%**

(1) The 2021 figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way, which are shown under "Holding, Services and Other".
(2) The figure does not include €2 million regarding units classified as held for sale or discontinued operations.

Capital expenditure increased mainly in Italy in the e-City and e-Home businesses, in North America and Australia in battery energy storage, in Brazil as the combined effect of increased costs incurred in the Smart Lighting, e-Home and Distributed Energy businesses (launch of new photovoltaic projects), in Peru in the Public Lighting Business, in Colombia following the launch of projects in the Distributed Energy Business (photovoltaics), and in Spain in the e-Home business.

Holding, Services and Other



Monica, architectural design new locations, Servizi Italia - Historic building designed by Giò Ponti in Via Carducci, Milan headquarters of the Enel Group since 1962.

Performance[(1)]

Millions of euro	2022	2021	Change	
Revenue	2,235	4,012[(2)]	(1,777)	-44.3%
Gross operating profit/(loss)	(273)	1,360[(2)]	(1,633)	-
Ordinary gross operating profit/(loss)	(261)	1,588	(1,849)	-
Operating profit/(loss)	(546)	1,068[(2)]	(1,614)	-
Ordinary operating profit/(loss)	(535)	1,340	(1,875)	-
Capital expenditure	332	289	43	14.9%

(1) The 2021 figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way.
(2) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

The following tables show a breakdown of 2022 performance by geographical area.

Revenue[(1) (2)]

Millions of euro	2022	2021	Change	
Italy	819	793	26	3.3%
Iberia	504	470	34	7.2%
Latin America	11	21	(10)	-47.6%
North America	57	42	15	35.7%
Europe	6	2	4	-
Other	1,095	2,915	(1,820)	-62.4%
Eliminations and adjustments	(257)	(231)	(26)	-11.3%
Total	**2,235**	**4,012**	**(1,777)**	**-44.3%**

(1) The 2021 figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way.
(2) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

The decrease in **revenue** is mainly due to the gain of €1,763 million recognized in 2021 on the sale of Open Fiber within the scope of the Stewardship strategic pillar.

Ordinary gross operating profit[(1)]

Millions of euro	2022	2021	Change	
Italy	50	34	16	47.1%
Iberia	(20)	21	(41)	-
Latin America	(118)	(79)	(39)	-49.4%
- of which Argentina	*(3)*	*(3)*	-	-
- of which Brazil	*(22)*	*(18)*	*(4)*	*-22.2%*
- of which Chile	*(93)*	*(57)*	*(36)*	*-63.2%*
- of which Peru	-	*(1)*	*1*	-
North America	(24)	(15)	(9)	-60.0%
Europe	(6)	5	(11)	-
Africa, Asia and Oceania	(3)	(2)	(1)	-50.0%
Other	(140)	1,624	(1,764)	-
Total	**(261)**	**1,588**	**(1,849)**	**-**

(1) The 2021 figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way.

The decrease in **ordinary gross operating profit** in 2022 is mainly attributable to the change in revenue described above, and particularly for the effects of the sale of Open Fiber in 2021.

Gross operating profit mainly reflects the factors described above in relation to ordinary gross operating profit. The non-recurring items in 2022 mainly concern charges for digitalization and the energy transition, whereas the non-recurring items for 2021 mainly included the provisions for restructuring and digitalization plans for a total of €216 million.

Ordinary operating profit[1]

Millions of euro

	2022	2021	Change	
Italy	(28)	(45)	17	37.8%
Iberia	(59)	(32)	(27)	-84.4%
Latin America	(121)	(82)	(39)	-47.6%
- of which Argentina	*(3)*	*(3)*	-	-
- of which Brazil	*(25)*	*(19)*	*(6)*	*-31.6%*
- of which Chile	*(93)*	*(59)*	*(34)*	*-57.6%*
- of which Peru	-	*(1)*	*1*	-
North America	(31)	(23)	(8)	-34.8%
Europe	(6)	3	(9)	-
Africa, Asia and Oceania	(4)	(2)	(2)	-
Other	(286)	1,521	(1,807)	-
Total	**(535)**	**1,340**	**(1,875)**	**-**

(1) The 2021 figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way.

Ordinary operating profit for 2022 is essentially in line with the decrease in ordinary gross operating profit, taking account of the €23 million increase in depreciation, amortization and impairment losses.

Operating profit for 2022 reflects the factors described above in relation to gross operating profit and ordinary operating profit.

Capital expenditure[1]

Millions of euro

	2022	2021	Change	
Italy	141	83	58	69.9%
Iberia	58	45	13	28.9%
Latin America	8	6	2	33.3%
North America	9	5	4	80.0%
Europe	1	2	(1)	-50.0%
Other	115	148	(33)	-22.3%
Total	**332**	**289**	**43**	**14.9%**

(1) The 2021 figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way.

The increase in **capital expenditure** in 2022 in Italy is mainly attributable to the capital expenditure by Enel Italia SpA for work done for the subsidiary Enel X Italia Srl in the field of energy efficiency.

The increase in capital expenditure in Iberia is due to the increased investment by Enel X Way on new electric vehicle charging points.

Enel shares

Enel and the financial markets

	2022	2021
Gross operating profit per share (euro)[1]	1.96	1.70
Operating profit per share (euro)[1]	1.10	0.74
Group profit per share (euro)	0.15	0.31
Group ordinary profit per share (euro)	0.53	0.55
Dividend per share (euro)	0.40	0.380
Group equity per share (euro)	2.82	2.92
Share price - 12-month high (euro)	7.20	8.95
Share price - 12-month low (euro)	4.00	6.53
Average share price in December (euro)	5.15	6.77
Market capitalization (millions of euro)[2]	52,325	68,804
No. of shares outstanding at December 31 (millions)[3]	10,167	10,167

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.
(2) Calculated on average share price in December.
(3) The number of shares includes 7,153,795 treasury shares in 2022 and 4,889,152 treasury shares in 2021.

		at Dec. 31, 2022	at Dec. 31, 2021
Rating			
Standard & Poor's	Outlook	NEGATIVE	STABLE
	Medium/long-term	BBB+	BBB+
	Short-term	A-2	A-2
Moody's	Outlook	NEGATIVE	STABLE
	Medium/long-term	Baa1	Baa1
	Short-term	-	-
Fitch	Outlook	STABLE	STABLE
	Medium/long-term	BBB+	A-
	Short-term	F2	F2

Global macroeconomic conditions in 2022 were characterized by a generalized slowdown in the real economy from the pace registered in the post-pandemic recovery that had marked 2021. High inflation quickly and unexpectedly impacted global economies, and forced the central banks to promptly adopt restrictive monetary policies. Furthermore, the military conflict between Russia and Ukraine, and the resulting uncertainty it has engendered on a global scale, has significantly impacted the energy, commodity and food markets, with direct repercussions on the prices of final consumer goods.

The inflationary dynamics, accompanied by the consequent restrictive financial conditions imposed by the Federal Reserve, weighed on the performance of US GDP, with output growing by 2.1% on an annual basis.

In the euro area, the first half of the year experienced a faster than expected recovery, while the second half was marked by a significant slowdown in the European economies due to the high uncertainty deriving from the military conflict between Russia and Ukraine, as well as the sudden increase in energy prices. The restrictive monetary policy measures introduced by the European Central Bank to counter the increase in inflation led to a deterioration in financial conditions on the markets.

The situation was similar in Latin America, where after a significant recovery in private demand for goods and services in the first half of the year, macroeconomic conditions were characterized by the restrictive monetary policies of the national central banks, which dampened the economic recovery.

The adverse macroeconomic situation impacted the performance of the financial markets. The main European stock indices closed 2022 with losses: the Italian FTSE-MIB index -13.3%, the Spanish Ibex35 index -5.6%, the German DAX -12.4% and the French CAC40 index -9.8%.

The euro-area utilities sector (EURO STOXX Utilities) closed the year with a decline of 11.3%.

Finally, as regards the Enel stock, 2022 ended with a price of €5.03 per share, a decline of 28.6% on the previous year.

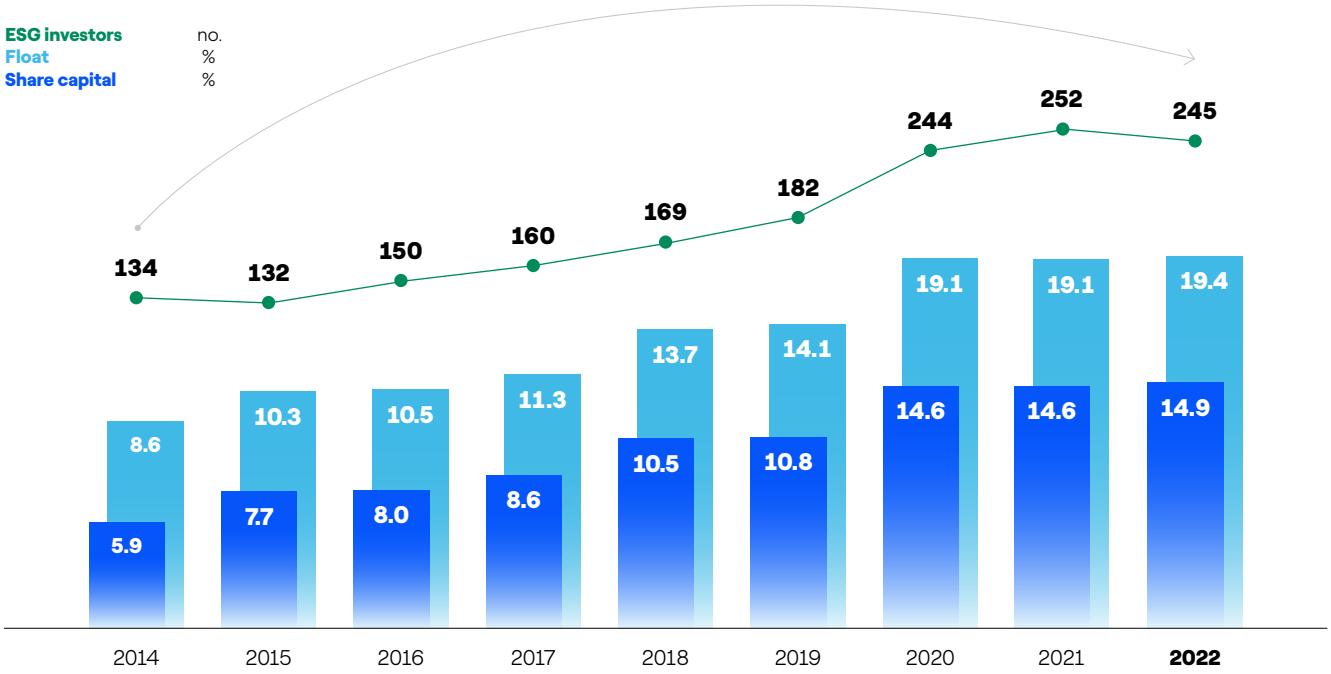
On January 26, 2022 Enel paid an interim dividend of €0.19 per share from 2021 profits and on July 20, 2022 it paid the balance of the dividend for that year in the amount of €0.19. Total dividends distributed in 2022 amounted to €0.38 per share, about 6% higher than the €0.358 per share distributed in 2021.
On January 25, 2023 an interim dividend of €0.20 per share was paid in respect of ordinary profit for 2022, while the balance of the dividend is scheduled for payment on July 26, 2023.

At December 31, 2022, institutional investors had reduced their position in Enel to 56.7% of share capital (compared with 59.4% at December 31, 2021), while the share of individual investors rose to 19.7% (as against 17.0% at December 31, 2021). The interest of the Ministry for the Economy and Finance was unchanged at 23.6%.
Socially responsible investors (SRIs) held about 14.9% of share capital at December 31, 2022 (up from 14.6% at December 31, 2021) and represent 26.2% of institutional investors (24.6% at December 31, 2021). Investors who have signed the Principles for Responsible Investment represent 42.1% of share capital.

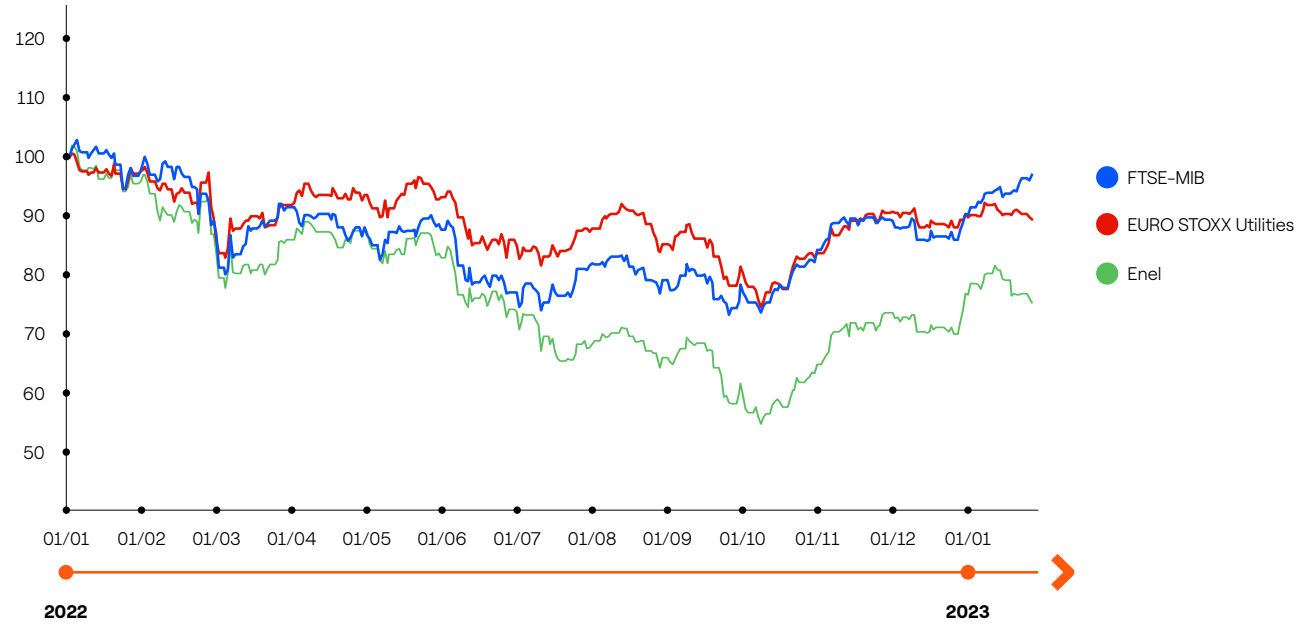
For further information we invite you to visit the Investor Relations section of our corporate website (https://www.enel.com/investors/overview) and download the "Enel Investor" app, which contains both economic and financial information (annual reports, semi-annual and quarterly reports, presentations to the financial community, analyst estimates and stock market trading trends involving the shares issued by Enel and its main listed subsidiaries, ratings and outlooks assigned by rating agencies) and up-to-date data and documentation of interest to shareholders and bondholders in general (price sensitive press releases, outstanding bonds, bond issue programs, composition of Enel's corporate bodies, bylaws and regulations of Shareholders' Meetings, information and documentation relating to Shareholders' Meetings, procedures and other documentation concerning corporate governance, the Code of Ethics and organizational and management arrangements.

We have also created contact centers for private investors (which can be reached by phone at +39-0683054000 or by e-mail at azionisti.retail@enel.com) and for institutional investors (phone: +39-0683051; e-mail: investor.relations@enel.com).

Growth in ESG investors



Performance of Enel share price and the EURO STOXX Utilities and FTSE-MIB indices from January 1, 2022 to January 31, 2023



Source: Bloomberg.

Innovation

194
Proofs of Concept, launched to test innovative solutions in 2022

60
solutions in scale-up phase in the business in 2022

In line with the Open Power vision, the Group promotes an open innovation approach to address the challenges of the energy transition. The Open Innovation model makes it possible to connect all areas of the Company with startups, industrial partners, small and medium-sized enterprises (SMEs), research centers, universities and entrepreneurs – drawing in part on crowdsourcing platforms – to face the challenges of the business, taking into account the drivers of the Group's Strategic Plan.
The Company has numerous innovation partnership agreements that, in addition to the traditional fields of action linked to renewable energy and conventional generation, have promoted the development of new solutions for e-mobility, microgrids, energy efficiency and the industrial Internet of Things (IoT).
Enel's innovation strategy leverages the online crowdsourcing platform openinnovability.com and a global network of 10 Innovation Hubs (3 of which are also Labs) and 22 Labs (3 of which are dedicated to startups), which consolidates the new model of collaboration with startups and SMEs. The latter offer innovative solutions and new business models and Enel makes its expertise, testing facilities and a global network of partners available to support its development and possible scale-up. The Hubs are located in the most relevant innovation ecosystems for the Group (Catania, Pisa, Milan, Silicon Valley, Boston, Rio de Janeiro, Madrid, Barcelona, Santiago de Chile, Tel Aviv). They manage relationships with all the players involved in innovation activities and constitute the main source of scouting for innovative startups and SMEs, responding to the innovation needs manifested by business lines. In September 2022 Enel inaugurated the new AI & Robotics Lab in Tel Aviv, specializing in the development of artificial intelligence and robotics for renewable energy and electricity grids.
Furthermore, in 2022, Enel was one of the first companies in the world to voluntarily adopt the ISO 56002 standard for innovation management. The ISO 56002 standard is part of the broader ISO 56000 series of standards and covers all aspects of innovation management: from the birth of an idea to its implementation on a global scale. It enables you to enhance the effectiveness of innovation and business opportunities, creating the conditions for a widespread culture of innovation that stimulates the creativity of employees and stakeholders and fosters the emergence of new value propositions in line with market developments.

In 2021, the integration of Open Innovation Culture and Agile Transformation was launched at the Group level with the aim of providing the business with comprehensive support, from the generation of the idea to the project implementation phase, using Innovation and Agile methodologies as key drivers to create competitive advantage and generate cost optimization over time.

2022 saw the continuation of the activities of the innovation communities, multidisciplinary working groups created to innovatively address the most relevant issues for the business and new technologies in order to create value for the Group. To the existing communities of energy storage, blockchain, drones, energy accumulation, metaverse, robotics, sensors and quantum computing, other innovation communities have been added, including wearables, additive manufacturing, data monetization, artificial intelligence and machine learning, materials and hydrogen. The communities continuously monitor potential technological improvements or share useful new business models, value-added services or use cases for types of technology that could be implemented in different areas of the Enel Group.

As part of innovation activities, 194 Proofs of Concept were launched in 2022 (168 in 2021) to test innovative solutions, while 60 innovative solutions (46 in 2021) are in the scale-up phase and €104.5 million have been invested (including personnel costs) in innovation.

Intellectual property

Enel's portfolio of intellectual property (also "IP") comprises a set of information functional to sustainable growth. The Open Innovability® ecosystem generates innovation through the creation and sharing of internal and external solutions that give life to a flow of inventions that are protected and leveraged using the tools of intellectual property protection.

At December 31, 2022, the Group had applied for a total of 883 patents for industrial inventions in 163 patent families. Of these, 711 have been granted and 172 are pending. The portfolio ensures protection in all the markets in which the Group is present. Enel's IP portfolio also includes 23 utility models and 194 design registrations. Together with patents, utility models and designs, IP rights also include industrial secrets of both a technical and commercial nature which are constantly codified and maintained in line with the provisions of the Trade Secrets Management procedure. The Group also owns 2,027 trademarks, of which 1,642 have already been registered and 385 are pending.

Enel has consolidated the processes for managing the generation and exploitation of intellectual property rights within the Intellectual Property Management and Trade Secrets Management organizational procedures. Both procedures look at human capital as an essential element in the creation of IP and seek to encourage employee participation in the inventive process, emphasizing the strategic importance of all inventions.

During 2022, the activity of coding and protection of intellectual property continued in all global business lines. More specifically:

- Enel X Global Retail focused its activity on strategic platforms, coding copyrights on the Big Data Platform, a container of strategic data for all Enel X business units, and the X Customer global management system for Enel X customers.
  With regard to the circular economy, Enel X has protected its circularity schemes under copyright law together with the related scores and operating mechanisms.
  In the field of telemedicine, a multiple design has been registered in the European Union for the graphic interfaces of the "Smart Axistance eWell" app, which offers users a complete wellness package.

- Enel Green Power and Thermal Generation report the following developments for the year:
  - in the photovoltaic sector: (i) a patent application for an industrial invention and a design application for a solution that automates the process of installing photovoltaic panels in the field, reducing installation times and costs and increasing operator safety; (ii) a patent application jointly owned with the Commissariat à l'Énergie Atomique et aux Énergies Alternatives (CEA) concerning a system for optimizing the removal and automatic insertion of the wafer bar holder of the cassette used to process wafers in fume cupboards. Furthermore, the generation and protection of the technological know-how necessary for the Gigafactory project continues at the 3SUN factory, mainly in the form of trade secrets;
  - in hydroelectric generation: a patent application for a utility model for a robotic solution that facilitates plant control, allowing the inspection of difficult-to-access locations, such as hydroelectric spirals, distributor vanes or small-diameter hydroelectric pipelines.

- Enel Grids filed two patent applications for inventions in 2022: one in the field of asset recognition and anomaly detection for grids and grid events (Project ODIN) and the other in the field of safety devices for workers working at height. We also note: (i) the registration of a design for a new sustainable road cab, which will be implemented using recycled materials to reduce the environmental impact; and (ii) the filing of a patent application for a utility model in the safety field, consisting of a method for the delimitation of road construction sites.
  Also during the year, Gridspertise consolidated its IP portfolio by filing a patent application relating to the Quantum Edge - Qed® device, which exploits edge computing to digitalize the physical components of secondary substations, reduces installation, training and operating and maintenance costs and increases network reliability.

- Global e-Mobility has protected the JuiceBox DC and JuiceBox 4.0 smart home charging devices respectively using: (i) an international design registered in the European Union, the United Kingdom and the United States and (ii) an international design registered in Canada, Mexico and the United States. Intellectual property protection for electric vehicle charging stations has also been extended to the registration in the European Union and in the United States of the designs of the JuiceMedia 2.0 and JuiceMod products.

- Enel Global Services filed a patent application in Italy for an industrial invention on the innovation management method, also protected as the trademark ENEL OOPS...! INNOVATION®. This method is based on the improvement of industrial processes using Open Innovability® tools.

More generally, the Group continues to invest resources in the development of solutions with a high IP density, which is mainly expressed in the forms of copyright protection and trade secrets for databases and forecasting algorithms for the electricity and gas markets, advanced quantitative models that use scenario data to evaluate the impact of climate change on specific assets/production

activities. In particular, this activity includes development models designed to: (i) characterize the ability of an asset to "resist" the possible effects of climate change; (ii) quantify the probability that an event or a combination of climate events will damage a plant; and (iii) provide an index of "weakness" for the asset, including in distributed form, with a specific technical approach to prioritize actions/fields for improvement.

Digitalization

In 2022, innovation activities in the field of cyber security benefited from the network of Innovation Hubs, as well as from their portfolio of startups and partnerships forged at the Group level.
These interconnections have enabled the sharing of best practices and operating models, as well as the construction and enhancement of info-sharing channels.
The main initiatives in this area are reported below:

- analysis of solutions based on Quantum Key Distribution and Quantum safe encryption algorithms to enhance understanding of how to remedy current encryption models under threat from the future increase in computational capacity offered by quantum computing;
- software development support services and solutions to analyze open source code and third-party software libraries, both from the point of view of any vulnerabilities and from the point of view of user licenses;
- analysis of browser isolation solutions (isolation of the browser from the network to prevent it from becoming an entry point for malicious actors) and browser security to understand the resilience of central protection techniques compared with distributed approaches;
- virtual authentication solutions based on machine learning and artificial intelligence for distributed devices with low computational capabilities;
- services for identifying vulnerabilities in assets and third-party services used by the organization that could undermine the security of the organization itself (external attack surface);
- solutions that exploit the greater potential of artificial intelligence and machine learning to enhance capabilities in detecting IT threats and automating the process of analysis, correlation and response to incidents;
- solutions for identifying vulnerabilities of assets and devices (mobile devices, IoT, web applications, etc.) with the help of innovative techniques;
- review of industrial environments through the implementation of a vulnerability identification process with scripts without impacting the operating environments.

Managing cyber security at Enel

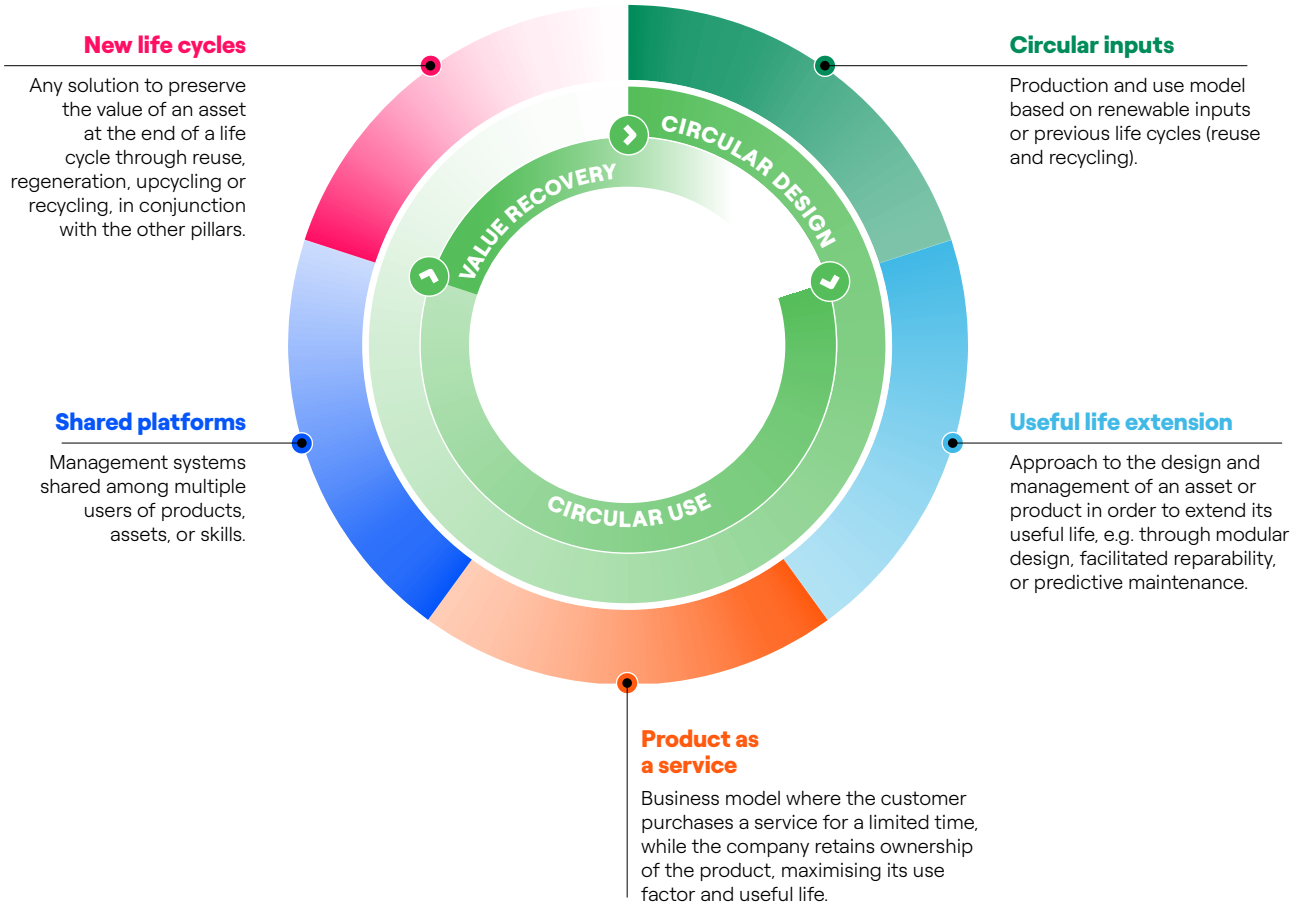
Enel has set up its own CERT (Cyber Emergency Readiness Team) to proactively manage and respond to cyber incidents, encouraging collaboration and exchange of information with relevant stakeholders in order to protect the Group's constituency, i.e., all employees and assets (plants, infrastructures, IT and OT objects and in general any device instrumental to the Group's business). On average, the CERT monitoring registers 3 billion events relating to corporate assets from around 7,000 data sources every day, correlating them through automatic analysis, and producing an average of 300 "incidents" per day. This data is collected globally on a Security Information and Event Management (SIEM) platform to identify potential threats and vulnerabilities before they can disrupt business operations and classify anomalous behavior on the network, in order to monitor and optimize management of security incidents.
The incidents are classified on the basis of a specific impact matrix (Enel Cyber Impact Matrix), on a scale from 0 to 4. The majority of accidents, having no significant impact on the Group's systems, are classified at level 0/1 and are automatically or semi-automatically blocked or managed by existing corporate defenses. Incidents classified as level 2, 3 or 4, which by contrast could have a potential impact on the Group, are managed directly by CERT analysts involving the interested stakeholders.
Incident management by its very nature must evolve over time to face a complex and constantly changing cyber landscape. In fact, since the establishment of the CERT, the number of events to be managed has increased, as has the perimeter to be protected, driving the introduction of new technologies and the integration of increasingly specialized skills. An evolution in this direction is represented by the integration of SOAR and machine learning. The former, the acronym for Security Orchestration, Automation and Response, is a software product that enables the automation of repetitive tasks through the definition of automatic operational flows. The latter is a branch of artificial intelligence that deals with creating systems that learn or improve performance based on the data they use. These technologies allow for the acceleration, enrichment and uniform tracking of the activities necessary during the analysis and management phases of an incident, providing great support to analysts, who are thus able to parallelize

and concentrate on the more complex activities that require human intervention.
Another significant evolution involving CERT in 2022 was the enhancement of the internal team with new cyber security professionals.

The circular economy

The circular economy has been a strategic driver for Enel since 2015 and is therefore integrated into all the Group's activities in order to make the business model more sustainable and competitive.
The circular economy is a key element in the transition towards a sustainable economic model thanks to its integrated approach in the use of natural resources, whether they be renewable sources, fuels or raw materials. Decarbonization and electrification are not separate from circularity, but rather are part of a single paradigm aimed at developing a new economic model to reduce dependence on raw materials as much as possible, ensuring full environmental and social sustainability and the competitiveness of the business model.

The Group's vision is based on five pillars, which act through three main levers: design (starting from the choice of input materials, planning focusing on extending useful life, maximizing the utilization factor of the asset and the value recoverable at the end of its life), the methods of use of the asset (i.e., the extension of the useful life, sharing, product as a service) and closing the loop of the cycles (i.e., reuse, remanufacturing, recycling and reuse of recovered materials as new circular input).



The circular model has therefore been implemented in all Group activities, with the aim of redesigning the value chain in order to reduce the consumption of resources and the related social and environmental impacts and make the business model more competitive by reducing geopolitical and price risks linked to the procurement of raw materials, especially critical commodities. In this regard, Enel's initiatives include promotion of the use of renewable resources or resources deriving from previous life cycles (for example, the use of recycled plastic for smart

meters or for charging infrastructure for electric vehicles) and identifying new solutions that use alternative materials and approaches (for example, gravity or thermal storage, which use more sustainable materials, such stone, than chemical storage systems).

By its very nature the circular approach is an open approach, seeking continuous collaboration with the various stakeholders and an enlarged ecosystem (suppliers, customers, institutions, innovation ecosystem, etc.) that is not limited only to one's specific sector, including counterparties in new sectors and areas with which synergies can be developed. For this reason, Enel has implemented the Circular Procurement Strategy, which aims to improve the circularity of the products and services purchased and is also developing tools and new approaches to improve the tracking of materials and their impacts along the value chain, in order to incentivize suppliers to make the use of resources more efficient by recycling and recovering them at the end of their life.

Since the initial stages of adopting the circular approach, Enel has leveraged the measurement of the environmental and economic benefits of circularity, understanding that a model must be measurable in order to be not only sustainable but also economically competitive. As part of the 2023 World Economic Forum in Davos, Enel launched a new KPI for measuring circularity, Economic CirculAbility©, which considers the Group's overall EBITDA and compares it with the quantity of resources consumed, including both fuel and commodities, along the entire value chain from the various business activities. At the same time, the Group has undertaken to double this indicator by 2030 compared with 2020, which means halving the amount of resources consumed compared with the EBITDA generated. Enel thus becomes the first company in the world to adopt a circularity indicator of this type, and to set itself such an ambitious goal.



People centricity

People management and development at Enel

The Enel Group workforce at December 31, 2022 numbered 65,124 (66,279 at December 31, 2021). The contraction of 1,155 in the Group workforce in 2022 reflects the impact of the balance between new hires and terminations during the period (1,998) and is more than offset by the change in the consolidation scope (a total of -3,153), which included:

- the acquisition of Enel Hydro Appennino Centrale Srl in Italy;
- the acquisition of Melita Italia Srl in Italy;
- the disposal of PayTipper SpA in Italy;
- the disposal of CityPoste Payment SpA in Italy;
- the disposal of PayTipper Network Srl in Italy;
- the disposal of FlagPay Srl in Italy;
- the disposal of Gridspertise Srl in Italy;
- the disposal of Enel Geração Fortaleza SA, Celg Distribuição SA - Celg-D (Enel Goiás) and Gridspertise Latam SA in Brazil;
- the disposal of Teploprogress, LLC Enel Rus Wind Azov, LLC Enel Rus Wind Kola and Enel Russia in Russia;
- the disposal of Enel Transmisión SA in Chile;
- the disposal of Gridspertise Iberia SL in Spain.

The following tables analyze the number and variation in employees by gender, age group, job classification and geographical area. An analysis by business line is also provided for the number of employees only.

Year-end workforce

		2022	2021	Change	
Employees by gender:	no.	**65,124**	**66,279**	**(1,155)**	**-1.7%**
- of which men	no.	49,899	51,341	(1,442)	-2.8%
	%	76.6	77.5	-0.9	-1.2%
- of which women	no.	15,225	14,938	287	1.9%
	%	23.4	22.5	0.9	4.0%
Employees by age group:	no.	**65,124**	**66,279**	**(1,156)**	**-1.7%**
- <30	no.	8,543	7,761	782	10.1%
	%	13.1	11.7	1.4	12.0%
- 30-50	no.	36,795	38,024	(1,229)	-3.2%
	%	56.5	57.4	-0.9	-1.6%
- >50	no.	19,786	20,494	(708)	-3.5%
	%	30.4	30.9	-0.5	-1.6%
Employees by level:	no.	**65,124**	**66,279**	**(1,155)**	**-1.7%**
- senior manager	%	2.1	2.1	-	-
- middle manager	%	19.4	18.5	0.9	4.9%
- office staff	%	53.2	53.6	-0.4	-0.7%
- blue collar	%	25.3	25.8	-0.5	-1.9%
Employees by geographical area:	no.	**65,124**	**66,279**	**(1,155)**	**-1.7%**
- Italy	no.	31,664	30,276	1,388	4.6%
	%	48.6	45.7	2.9	6.3%
- Iberia	no.	9,643	9,518	125	1.3%
	%	14.8	14.4	0.4	2.8%
- Latin America	no.	17,361	18,763	(1,402)	-7.5%
	%	26.7	28.3	-1.6	-5.7%
- Europe	no.	3,532	4,994	(1,462)	-29.3%
	%	5.4	7.5	-2.1	-28.0%
- North America	no.	2,100	1,914	186	9.7%
	%	3.2	2.9	0.3	10.3%
- Africa, Asia and Oceania	no.	824	814	10	1.2%
	%	1.3	1.2	0.1	8.3%

Workforce by business line

No.

	at Dec. 31, 2022	at Dec. 31, 2021	Percentage of total continuing operations at Dec. 31, 2022	Percentage of total continuing operations at Dec. 31, 2021
Thermal Generation and Trading	6,447	7,847	10.4%	11.8%
Enel Green Power	9,397	8,989	15.2%	13.5%
Enel Grids	30,262	33,263	49.0%	50.2%
End-user Markets	5,418	6,148	8.8%	9.3%
Enel X	2,875	3,352	4.7%	5.1%
Holding, Services and Other	7,325	6,680	11.9%	10.1%
Total continuing operations	**61,724**	**66,279**	**100.0%**	**100.0%**
Total discontinued operations	**3,400**	**-**		
TOTAL	**65,124**	**66,279**		

Change in workforce

Balance at December 31, 2021	**66,279**
Hirings	6,412
Terminations	(4,414)
Change in consolidation scope	(3,153)
Balance at December 31, 2022	**65,124**

Breakdown of changes in workforce

		2022	2021	Change	
Hiring rate	%	**9.8**	**8.1**	**1.7**	**21.0%**
New hires by gender:	no.	**6,412**	**5,401**	**1,011.0**	**18.7%**
- of which men	no.	4,356	3,764	592	15.7%
	%	67.9	69.7	-1.8	-2.6%
- of which women	no.	2,056	1,637	419	25.6%
	%	32.1	30.3	1.8	5.9%
New hires by age group:	no.	**6,412**	**5,401**	**1,011**	**18.7%**
- <30	no.	3,359	2,579	780	30.2%
	%	52.4	47.8	4.6	9.6%
- 30-50	no.	2,905	2,653	252	9.5%
	%	45.3	49.1	-3.8	-7.7%
- >50	no.	148	169	(21)	-12.4%
	%	2.3	3.1	-0.8	-25.8%
New hires by geographical area:	no.	**6,412**	**5,401**	**1,011**	**18.7%**
- Italy	no.	2,866	1,697	1,169	68.9%
	%	44.7	31.5	13.2	41.9%
- Iberia	no.	741	693	48	6.9%
	%	11.6	12.8	-1.2	-9.4%
- Latin America	no.	1,542	1,704	(162)	-9.5%
	%	24.0	31.5	-7.5	-23.8%
- Europe	no.	443	439	4	0.9%
	%	6.9	8.1	-1.2	-14.8%
- North America	no.	614	636	(22)	-3.5%
	%	9.6	11.8	-2.2	-18.6%
- Africa, Asia and Oceania	no.	206	232	(26)	-11.2%
	%	3.2	4.3	-1.1	-25.6%

		2022	2021	Change	
Turnover rate	%	**6.8**	**8.8**	**-2.0**	**-22.7%**
Terminations by gender:	no.	**4,414**	**5,862**	**(1,448)**	**-24.7%**
- of which men	no.	3,391	4,779	(1,388)	-29.0%
	%	76.8	81.5	-4.7	-5.8%
- of which women	no.	1,023	1,083	(60)	-5.5%
	%	23.2	18.5	4.7	25.4%
Terminations by age group:	no.	**4,414**	**5,862**	**(1,448)**	**-24.7%**
- <30	no.	655	702	(47)	-6.7%
	%	14.8	12.0	2.8	23.3%
- 30-50	no.	1,759	2,275	(516)	-22.7%
	%	39.9	38.8	1.1	2.8%
- >50	no.	2,000	2,885	(885)	-30.7%
	%	45.3	49.2	-3.9	-7.9%
Terminations by geographical area:	no.	**4,414**	**5,862**	**(1,448)**	**-24.7%**
- Italy	no.	1,224	1,249	(25)	-2.0%
	%	27.7	21.3	6.4	30.0%
- Iberia	no.	578	956	(378)	-39.5%
	%	13.1	16.3	-3.2	-19.6%
- Latin America	no.	1,534	2,779	(1,245)	-44.8%
	%	34.8	47.4	-12.6	-26.6%
- Europe	no.	454	406	48	11.8%
	%	10.3	6.9	3.4	49.3%
- North America	no.	428	361	67	18.6%
	%	9.7	6.2	3.5	56.5%
- Africa, Asia and Oceania	no.	196	111	85	76.6%
	%	4.4	1.9	2.5	-

Training and development

The rapid, ongoing evolution of our business and the support of our strategy for a fair transition have resulted in a need for new technical and professional skills and led to the natural obsolescence of others. Within this landscape, ongoing employee training, along with strategies of upskilling, aimed at developing training and empowerment programs to improve performance within a given role, and reskilling, aimed at learning new skills and capabilities that enable people to fill new positions, are of increasing importance.

In 2022, in support of these strategies, we provided a total of about 3.1 million hours of training, up from the previous year (about 2.9 million hours in 2021), an average of more than 47 hours per employee (more than 44 hours per employee in 2021). This was made possible by the upgrading of digital tools and the E-Ducation platform, which ensured broad access to content and expanded the culture of digitalization for learning, including remotely. In Italy, we signed a remote-work agreement that allows employees in roles that can be performed remotely to work remotely for up to 60% of their total work days, with the option to increase that percentage in certain cases. This capacity for flexibility and resilience has drawn on the flexible working experience gained in Italy since as early as 2016 and then gradually extended throughout the Group and on the digital and technological transformation, which made Enel the world's first major utility company to fully embrace the cloud model.

In addition to training and awareness initiatives to accompany the adoption of fully digital modes of work, we have continued training programs related to conduct, technical issues, safety, reskilling, and the digital culture.

In line with the Group's commitment, the training budget has been increased compared with the previous year, with total training costs incurred in 2022 coming to about €30 million (about €20 million in 2021).

Average training hours per employee

		2022	2021	Change	
Average number of training hours	hrs/person	**47.4**	**44.6**	**2.8**	**6.3%**
Average number of training hours by level:					
- senior manager	hrs/person	44.1	29.6	14.5	49.0%
- middle manager	hrs/person	47.4	41.9	5.5	13.1%
- office staff	hrs/person	43.0	38.4	4.6	12.0%
- blue collar	hrs/person	57.1	60.3	(3.2)	-5.3%
Average number of training hours by gender:					
- men	hrs/person	48.3	46.5	1.8	3.9%
- women	hrs/person	44.3	37.7	6.6	17.5%

In 2022, with regard to the development and assessment of Enel's people, we continued with the program Open Feedback Evaluation (OFE), a mechanism for the constant, 360° gathering of feedback from all employees, thereby creating an ongoing dialogue within the organization.
The new OFE model is made up of three interdependent dimensions: "Talent", which highlights an individual's skills related to the four Open Power values of Trust, Responsibility, Innovation and Proactivity; "Generosity", meaning a propensity for interacting with others; and "Action", i.e., the ability, as assessed by both superiors and peers, to achieve professional objectives.

With a view to promoting and developing individuality, mechanisms such as job shadowing, mentoring and coaching are available to increase awareness of and express one's talents, while promoting a climate of inclusiveness and active listening. This year, 667 employees worldwide were involved in mentoring initiatives (325 mentees and 342 mentors).

Finally, with regard to acknowledging the value of people, we made the transition in 2022 from a system based on assessments for entering management positions to the development of a program of empowerment that helps people to be more aware of their specific talents, attitudes, preferences and aspirations, while supporting them in more complex roles within the organization.
Within this context, new selection criteria have been introduced into the annual plan of management succession aimed at greater inclusiveness and at valuing diversity. More specifically, we have removed the age limit for eligibility in the succession plan and introduced a parameter than ensures at least 50% of all successors are women, while also incentivizing the inclusion of office staff among the appointments.

Open Listening and organizational wellness

At the end of 2022, we issued a new Open Listening survey concerning the organization's global corporate climate. The 2022 survey was completed by 75.6% of all Group employees, and the overall job-satisfaction rate was 89.6%. The goal of the survey is to measure employee wellness and job satisfaction through active listening in a number of areas of importance to the organization (including work-life balance, networking, training, diversity and inclusion).

In addition, in 2021, Enel worked with employees to create a global wellbeing model founded on eight pillars with an impact on overall satisfaction, namely: emotional, physical, social, ethical, financial and cultural wellbeing, work-life harmony, and sense of protection. To measure wellness and understand what is of greatest importance to people, a global wellbeing survey has been conducted. The results of the 2021 survey, which was repeated in October 2022 with the added dimension of motivation, led to the preparation and launch of the 2022 Global Wellness Program involving a diverse, multicultural team. The program is intended for all Enel employees and features an experience that is both physical and digital. As for results, the surveys measured an overall sense of wellness, worldwide, of 60%, meaning that 60% of all those surveyed reported feeling average to high levels of satisfaction with their own wellness.

Including diversity at Enel

At Enel, inclusion, wellness, engagement and value creation are fundamental aspects of our approach with our people. Our approach to diversity and inclusion is based on the principles of non-discrimination, equal opportunities, personal dignity, inclusion regardless of any form of diversity, and work-life balance. This approach is embodied in an organic set of actions that promote an attention to and expression of individuality, a culture of inclusiveness without prejudice, and a coherent mix of talents, qualities and experience, all of which creates value for our people and for our business.

The approach has been ratified in our Charter for the Individual, a protocol of intent that Enel signed on March 29, 2022, underscoring the importance of personal wellbeing and integrity to a healthy, safe, motivating and engaging ecosystem able to express its full potential.

This is an innovative protocol, a new model designed in this unprecedented era of uncertainty due to the COVID pandemic, which has transformed working relationships and has presented us with an extraordinary opportunity for change, capping off a cultural transformation at Enel that had already begun some time before. In processes of digital, cultural and energy transition, people are the key to our success – our true competitive advantage. Managing these times of rapid change calls for inclusiveness, especially in the workplace. It is out of this awareness that our Charter of the Person aims to value the individual as a key player in an ecosystem in which the Company and the trade unions work together to create a healthy, safe, motivating and engaging workplace – a workplace in which wellness, productivity, continuous learning, and safety can work in concert towards the complete fulfillment of the individual, with an ever greater role for, and hence accountability of, the person.

The milestones that have brought us to today began back in 2013 with publication of our policy on Human Rights. This was followed, in 2015, by Enel's adoption of the seven Women's Empowerment Principles (WEPs) promoted by the UN Global Compact and UN Women and the parallel publication of the policy on Diversity and Inclusion, which defines the principles of non-discrimination, equal opportunities, dignity, work-life balance, and inclusiveness regardless of any form of diversity. In 2019, our Workplace Harassment Policy introduced the issues of individual respect, integrity and dignity in the workplace into the prevention of all types of harassment, and these principles were disseminated in 2020 when we published online Enel's Statement Against Harassment in the workplace.[43]

In 2021, we issued our global policy on Digital Accessibility to ensure equal opportunities in access to digital systems and information.

In recent years, intensive awareness efforts have led to the dissemination and strengthening of a culture of inclusion at all levels and in all settings within the organization by way of communication campaigns and local and global events focused on a range of issues. Of note among the most important initiatives in 2022 are the actions dedicated to having a systemic impact on various aspects of the gender gap and the inclusion of disabilities, new global initiatives of STEM awareness, projects to support the vulnerable, initiatives related to cultural diversity in various countries, and events to raise awareness of the concept of individuality and uniqueness. In particular, we organized the global event YOUniqueness Makes the Difference aimed at exploring the concept of individual uniqueness in relationships and in the organization, and we completed the provision of training throughout the Group entitled Beyond Bias and Harassment in the Workplace.

Promoting a culture of inclusiveness at Enel also involves target setting and measurement. It is an approach that is encapsulated in an organic plan of actions measured by way of a broad set of KPIs subject to commitments approved by the corporate boards and published in the Sustainability Report and Plan. These commitments include: balancing the percentage of women in hiring processes; increasing the representation of women in senior and middle management and in succession plans; increasing the number of female students involved in STEM-awareness initiatives; and promoting projects for the inclusion of employees with disabilities at all stages of the employee journey.

More specifically, in terms of gender equality, company strategy is organized into various lines of action. We are working to increase the presence of women in hiring processes, reaching 52.2% in 2022 (52.1% in 2021) and continuing the upward trend of the last five years. In terms of women in management positions, we have seen both the number and the percentage of female managers continue to climb, increasing by 1.3 percentage points in 2022 (from 23.6% in 2021 to 24.9% in 2022). Actions to value the contribution of women throughout the organization, and not just in senior positions, have also continued, and the effects of these efforts will be better seen over the medium to long term, due in part to generational dynamics. Among the actions taken globally, the performance target for the percentage of women in top management succes-

(43) https://www.enel.com/content/dam/enel-com/documenti/investitori/sostenibilita/enel-statement-against-harassment.pdf.

sion plans has been confirmed for 2024 targets under the Long-Term Incentive Plans, and the weighting has been increased from 5% to 10% of the total in order to lend greater continuity to a policy to establish a suitable platform for management appointments into the near future.

Over the years, we have also increased our commitment to promote the presence of women in Science, Technology, Engineering and Math (STEM) training and careers in collaboration with schools and government, so as to overcome gender stereotypes and promote the importance of STEM and its integration with the humanities. These STEM awareness and orientation initiatives reached nearly 10,000 female secondary-school students in 2022 and more than 30,000 female students over the last six years.(44)

On the issue of disabilities, Enel provides equipment, services, working methods and other initiatives to create an inclusive climate for work and relationships for all that provides full autonomy at work regardless of the disability. Worldwide, we have 2,129 employees with disabilities. The issue is particularly relevant in Italy (with 1,568 employees with disabilities, about 74% of the Group total).

With Enel's participation in the global "Valuable 500" initiative in 2019, the issue became one of great interest, leading, in 2020, to the launch of the global project "Value for Disability", aimed at seizing potential business and promoting inclusion among employees and customers with disabilities by designing specific global and local plans of action. Every country with at least one employee with a disability has a focal point for hearing and responding to specific needs and designing dedicated actions, as stated in the Diversity and Inclusion Policy. Many countries have also organized initiatives focused on intercultural and intergenerational issues and on the LGBTQ+ community.

Finally, to promote care for all people who find themselves in circumstances that have had an impact on work, the MaCro@Work Caring Program for employees with chronic disorders and the Parental Program to support parenting throughout the Group are continuing in the various countries to which they have been extended.

The table below shows Enel's commitment to diversity and inclusion, including the percentage of employees with disabilities, the number of women in senior and middle management, and the ratio of the average salaries of women to those of men.

Diversity and inclusion

		2022	2021	Change	
Disabled personnel or personnel belonging to protected categories	%	**3.3**	**3.2**	**0.1**	**3.1%**
Women in senior and middle management	no.	**4,462**	**4,163**	**299**	**7.2%**
Percentage of women in senior and middle management	%	**31.8**	**30.6**	**1.2**	**3.9%**
Percentage of women in management succession plans	%	**46.1**	**42.7**	**3.4**	**8.0%**
Percentage of women in senior management succession plans	%	**50**	**-**	**50**	**-**
Base salary and remuneration ratios					
Ratio of base salary women-to-men:	%	**104.7**	**104.8**	**-0.1**	**-0.1%**
- senior manager	%	83.9	84.6	-0.7	-0.8%
- middle manager	%	92.8	94.2	-1.4	-1.5%
- office staff	%	88.8	88.4	0.4	0.5%
- blue collar	%	125.0	111.2	13.8	12.4%
Ratio of base remuneration women-to-men:	%	**105.4**	**105.1**	**0.3**	**0.3%**
- senior manager	%	80.7	81.1	-0.4	-0.5%
- middle manager	%	91.9	93.2	-1.3	-1.4%
- office staff	%	89.3	88.4	0.9	1.0%
- blue collar	%	125.4	112.0	13.4	12.0%

(44) Beginning in 2022, the figure only includes initiatives targeting primary and secondary schools.

Workplace health and safety

The mental and physical health and safety of our people are the most important thing to protect at Enel in all areas of life. It is precisely in this view that Enel is committed to developing and promoting a strong culture of safety that ensures we provide a healthy workplace that is free from hazards for all who work with and for the Group.
The constant commitment of us all, the integration of safety both in our processes and in our training, the reporting and analysis events, rigor in the selection and management of contractors, constant control over quality, the sharing of experience, and benchmarking against the leading international players are all cornerstones to our culture of safety.

Ensuring the health and safety of our people is a responsibility for all who work at Enel. This is why, as established in the Group's Stop Work Policy, both employees and contractors are required to stop any work immediately that could put the health and safety of themselves or other as risk or, similarly, that could harm the environment or compromise the quality of any of its component parts.

Each of the Group's business line has its own ISO 45001 compliant Health and Safety Management System. This management system centers around the identification of hazards, the qualitative and quantitative assessment of risks, the planning and implementation of preventive and protective measures and the verification of their efficacy, the implementation of any corrective action, and the preparation of the operating teams.



The following table reports the main workplace safety indicators.

		2022	2021	Change	
Hours worked	millions of hours	**427.847**	**423.362**	**4.486**	**1.1%**
Enel	millions of hours	123.624	123.421	0.203	0.2%
Contractors	millions of hours	304.223	299.940	4.282	1.4%
Total Recordable Injuries (TRI)[1]	no.	**962**	**1,212**	**(250)**	**-20.6%**
Enel	no.	153	157	(4)	-2.5%
Contractors	no.	809	1,055	(246)	-23.3%
Total Recordable Injury Frequency Rate (TRI FR)[2]	i	**2.25**	**2.86**	**(0.61)**	**-21.3%**
Enel	i	1.25	1.27	(0.02)	-1.6%
Contractors	i	2.66	3.52	(0.86)	-24.4%
Fatal injuries (FAT)	no.	**6**	**9**	**(3)**	**-33.3%**
Enel	no.	1	3	(2)	-66.7%
Contractors	no.	5	6	(1)	-16.7%
Fatal Injury Frequency Rate (FAT FR)	i	**0.014**	**0.021**	**(0.007)**	**-33.3%**
Enel	i	0.008	0.024	(0.016)	-66.7%
Contractors	i	0.016	0.020	(0.004)	-20.0%
Life Changing Accidents (LCA)[3]	no.	**2**	**4**	**(2)**	**-50.0%**
Enel	no.	-	1	(1)	-
Contractors	no.	2	3	(1)	-33.3%
Life Changing Accidents (LCA) frequency rate	i	**0.005**	**0.009**	**(0.004)**	**-44.4%**
Enel	i	-	0.008	(0.008)	-
Contractors	i	0.007	0.010	(0.003)	-30.0%
Lost Time Injury Rate with days lost (ACC>3 FR)[4]	i	**0.36**	**0.43**	**(0.07)**	**-16.3%**
Enel	i	0.48	0.49	(0.01)	-2.0%
Contractors	i	0.31	0.40	(0.09)	-22.5%
Lost Time Injury Frequency Rate with days lost (LTI FR)[5]	i	**0.50**	**0.65**	**(0.15)**	**-23.1%**
Enel	i	0.56	0.68	(0.12)	-17.6%
Contractors	i	0.48	0.64	(0.16)	-25.0%
High Potential Accidents Frequency Rate (HPO FR)[6]	i	**0.072**	**0.094**	**(0.022)**	**-23.4%**
Enel	i	0.057	0.065	(0.008)	-12.3%
Contractors	i	0.079	0.107	(0.028)	-26.2%

(1) Total Recordable Injuries (TRI): this includes all incidents that have caused injuries, including lost time injuries, incidents requiring the administration of first aid, or incidents that did not result in lost time.
(2) Total Recordable Injury Frequency Rate (TRI FR): as for all the frequency rates for the various types of incidents, this is calculated as the ratio of number of events to total hours worked (in millions).
(3) Life Changing Accidents (LCAs): injuries whose health consequences caused permanent changes in the life of the individual (e.g., amputation of a limb, paralysis, extensive and visible scarring, etc.). Beginning with the 2021 reporting cycle, the metric Life Changing Accidents replaced High Consequence Injuries following efforts to standardize safety reporting within the organization. Therefore, the figures for 2020 and 2019 have been recalculated in line with this new approach.
(4) Lost Time Injury Rate with days lost is calculated considering accidents in which the worker lost at least three days of work.
(5) Lost Time Injury Frequency Rate (LTI FR): all injuries that have resulted in at least one day of absence from work shown as a ratio to total hours worked (in millions).
(6) High Potential Accidents Frequency Rate (HPO FR): all injuries the characteristics of which have a high potential for causing a life-changing or fatal event, shown as a ratio to total hours worked (in millions).

Compared with the previous year, 2022 shows a significant reduction in all injury indicators, while the total number of hours worked remained nearly constant (+1.1%).
In 2022, the Total Recordable Injury Frequency Rate (TRI FR) decreased from 2021 by 21.3% to about 2.2 injuries per million hours worked. This reduction is seen in both Enel employees (-1.6%) and in contractor personnel (-24.4%).

In addition, with regard to events of the greatest impact, there were:

- 6 fatal injuries, of which 1 involving a Group employee (at Enel Grids in Romania) and 5 involving contractors (all involving Enel Grids: 3 in Brazil, 1 in Italy and 1 in Argentina). The causes of these incidents are primarily associated with electrical risk (5) and mechanical risk (1);

- 2 life-changing accidents involving contractor personnel, one working for Enel Grids in Brazil, the other for Enel X in Chile.

In 2022, there were 217 cases of Extra Checking on Site (ECoS), which are internal environment and safety assessments with the goal of verifying the adequacy of organization and processes in a specific area of Group operations. These checks are conducted by specialist HSEQ personnel from outside the units being assessed, assisted by technicians specialized in the specific business.

With regard to incident detection, analysis and management, the Group follows Policy 106 - Classification, communication, analysis and reporting of incidents, which establishes the roles and procedures that ensure the timely reporting of accidents, analysis of their causes, and definition and monitoring of improvement plans based on the type of incident.

Based on the evidence to come out of the monitoring system, we have implemented a data-driven approach based on analytics and other digital tools that enable us to assess the performance of internal units and suppliers, to identify the areas at greatest risk of fatal or life-changing injuries, and to then establish procedures for managing them. This approach is supported by the collection and dissemination of best practices, which are integrated into ongoing training in order to prevent repeat occurrences of the given incident type.

With regard to suppliers,[45] the approach of the Enel Group is to consider each to be a partner with which we share the cardinal environment and safety rules. As such, these issues are integrated into the tender process, and supplier performance is assessed both as part of the qualification process and when carrying out the contract by way of numerous controls and other mechanisms, including: the Health, Safety and Environment (HSE) Terms, the Supplier Performance Management (SPM) process, the Contractor Assessment (CA) process, and Evaluation Groups (EGs).

As for safety, health, too, is a fundamental value in our focus on individual growth and wellness. For this reason, the Enel Group has adopted a structured health management system based on preventive and protective measures and is committed to developing a corporate culture that promotes psycho-physical health, organizational wellbeing and a balance between personal and professional life.

To this end, both globally and locally, Enel: promotes initiatives aimed at improving the quality of a typical workday in terms of both physical and emotional wellbeing; designs awareness campaigns to promote a healthy lifestyle; sponsors screening programs aimed at preventing illness; and provides facilitated access to medical and other healthcare services, assistance for people with disabilities, and specific initiatives of preventive medicine.

In order to support the change process and ensure the dissemination of a strong culture of safety throughout the organization, the Enel Group has established a detailed process for the provision and management of training for all employees. In 2022, a total of about 1.245 million hours of health and safety training was provided to Enel employees.

In particular, within the HSEQ unit of the holding company, there is the unit known as SHE Factor, the mission of which is to implement, integrate and harmonize throughout the Group dedicated training programs aimed at promoting a new mentality concerning a better way to work that is safer for people and more sustainable for the environment, such as the courses Safety Leadership, Stop Work Policy, and Buddy Partners.

(45) Supplier: any individual or organization (lead contractor, sub-contractor, consortium, business grouping, or independent contractor), other than employees of the Enel Group, that provides a service or performs work under an agreement signed by a company of the Enel Group.

Responsible relations with communities

No. (million)	2022	2021	Change
Access to accessible and clean energy	15.6	13.2	2.4
Quality, fair and inclusive education	3.7	3.0	0.7
Decent work and economic growth	4.9	3.7	1.2

Establishing solid and lasting relationships with local communities in the countries in which Enel operates is a fundamental pillar of the Group's strategy, underpinning a model of development and management of the business that leaves no one behind and creates long-term shared value for all stakeholders. This model has been incorporated along the entire value chain and is divided into six main steps such as the analysis of the contexts already in the initial phase of the business projects, the mapping and analysis of stakeholders and their priorities, the development of the materiality matrix to then plan and manage sustainability projects, which are evaluated at different stages of project implementation. Models of sustainable construction sites and plants are also included in the approach. A further evolution has been the extension of this approach to the design, development and supply of energy services and products, as well as in the innovation of processes by using new technologies and helping to build increasingly circular, inclusive and sustainable communities.
In line with the Sustainable Development Goals (SDGs), Enel makes a concrete contribution to the sustainable progress of the territories in which it operates. This commitment is fully integrated into our purpose and corporate values, from the expansion of infrastructure to education and vocational training programs, and projects to support cultural and economic activities. Specific initiatives have been designed to promote access to energy with rural and suburban electrification, addressing energy poverty and promoting social inclusion for the most vulnerable segments of the population, also using new technologies and circular economy approaches and adopting a strategy that fully incorporates sustainability into our business model and activities. Various initiatives have been developed globally for the protection of biodiversity, in line with the Group's decarbonization strategy.

There are two major challenges in particular: the equitable and sustainable transition and the post-pandemic recovery.
The energy transition represents an important accelerator of growth and modernization of industry, thanks to the potential it offers in terms of economic development, well-being, quality of life and equality. Far-sighted policies are necessary to seize these opportunities, ensuring a just and inclusive transition and taking particular account of the needs of the social categories most exposed to change. Enel is convinced that in order to generate lasting profit, value must be shared with the entire environment in which it operates.
With the continuation of the COVID-19 pandemic, our commitment to support communities has also continued, with the activation of specific initiatives to sustain socio-economic recovery through the development of local marketplaces, facilitating access to credit and promoting inclusive business models to support the weaker segments of the population, with particular attention to people in physically, socially and economically vulnerable positions. Many digitalization projects have also been undertaken to support connectivity in rural areas, computer literacy, the participation of women in STEM fields, e-commerce platforms and online or offline solutions with a positive impact on local economies.
In 2022, Enel developed over 2,300 sustainability projects involving more than 6.3 million beneficiaries in the countries in which Enel operates. In line with the SDGs, the projects concern activities such as the expansion of infrastructure, vocational education and training programs, projects to support cultural and economic activities, promotion of access to energy, rural and suburban electrification, addressing energy poverty and the promotion of social inclusion for the most vulnerable categories of the population. A fundamental lever in the realization of these projects is the use of over 1,200 active international partnerships with non-profit organizations, social enterprises, startups and institutions with close ties to the area.
An approach that leads to the implementation of a wide range of projects in different areas, thanks in part to the activation of virtuous ecosystems such as the Open Innovability® platform, which is based on openness and sharing, facilitating and promoting the identification of innovative social ideas and solutions.

The involvement of local communities is essential to develop a constructive dialogue that can actively contribute to facing the challenges posed by the social impacts of the decarbonization of the economy and to identify effective measures to respond to local needs in synergy with corporate objectives.

Sustainable supply chain

		2022	2021	Change	
Active suppliers	no.	20,434	11,311	9,123	80.7%
Suppliers (FTE)	no.	172,854	170,421	2,433	1.4%
Qualified suppliers assessed for ESG issues	%	99	99	-	-
Qualified suppliers assessed for social issues (including human rights and health and safety) for all goods categories	%	99	99	-	-
Qualified suppliers assessed for environmental issues for all goods categories	%	99	99	-	-

At Enel, purchasing processes are based on conduct oriented towards reciprocal good faith, transparency and collaboration. Suppliers are asked not only to meet the necessary quality standards but also to commit themselves to adopting best practices in the fields of human rights and the environment.
This is pursued within clear references to codes of conduct, including the Group's Human Rights Policy, the Code of Ethics, the Zero-Tolerance-of-Corruption Plan and global compliance programs.

In 2022 we signed agreements with a total of more than 6,213 vendors.

Assessments of environmental, social and governance aspects are conducted at all procurement phases, i.e., in the qualification phase, in the tender and contracting process and in the performance monitoring phase. Enel's global vendor qualification system (with about 31,400 active qualifications at December 31, 2022) enables us to accurately assess businesses that intend to participate in tender processes through the analysis of compliance with technical, financial, legal, environmental, human (including health and safety), ethical rights and integrity requirements. The company must continue to meet these requirements throughout the duration of their qualification. Accordingly, companies already included in Enel's Register of Qualified Suppliers are constantly monitored for events involving both the company itself and its main officers, mainly through the use of external databases. As regards the tendering and bargaining process, in line with Enel's commitment to introduce sustainability issues, the Company has adopted a structured process for defining "sustainability requirements and rewarding factors (K)" which can be used by the various purchasing and monitoring units throughout the period of execution of the contract. The process provides for the presence of two "Libraries", which catalog all the sustainability requirements and Ks grouped into social, environmental and circularity certification macro-categories. Furthermore, specific contractual clauses have been defined, which are included in all works, service and supply contracts and updated periodically, to take account of various regulatory developments and ensure alignment with international best practices.
The General Terms of Contract refer to the current regulations on pay, contributions, insurance and taxation for all workers employed in any capacity in the execution of the contract by the supplier. Furthermore, the principles referred to in the relevant ILO Conventions and provisions of law are explicitly referred to: equal treatment, prohibition of discrimination, abuse and harassment; trade union freedom, association and representation; refusal of forced labor; safety and environmental protection and sanitation conditions. In the event of conflict between regulatory sources, the more restrictive shall prevail. Vendor performance is evaluated and monitored along the entire procurement process. In particular, the monitoring systems employed during execution of the contract include Supplier Performance Management (SPM), whose objective within our collaboration with vendors is not only to undertake any corrective actions in the contract execution phase, but also to encourage a process of improvement using actions that reward the adoption of best practices. The process is based on an objective and systematic collection of data and information relating to the execution of the service covered by the contract. These data are used to produce specific indicators, also called categories (Quality, Punctuality, Health and Safety, Environment, Human Rights & Correctness, Innovation & Collaboration), which, when combined in a weighted average, represent the Supplier Performance Index (SPI).
Through the SPM process, 701 goods categories and 7,666 vendors were monitored in the last year (compared with 698 goods categories and some 6,782 vendors in 2021).

Meetings with suppliers continued in 2022 with a focus on decarbonization issues, circularity and human rights with a view to jointly developing practices and common approaches and to accompany suppliers in along the virtuous path of sustainability.

Significant events in 2022

Enel finalizes the acquisition of 527 MW of hydro plants from ERG

On January 3, 2022 Enel Produzione SpA finalized the acquisition of the entire share capital of ERG Hydro Srl (subsequently renamed Enel Hydro Appennino Centrale Srl and merged into Enel Produzione on December 1, 2022) from ERG Power Generation SpA for €1,267 million. The plants owned by Enel Hydro Appennino Centrale Srl, located in the Umbria, Lazio, and Marche regions, have an installed capacity of 527 MW and an average annual production of around 1.5 TWh.

Enel places a triple-tranche €2.75 billion sustainability-linked bond in the Eurobond market

On January 10, 2022, Enel Finance International NV, the Dutch-registered finance company controlled by Enel SpA, placed a triple-tranche €2.75 billion sustainability-linked bond, linked to the achievement of Enel's sustainability objective relating to the reduction of direct greenhouse gas emissions (Scope 1), contributing to United Nations Sustainable Development Goal 13 (Climate Action) and in line with the Group's Sustainability-Linked Financing Framework.

Fitch reviews Enel's long-term rating to "BBB+" and maintains the short-term rating at "F-2". Outlook stable

Fitch Ratings announced on February 4, 2022 that it had reviewed its long-term rating of Enel SpA to "BBB+" from its previous level of "A-". The agency maintained its short-term rating for Enel at "F-2". The outlook remains stable.
The rating agency affirmed that the change in Enel's rating mainly reflects the expected rise in leverage in the medium term, driven by the investment opportunities that have led Enel to progressively expand its capex plan within the energy transition.

Enel finalizes the renewal of its partnership with Cinven in Ufinet Latam

On March 24, 2022 Enel X International Srl, a fully-owned subsidiary of Enel X Srl, closed the agreement signed on December 21, 2021 with a holding company controlled by the Sixth Cinven Fund and with a holding company controlled by the Seventh Cinven Fund. Under the agreement Enel X International acquired 79.4% of the share capital of Ufinet Latam SLU from the Sixth Cinven Fund and simultaneously sold 80.5% of the company's share capital to the Seventh Cinven Fund. As a result, Enel X International now indirectly retains a stake equal to 19.5% of Ufinet, renewing the partnership in the company with Cinven.
More specifically, Enel X International, which previously indirectly owned a stake of 20.6% in the company, has exercised the call option to acquire the remaining 79.4% for €1,320 million. At the same time, Enel X International has received an amount of €207 million as distribution of available reserves from Ufinet and has simultaneously sold 80.5% of the company's share capital to the Seventh Cinven Fund for €1,186 million.
Under said agreement, Enel X International, on top of indirectly retaining 19.5% of the share capital of Ufinet, keeps a representation in the latter and its holding company's boards of directors, retaining standard minority protection rights.

Enel launches a £750 million sustainability-linked bond in a single tranche

On April 5, 2022, Enel Finance International NV has placed a pound sterling sustainability-linked bond in the market, linked to the achievement of Enel's sustainability objective relating to the reduction of direct greenhouse gas emissions (Scope 1), contributing to the United Nations Sustainable Development Goal 13 (Climate Action) and in compliance with the Group's Sustainability-Linked Financing Framework.

Enel agrees on a €600 million facility with the European Investment Bank and SACE for sustainability-linked financing in Latin America

On April 11, 2022, Enel, the European Investment Bank (EIB) via its development branch EIB Global, and SACE, the Italian export credit agency, joined forces to support the development of renewable energy and energy efficiency programs in Latin America through a sustainability-linked financing framework which foresees a multi-country, multi-business and multi-currency facility of up to €600 million (equal to over $650 million), backed by a guarantee from SACE.
As part of the agreement, Enel Green Power Perú SAC, a subsidiary of Enel Group, was granted $130 million, earmarked to implement wind and solar photovoltaic projects for nearly 300 MW in Peru. The remainder of the €600 million facility will support the growth of the Enel Group's sustainable investments in Brazil and Colombia through renewable energy generation and power distribution projects.

Enel increases sustainability-linked revolving credit facility to €13.5 billion

On May 11, 2022, Enel SpA and its Dutch subsidiary Enel Finance International NV (EFI) entered into an amendment and restatement agreement to increase by €3.5 billion the amount of the €10 billion sustainability-linked revolving credit facility signed in March 2021 with a pool of financing institutions. The agreement envisages that the €3.5 billion increase will be made available for three years, up until May 2025, and, alongside the main €10 billion tranche maturing in May 2026, will be utilized to meet the Group's financing needs, therefore strengthening its strong liquidity position.
The credit facility, whose main financing conditions did not change following the amendment and restatement agreement, is linked to the Key Performance Indicator (KPI) related to direct green house gas emissions intensity (Scope 1), contributing to the achievement of the United Nations Sustainable Development Goal (SDG) 13 "Climate Action".
The transaction is part of Enel's financial strategy, which is increasingly characterized by sustainable finance and in line with the objective to achieve a share of sustainable finance sources on Group's total gross debt equal to around 65% in 2024 and more than 70% in 2030, as outlined in the Group's Strategic Plan.

Enel successfully launches a multi-tranche $3.5 billion sustainability-linked bond in US and international markets, the world's first by a multinational energy group involving a full decarbonization path

On June 9, 2022, Enel Finance International NV (EFI), the Dutch-registered finance company controlled by Enel SpA, launched a multi-tranche sustainability-linked bond for institutional investors in the US and international markets totaling $3.5 billion, equivalent to about €3.3 billion.
The bond is linked to the achievement of Enel's sustainability objective relating to the reduction of direct greenhouse gas emissions (Scope 1), contributing to United Nations Sustainable Development Goal (SDG) 13 ("Climate Action") and in accordance with the Group's Sustainability-Linked Financing Framework.
For the first time ever for a multinational energy group, a bond is linked to a trajectory towards full decarbonization, with a 30-year tranche of this issuance being linked to the Group's target of achieving zero direct greenhouse emissions by 2040 from the production of electricity and heat.

Enel purchases treasury shares serving its 2022 Long-Term Incentive Plan

On June 28, 2022, Enel SpA had purchased 394,500 treasury shares, between June 20 and 24, 2022, at a volume-weighted average price of €5.4063 per share on the Euronext Milan market organized and managed by Borsa Italiana SpA, for a total of €2,132,769.266.
The transaction marks the start of a share buyback program, implementing the authorization granted by the Shareholders' Meeting held on May 19, 2022 and resolved to serve the 2022 Long-Term Incentive Plan.

Enel and Intesa Sanpaolo jointly finalized acquisition of Mooney

On July 14, 2022 Enel, acting through its wholly-owned subsidiary Enel X Srl, and Intesa Sanpaolo SpA, acting through its subsidiary Banca 5 SpA, finalized the acquisition from Schumann Investments SA, a company controlled by the international private equity fund CVC Capital Partners Fund VI, of 70% of the share capital of Mooney Group SpA.

Specifically, after having obtained the required administrative authorizations, Enel X acquired 50% of Mooney's share capital, whereas Banca 5, which previously owned a 30% stake of Mooney, increased its participation to 50%, placing Mooney under the joint control of both parties.
On the basis of a €1,385 million enterprise value of 100% of Mooney, Enel X paid a total of approximately €225 million (including the price adjustment) for the equity portion and approximately €125 million for the purchase of a pre-existing credit of Schumann Investments SA against Mooney.
On July 25, 2022, all the activities related to Enel X's financial service business in Italy, marketed under the brand Enel X Pay, were sold to Mooney. Specifically, Enel X sold to Mooney, for about €140 million, its stakes equal to 100% of the share capital of Enel X Financial Services, CityPoste Payment, PayTipper, Junia Insurance and subsidiaries, hence creating a joint European-based fintech. These transactions are in line with Enel Group's 2022-24 Strategic Plan and fall under the Stewardship model.

Enel successfully launches a €1 billion sustainability-linked bond in the Eurobond market

On September 6, 2022, Enel Finance International NV, the Dutch-registered finance company controlled by Enel SpA, launched a sustainability-linked bond for institutional investors in the Eurobond market for a total of €1 billion.

The new issue is linked to the achievement of Enel's sustainable objective relating to the reduction of direct greenhouse gas emissions (Scope 1), contributing to United Nations Sustainable Development Goal (SDG) 13 ("Climate Action") and in accordance with the Group's Sustainability-Linked Financing Framework.

In line with the Strategic Plan, the new sustainability-linked bond contributes to the achievement of the Group's objectives related to sustainable finance sources on Group's total gross debt, set at around 65% in 2024 and over 70% in 2030.

New sustainability-linked bonds

On October 7, 2022, Enel SpA, through its subsidiaries Enel Finance International NV, the Dutch-registered finance company, and Enel Finance America LLC, the US-registered finance company, launched sustainability-linked bonds for a total aggregate amount of $4.0 billion, equivalent to about €4.1 billion, aimed at institutional investors in the US and international markets. The bonds, which will be separately issued in different tranches, will be guaranteed by Enel.

Enel agrees on an $800 million sustainability-linked general purpose financing with EKF and Citi

On October 12, 2022, the Enel Group received a facility from Denmark's export credit agency, EKF, for up to $800 million. The facility, arranged by Citi, is based on the Group's worldwide business relationship with Danish suppliers and is aimed at supporting the development of wind energy as well as mitigating the effects caused by climate change, as part of Enel's 2040 Net-Zero ambition, through a flexible instrument.

Enel sells its entire stake in PJSC Enel Russia

On June 16, 2022, Enel SpA signed two separate agreements with, respectively, PJSC Lukoil and Closed Combined Mutual Investment Fund "Gazprombank-Frezia" for the sale of the entire stake held in Enel Russia, equal to 56.43% of the latter's share capital, for a total of about €137 million.

On October 12, 2022, following the agreements of June 16, 2022, Enel SpA finalized the sale of its entire stake in PJSC Enel Russia, equal to 56.43% of the latter's share capital, to PJSC Lukoil and the Closed Combined Mutual Investment Fund "Gazprombank-Frezia", for a total of €137 million. The transaction was closed following the fulfillment of all the conditions set out in the two separate contracts entered into with them, including approval of the transaction by the President of the Russian Federation in accordance with paragraph 5 of Decree 520 of August 5, 2022.
As a result of the transaction, Enel disposed of all its Russian power generation assets, which include approximately 5.6 GW of conventional capacity and around 300 MW of wind capacity at different stages of development, ensuring continuity for its employees and clients.
The transaction generated a negative impact on reported Group profit of approximately €1,551 million, mainly driven by the release of a currency translation reserve (about €1,054 million).

Enel finalized sale of electricity transmission business in Chile

On December 9, 2022, Enel SpA announced that, following up on the agreements of July 28, its listed subsidiary Enel Chile SA finalized the sale of its entire 99.09% stake in the share capital of listed Chilean power transmission company Enel Transmisión Chile SA to Sociedad Transmisora Metropolitana SpA (STM), controlled by Inversiones Grupo Saesa Ltda.
Following the fulfillment of certain conditions customary for these kinds of transactions and after the approval from Chilean Competition Authority Fiscalía Nacional Económica (FNE), the sale was carried out in compliance with a public tender offer that STM and Mareco Holdings Corp. launched on November 7 and ended on December 6, 2022.

STM paid an overall equity consideration of $1,399 million for the entire stake held by Enel Chile in Enel Transmisión Chile – equal to around $1,575 million of enterprise value – including the price adjustment based on an interest rate from January 1, 2022 until the public tender offer's launch date.
As part of the transaction, STM has also repaid Enel Transmisión Chile's intercompany loans.
The transaction generated a capital gain of about €1 billion.

Enel enters into exclusive negotiations with PPC on sale of all Romanian operations

On December 14, 2022, Enel SpA entered into an Exclusivity Agreement with Greek company Public Power Corporation SA (PPC) in relation to the potential disposal of all the equity stakes held by Enel Group in Romania ("Target Assets"). During the exclusivity period, until the end of January 2023, the parties will negotiate the transaction documentation and PPC will carry out appropriate due diligence on the Target Assets. Upon completion of such due diligence, PPC's board of directors will determine whether PPC will submit a binding offer to Enel. The parties will inform the market should they enter into a binding agreement on the transaction.

Enel closes sale of 50% of Gridspertise to CVC

On December 22, 2022, Enel SpA informed that, following an agreement signed on October 20, 2022, it has closed, through Enel Grids Srl, the sale of a 50% quota in its wholly-owned subsidiary Gridspertise Srl to the international private equity fund CVC Capital Partners Fund VIII (CVC), following the fulfillment of all conditions set forth in the previously signed agreement.

In line with the above agreement, CVC paid a total of approximately €300 million, equivalent to an enterprise value of €625 million (on a 100% basis). In addition, the agreement included potential deferred payments that could bring the enterprise value up to €1 billion (on a 100% basis).
The overall transaction generated a positive impact in the Enel Group's profit of approximately €520 million. Following the transaction, Enel and CVC operate the company in a joint control regime.
The transaction is in line with the Enel Group's current Strategic Plan, under the Stewardship model, which envisages investments carried out with third parties, with the aim to add new infrastructure and services in order to accelerate the electrification process of customers' energy demand.

The agreements in place with the counterparty envisage, among other clauses, that, starting from 2029, if CVC decides to sell its share on the market and does not find buyers willing to pay a price that will ensure a specific return on the investment made by the fund, Enel would have the option of regaining control of Gridspertise. The probability of this scenario occurring was assessed as remote as at December 31, 2022.

Enel signs a €12 billion revolving credit facility guaranteed by SACE

On December 23, 2022, Enel SpA and a pool of financial institutions composed of Banco BPM SpA, BPER Banca SpA, Cassa Depositi e Prestiti SpA, Intesa Sanpaolo SpA and UniCredit SpA, with the latter also acting as agent bank, signed a €12 billion revolving credit facility to fund the collateral requirements of the trading activities of Enel and Enel Global Trading SpA on energy markets.
The credit facility, which is guaranteed by the Italian export credit agency SACE SpA up to 70% of its nominal amount and has a term of about 18 months, was finalized in line, *inter alia*, with the provisions of (i) Communication C(2022) 7945 final from the European Commission regarding the "Temporary Crisis Framework for State Aid measures to support the economy following the aggression against Ukraine by Russia" and European Commission Decision SA.104722 of December 20, 2022 regarding "State aid: amendments to Italian scheme, including up to €23 billion budget increase, to support companies in context of Russia's war against Ukraine", as well as (ii) the Decree Law 50 of May 17, 2022 (the "Aid Decree"), converted into Law 91 of July 15, 2022, as amended with Decree Law 144 of September 23, 2022, converted into Law 175 of November 17, 2022.

Enel finalized sale of Brazilian electricity distributor in Goiás

On December 29, 2022, Enel SpA announced that, following the agreement signed on September 23, 2022, its subsidiary Enel Brasil SA, controlled through Chilean listed company Enel Américas SA, had finalized the sale of its entire stake in the Brazilian power distribution company Celg Distribuição SA - Celg-D (Enel Goiás), equal to approximately 99.9% of the latter's share capital, to Equatorial Participações e Investimentos SA (Equatorial), a subsidiary of Equatorial Energia SA.
In line with the sale and purchase agreement signed in September 2022, the closing of the sale followed the approval of the transaction by the board of directors of Enel Brasil and Enel Américas and the fulfillment of certain additional conditions customary for these kinds of transactions, including the authorization by Brazilian electricity regulator *Agência Nacional de Energia Elétrica* (ANEEL) and the country's Competition Authority Conselho Administrativo de Defesa Econômica (CADE).

Enel Brasil finalized the sale of its entire stake held in Enel Goiás for a total of approximately 8.5 billion Brazilian reais (equivalent to about $1.6 billion), subject to a post-closing adjustment.
Out of the total consideration:

- Equatorial paid, for the equity portion, approximately 1.5 billion Brazilian reais (equivalent to over $285 million) on closing; and
- Enel Goiás will repay the intercompany loans, in the amount of approximately 7.0 billion Brazilian reais (equivalent to around $1.3 billion) within 12 months from the closing.

The overall transaction encompassed Enel Goiás's (i) current cash position, (ii) third party debt, and (iii) contingencies.
Additionally, the parties agreed to an earn-out payment mechanism based on the outcome of current and possible contingencies.
The transaction produced a total negative impact on profit or loss of about €1 billion.

Criminal proceeding against e-distribuzione concerning an accident - Italy

On July 1, 2021, e-distribuzione SpA was notified of a proceeding against a number of its employees and managers and e-distribuzione SpA itself pursuant to Legislative Decree 231/2001, initiated by the Public Prosecutor's Office of Taranto, following the accident that occurred on the night between June 27 and 28, 2021 in which an employee of a contractor was harmed.
During the investigative phase, an unrepeatable technical assessment was ordered and the report of the Technical Consultant of the Public Prosecutor, dated December 15, 2021, was filed and incorporated in the Public Prosecutor's case. Subsequently, a notice of completion of the preliminary investigation was subsequently sent to the defendants and the company. With the grant of access to the Public Prosecutor's file, the defense learned of the decision to dismiss charges against a number of defendants.

Penalty proceedings initiated by the Energy Directorate General of the Government of the Canary Islands - Spain

On October 6, 2021, the Directorate General of Energy of the Government of the Canary Islands (Energy Directorate General) notified Edistribución Redes Digitales SLU (EDRD) of three resolutions initiating an equal number of disciplinary proceedings (ES.AE.LP 006/2019ES, AE.LP 007/2019ES and AE.LP 008/2019), respectively, for alleged violations consisting in the unjustified refusal or alteration of the permit for connection to a point on the grid and failure to comply with the operation and proper functioning obligations of a contact service for complaints and accidents. On October 29, 2021, EDRD filed written briefs in each proceeding. The penalties that could be imposed in the three proceedings amount to €11 million, €18 million and €28 million respectively. One of the three proceedings (ES.AE.LP 006/2019ES) was closed without imposing any penalty.
On January 24, 2022, the Energy Directorate General notified EDRD of a new resolution, dated November 18, 2021, with which a further disciplinary procedure was being initiated for the alleged commission of five infringements classified as continuous and serious and of two infringements classified as very serious and not continuous, indicating a possible fine of up to €94 million. The alleged infringements again refer to applications for access and connection to the grid, the execution of connections, the processing of customer requests, the information provided, the systems implemented and delays in execution.
On September 28, 2022, the Energy Directorate General notified EDRD of a proposed resolution dated September 26, 2022 to fine EDRD about €31.5 million for having

been identified as responsible for the commission of five serious and two very serious infringements envisaged under the provisions of the Electricity Industry Act (Law 24/2013). At present, no penalties have been imposed.

Extraordinary rate revision 2022 (Rio de Janeiro) – Brazil

On July 13, 2022, Enel Distribuição Rio de Janeiro filed a precautionary action ("writ of mandamus") to suspend the effects of Resolution no. 3064/2022 with which the Directorate General of the *Agência Nacional de Energia Elétrica* (ANEEL) approved, on July 12, 2022, an extraordinary rate revision for 2022, the impact of which was preliminarily calculated at approximately 300 million Brazilian reais (approximately €59 million). On July 27, 2022, the Federal Court accepted the precautionary petition of Enel Distribuição Rio de Janeiro, granting the suspension of the effects of Resolution no. 3064/2022 until further resolution. On August 3, 2022, ANEEL filed an appeal against this decision and, subsequently, filed a note from the Directorate General in which it asked the Court to reconsider the precautionary measure granted in favor of Enel Distribuição Rio de Janeiro.

Regulatory and rate issues

The European regulatory framework

Recovery and Resilience Facility – REPowerEU

In response to Russia's invasion of Ukraine, in May 2022 the European Commission presented the REPowerEU plan, which provides for financing new measures to diversify energy supplies and reduce the EU's dependence on Russian fossil fuels. The legislative proposal seeks to make the Recovery and Resilience Facility the strategic framework for the initiatives to be introduced under REPowerEU. In order to access the resources available under this plan, Member States must add to their existing Recovery and Resilience Plans a dedicated chapter setting out the reforms and new investments they will pursue to hasten the reduction in dependence on fossil fuels, while at the same mitigating their costs and socio-economic impact during the transition.

The Commission estimates the investment needed by 2030 to achieve the REPowerEU objectives and gradually eliminate imports of fossil fuels from Russia at around €300 billion (€210 billion by 2027). About 95% of this will be dedicated to accelerating the energy transition (with an increase in the renewables capacity, energy efficiency and heat pumps in the residential sector, energy efficiency and decarbonization in the industrial sector, development of transmission networks, distribution and storage, increase in the production of sustainable biomethane and biomass).

The legislative process, which began in May, was concluded in December with the provisional agreement reached by the Council and the European Parliament on the proposed REPowerEU regulation, which in addition to confirming the main elements proposed by the Commission also sets out how the plan will be financed, including the use of:

- €225 billion of loans not yet used in the Recovery and Resilience Plans. Even countries that have already used all the funds at their disposal (e.g., Italy, Romania and Greece) will be able to access any resources remaining after the countries that are still entitled have submitted their applications;
- €20 billion, funded both through the Innovation Fund and by frontloading the auctioning of ETS allowances. These funds will be distributed to each country based on the allocation key which takes into account cohesion policy, the Member States' dependence on fossil fuels and the increase of investment prices;
- additional resources from voluntary transfers from the Brexit Adjustment Reserve (BAR) and unspent cohesion funds from the previous multiannual financial framework (2014-2020) to support SMEs and vulnerable households particularly affected by energy price increases.

As regards the Recovery and Resilience Facility, in 2022, the Commission and the European Council continued work on reviewing the National Recovery and Resilience Plans, approving those of the final two countries, Hungary and the Netherlands, in the 2nd Half of the year.

During the year, the European Union continued to disburse financing to those Member States that had requested pre-financing of their activities or that had reached the milestones and targets indicated in their Recovery and Resilience Plans. At the end of 2022, the total amount of funds disbursed by the EU amounted to around €139 billion (€94 billion in grants and €45 billion in loans).

Developments in the "Fit for 55" and REPowerEU packages

Energy and climate targets

The European Commission's "Fit for 55" package, presented in July 2021, proposed raising the EU's 2030 targets in support of a more ambitious climate goal of reducing greenhouse gas emissions by 55% by 2030 and achieving climate neutrality by 2050.

Due to the energy crisis that began in 2021 and that was exacerbated by the Ukraine crisis in 2022, it has become necessary to find additional short and medium-term measures to strengthen economic growth, ensure secure energy supplies and hold to the commitment on Europe's climate targets.

The REPower EU strategy is the response of the European Commission, which proposes to:

- speed up the spread of renewable energy, by increasing the 2030 "Fit for 55" target from 40% to 45% and presenting the "EU Solar Strategy";

- promote greater direct electrification solutions that reduce the demand for natural gas by end users and enhance long-term energy efficiency measures, including increasing the original binding energy efficiency target by 2030 set out in the "Fit for 55" package from 9% to 13%;
- diversify energy supplies, in particular through measures to diversify shorter-term gas supplies;
- modernize and digitalize power grid infrastructure;
- promote the legal obligation to install solar panels on new public and commercial buildings and new residential buildings starting from 2026 under the Solar Rooftop Initiative.

In 2022, the European institutions engaged in discussions over the various dossier contained within the "Fit for 55" package and adapted it to the changes introduced by REPowerEU. Some of the most significant of these are the revisions of the Renewable Energy Directive (RED III), the Energy Efficiency Directive (EED), the Energy Performance of Buildings Directive (EPBD), the EU Emissions Trading System Directive (EU ETS), and the Regulation setting CO_2 emissions restrictions for motor vehicles.

European Industrial Strategy

On March 10, 2020, the new Industrial Strategy was presented, with the goals of: helping European industry remain competitive globally, making Europe climate neutral by 2050 and shaping Europe's digital future. The strategy proposes a series of legislative and non-legislative initiatives to support all of Europe's industrial actors, ranging from large to small enterprises, research centers and start-ups. These include comprehensive measures to modernize and decarbonize energy intensive industries, to support the sustainable and smart mobility industries, to promote energy efficiency and ensure a secure and sufficient supply of low-carbon energy at competitive prices. The Industrial Strategy also proposes entering into a series of new alliances like the European alliance on clean hydrogen in order to speed up the decarbonization of industry and to maintain a position of industrial leadership, followed by alliances on low-carbon industries, on industrial clouds and platforms and raw materials. In addition to a full range of actions – both horizontal and intended to promote specific technologies – the European Commission will systematically analyze the risks and needs of the various industrial ecosystems. In carrying out its analysis, the Commission will work closely with an inclusive and open industrial forum that was to be set up by September 2020.

Digital technology

On June 3, 2022, the European Data Governance Act (Regulation (EU) 2022/868) was adopted. It seeks to organize and encourage data sharing within the EU to build a more competitive European data economy. In addition, negotiations with the United States on a new data privacy shield concluded with the publication on December 13, 2022 of a process to adopt an adequacy decision for the EU-US Data Privacy Framework, which, once formally adopted, acknowledges that the United States will guarantee an adequate level of protection for the personal data transferred from the EU.

Furthermore, two regulations were adopted in 2022, the Digital Markets Act (DMA) and the Digital Services Act (DSA), which introduce rules applicable to all digital services, including online markets and other online platforms that operate in the European Union. The DMA establishes a series of strictly defined objective criteria for qualifying a large online platform as a so-called "gatekeeper". The DSA sets a new standard for the liability of online platforms for illegal and harmful content. It will provide better protection for internet users and their fundamental rights, as well as define a single set of rules for the internal market, helping smaller platforms to grow. Also relating to data use, the European Commission published on February 23, 2022 its proposed Data Act, a regulation touching on delicate issues, such as obligations for sharing data, monetizing data and data access, which is currently being debated at European level.

Prompted by growing concerns regarding cyber risk, discussions about the revision of the Network and Information Security Directive (NIS2), intended to improve the management of risks and incidents and cooperation for essential businesses, were concluded quickly and the new Directive (EU) 2022/2555 was published in the Official Journal on December 27, 2022. The new directive was aligned with sector legislation, in particular the Digital Operational Resilience Act (DORA), which was also published on the same day as the Directive (EU) 2022/2555, to provide legal clarity and to ensure consistency between it and NIS2.

On September 28, 2022, the Commission published two new proposals in relation to the EU's digital strategy and artificial intelligence, the main objectives of which are to adapt liability rules to the digital age, circular economy and the impact of global value chains:

I. revision of the product liability directive, to modernize the existing rules on liability for defective products to obtain fair compensation for personal injuries, damages or loss of data;
II. new AI liability directive on adapting non-contractual civil liability rules to artificial intelligence (AI), which aims to harmonize national rules on liability for damage arising from tortious conduct, to make it easier to receive compensation for damage and to give companies the right to bring claims for liability based on a presumption of causality.

Both directives are currently being examined at European level, which is expected to continue throughout 2023.

Mobility

In July 2021, following the "European Green Deal" and the "Smart and Sustainable Mobility Strategy" published in 2019 and 2020 respectively, the European Commission issued the "Fit for 55" package of legislative proposals. The package includes numerous proposals concerning transport and reducing CO_2 emissions in the transport sector and accelerating the transition to zero-emission mobility.
During the second half of 2022 the European Parliament and Council made progress in analyzing numerous aspects of the "Fit for 55" legislation:

- the revision of the CO_2 standards for cars and vans (final act pending), which increases the emission reduction targets for 2030 for passenger cars and vans and requires that all new light vehicles sold from 2035 be zero-emission vehicles;
- Alternative Fuels Infrastructure Regulation (AFIR), currently in inter-institutional negotiations (Trilogue) stage, for the development of a public infrastructure for the distribution of alternative fuels (charging points, hydrogen refueling stations, etc.);
- the revision of the European Performance Building Directive (EPBD) to facilitate the installation of charging points in residential properties;
- the revision of the Trans-European Network of Transport (TEN-T) Regulation which aims to close regional, economic and social gaps through the development of interconnected air transport, roadway, railway and maritime network infrastructures at European level;
- the revision of the Intelligent Transport System (ITS) Directive, currently in Trilogue stage, to regulate the deployment of intelligent transport systems in the field of road transport and for interfaces with other modes of transport;
- the ReFuelEU Aviation and FuelEU Maritime initiatives, at the Trilogue stage, targeted at reducing greenhouse gas emissions for aviation and maritime transport, setting increasingly stringent emission limits for ships and planes, and envisaging measures to promote renewable or low-carbon fuels.

On November 10, 2022, the Commission presented the proposal on new Euro 7 standards to reduce air pollution from light and heavy vehicles and to improve air quality.

Hydrogen and decarbonized gas market package

On December 15, 2021, the European Commission published the package for the decarbonization of the gas market and the definition of a framework enabling the penetration of renewable and low-carbon gases into the system, including hydrogen, and rules governing the market and organization of the sector, including infrastructure aspects. The package includes low-carbon gas certification standards that ensure a 70% reduction in greenhouse gas emissions.
In addition, it promotes access and rate discounts for renewable and low-carbon gases. Among the salient points are the rules on vertical and horizontal unbundling and on access to networks in the hydrogen sector, with less stringent provisions until 2030 and exemptions for existing and new geographically confined hydrogen networks. The Commission proposal also provides for separate Regulatory Assets Base (RABs) between gas and electricity and hydrogen infrastructures, but allows, subject to authorization by regulators, financial transfers between them to finance the hydrogen network (charges on final gas and electricity consumers). Finally, the package envisages that gas Transmission System Operators (TSOs) must accept gas-hydrogen mixtures (so-called blending) at borders up to a percentage of 5%, with a cost allocation procedure that provides for the intervention of the authorities in the event of no agreement between network operators.
The final position to be negotiated in Trilogue by the Parliament and the Council is still being defined. It appears that position will be to propose a less stringent regulatory framework for hydrogen, at least in the initial stage.

Definition of renewable hydrogen

As required by the Renewables Directive of 2018, the European Commission is responsible for issuing a delegated act to define the criteria by which hydrogen produced from electricity can be considered renewable. The Commission has opened a formal stakeholder consultation and the act is now under review prior to adoption. The criteria concern the principles of additionality for renewable plants that power the electrolyzers and the spatial and temporal correlation between electrolyzers and renewable plants.
The European Parliament expressed its disagreement with the rules it deemed too strict in setting out its position on the revised Renewable Energy Directive.

EU strategy on energy system integration

Alongside its hydrogen strategy, on July 8, 2020, the Commission presented the EU strategy on energy system integration. The scope of the strategy is to transform the present energy system in which each sector (transport, industry, gas, buildings) is an isolated compartment, creating new cross-sectoral links, leveraging technological progress so as to achieve climate neutrality by 2050 at the least possible cost. The strategy sets out 38 actions to implement this more integrated system and is based on three main pillars: a more circular energy system, hinging on energy efficiency; greater direct electrification of end-use sectors; and the promotion of clean fuels, including renewable hydrogen and sustainable biofuels and biogas for sectors where electrification is difficult.

Just Transition Fund

The Just Transition Fund (JTF) is a funding instrument under the Just Transition Mechanism (JTM) which aims to provide support to Member States by reducing the socio-economic impact of the transition towards climate neutrality. The total resources (2021-2027) allocated at Community level to the JTF amount to €17.5 billion (at 2018 prices), of which €7.5 billion under the 2021-2027 EU multiannual financial framework and €10 billion under Next Generation EU.
The JTF will support workers, businesses and regional authorities in the green transition and will finance a specific number of activities, including the regeneration and decontamination of brownfield sites, investments in renewable energy and energy efficiency, upskilling and reskilling, and sustainable mobility.
The National Transition Plans for Italy and Spain were approved in December 2022, with allocated funding of €1.2 billion and €869 million (current prices), respectively.
As regards Italy, its plan focuses on investment in the areas of Sulcis Iglesiente and the Province of Taranto in projects to counter the effects of the transition by: increasing the share of energy generated from renewable sources for businesses and persons, diversifying the local production system, and mitigating the social effects and those on employment.
The Spanish plan targets the region of Asturias, the provinces of A Coruña, Teruel, León, Palencia, Almería, Cadiz and Córdoba, and a group of municipalities around Alcúdia on the island of Mallorca. The plan will invest in energy efficiency, the circular economy, renewable energy sources (solar, offshore wind, renewable hydrogen), and the "green transformation" of the nation's industry.

Sustainable Finance

With regard to the European taxonomy, the first delegated act, which establishes the technical screening criteria for determining whether a specific economic activity makes a substantial contribution to the fight against climate change (adaptation and mitigation), entered into force on January 1, 2022. Furthermore, in February 2022, the European Commission presented the Complementary Delegated Act, which sets out the criteria for gas and nuclear energy activities, which was approved by the European Parliament and the Council, entering into force on January 1, 2023.
In the 2nd Half of 2022, the European Parliament and the Council were also engaged in inter-institutional negotiations (Trilogue) to agree on the final text of the Green Bond Standard Regulation. However, the co-legislators were unable to reach an agreement, mainly on the European Parliament's proposal to extend the disclosure obligations to other sustainable bonds, including sustainability-linked bonds.
In 2022, the European Parliament and the Council also reached an agreement on the corporate sustainability reporting directive, which entered into force in January 2023.
Also in the 2nd Half of 2022, the Council adopted its position on the corporate sustainability due diligence directive targeted at large companies, the proposal for which was presented by the European Commission in February 2022. Instead, the European Parliament has not completed its work and the inter-institutional negotiations have been postponed to 2023.
Finally, in September 2022 the European Commission presented its proposed regulation to ban products made with forced labor, both "domestic" goods made in Europe and those imported from outside the EU. The European Parliament and the Council are expected to define their positions in 2023.

New State aid regulations

On January 27, 2022, the new 2022 regulations on State aid for climate, environment and energy, namely Climate, Energy and Environmental Aid Guidelines (CEEAG), came into force. They will guide investment support for decarbonization in the coming years, and for that they are of considerable importance for the energy sector and for the Enel Group. The new regulations include a section dedicated to aid for the reduction of greenhouse gas emissions including aid for the production of renewable and low-carbon energy, aid for energy efficiency, including high-efficiency cogeneration, aid for hydrogen, aid for storage and batteries and aid for the reduction or prevention of emissions from industrial processes. An entire chapter has been dedicated to sustainable mobility, which governs aid for electric mobility and charging infrastructure, including the maritime sector. Energy efficiency measures for buildings are also regulated, including batteries and charging of electric vehicles. The proposed rules also officially recognize that financing for natural or legal monopoly power grids does not represent State aid. Finally, aid to nuclear technologies and fossil fuels are excluded from the scope of the guidelines, while all types of storage, including stand-alone systems, are included among the technologies allowed in the section dedicated to aid for the reduction of greenhouse gas emissions.

In 2022 work continued on the draft revision of the General Block Exemption Regulation (GBER) with important changes to the sections relating to climate, environmental protection and energy, including an update of the notification thresholds, in response to the energy crisis. The GBER defines specific categories of State aid that, under certain conditions, are compatible with the Treaty on the Functioning of the European Union (TFEU) and exempts these categories from the obligation of prior notification to the Commission and its approval. The draft regulation proposes to expand the scope for Member States to finance different types of green projects, such as those to reduce CO_2 emissions, sustainable mobility and charging infrastructure. It also introduces new green conditions that large energy-intensive businesses must meet to receive aid in the form of reduced tax rates or exemptions from payment of system charges; storage, including batteries; sustainable hydrogen and renewable energy communities. The new regulation will be published in the early months of 2023 and will permit greater flexibility in these key sectors in the long term.

The revised rules on State aid in favor of major important projects of common European interest (IPCEI) entered force on January 1, 2022. The legislation sets out the criteria for the Commission's evaluation of the aid that Member States grant to cross-border IPCEIs that remedy market failures and enable cutting-edge innovations in key sectors and investments in technologies and infrastructures, with positive spillovers for the entire EU economy.

The European Commission approved the map for granting regional aid from January 1, 2022 to December 31, 2027 for Italy and Romania in December 2021, for Greece in January 2022 and for Spain in March 2022, within the framework of the revised regional aid guidelines.

On May 12, 2022, the European Commission decided to phase out the State aid COVID Temporary Framework (TF COVID), adopted on May 19, 2020 and last amended on November 18, 2021, which covered the funds and projects of the NRRP. Most of the instruments provided under the Temporary Framework expired on June 30, 2022. The possibility of investment and solvency support measures for Member States expired on December 31, 2022. However, a flexible transition for the conversion of debt instruments into other forms of aid is guaranteed until June 30, 2023. We have worked, within the TF COVID, to disburse aid for national measures intended to boost employment even in disadvantaged areas.

On March 23, 2022, the European Commission approved the Temporary Crisis Framework (TCF), which was intended to tackle rising electricity and gas prices as a consequence of the current geopolitical crisis sparked by the situation in Ukraine. The TCF was amended on July 20, 2022 to include new measures in line with the REPowerEU plan regarding the acceleration of the rollout of renewable energy and the facilitation of the decarbonization of industrial processes. An additional amendment was approved in October 2022 to further simplify the development of renewables and to align the TCF with the emergency measures taken in response to the energy crisis (for example, demand reduction measures) and to include government guarantees among liquid collateral on power trading markets. Some €672 billion has been disbursed under the TCF since when it was approved to the end of 2022. More specifically, 53% of the State aid approved was notified by Germany, 24% by France and 7% by Italy.

On October 19, 2022, the European Commission published the revised State aid Framework for research, development and innovation.

Cases of State aid

As part of the IPCEI Hydrogen Technology (Carlentini) project, we contributed to the resolution of the request for information from the Competition DG (market failure aid) and to the positive evaluation of the project so that it would be selected for the final notification phase in Brussels. The IPCEI Hydrogen Technology project was approved on July 15, 2022. Alongside this, work was begun on selecting the projects to be carried out under IPCEI Hydrogen Industry or IPCEI Hy2Use, approved on September 21, 2022.

In 2022, we continued to monitor the funds authorized by the European Commission for the countries of importance to the Group in relation to TF COVID and TF Crisis.

On June 8, 2022, the Commission approved the €8.4 billion in State aid from Spain and Portugal to reduce wholesale electricity prices on the Iberian market, lowering the production costs of fossil fuel power plants.
On July 26, 2022, the European Commission approved a €700 million Italian scheme to support SMEs and Midcaps affected by the crisis in Ukraine through direct grants. Alongside this, it approved a €10 billion loan guarantee scheme proposed by Italy to support companies across sectors in the context of the Ukraine crisis.
On September 5, 2022, the Commission approved the Greek scheme of €341 million to provide grants for investment and operational support for electricity storage facilities, partly funded by the Recovery and Resilience Facility (Case SA.64736).
On September 30, 2022, the Commission approved the €2 billion Italian scheme for the reinsurance of natural gas and electricity trade credit risk (SACE) in the context of the crisis.
On October 5, 2022, the Commission approved a €21.1 million Italian measure to support Poste Italiane in building charging infrastructure.
On November 15, 2022, the Commission approved the €500 million Italian scheme that provides direct grants for the acquisition of new vessels and the retrofitting of existing ones in order to replace low environmental performance vessels with clean, zero-emission ones.
On December 20, 2022, the Commission approved the amendments to an existing Italian guarantee scheme, including an up to €23 billion budget increase, to support companies in the context of the Ukraine crisis. The overall budget of the measure does not exceed €33 billion.

We continued to provide support in 2022 to the assessment of the State aid aspects of priority projects for the Group under the NRRP.

Market Revenue Cap

In October 2022, the Council approved the regulation on emergency measures to reduce energy prices. The regulation includes a cap on market revenue for inframarginal producers (e.g., renewable energy, nuclear power) of €180/MWh. Revenue above this threshold will be subject to a clawback tax at a rate of 90-100% from December 2022 to June 2023 and redistributed to customers to help them bear energy costs. The threshold imposed by the EU is higher than the average prices recorded in many Member States for inframarginal generation. Many Member States have adopted even stricter measures.

Solidarity taxes

The surplus revenue generated by European Union companies and permanent establishments with activities in the crude oil, natural gas, coal and refinery sectors is subject to a mandatory temporary solidarity contribution, unless the Member States have enacted equivalent national measures. Member States must ensure that enacted equivalent national measures share similar objectives and are subject to rules similar to those for the temporary solidarity contribution under the Regulation and generate comparable or higher proceeds than those estimated for the solidarity contribution. The temporary solidarity contribution for EU companies and permanent establishments with activities in the crude oil, natural gas, coal and refinery sectors, including those that are part of a consolidated group merely for tax purposes, shall be calculated on the taxable profits, as determined under national tax rules, in the fiscal year 2022 and/or the fiscal year 2023 and for their full duration, which are above a 20% increase in the average taxable profits, as determined under national tax rules, in the four fiscal years starting on or after 1 January 2018. If the average of the taxable profits in those four fiscal years is negative, the average taxable profits shall be zero for the purpose of calculating the temporary solidarity contribution.

Regulatory framework by business line

Thermal Generation and Trading

Italy

Generation and the wholesale market

For 2022 and 2023 the Sulcis, Portoferraio and Assemini plants were declared eligible for the cost reimbursement scheme. The Porto Empedocle plant is eligible for long-term cost reimbursement until 2025, while plants located on the smaller islands are automatically eligible for cost reimbursement for all years in which they are declared essential, including 2022 and 2023. Admission to the cost reimbursement scheme guarantees coverage of the operating costs of the aforementioned plants, including a return on capital invested. Generation cost reimbursement, net of plant revenue, is granted by the Regulatory Authority for Energy, Networks and the Environment (ARERA) with measures authorizing payments on account and a final balance payment based on applications submitted by operators.

For 2022 and 2023 the remainder of essential capacity was contracted under alternative contracts which provide for the obligation, on the Ancillary Services Market (ASM), to offer to go up/down to prices no higher/lower than the values identified using methods established by ARERA for a fixed premium.

In 2022, ARERA revised the valuation criteria for cost components relating to the cost of natural gas and the charges connected with the Emission Trading System (ETS) obligations pertaining to essential plants eligible for the cost reimbursement scheme and under alternative contracts, in order to more accurately reflect the spot price of the commodities underlying those charges in an environment of rising volatility in the benchmark prices.

More specifically, with its Resolution no. 452/2022/R/eel, ARERA revised the valuation criteria for natural gas costs, introducing, as from October 1, 2022, weekly indexing of the prices recorded in the national balancing market, which replaces the previous quarterly indexing mechanism and the related prices recorded on the Dutch Title Transfer Facility (TTF) platform.

These rules were confirmed for 2023 by Resolution no. 532/2022/R/eel, with which ARERA also established that there would be a shift for 2023 from monthly to weekly indexing to calculate the cost component for ETS obligations.

In order to tackle the gas supply problems for the 2022/2023 thermal year, Decree Law 14/2022 (the so-called "Ukraine Decree") allowed the Ministry of Ecological Transition (MiTE) to require Terna to maximize thermal generation by plants with a capacity of over 300 MW powered by non-gas alternative fuels, as well as generation by bioliquid plants. The decree law also contains measures for the competent institutions to cooperate on issuing environmental waivers that may be necessary for the operation of plants whose output is to be maximized and ask ARERA to establish the supply rules for those plants and the reimbursement of costs incurred following the activation of the measure.

With its Guidelines of September 1, 2022, MiTE asked Terna to draw up and implement a gas-alternative production maximization plan for the September 19, 2022 - March 31, 2023 period to enable a savings of 1.8 billion cubic meters of gas, minimizing recourse to environmental waivers.

Terna has identified the plants that will take part and, on September 19, launched the production maximization plan. Enel's Sulcis, Fusina, Torrevaldaliga Nord, and Brindisi plants are included.

With its Resolution no. 430/2022/R/eel, ARERA established that:

- for plants that are already deemed essential plants eligible for the cost reimbursement scheme (Sulcis plant), the existing supply and production cost reimbursement rules will continue to apply;
- for other plants, the operator is required to present bids relating to the maximization plan announced by Terna at the minimum technical price on the energy markets and at the recognized variable cost (RVC) for each unit of generation in the ASM. Terna pays to the operator any positive difference between the energy market price and the RVC; while Terna pays to operators whose bids are accepted for sale on the ASM the day-ahead market zonal prices, if higher than the RCV. If revenue is not sufficient to cover even the fixed costs incurred during the maximization period, the operator can request that ARERA reimburse these costs, excluding the remuneration and amortization of the capital invested in the plant prior to the start of the maximization procedure.

ARERA, with Resolution no. 433/2021/R/eel, set the invested capital remuneration rate for essential plants eligible for reimbursement of costs for 2022, leaving it at 7%, the same as decided for 2021.

Starting in 2023, ARERA, with Resolution no. 532/2022/R/eel, modified the methodology for determining the nominal remuneration rate on capital invested in plants essential to the security of the electricity system eligible for the cost reimbursement scheme. The new methodology in-

volves calculating the real WACC based on the rules in effect for the remuneration of infrastructure services pursuant to Resolution no. 614/2021/R/com (TIWACC) and the conversion into nominal WACC based on the ECB's inflation expectations for the relevant year. More specifically, WACC is obtained by applying the benchmarks for electricity transmission, with the exception of the specific risk (beta asset) set equal to the electricity distribution value (0.4). It also includes an add-on of 0.2% to take account of any further charges and risk associated with essential generation eligible for the cost reimbursement scheme. Using the new methodology, the resolution sets nominal WACC for 2023 at 11.9% and this figure will be adjusted annually based on changes in the financial benchmarks used in the calculation.

On June 28, 2019, the Minister for Economic Development issued a decree approving the definitive rules governing the capacity remuneration mechanism (the capacity market). On November 6 and November 28, 2019 two auctions were held with delivery in 2022 and 2023 respectively: Enel was awarded capacity for both years. A number of operators and a sectoral trade association contested the decree and the results of the two auctions before the Lombardy Regional Administrative Court.
Two operators also challenged the European Commission decision approving the Italian mechanism before the EU Court. In two decisions dated 7 September 2022, the European General Court dismissed the actions and the two applicant companies decided to not appeal the decisions before the Court of Justice of the European Union, thereby concluding the disputes. The disputes are still under way before the Lombardy Regional Administrative Court, which had suspended proceedings in April 2021 pending the rulings of the EU Court, having found a preliminary issue with respect to these proceedings.

With the Decree of the Minister for the Ecological Transition (MiTE) of October 28, 2021, the new capacity market regulation was approved. It will apply to auctions with delivery from 2024. In execution of the decree, Terna launched the auction procedures for 2024, which took place on February 21, 2022. Enel was awarded annual contracts for approximately 10.4 GW of existing capacity with delivery in 2024, and contracts for approximately 1.5 GW of new capacity with a duration of 15 years from 2024 to 2038. Pursuant to the decree, the results of the 2024 auction will be used as the basis for assessing whether to hold an auction for the 2025 delivery year.
In December 2021, two operators filed two appeals with the Lombardy Regional Administrative Court against the MiTE Ministerial Decree of 28 October 2021, Terna's 2021 Capacity Market Regulations and the ARERA resolutions which define the framework for the execution of the capacity auction for 2024 (and possibly for 2025). In May 2022, the same companies also challenged the detailed report of the results of the main auction for 2024, published by Terna.

In March 2022, ARERA issued Resolution no. 83/2022/R/eel with urgent measures to change the methods of calculating the strike price of the capacity market. The resolution was adopted to cope with the extreme volatility of the markets in recent months, introducing a mechanism for indexing on a daily basis the components relating to the cost of gas and the issue charges included in the calculation of the strike price. The new methodology replaces the current formulas, which provide for an indexation of the strike price on a monthly basis. The changes are effective from March 5, 2022 and shall apply until a subsequent ARERA measures is issued.

With Resolution no. 523/2021/R/eel, from April 1, 2022, in implementation of the EU regulatory framework, an amendment was introduced to the rules governing imbalances, with the extension of the "single pricing" mechanism for assigning a value to imbalances of all units, including those authorized for the Ancillary Services Market (ASD). The reform eliminates the dual price mechanism, which had applied to units authorized for the ASD and was more costly. At the same time, in order to discourage imbalances that could lead to an increase in system costs, the new regulation extends the macro-zone non-arbitrage fee to units authorized for the ASD and revises the structure of the fees for non-compliance with dispatching orders.

At the end of November 2021, Legislative Decree 199/2021 implementing Directive 2018/2001 on the promotion of the use of energy from renewable sources was published in the *Gazzetta Ufficiale*. The decree also contains provisions on the configuration of self-consumption and renewable energy communities, which are already governed in Italy by the experimental regulations introduced with Law 8/2020 (ratifying Decree Law 162/2019, the "Milleproroghe" omnibus extension act) and subsequent implementation measures (ARERA Resolution no. 318/2020/R/eel and Ministerial Decree of September 16, 2020 of the Ministry for Economic Development). On December 27, 2022, in implementation of Legislative Decree 199/2021, ARERA approved the Consolidated Distributed Self-Consumption Code (TIAD), which sets out the new regulatory framework for energy communities and distributed self-consumption configurations. The Ministry of the Environment and Energetic Safety (MASE) will have to update the incentive mechanisms for renewable energy plants inserted in collective self-consumption configurations or renewable energy communities set out in the experimental rules. Until MASE adopts the implementing measures, the transitional rules will apply.

Decree Law 4 of January 27, 2022, ratified with Law 25 of March 28, 2022 introduced a refund mechanism for plants powered by renewable sources receiving incentives through the energy account and for all plants powered by renewable sources that are not receiving incentives and that entered service by January 2010. Producers must return the difference between the market price, or the contracted price for forward sales, and a reference price identified in the same decree for each market zone (an average of €60/MWh). The implementation procedures of this mechanism have been specified by ARERA with Resolution no. 266/2022/R/eel. Decree Law 115 of August 9, 2022, ratified with Law 142 of September 21, 2022, introduced some modifications to the January measure by extending the application period, initially from February to December 2022, until June 2023, and specifying that, for vertically integrated groups, only contracts signed by group companies (including non-generators) with other natural or legal persons outside the group are eligible. On December 1, 2022, the Lombardy Administrative Regional Court granted the appeals filed by several operators, voiding Resolution no. 266/2022/R/eel and the technical standards. On January 18, 2023, the Council of State granted the precautionary request presented by ARERA and published an order restoring Resolution no. 266/2022.
Finally, the 2023 Budget Act (Law 197 of December 29, 2022), transposing Regulation (EU) 1854/2022, extends the reimbursement scheme to plants not covered by Decree Law 4 of January 27, 2022, establishing a cap of €180/MWh.

Article 21 of Decree Law 17 of March 1, 2022, calls for optimizing the gas injection cycle in order to fill the national stocks to at least 90% of available capacity, including through special storage conditions and methods of allocation of modulated storage space and the corresponding injection obligations.
In issuing the implementing regulations, ARERA, through Resolution no. 110/2022/R/gas, sought to promote filling gas stores by setting reserve prices at zero for all procedures for allocating modulated storage capacity. It also provides that costs in connection with the technical consumption of gas compression and treatment plants will not be charged to storage users.
In addition, ARERA introduced, with Resolution no. 165/2022/R/gas, a mechanism (the so-called "stock bonus") to further encourage the filling of gas stores. More specifically, the mechanism calls for paying users a storage premium based on the volume of gas in storage at the end of the injection phase.

Iberia

Royal Decree Law 6/2022 of March 29 adopting urgent measures as part of the Plan for the National Response to the economic and social consequences of the war in Ukraine, Royal Decree Law 11/2022 of June 25 adopting and extending certain measures to respond to the economic and social consequences of the war in Ukraine, address situations of social and economic vulnerability and the economic and social recovery of the island of La Palma

On March 30, 2022, Royal Decree Law 6/2022 of March 29 was published in Spain's Official Journal, approving certain measures as part of the Plan for the National Response to the consequences of the war in Ukraine. The legislation contains various measures for the energy sector, some of which were extended until December 31, 2022 with Royal Decree Law 11/2022 of June 25 and until December 31, 2023 with Royal Decree Law 18/2022 of October 18 and Royal Decree Law 20/2012 of December 27. Some of the most significant measures were the following:

- extends until December 31, 2022 the payment obligation that Royal Decree Law 17/2021 of September 14 established for non-emitting generation plants in proportion to the presumed higher revenue that those plants would have earned following the incorporation into wholesale electricity prices of the value of the price of natural gas. Power hedged with fixed-price forward contracts before March 31, 2022 will be exempt from the application of the mechanism. Hedging instruments with a duration equal to or greater than one year and a fixed price after March 31, 2022 will be excluded if the fixed price is equal to or less than €67/MWh. In the case of bilateral contracts between generators and retailers in the same business group, the hedge price will be the price that sellers pass on to final consumers and, in this case, the exempt fixed price will be determined by increasing the value by €67/MWh in the average marketing margin of the sector;
- exceptionally, within two months of the entry into force of the royal decree law, a ministerial order will update the remuneration parameters for renewable sources, cogeneration and waste plants, taking account of forward prices for the 2nd Half of 2021 for market prices and carbon dioxide (CO_2). Furthermore, starting from 2023 inclusive, the adjustment mechanism for deviations from the market price is eliminated, in order to encourage the forward sale of energy by these plants. However, Royal Decree Law 10/2022 of May 13 restored the adjustment mechanism for deviations from the market price, incorporating forward benchmarks in relation to the expected price;

- specific, simplified procedures have been established to promote the streamlining of the authorization process for new renewable plants or plants under construction, for wind projects up to 75 MW and photovoltaic plants up to 150 MW, with connection lines of less than 15 kW;
- as regards the access auctions, for two years from the publication of the royal decree law, in the nodes where the capacity tenders were held, 10% of the available reserved capacity will be released for renewable plants (linked to transmission or distribution) for self-consumption;
- exceptionally, for the 2023-2025 period, electricity distributors must specifically include in their investment plans specified actions to increase the capacity of their networks to allow the evacuation of electricity from renewable sources and self-consumption, which must represent a minimum of 10% of the investment eligible for the remuneration paid by the system each year, and must be primarily intended for areas where there is a lack of access capacity for renewable energy;
- strategic natural gas reserves will be increased from 20 days of consumption to 27.5 days, with greater flexibility.

Royal Decree Law 10/2022 of May 13 establishing a temporary generation cost adjustment mechanism to reduce wholesale electricity prices

On May 14, 2022, Royal Decree Law 10/2022 of May 13 was published in Spain's Official Journal. It establishes a temporary mechanism for adjusting generation costs to reduce the wholesale price of electricity. The measure establishes a mechanism for adjusting the generation costs of marginal fossil fuel technologies, with the aim of obtaining an equivalent reduction in the clearing price of the wholesale market until May 31, 2023.

Under this mechanism, the adjustment is based on the difference between a benchmark price for the gas consumed by thermal generation plants (€40/MWh for six months, subsequently increasing by €5/MWh per month, up to €70/MWh) and the spot price of gas on the Spanish organized gas market (MIBGAS). This mechanism will be applicable to combined-cycle, coal and cogeneration plants not covered by any regulated remuneration framework. The amount of the adjustment will be distributed among the portion of Iberian demand that directly benefits, either because it buys energy at a price directly related to the wholesale market value or because it has signed or renewed a contract that already takes account of the beneficial effect of the wholesale pricing mechanism. With regard to the latter aspect, the storage units, whether batteries or pumping systems, as well as supply units for auxiliary generation services, are exempt from payment of the cost of the mechanism.

The entry into force of the mechanism was subject to the authorization of the European Commission, which was granted on June 8, 2022, following which the Ministry for the Ecological Transition and the Demographic Challenge approved Order TED/517/2022 of June 8, which established June 14, 2022 as the start date for application of the mechanism (for the June 15 market day). In addition, this Royal Decree Law includes the following:

- a mandate has been established to introduce a reference to forward market prices, incorporating a price component based on a basket of products (annual, quarterly and monthly) and a daily and intraday market price component, so that the new voluntary retail consumer price (PVPC) energy costing formula can begin to be applied in early 2023. Therefore, the Ministry began hearings on the drafting of a royal decree to modify the PVPC energy costing formula to incorporate a forward basket of products in addition to the daily and intraday market price component. Moreover, the cost of funding the Social Bonus by the operators of the reference market is incorporated in the PVPC. The draft royal decree also modifies the scope of application of the PVPC, which would apply to residential customer and micro-enterprises with a contractual capacity of no more than 10 kW. Finally, changes were made to the rules for non-peninsular territories;
- the regime for the installation of renewable, cogeneration and waste facilities has been modified to reintroduce the adjustment mechanism for deviations from the market price and to incorporate a basket of prices in the price forecast, which will include both the daily market and forward benchmarks (annual, quarterly and monthly), with different weights.

Royal Decree Law 17/2022 of September 20 adopting urgent measures in the field of energy, in application of the remuneration system for cogeneration plants and temporarily reducing the Value Added Tax (VAT) rate applicable to intra-EU delivery, import and acquisition of certain fuels

On September 21, 2022, Royal Decree Law 17/2022 of September 20 was published, containing several urgent measures in the energy field, some of which were subsequently extended by Royal Decree Law 20/2022 of December 27. The measures adopted were as follows:

- option for cogeneration plants to temporarily waive the regulated remuneration scheme in favor of the adjustment mechanism for production costs provided under Royal Decree Law 10/2022 of May 13;
- creation of a new active demand response service through auctions managed by the system operator;
- greater flexibility in determining network transmission capacity, and streamlining and simplifying procedures for renewable energy projects;
- reduction in the VAT rate from 21% to 5% on supplies of natural gas, pellets, briquettes, and firewood until December 31, 2023;
- application of the entire surplus for 2021 to cover temporary imbalances and transitory deviations between revenue and costs in the 2022 financial year.

Royal Decree Law 18/2022 of October 18 which approves measures to reinforce the protection of energy consumers and to contribute to reducing natural gas consumption in application of "Plan +Security for your energy (+SE)", as well as measures on the remuneration of public sector workers and to protect seasonal agricultural workers affected by the drought

The Royal Decree Law 18/2022 was published on October 19, 2022, and implements some of the measures contained in the "Plan +Security for your energy". The most significant features are as follows:

- extension of the mechanism to reduce excess electricity market remuneration caused by high natural gas prices in the international markets, introduced by Royal Decree Law 17/2021 of September 14, until December 31, 2023;
- until the ordinance regulating auctions for the supply of fuel in non-peninsular territories is approved, a new dynamic dispatch pricing system, based on monthly calculations, will apply in these territories in order to making dispatching more efficient and reduce excess costs.

Law 38/2022 of December 27 on the establishment of temporary energy levies and taxes on credit institutions and financial credit establishments by creating the temporary solidarity tax on large fortunes, and amending certain tax rules

On August 30, 2022, socialist parliamentary groups and the parties constituting the government presented a draft law imposing temporary levies on the energy and banking sectors.

The law was published in Spain's Official Journal on December 28, 2022, after being approved by the Spanish Parliament.

The main features of the energy levy under this law are as follows:

- in 2023 and 2024, a temporary levy of 1.2% will be imposed on the net turnover derived from activity carried out in Spain in the previous calendar year, with the payment obligation arising as of the first day of the calendar year;
- the net turnover amount does not include revenue relating to the tax on hydrocarbons, the Canary Islands special tax on petroleum-derived fuels and the additional charges on fuels and petroleum products in Ceuta and Melilla, which have been paid or incurred as an input tax. It will also exclude turnover relating to regulated activities, meaning the supply at regulated prices (PVPC for electricity, the last resort rate (TUR) for gas, bottled LPG and piped LPG), the regulated revenue of electricity and natural gas transmission and distribution networks and, in the case of generation with regulated remuneration and additional remuneration in non-mainland areas, all plant revenue, including any received from the market and from dispatch services;
- the levy will apply to persons or entities considered main operators in the energy sectors, with an annual net turnover in 2019 of more than €1,000 million, or whose net turnover in 2017, 2018 and 2019 from their qualifying activities exceeded 50% of total net turnover for that year. It also establishes that main operators will include any individuals or entities who carry out in Spain activities relating to the production of crude oil or natural gas, coal mining or oil refining, and who generate, in the year preceding that in which the levy payment obligation arises, at least 75% of their turnover from economic activities relating to extraction, mining, oil refining or the manufacture of coke products;
- the net turnover for companies that are part of a tax group that is taxed on a consolidated basis is calculated based on the entire group;
- the tax is legally classified as non-tax levy of a public nature and is not deductible for corporate income tax purposes, nor can it be passed on to customers//third parties.

Royal Decree Law 20/2022 of December 27 on measures to respond to the economic and social consequences of the war in Ukraine and to support the reconstruction of the island of La Palma and other situations of vulnerability

On December 28, 2022, Royal Decree Law 20/2022 of December 27 was published, with the following most significant aspects:

- the scope of application of the exceptions introduced by Royal Decree Law 10/2022 of May 13 includes waste-to-energy plants authorized prior to 2013 with a power capacity of between 50 MW and 100 MW, which allows them to temporarily waive inclusion in the specific regulated remuneration scheme as is currently allowed for cogeneration plants;
- in order to prevent speculative maneuvers in the renewable energy sector and to avoid overwhelming the administrative process, some procedures for which applications have been submitted will be suspended for a period of 18 months with regard to nodes reserved for capacity tenders;

- progress has been made in simplifying and speeding up the procedures for processing authorizations for renewable energy plants;
- in the area of self-consumption, the distance for a photovoltaic system used for self-consumption to be considered in close proximity to the grid has been increased from 1,000 to 2,000 meters, and they may be located, in addition to on rooftops, on industrial land or on structures whose primary purpose is not the generation of electricity;
- with regard to electricity transmission, by March 31, 2023 the government will start to modify the development plans for the transmission grid to include priority measures to promote the energy transition and that make it possible to develop the industrial value chain. On an exceptional basis, these measures may be partially funded by the Recovery, Transformation and Resiliency Plan and are not subject to the investment limits for transmission companies;
- aid will be available to gas-intensive companies to offset the increase in natural gas prices;
- finally, a number of measures enacted to make natural gas supply contracts more flexible were extended until December 31, 2023.

Renewable energy auctions

Based on the provisions of Order TED/1161/2020 of December 4, which sets out the rules for the first auction held under the economic regime for renewable energy and sets the indicative timetable for 2020-2025, the Resolution of July 18, 2022, published on July 28, 2022, announced the third auction under the economic regime for renewable energy. A total of 380 MW was allocated for the auction, which was held on October 25, 2022. In the same way, the Resolution of August 2, 2022, published on August 5, 2022, announced a fourth auction, with 3,300 MW allocated to be awarded, which was held on November 22, 2022.
Furthermore, in 2022 various ministerial orders where approved, updating the remuneration of some of the compensation parameters of the structures, and work has begun on updating the parameters for the 6-month regulatory period beginning in 2023.

Tenders for access capacity at certain nodes of the transmission grid

On June 10, 2022, the Ministry for the Ecological Transition and the Demographic Challenge began preparation of a proposal for an ordinance for calling a tender for the access capacity at certain nodes of the transmission network, in compliance with the provisions of Royal Decree 1183/2020 of December 29 concerning access and connection to the electricity transmission and distribution networks, for a total capacity of 5,844 MW.
In addition, on August 9, 2022, the Resolution of the Secretary of State for Energy of August 3, 2022 was published, containing the decision to hold another tender for access capacity at certain nodes of the transmission grid.

Fuel Order in the non-peninsular territories

On December 30, 2022, Order TED/1315/2022 was published, which implements Decision 1337/2021 of November 16, 2021 of the Spanish Supreme Court, relating to the need to regulate auctions for the supply of fuel in the non-peninsular territories and other technical aspects.
The order sets out the procedure for conducting fuel auctions, which will be held every two years and will be for the product introduced into the plant (or the raw material in the case of gas from the Balearic Islands). The auctions will be reverse auctions based on starting prices obtained by increasing the benchmark prices by 10% (3% in the case of natural gas), which will be those applied until the auctions are held or the auctions do not take place or are canceled. As from January 27, 2022, the benchmark price for natural gas will be the price on the Iberian Gas Market (MIBGAS), while for other fuels it is determined based on a series of international indices, to which a premium is added, where appropriate. The order also recognizes the logistics costs of delivering the product to the plant, which may be revised every three years.
In addition, the order also provides for the use of natural gas in the Canary Islands and in Melilla, as well as LPG in the Canary Islands, together with other less polluting fuels.

Europe

Romania

Enel Green Power Romania

The company's financial position was impacted by the energy transition solidarity fund that has been imposed since November 2021. Some 80% of revenue in excess of €90/MWh for the period January-August 2022, and 100% of the revenue above €90/MWh for the period September-December 2022 were collected. Balancing costs and financial transaction costs had to be covered by the amount up to €90/MWh, which had negative effects on the profitability of electricity producers, which had to purchase balancing energy to meet their contractual or hedging//coverage requirements through various transactions. Producers must withhold the contributions payable to the Energy Transition Fund on electricity traded with traders through physical or financial products.

Enel Trade Energy

Traders, suppliers that engage in trading and aggregators that sell electricity and/or gas are required to pay a new contribution to the Energy Transition Fund, in effect from September 1, 2022 to August 2023. They are allowed a profit margin of 2% on trading activities, with the difference on the profit paid into the fund.

Russia

Electricity and capacity markets

Government Decree 238 of April 13, 2022 provided for an indexation rate of 7.4% for regulated capacity rates for generators that begin selling capacity through long-term capacity auctions (KOM) from January 1, 2022 after the termination of the long-term capacity supply contract period (DPM).

Latin America

Chile

Rate revision – Introduction of temporary electricity price stabilization mechanisms

On November 2, 2019, Law 21.185 of the Ministry of Energy was published, introducing a temporary electricity price stabilization mechanism for customers subject to rate regulation. Consequently, the prices to be applied to regulated customers in the 2nd Half of 2019 were lowered to those applied in the 1st Half of 2019 (Decree 20T/2018) and were defined as "stabilized prices for regulated customers" (PEC).

Between January 1, 2021 and the expiry of this mechanism, the prices to be applied will be those set every six months on the basis of Article 158 of the Electricity Law and may not exceed the level of the PECs noted above adjusted for consumer price inflation.

Any differences between the amount invoiced by applying the stabilization mechanism and the theoretical amount that could be invoiced considering the price that would have been applied in accordance with the contractual terms and conditions agreed with the various electricity distribution companies will be accounted for as receivables for invoices to be issued to generation companies up to a maximum of $1,350 million until 2023. These differences will be recognized in US dollars and will not accrue interest until the end of 2025. Any imbalances in favor of the generation companies must be recovered no later than December 31, 2027. It should be noted that the fund limit was reached in January 2022.

On August 2, 2022, the Ministry of Energy published Law 21.472, which establishes a rate stabilization fund and a new mechanism for the temporary stabilization of electricity prices for customers subject to rate regulation. This law establishes a Transitional Customer Protection Mechanism (TCPM) which will stabilize energy prices, complementing that provided for by Law 21.185, for customers subject to regulation of prices supplied by concession holders of the public distribution service governed by the General Law of Electricity Services. The purpose of the TCPM will be to pay the differences that occur between the invoicing of distribution companies to end customers for the energy and power component, and the amount that corresponds to the payment of the supply of electricity to generation companies. The resources appropriated for the operation of the TCPM cannot exceed $1,800 million and their availability will be extended until the balances originating from the application of the law are extinguished. Starting from 2023, the National Energy Commission must project the total payment of the residual final account every six months for a date that cannot be later than December 31, 2032.

Argentina

Rate revision – New resolutions

The Argentine generation sector is made up of companies that own power generation plants. The electricity generation companies sell the energy produced and their capacity on the market at a price established by the market regulator, CAMMESA, as is done for any subsequent rate adjustment or discounting.

With Resolution SE no. 826/2022, the Energy Secretariat approved two rate increases for generation companies for

2023, for a total rise of 60%, in line with the inflation projections envisaged in the 2023 national budget.
The main points addressed by the aforementioned Resolution are summarized below:

- remuneration increases for 2023:
  - February 2023 = 25%;
  - August 2023 = 28%;
- furthermore, the increases for 2022 were retroactively approved: +20% from September and +10% from December;
- a change was introduced in the definition of remuneration for available power during peak hours for thermal generation, as more generally reference is made to remuneration for available power during peak hours;
- the price of the remuneration will no longer be influenced by the remuneration of the thermal units in the event of non-compliance with the *Disponibilidad Garantizada Ofrecida* (DIGO);
- CAMMESA will have to monitor the availability of plants in order to verify the effective operational efficiency of the generating machines.

Brazil

Ordinary revision of the physical guarantee of hydroelectric plants

On November 30, the Ministry of Mines and Energy published Ordinance 709/2022 with the ordinary revision of the physical guarantee of centrally dispatching hydroelectric plants in the National Interconnection System (SIN), which takes place every five years. The hydroelectric plants of Cachoeira Dourada and Volta Grande had a 5% reduction in the current physical guarantee, respectively of 374.6 and 219.1 MWmed. The revision for these plants was a measure already envisaged by the Group.

Enel Green Power

Italy

The Ministerial Decree of July 4, 2019 provided for competitive procedures based on Dutch auctions and registers, depending on the installed capacity and by technology groups, including photovoltaic systems. In particular, up to October 2021, seven procedures will be held with:

- Dutch auctions for plants with a capacity of more than 1 MW;
- registers for plants with a capacity of less than 1 MW.

Unlike previous decrees, the Ministerial Decree of July 4, 2019 provides for a new method for supporting renewable sources through two-way contracts for differences under which the successful tenderer returns any positive differences between the zonal price and the auction price.
At March 31, 2022 the indicative annual cumulative cost was around €731 million, compared with a ceiling of €5.8 billion for termination of the incentive mechanism.

On November 30, 2021, Legislative Decree 199 of November 8, 2021 transposing Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources (the RED II Decree) was published in the *Gazzetta Ufficiale*.
The decree provides that capacity not assigned in the auction procedures referred to in the Ministerial Decree of July 4, 2019 shall be put up for auction in subsequent procedures in 2022, until the publication of the new auction schedule for the next five years. Pending the new scheduling, two additional auction procedures were published during 2022.
In addition, the measure confirmed the same Dutch auction mechanisms for plants with a capacity greater than 1 MW, providing for an exception for plants with a capacity greater than 10 MW, which will be able to use the mechanism even though they have not completed the authorization process.
Plants with a capacity of less than 1 MW, on the other hand, will have direct access to incentives, with the exception of innovative technology plants, which will be able to access the subsidies through specific tenders.

Iberia

Renewable energy

Royal Decree Law 6/2022 of March 29, 2022 includes several measures in the sector of renewable energy. These include:

- the creation of a simplified and shortened procedure for the preparation of certain renewable energy projects;
- an update of certain specific aspects of the renewable energy remuneration scheme set out in Royal Decree 413/2014;
- the extension of the reduction mechanism established in 2021 and the setting of a benchmark price of €67/MWh from which exemptions are envisaged for certain bilateral or intercompany contracts;
- an obligation for at least 10% of distributors' investments to be aimed at creating new access capacity to connect renewable generation plants.

On May 13, 2022, the Council of Ministers approved the "Iberian mechanism to limit the price of gas and reduce electricity prices". The mechanism has a duration of one year and is designed to reduce prices to customers in PVPC.

Royal Decree Law 11/2022, published on June 25, 2022, reduces the VAT on electricity, maintains the reduction of the special tax on electricity, and suspends the tax on the production value of electricity generation.

Royal Decree Law 18/2022, published on October 18, 2022, extends the measures set out in Royal Decree Law 17/2021 until December 31, 2023.

Royal Decree Law of December 27, 2022 extends to December 31, 2023 the reduction in VAT on electricity (set at 5%) and the suspension of the tax of 7% on the production value of electricity generation.

Furthermore, these royal decree laws include measures to make drawing up renewable energy generation projects quicker and easier.

Europe

Greece

The Greek Parliament approved Law 4936/2022, published on May 27, 2022. Article 37 of the law introduced an extraordinary retroactive tax on the windfall earnings on the gross revenue of generators participating in the wholesale market (excluding RES under the FiT and FiP mechanisms). The measure aims to mitigate the impact of rising energy prices on consumers, financing discount in their electricity bills, and applies from October 1, 2021 to June 30, 2022 at a level of 90%. The exact method of calculation was introduced in October 2022 via ministerial decision. The regulatory authority estimates the impact on FEG to be €1.8 billion.

Ministerial decision 70248/2434/2022, published on July 7, 2022, introduced a temporary energy market mechanism in response to the energy crisis. The new mechanism imposes a cap on generators' earnings, which varies by technology. The wholesale market is normally regulated to avoid disruptions in cross-border trading prices. The difference between the wholesale market price and the cap is paid into the Energy Transition Fund, which is used to subsidize consumers electricity bills. The cap for renewable energy generators operating in the wholesale market is set at €85/MWh (€112/MWh for hydroelectric power). The caps for companies generating electricity from lignite and natural gas will be calculated and announced monthly. The formula used to calculate the caps for these producers takes into account various parameters for covering electricity generation costs and enabling producers to earn a reasonable profit. The mechanism entered into force in July 2022 and should be operational by July 2023.

Ministerial decision 66576/5877/2022, published on July 7, 2022, determined the installed capacity from RES power plants that will be auctioned via a competitive procedure, the number of auctions to be held per year, the calendar for holding the auctions and other related matters. The auction support regime will remain in effect until the end of 2024.

Ministerial decision 84014/7123/2022, published on August 13, 2022, established the priority framework for granting binding grid connection terms for RES plants and storage provided by the grid manager and the system manager, including grid saturation areas. The priority clusters also include BESS+RES projects of FEGGH. This development is important because Enel Green Power Hellas has around 1.42 GW RES + 2.46 GW BESS (54 projects) in its pipeline (under joint development agreements).

Romania

The application of Emergency Ordinance no. 27/2022, containing measures applicable between April 1, 2022 and March 31, 2023 to end customers in the electricity and natural gas market, had an impact on Enel Green Power Romania's activities in 2022. GEG requires all electricity producers to pay a contribution to the Energy Transition Fund: the additional revenue generated by electricity producers as the difference between the average monthly net price on the sale of electricity and the benchmark price of RON 450/MWh (about €91/MWh) is taxed at 100% (for some months 80%). Only 5% of the cost of imbalances is taken into account, and for some months, the costs associated with financing contracts are not even included. Moreover, since December 2022 producers that trade electricity on the wholesale market are required to withhold and pay taxes to the Energy Transition Fund on revenue generated from residents/non-residents relating to long-term contracts for hedging market risk.

Germany

The German government introduced a 90% tax on the revenue of producers of renewable energy, nuclear energy, and production from oil, waste and lignite above a certain price (which varies based on technology), which began on December 1, 2022 and is expected to last until the end of June 2023, although it may be extended until April 30, 2024. The revenue raised from the tax will be used to finance the price brakes on electricity, gas and heating prices that are at the heart of a €200 billion package that Germany has adopted in response to high natural gas wholesale prices. RES plants receiving government support will be taxed on revenue above the strike price plus a margin of €30/MWh and 10% of market revenue (in Germany, contracts for dif-

ferences are one way). Other RES plants will be taxed on revenue above €100/MWh plus a margin of €30/MWh and 10% of market revenue.

North America

United States

Forced labor in the solar supply chain

In June 2021, US customs authorities responded to reports by issuing a "Withhold Release Order" (WRO) on silicon-based products manufactured by the company Hoshine Silicon Industry Co. Ltd (Hoshine) and its subsidiaries, since they have been accused of exploiting their workforce. The WRO restricts the import into the United States of polysilicon products made by Hoshine Silicon Industry Co. Ltd.

The effect on the US solar industry was the halt of shipments of photovoltaic modules by US customs, resulting in a delay in the delivery of solar equipment to end users, including Enel.

All photovoltaic equipment manufacturers had to produce clear documentation of their supply chain to meet US customs requirements. The documentation had to prove the specific origin of metallurgical grade silicon in imported photovoltaic products and demonstrate the absence of any Hoshine product in any part of the mining or manufacturing process.

Enel's Code of Ethics and corporate procedures do not permit the exploitation of workers by any Group supplier or subcontractor. Nevertheless, Enel is strengthening its controls, reviewing its supply chain and monitoring the implementation of the WRO by customs officials.

In a separate but connected development, in December 2021, President Biden signed the Uyghur Forced Labor Prevention Act (UFLPA). UFLPA requires US customs authorities to apply a presumption that goods "mined, produced, or manufactured in whole or in part" in the Xinjiang Uyghur Autonomous Region are made with forced labor and, therefore, are prohibited from being imported into United States.

Goods covered by this presumption shall not be allowed to enter unless the importer proves that:

- it has fully complied with government guidelines and regulations;
- it has responded fully and substantially to all US customs inquiries; and
- it is determined "with clear and convincing evidence" that the goods were not produced using forced labor.

Polysilicon is one of the three industries on which application of the WRO is focused, and this focus extends to photovoltaic equipment that could contain raw materials mined in the Xinjiang Uyghur Autonomous Region.

Implementation of the law will be guided by an administrative regulation process under way since February 2022, which is expected to be completed by June 2022.

A key element of the UFLPA came into force on June 21, 2022: rebuttable presumption. From now on, any import of goods mined, produced or manufactured in whole or in part in the Xinjiang Uygur Autonomous Region (XUAR), or from entities identified in a new UFLPA entity list, will be assumed to have been made with forced labor and will be barred from entering the United States. To prevent US customs from blocking the delivery of goods, importers will need to demonstrate whether the goods to be imported (or their components) were extracted, produced or manufactured in the XUAR and/or whether the goods to be imported were purchased from a supplier identified in the UFLPA entity list.

UFLPA compliance by importers should ensure compliance with the current Withhold Release Order (WRO), which blocks the import of any solar equipment containing metallurgical grade silicon manufactured by Hoshine.

The private nature of the blocked imposed by US customs makes it difficult to monitor the application of the UFLPA. According to media reports, in June 2022 US customs blocked certain imports of solar equipment into the United States under the UFLPA and required documentary evidence proving the origin of the quartzite in the equipment supply chain.

US duties on imported solar equipment

In February 2022, the Biden administration announced its decision to extend the duties applicable to imported solar panels. The decision extends the collection of duties for another four years, while adopting a very marginal annual tariff reduction: the duty on imported solar panels will decline by 0.25% each year. It is important to note that the Biden administration's decision also confirms the tariff exemption for bifacial solar modules, which are the main type of solar panels used by Enel for its utility-scale projects in the United States.

US duties on imported Chinese products

In 2018, the United States Trade Representative (USTR) conducted a Section 301 investigation and found that China's acts, policies and practices related to technology transfer, intellectual property and innovation were unreasonable and discriminatory.

As a result, it published five lists (List 1, 2, 3, 4A and 4B), each of which identifies different Chinese products subject to different duties. To Enel, the list of greatest interest is that including Chinese components used for wind and solar projects and batteries.
In September 2022, the USTR announced that it was seeking public comments regarding the effectiveness of the Section 301 duties in order to understand the effects of these on the economy and on US consumers in order to identify any other actions that could be taken.

It is not clear whether the USTR will use the comments to consider starting a new exclusion process.

Federal loans and incentives for clean energy in the United States

In November 2021, President Biden signed the $1 trillion Infrastructure Investment and Jobs Act (IIJA), also known as the bipartisan infrastructure law, unlocking funds for new spending on roads, bridges, aqueducts, broadband. The new law also contains provisions to boost the expansion of the country's electricity grid and support existing and new clean energy technologies. It also contains provisions to support existing nuclear power plants and hydroelectric plants, clean up orphaned wells and abandoned mining lands and facilitate access to critical minerals needed for clean energy production. Of potential interest to Enel, the following programs were announced in the 1st Half of 2022:

- clean hydrogen: the Department of Energy (DOE) has received $8 billion to develop between 6 and 10 "Clean Hydrogen Hubs" in the United States. Each hub will consist of a network of clean hydrogen producers, potential consumers and connecting infrastructure located in close proximity. The DOE is receiving applications, which must be completed and sent by April 2023. The programs selected for funding will be announced in the summer of 2023;
- the National Electric Vehicle Infrastructure Formula Program (NEVI) has made $5 billion in funding available over five years and distributed across all 50 states. The plan aims to promote the development of battery-powered cars, ensuring that motorists always have somewhere to charge their vehicles.
  The funding covers the cost of EV charging stations and the related infrastructure (including solar power and storage systems), as well as operation and maintenance costs for five years;
- electric vehicle charging infrastructure: the US Department of Energy (DOE) and the US Department of Transportation (DOT), acting through the Federal Highway Administration, have presented a plan to create a network of public electric vehicle chargers along interstate highways worth $5 billion. The money will be distributed over five years across all 50 states. The plan aims to promote the development of battery-powered cars, ensuring that motorists always have somewhere to charge their vehicles. Separately, the DOT, acting through the Federal Transit Administration, has announced a plan to distribute $5.3 billion in grants to state and local transit agencies for the "Low or No Emission Vehicle Program". The "Low or No Emission Vehicle Program" supports transport agencies in purchasing or leasing low or no emission buses and other transport vehicles that use technologies such as electric batteries;
- strengthening the power grid and expanding transmission: this program of $2.5 billion in government subsidies over five years was introduced to strategically distribute publicly available EV charging infrastructure and other infrastructure to be located along alternative fuel corridors. At least 50% of this funding must be used for projects that expand access to EV recharging and alternative fuel infrastructures in rural areas and in low- and moderate-income communities with little private parking;
- electric school buses: $5 billion over five years has been allocated to replace existing diesel-powered school buses with clean, zero-emission buses. Half of the funding will be spent on electric zero-emission buses, while the other half will be used on zero-emission buses powered with alternative fuels. Grants can cover up to 100% of the costs of replacing existing schools and installing charging and refueling stations. The IIJA will replace over 1,000 transport vehicles, including buses, with clean electric vehicles, thanks to an additional appropriation for the US DOT of $5.75 billion over the next five years, 5% of which will be dedicated to training the transportation labor force on maintaining and managing the fleets.

Inflation Reduction Act of 2022

On August 16, 2022, President Biden signed the Inflation Reduction Act (IRA), which sets aside $415 billion over the next 10 years in the form of grants, tax credits and investments to support new clean energy technologies projects, renewable energy generation, the electrification of transport systems and climate-smart agriculture. It is expected that the measures will reduce carbon emissions by almost 40% in the United States by 2030 and will raise US GDP by 0.2% in 2031. The funding will be distributed as follows:

- energy (to extend, and in some cases increase, tax credits; $263 billion);
- climate (to accelerate the reduction in emissions and support low-income communities; $48 billion);
- generation (to encourage the domestic production of solar panels, wind turbines and batteries; $48 billion);
- environment (to create environmental quality incentives; $27 billion);

- transportation (through offering tax credits to consumers; $24 billion);
- water (though a drought-relief program; $5 billion).

The US Department of Treasury is currently working on the guidance needed for a new set of tax credits. The various tax credits will be phased down starting the latter of:

- December 31, 2032; or
- the year in which the US's greenhouse gas emissions from electricity generation will be 25% below 2022 emission levels.

Depending on that status of the infrastructure to be built, tax credits may be available beyond 2032. The following are the IRA provisions that are of greatest interest to Enel.

Extension and expansion of federal tax credits for clean energy: the IRA extends the production tax credit (PTC) ($26.5/MWh for projects that begin construction after December 31, 2021) and introduces a new technology-neutral clean electricity tax credit commencing in 2025. It also extends the investment tax credit (ITC) (30% for projects the begin construction after December 31, 2021) and launches a new technology-neutral clean electricity ITC beginning in 2025. Solar power developers may now request PTC instead of ITC. However, to be eligible for the full credit, projects must meet the prevailing wage and apprenticeship requirements for the entire period of construction (and perhaps also for some of the maintenance activities); project owners that fail to comply will have to pay a penalty or see their tax credit reduced to 20% ($5/MWh PTC or 6% ITC). The IRA also adds standalone energy storage projects, in line with the conditions for solar power, and microgrid controllers, specifically for systems of between 4 kW and 20 MW, to the technology eligible for ITC.
The IRA creates a bonus tax credit if domestic content requirements or energy community requirements are met. Another new bonus tax credit is available for solar and wind facilities (and connected storage systems) located in low-income communities.
A new 10-year clean hydrogen PTC of $3 per kilogram is available for hydrogen produced after December 31, 2022. For a project to be eligible, construction must begin before January 1, 2033.

Extension and expansion of federal tax credits and loans for electric vehicles: in order to encourage the electrification of the transportation sector, the IRA extends various tax credits for new and previously owned electric vehicles and commercial electric vehicles, including buses, and expands the tax credit to cover the purchase of EV charging equipment.

The IRA allocates $1 billion for replacing heavy-duty Class 6 and 7 commercial vehicles with zero-emission vehicles (for example, school buses, public transportation bus, garbage trucks) and $3 billion for the US Postal Service to purchase new electric delivery vehicles and charging stations.

New advanced manufacturing production tax credits: the IRA creates a new PTC for the production of components for wind, solar and battery projects, such as solar PV cells, PV wafers, PV modules, wind turbines, nacelles, inverters, battery cells and modules, and many others. Tax credit amounts vary by component, production cost and certain capacity factors. To be eligible, the component must be produced by the taxpayer in the United States. Credits are available on an annual basis for components sold beginning in 2023 until 2032 (gradually reduced starting from 2030).

New direct payment of applicable tax credits and the transferability of some tax credits: the IRA creates the option for some sector operators to choose between direct pay or transferability of the tax credit, which means that we will see changes in the ways projects are developed and an expansion in the number of industries that develop projects. Enel is particularly interested in the direct pay option for new advanced PTC and for new clean hydrogen PTC.

Development of renewable energy on federal/public lands

The Biden administration set the goal of authorizing 25 GW of renewable energy on public lands by 2025. In order to reach this goal, the administration has ordered federal agencies to accelerate reviews of clean energy projects for production on public lands by establishing five new renewable energy coordination offices and has cuts rents and fees for solar and wind projects on public lands by more than 50%.

Domestic production of clean energy technologies

On June 2, 2022, President Biden issued presidential determinations giving the United States Department of Energy (DOE) the authority to use the Defense Production Act (DPA) to accelerate domestic production of five key energy technologies:

- solar;
- transformers and electric grid components;
- heat pumps;
- insulation;
- electrolyzers, fuel cells and platinum group metals.

The DPA actions are part of the Biden administration's plan to reduce energy costs for households, strengthen national security and achieve lasting American energy independence that reduces demand for fossil fuels and supports the development of renewable energy generation.

Climate information

The US Securities and Exchange Commission is finalizing the rules on what climate-related information registrants need to disclose in their filings and annual reports. Such information will include data on greenhouse gas emissions, certain climate-related financial metrics, and material climate risk. The rules had been scheduled to be issued by the end of 2022, but the release date has been postponed.

Individual state policy actions

California appropriates significant funds for clean energy initiatives: at the end of 2022, California had an almost $100 billion budget surplus and so allocated significant funding for various programs, including clean energy. Among these, it allocated a $550 million lump sum to support distributed backup electricity assets for zero or low-emission resources to support the grid when necessary, and a one-time $200 million appropriation for demand-side grid support to reduce the load on the grid during periods of extreme stress.
The governor also allotted $10 billion over six years to accelerate the electrification of the transportation system.

Maryland approves an important climate act: the Climate Solutions Now Act came into force in June 2022. The measure increases the State's target for reducing greenhouse gas emissions to 60% compared with 2006 levels by 2031, compared with the previous target of 40% by 2030. It also sets a deadline of 2045 for the achievement of net zero greenhouse gas emissions across the economy. The law creates a new standard of energy performance for buildings, which will have to report their emissions starting from 2025. By 2030 buildings will have to reduce emissions by 20% compared with 2025 levels. The law allows the use of energy storage and upgrading of grid infrastructure as emission reduction measures, but only if it can be demonstrated that "verifiable carbon reductions" will be achieved.

Massachusetts introduces zero-emission vehicle standards and energy storage initiative: Governor Charlie Baker signed a climate bill that requires that all new vehicles sold in the commonwealth be zero-emission vehicles as from 2035. The law also provides that the Department of Public Utilities institute an incentives program for energy storage in order to achieve a 1,000 MWh energy storage target by December 31, 2025.

New York governor reaches budget agreement on electric buses: New York Governor Kathy Hochul announced a deal that includes a historic plan to fully electrify the state's school bus fleet. The plan calls for all new school bus purchases to be electric starting in 2027 and for the state fleet to be electric by 2035. The state will provide aid to schools for the purchase or rental of electric buses, including charging infrastructure.

Canada

Clean Fuel Standards

Canada has released its standards for low-carbon fuels, the "Clean Fuel Standards", after a significant delay prompted by the COVID crisis. This policy was announced a number of years ago and its rules have been finalized for implementation in 2023. The Clean Fuel Standard (CFS) is central to the Canadian Government's commitment to reduce greenhouse gas emissions by 30% compared with 2005 levels by 2030. The proposed regulation is also a key part of Prime Minister Justin Trudeau's commitment to achieve net zero emissions by 2050.

CFS requires suppliers of liquid fuels, such as gasoline, diesel and kerosene, to gradually reduce the amount of carbon in their products. Carbon intensity reduction targets will be set for each fuel, starting in 2022 and increasing annually until 2030. Following entry into force in 2023, the regulation will require gasoline and diesel suppliers to meet increasingly stringent requirements to reduce the carbon intensity in the life cycle of their products. They will be able to do this both by reducing emissions from their production and refining processes, and by buying credits from producers of lower-emission fuel sources – which means that legislation should help support emerging sectors such as biofuels and electric vehicle charging.

Recapitalization of funds for the reduction of carbon emissions

During 2022, most of the funds earmarked for actions to reduce carbon emissions were appropriated. These include:

- Low Carbon Transit Operations Program: valued at $2.75 billion, it offers support to public transit and school bus operators across Canada who are electrifying their fleets. The Zero Emission Transit Fund maintains the federal government's commitment to contribute to the purchase of 5,000 zero-emission buses over the next five years. This investment is being made in coordination with Canada Infrastructure Bank's commitment to invest $1.5 billion in zero-emission buses as part of its three-year growth plan;
- Zero Emission Vehicle Infrastructure Program (ZEVIP): this is a $680 million initiative ending in 2027 and aimed at addressing the lack of charging and refueling stations in Canada, a major barrier to the adoption of zero-emission vehicles, by increasing the availability of local charging and hydrogen refueling opportunities. Funding will be provided through cost-sharing contribution agreements for eligible projects that will help meet the growing demand for recharging and refueling. This fund strengthens Canada's mandatory goal of making all new passenger cars and light trucks carbon neutral by 2035, accelerating the previous goal of 100% by 2040;

- Smart Renewables and Electrification Pathways Program (SREPs): this is a $964 million program that provides $922 million over four years for power grid modernization and smart renewable energy projects. The program will significantly reduce greenhouse gas emissions by encouraging the replacement of electricity generated from fossil fuels with renewable sources that can provide essential grid services, while supporting Canada's smooth transition to an electrified economy.

Launch of clean electricity standards

In March 2022, the government launched consultations to develop a Canadian standard for clean electricity, the Clean Electricity Standard (CES), and drive progress towards a zero-emission electricity grid by 2035. Expanding clean electricity will also be key to achieving the ambitious and achievable Canadian emissions reduction target of 40-45% compared with 2005 levels by 2030 and net-zero emissions by 2050. Canada already has one of the cleanest electricity grids in the world, with 82% of the electricity used coming from non-emitting sources.

Developing a clean electricity standard is a collaborative process between the federal government, provinces, territories, indigenous groups, power companies, industry and Canadians in general. This inclusive approach supports the competitiveness of the economy by providing a clear basis for provinces and territories to plan and operate their grids, while continuing to provide reliable electricity to Canadians and keeping costs for households and businesses affordable.

Alberta Act on energy supply and storage

The Electricity Statutes Amendment Act, 2022, contains a package of aid for Alberta's electricity system to enable it to optimize and to implement public-scale energy storage systems.

The act integrates new technologies and innovations into Alberta's electricity system enabling energy storage, unlimited self-supply with export and help for the distribution system plan for electric vehicles, renewable power sources and other distributed energy resources. More specifically, this legislation:

- includes a formal definition for energy storage in Alberta's legislative and regulatory framework;
- allows distribution and transmission utilities to own and/or operate energy storage assets under specific conditions;
- allows competitive models to be used to procure distribution and transmission services from market participants.

Africa, Asia and Oceania

India

On December 5, 2022, the Deviation Settlement Mechanism and Related Matters Regulation (2022 DSM Regulation) entered into force. It was published by the Central Electricity Regulatory Commission (CERC) and will replace the 2014 DSM Regulation. The new regulation has a negative impact on Independent Power Producers (IPPs) with wind and solar plants. Basically, over-injection (i.e., injection into the grid in excess of the declared generation) will be compensated at the contractual rate for up to a 5% deviation and at 90% of the contractual rate for an over-injection of between 5% and 10%. No payment will be made for an over-injection of above 10%. The 2014 DSM Regulation instead provided that over-injection be remunerated based on a declining percentage of the contractual rate, ensuring higher revenue for producers. Over-injection up to 15% was remunerated at 100% of the contractual rate, between 15% and 25% at 90%, and so forth. The terms are also worse for under-injection (generation below that scheduled). A smaller range of deviation from the scheduled generation is tolerated and the penalties are greater than those in the 2014 version. In the case of under-injection up to 10%, the IPP must reimburse the purchaser according to the contractual rate without further penalty. If the under-injection exceeds 10%, the IPP must pay 10% of the average price on the day-ahead market, i.e., the clearing price, in addition to the costs associated with the deviation.
The new DSM Regulation has an impact on revenue owing to (i) no payment for over-injection above a 10% deviation, and (ii) higher deviation charges for under-injection.

Enel Grids

Italy

Rates for the fifth regulatory period (2016-2023) are governed by the Regulatory Authority for Energy, Networks and the Environment (ARERA) Resolution no. 654/2015/R/eel. This period lasts eight years and is divided into two sub-periods of four years each (NPR1 for 2016-2019 and NPR2 for 2020-2023).
With regard to the NPR2 period, ARERA published Resolution no. 568/2019/R/eel, with which it updated rates for transmission, distribution and metering services in force in the 2020-2023 period, publishing the new integrated texts.
The method for determining the WACC for the period 2022-2027 was updated with Resolution no. 614/2021/R/com, establishing a value of 5.2% for electricity distribution and metering. The regulation provides for an update of the value for 2025-2027, as well as the possibility of a further annual updating (in 2023 and 2024) should certain financial indicators lead to a change in the WACC of at least 50 bps.

As for distribution and metering rates, ARERA approved the definitive reference rates for 2021, calculated by taking into account the updated balance sheet data for 2020 (Resolution no.153/2022/R/eel) and the provisional reference rates for 2022 on the basis of the preliminary balance sheet data for 2021 (Resolution no.193/2022/R/eel). The definitive reference rates for 2022 are expected to be published in 2023.

With Resolution no. 271/2021/R/com, ARERA initiated a procedure to introduce, from 2024, new methods for recognizing the costs of infrastructure services, called "ROSS" (Adjustment for Expenditure and Service Objectives). In 2022, the corresponding consultation documents no. 317/2022/R/com and no. 655/2022/R/com were published. ARERA, with its Resolution no. 527/2022/R/com, also initiated a procedure to introduce, from 2026, the "full ROSS" version (based on analysis of the business plans drawn up by the companies and validated by ARERA).

Throughout 2022, when making the quarterly updates, ARERA took the extraordinary step of canceling the general system charges for all types of customers and reinforcing the Social Bonus. The measures were made possible thanks to the resources allocated by the government to contain the effects of price increases in the electricity sector. As part of these measures, the government also raised the ISEE (indicator of the equivalized economic) threshold for eligibility for Social Bonuses (for 2022 to €12 thousand; for 2023 to €15 thousand). As a result, ARERA implemented the regulatory provisions scheduled for 2022 and is preparing the ones for 2023.

In 2022, ARERA completed the rate regulation for reactive energy, providing for the entry into force by April 1, 2023 of charges for reactive energy injected and an update of the charges for reactive energy withdrawn for distributors as well.

As regards service quality, ARERA, with Resolution no. 646/2015/R/eel as amended, established output-based regulation for electricity distribution and metering services, including the principles for regulation for 2016-2023 (TIQE 2016-2023). With Resolution no. 566/2019/R/eel, ARERA completed the update of the TIQE for the 2020-2023 semi-period, proposing tools to bridge gaps in quality of service still existing between the various areas of the country, taking account of the time needed to implement interventions on the grid as well as the effects of climate change.
With Resolution no. 622/2022/R/eel, ARERA specified the bonuses and penalties connected with the output-based regulations for the electricity distribution service and innovative functions for 2021.
With Resolution no. 722/2022/R/eel, ARERA specified the bonuses for resilience interventions completed by e-distribuzione in 2021 eligible for the bonus-penalty mechanism envisaged under the provisions of Resolution no. 668/2019/R/eel, which introduced an incentive mechanism for investments to increase the resilience of distribution grids in terms of resistance to loads deriving from extreme weather events.

With regard to relations between distributors and traders, on January 1, 2021 the new version of the Electricity Transport Grid Code came into force with Resolution no. 261/2020/R/eel, which, due to the reduction in the time required to terminate transport contracts due to the default of sellers, reduced the credit exposure of distributors. Consequently, the value of guarantees that all sellers must give to distributors to cover the transport service provided was reduced (passing from a level of coverage ranging from 3 to 5 months of the trader's turnover to a new range between 2 and 4 months).

With Resolution no. 119/2022/R/EEL, ARERA introduced a single mechanism for distribution companies for the reimbursement of system general charges and network charges not collected by defaulting sellers in order to unify and streamline the pre-existing mechanisms.

More specifically, the resolution confirms the application of two deductibles for the recognition of credits relating to network charges. On the one hand, this is to serve as an incentive for an efficient management of the credit by the distributor and, on the other, to remove what has already been compensated by the rate system. The resolution provides for requests for reimbursement to be made on an annual basis and liquidated in the same year.

Energy efficiency – White certificates

The decree of the Ministry for the Ecological Transition of May 21, 2021 amended the ministerial decree of January 11, 2017 as already amended by the decree of the Ministry for Economic Development of May 10, 2018. The measure set the national quantitative targets for electricity and gas distribution companies for the years 2021-2024. The decree also updated the methods for distribution companies to meet the obligation and for reimbursing the related costs.

Iberia

2022 electricity rates

On December 22, 2021, Resolution TED/1484/2021 of December 16, 2021 of the Spanish National Markets and Competition Commission (CNMC) was published in Spain's Official Journal. It establishes access rates for electricity transmission and distribution networks to be applied starting from January 1, 2022, providing for an average reduction of 5.4% compared with June 1, 2021.

On December 30, 2021, Order TED/1484/2021 of December 28, 2021 was published in Spain's Official Journal. It establishes electricity system charges applicable from January 1, 2022 and sets the various regulated costs of the electricity system for 2022. The new rates for 2022 represent an average reduction of about 31% compared with the charges approved on June 1, 2021.

Furthermore, Royal Decree Law 6/2022 of March 29, 2022 approved a 36% reduction in charges compared with the values in force on January 1, 2022.

2023 electricity rates

On December 22, 2022, the National Commission for Markets and Competition (CNMC) Resolution of December 15, 2022 was published in Spain's Official Journal, establishing the access charges for electricity transmission and distribution networks to be applied starting from January 1, 2023, providing for an average reduction of 1.0% compared with January 1, 2022.

On December 29, 2022, Order TED/1312/2022 of December 23, 2022 was published in Spain's Official Journal. It establishes electricity system charges applicable from January 1, 2023 and sets the various regulated costs of the electricity system for 2023. The new rates for 2023 represent an average reduction of about 40.0% compared with the charges approved on January 1, 2022.

Natural gas rates for 2022

On December 25, 2021, the Resolution of December 22, 2021 of the Directorate General for Energy Policy and Mines (DGEPM) was published. It establishes the rate of last resort (TUR) for natural gas to be applied in the 1st Quarter of 2022, which, taking account of the provisions of Royal Decree Law 17/2021 of September 14, provides for approximate increases of 5.4%, 6.8% and 7.5% respectively for the Last Resort Rate 1 (TUR 1), the Last Resort Rate 2 (TUR 2) and the Last Resort Rate 3 (TUR 3).

On March 31, 2022, the Resolution of March 28, 2022 of the DGEPM was published. It establishes the rate of last resort for natural gas to be applied starting from April 1, 2022, providing for approximate increases of 5.9%, 7.2% and 7.9%, respectively for TUR 1, TUR 2 and TUR 3.

On June 29, 2022, the Resolution of June 27, 2022 of the DGEPM was published. It establishes the rate of last resort for natural gas to be applied starting from July 1, 2022, providing for approximate increases of 6.4%, 7.8% and 8.4%, respectively for TUR 1, TUR 2 and TUR 3.

On September 29, 2022, the Resolution of September 28, 2022 of the DGEPM was published, establishing the rate of last resort for natural gas to be applied starting from October 1, 2022, providing for approximate increases of 5.9%, 7.2% and 7.9%, respectively for TUR 1, TUR 2 and TUR 3.

Similarly, on May 25, 2022, the National Commission for Markets and Competition (CNMC) published in Spain's Official Journal a resolution of May 19, 2022 establishing access rates for transport networks, local networks and regasification for the 2023 gas year (from October 1, 2022 to September 30, 2023), providing for an average reduction of approximately 13.2%.

On October 19, 2022, Royal Decree Law 18/2022 of October 18 was published, which approves measures to reinforce the protection of energy consumers and to contribute to reducing natural gas consumption in application of the "Plan +Security for your energy (+SE)", as well as measures on the remuneration of public sector workers and to protect seasonal agricultural workers affected by the drought, which, in the natural gas sector, extends the quarterly limit of 15% on increases in the cost of raw materials until December 31, 2023. It also establishes a new TUR, in effect until December 31, 2023, for homeowners' associations (or groups of homeowners) that consume more than 50,000 kWh/year and for energy services companies, to reduce costs. The cost of these measures regarding gas will be covered by the General State Budget (GSB).

Finally, on September 29, 2022, Order TED/929/2022 of September 27, which establishes that the gas system charges and the remuneration and fees for basic underground storage facilities for 2023 (from October 1, 2022 to September 30, 2023), was published.

Natural gas rates for 2023

On December 28, 2022, the Resolution of December 22, 2022 of the Directorate General for Energy Policy and Mines was published. It establishes the TUR for natural gas to be applied as of January 1, 2023, and, taking account of the provisions of Royal Decree Law 17/2021 of September 14, provides for approximate increases of 7.7%, 9.0% and 9.5% respectively for TUR 1, TUR 2, and TUR 3. Apart from these, the TURs applicable to homeowners' associations, introduced by Royal Decree Law 18/2022 of October 18, were reduced by around 2.0%.

Remuneration for distribution activities

On August 3, 2022, Order TED/749/2022 of July 27 was published, approving the incentive or penalty for achieving a reduction in losses within the electricity distribution network for 2016, modifying the base remuneration for 2016 for several distribution companies, and approving the remuneration of electricity distribution companies for 2017, 2018 and 2019. This ministerial order sets the value of the remuneration for the years 2017 to 2019, taking into account the previous reports of the National Commission for Markets and Competition (CNMC).

Furthermore, on December 16, 2022, CNMC began preparing its proposed resolution setting the remuneration for 2020.

Europe

Romania

In Romania, Distribution System Operators (DSOs) are required to purchase the power needed to cover grid losses from the wholesale market. ANRE will pay in advance a quota of the cost of such purchase, to be covered through the distribution tariffs collected during the year. Within the context of the energy crisis, the costs of procuring energy have risen many times higher than amounts paid in advance, with serious consequences for the DSOs' financial position.

In 2022, the distribution rates were set by primary legislation through April 2023, independent of energy price developments on the wholesale market.

In September 2022, the authorities introduced, via primary legislation (followed by the corresponding secondary legislation), a capitalization mechanism for the additional costs paid by the DSOs over the advance costs paid. The assets arising from this capitalization should be recovered over five years and compensation is equal to half the regulated rate of return applicable for the years analyzed.

In addition, the authorities introduced a centralized acquisition mechanism, managed by the market operator (OPCOM), based on which producers sell electricity beyond that contracted to DSOs to cover grid losses, at a fixed price of RON 450/MWh (about €91/MWh), thereby reducing the financial pressure on the DSOs.

Latin America

Chile

Determination of 2020-2024 distribution rates

On December 23, 2022, with Resolución Exenta no. 908, the National Energy Commission approved the technical report for the calculation of the components of the aggregate distribution value for the period 2020-2024.

However, the process of determining rates for the period 2020-2024 is still ongoing. For the moment, rates continue to be applied in accordance with the methodology in force for the 2016-2020 period.

Argentina

Rate revisions

Until the approval of a revision of the definitive integral rate is reached, the regulator ENRE is empowered to set temporary rate adjustments in order to guarantee stability in the provision of services.

In this context, during 2021, three changes to the rate framework were approved, of which two relating to the price of electricity to be applied to customers and one relating to the aggregate value of distribution. The latter resulted in a rate adjustment of 21.8% on April 30, 2021, which translated into a rate increase for final customers of approximately 9%. During 2022, another rate change was approved which led to a rate increase of 8% starting from March 1, 2022, again pending the launch of a complete rate renegotiation process.

Brazil

Rate revision for Enel Distribuição Ceará

The latest complete rate revisions approved for each Brazilian distribution company belonging to the Enel Group date back to 2018 (for Enel Distribuição Rio de Janeiro) and 2019 (for Enel Distribuição Ceará and Enel Distribuição São Paulo). The next rate revisions are scheduled for 2023.

The latest rate adjustments are summarized below:

		Average increase	
Company	Date of rate adjustment	High voltage	Law voltage
Enel Distribuição Rio de Janeiro	March 2022	+15.38%	+17.39%
Enel Distribuição Ceará	April 2022	+24.16%	+25.09%
Enel Distribuição Ceará (RTE)	July 2022	-2.96%	-3.02%
Enel Distribuição São Paulo	July 2022	+18.03%	+10.15%

With regard to regulatory updates in the field of electricity distribution in Brazil, on January 7, 2022, Law 14300/2022 was published, defining the reference legal framework for distributed generation (DG) in the country. The law provides for gradual changes to the net metering system for new DG systems and ensures the application of current rules until 2045 for plants already in operation or which come into operation within the following 12 months.
Additionally, the law creates a transition period for new DG plants that connect to the grid between January 7, 2023 and July 7, 2023. After the transition period, consumers with DG will have to pay 100% of the network's transport costs (rate applied for the use of the distribution grid), net of the system benefits produced by the DG which must be calculated by the regulator in the 18 months following the publication of the law.

CIEN concession assigned to another operator
In December 2022, the concession for the CIEN Brazil-Argentina interconnection (Garabi I and Garabi II) was put out for tender following the expiry of the concession previously assigned to Enel.
The new operator TAESA will take over from March 31, 2023.
The new operator will therefore sign a new contract on March 31, 2023 and Enel will receive compensation relating to the values of the assets not yet depreciated equal to €163.2 million (figure updated to August 2022). The amount will in any case be updated at the effective date of the compensation payment.

Colombia

The Energy and Gas Regulatory Commission (CREG) defines the method of remuneration of the distribution grid. The distribution rates are determined every five years and are updated monthly on the basis of the Producer Price Index (IPP).

Rate revisions
With Resolution no. 122 of 2020, CREG set the distribution rates for Codensa for the period 2018-2023.

In September 2022, following a national debate on high energy prices, CREG issued Resolutions nos. CREG 101-027, 101-028, 101-029 and 101-031, which contain measures aimed at: (i) mitigating the high impact that inflation indices exert on the transmission and distribution components of the electricity deriving from the rate; (ii) establish an optimization of the startup and shutdown costs of thermal plants, in order to reduce the cost of the constraints; (iii) open a voluntary mechanism for sellers serving end users, sellers and producers to conduct negotiations to renegotiate the prices, durations and ratios of bilateral electricity contracts; and (iv) establish a mechanism that enables sales companies to defer payments to be made on the wholesale market to transmitters and grid operators.

In December 2022, the Communications Regulation Commission (CRC) published the Regulatory Agenda for the period 2023-2024, which contains 26 initiatives (comprising regulatory projects, activities and studies), structured around five strategic pillars: (i) welfare and consumer and public rights; (ii) markets and competition; (iii) innovation and regulatory improvement; (iv) value group management; and (v) institutional strengthening.

Peru

In Peru, the process for determining distribution rates takes place every four years and is referred to as the "Distribution Value Added Fixing" (ADVD). Exceptionally, the last tariff cycle set a duration of five years. Therefore, in 2018 the process of determining the ADVD for the period 2018-2022 was completed. The procedure for the period 2022-2026 is currently underway.
It should be noted that Peruvian legislation follows the regulatory scheme of the Model Company, whereby in each rate process the investment and operating and maintenance costs necessary to meet demand in the concession area are established, which will be recognized by each distribution company in accordance with the parameters and criteria defined by Osinergmin. The ADVD is determined individually for each distributor with more than 50,000 customers.

End-user Markets

Italy

The current regulatory framework governing the process of eliminating regulated prices in the electricity sector (Law 124/2017 – the Competition Act – as most recently amended by Decree Law 152/2021 implementing the NRRP, ratified with Law 233/2021) provides for a staggered postponement of the removal of price protection: to January 1, 2021 for small businesses, to January 1, 2023 for micro-enterprises and to January 2024 for domestic customers.
Due to the postponement, for technical reasons, of the start date for the last resort service for micro-enterprises and non-residential customers with an installed capacity of less than 15 kW, in November 2022 the Regulatory Authority for Energy, Networks and the Environment (ARERA) established that the financial terms and conditions of the enhanced protection service will continue to apply until March 31, 2023 for customers already served.
As regards the gas sector, the elimination of price protections is scheduled to occur in January 2024 for residential customers and condominiums.

With regard to the end of price safeguards for small firms in the electricity sector (January 1, 2021), the Ministry for Economic Development issued a decree implementing the Competition Act on December 31, 2020, delegating ARERA to define the measures governing the transition to the free market based on certain criteria and guidelines. With Resolution no. 491/2020/R/eel, ARERA established a last resort service ("gradual safeguards service") for small businesses without a supplier, to be assigned by auction on a territorial basis for a period of three years. A ceiling of 35% was set for the market share that can be assigned to each supplier.
In March 2021, Enel Energia and Servizio Elettrico Nazionale (together with Enel Italia) appealed the ministerial decree before the Lazio Regional Administrative Court, contesting the imposition of the antitrust cap at 35% and the lack of provisions (e.g., a social clause) for the reimbursement of the residual costs of Servizio Elettrico Nazionale following the loss of customers. With regard to the latter point, in March 2021, Servizio Elettrico Nazionale and Enel Italia also challenged Resolution no. 491/2020/R/eel with an appeal before the Lombardy Regional Administrative Court. At the moment, no hearing has yet been set for these appeals.

With Resolution no. 208/2022/R/eel (as amended) ARERA established another last resort service ("gradual safeguards service") for supplying micro-enterprises and non-residential customers with installed capacity of less than 15 kW that did not opt for a free-market contract, starting as of April 1, 2023 (due to the technical extension under Resolution no. 586/2022/R/eel). The gradual safeguards service for micro-enterprises is to be provided for a period of four years by operators that serve their local areas and that are chosen through a tender held by the Single Buyer open to all operators that meet certain technical and financial requirements. At the end of the four years, the customer will continue to be served by the same operator under free market terms and conditions, unless the customer enters into a contract with another operator.
As with the measures governing the elimination of price protections for small business, Enel Energia and Servizio Elettrico Nazionale appealed Resolution no. 208/2022/R/eel, applicable for micro-enterprises, before the Lombardy Regional Administrative Court in July 2022, challenging the imposition of the antitrust cap at 35% and the lack of provisions (e.g., a social clause) for the reimbursement of the residual costs of Servizio Elettrico Nazionale following the loss of customers as a result of the effects of the resolution. In October 2022, the companies also appealed before the Lazio Regional Administrative Court the MiTE decree setting out how the gradual safeguards service for micro-enterprises is to be implemented, basing their challenges on the same grounds.

With ruling no. 18/2021, the Lombardy Regional Administrative Court granted the appeals filed by Servizio Elettrico Nazionale and Enel Energia, voiding Resolution no. 279/2017/R/com. The resolution had established an incentive mechanism to increase the use of electronic invoices with customers on the regulated markets and made the compensation for the seller of the differential between the discount granted to customers and the avoided cost conditional upon reaching certain thresholds. With Resolution no. 477/2021/R/com, ARERA consequently also amended, with effect from 2022, the rules governing the recovery of amounts relating to previous years.

Electricity
With Resolution no. 402/2021/R/eel, the update for 2022 of the rate component covering the marketing costs of the operators of the enhanced protection service (RCV) and the levels of the fee for covering electricity marketing costs (PCV) was postponed to March 2022 (the RCV and PCV fees set by Resolution no. 604/2020/R/eel remained in effect for the 1st Quarter).
With Resolution no. 146/2022/R/eel ARERA updated, with effect from April 1, 2022 to March 31, 2023, the RCV component, at the same time adjusting the values in order to take account of the effects of the delay in the update from

January 2022. The same measure also updated the level of the PCV fee, which represents the reference price for sellers on the free market.

In order to soften the impact of rising electricity prices on final customers, with Resolution no. 463/2022/R/eel ARERA updated the RCV rates for the 4th Quarter of 2022, leaving unchanged from the previous quarter the rate of recovery of the positive difference between the actual wholesale market prices for the 3rd Quarter of 2022 and the estimates used in the updates for that period. At the same time, ARERA also announced that, by the end of 2022, the Energy and Environmental Services Fund would disburse to RCV operators an amount equal to the best estimate of the recovery amount calculated at the end of the 3rd Quarter and would collect it from final customers in the form of revenue from the fee for covering procurement costs (PED) in the 4th Quarter. Resolutions no. 558/2022/R/eel and no. 743/2022/R/eel contain the necessary implementing measures.

Likewise, ARERA issued Resolution no. 473/2022/R/eel, calling for an extraordinary session to be moved forward to the end of December 2022 to equalize the load profiling for the 1st Half of 2022, because RCV operators were facing a financing gap as a result of the significant switch over in recent years from non-time-based metering to time-of-use metering. Free-market operators were also given the opportunity, under the measures, to settle their corresponding debt position by January 2023 so as to not to have an impact on their cash positions at the end of 2022.

With regard to reimbursement mechanisms for end users in arrears in the electricity sector, in Article 18 of the TIV (Integrated Sales Code) ARERA governs the compensation mechanism for the amounts not collected by operators of the enhanced protection service in respect of fraudulent withdrawals of power.
With Resolution no. 32/2021/R/eel, ARERA established a mechanism to reimburse arrears relating to the general system charges paid by the sales companies on the free and safeguard markets to distribution companies but not collected from end users (for the safeguard market, this only applies to customers that can be disconnected).
For customers who cannot be disconnected on the safeguard market, the mechanism for reimbursing non-recoverable charges is governed by Article 44 of the Integrated Sales Code (TIV).

Gas

With Resolution no. 603/2020/R/gas, the levels of the QVD component were updated for 2021, and subsequently delayed, with Resolution no. 401/2021/R/gas and notwithstanding the provisions of Article 7.2 of the 7.2 del TIVG (Integrated Gas Sales Code), until March 31, 2022.

The QVD component was updated, starting from April 1, 2022, with Resolution no. 147/2022/R/gas. Its specification took account of the effects of the delay in the update from January 1, 2022. ARERA has also established that any updates that become necessary shall be made by March 2023.

With regard to reimbursement mechanisms for end users in arrears in the gas sector, in Articles 31-*quinquies* and 37.1 letter b) of the Integrated Gas Sales Code (TIVG), ARERA regulates specific mechanisms for the reimbursement of arrears for providers of the last resort service and the default service on distribution grids.

Antitrust proceeding PS12461 – Modification of price conditions

On December 13, 2022, the Competition Authority notified Enel Energia SpA and six other companies (Hera, A2A, Acea, Eni Plenitude, Engie, Edison) that it had initiated a proceeding for unfair commercial practices, contesting the violation of certain provisions of the Consumer Code and Article 3 of Decree Law 115 of August 9, 2022 (the so-called "second Aid Decree") of August 10, 2022, ratified with Law 142 of September 21, 2022. The decree law suspends, from August 10, 2022 to April 30, 2023 (subsequently extended to June 30, 2023 by the Milleproroghe Decree Law 198/2022), the effectiveness of both contractual clauses that allow distribution companies to change the supply price and related notifications, unless the price changes had already been made before the decree entered into force (August 10, 2022). With the notice of the start of the proceeding, the Competition Authority also prohibited the sending of new notices of price changes and ordered the correction of those already sent.
With an order of December 22, 2022, issued as part of the appeal filed by Iren, the Council of State distinguished contractual renewals (of expiring offers) from those covered by *ius variandi* and excluded the applicability of Article 3 of the decree law. This principle was also recognized by the government, which, with the Milleproroghe Decree of December 29, 2022, established that Article 3 of the second Aid Decree shall not apply to the contractual clauses that allow an electricity and natural gas supply company to update the contractual financial conditions upon expiry of the same, in compliance with the contractual terms of notice and without prejudice to the right of withdrawal of the counterparty. On December 30, 2022, following the pronouncement of the Council of State and the aforementioned clarifying legislative intervention, the Competition Authority notified Enel Energia of a precautionary measure partial upholding that issued at the start of the proceeding, calling upon it – for contracts for which the expiry of the financial conditions was not specified or was otherwise not determinable – to suspend renewals of the financial condi-

tions, to be carried out and already carried out, confirming the supply conditions previously in force and to contact customers who had made the withdrawal following the renewal communication, informing them of the possibility of returning to the previous conditions.
On January 16, 2023, Enel Energia produced a compliance report in response to the precautionary injunction, communicating to the Competition Authority that its actions had been limited, during the period in which Article 3 was in effect, to merely updating the price terms upon the expiry of those previously applied. Enel Energia appealed the Competition Authority's injunctions before the Lazio Regional Administrative Court, before which a ruling is pending. The deadline for the completion of the proceedings is May 11, 2023, unless extended.

Iberia

Energy efficiency

Law 18/2014 of October 15 containing urgent measures for growth, competitiveness and efficiency created the National Energy Efficiency Fund to achieve energy efficiency objectives.
On March 23, 2022, the Order TED/220/2022 of March 16, which establishes the contribution to the National Energy Efficiency Fund for 2022, amounting to €26 million for Endesa, was published in the Spain's Official Journal.
It provides that Endesa contribute €49 million to the National Energy Efficiency Fund in 2023, of which it must contribute at least €30 million (40.0%) of that amount. It can satisfy the rest of its obligation by submitting energy efficiency certificates (EEC).

Consumer protection measures: Social Bonus

On March 30, 2022, Royal Decree Law 6/2022 of 29 March, adopting urgent measures within the framework of the National Response Plan for the economic and social consequences of the war in Ukraine, was published in Spain's Official Journal. Specifically, in the energy sector, this royal decree law includes several measures, some of which were extended until December 31, 2022 by Royal Decree Law 11/2022 of 25 June, and until December 31, 2023 by Royal Decree Law 18/2022 of October 18 and by Royal Decree Law 20/2022 of December 17. The primary measures regarding the Social Bonus are as follows:

- the increase in the discounts of the electricity social bonus from 25% to 60% for vulnerable consumers, and from 40% to 70% for severely vulnerable consumers was extended until December 31, 2022;
- other aspects of the eligibility criteria of the Social Bonus were also modified. Specifically, the Social Bonus is automatically renewed every two years. Likewise, there are new criteria for defining the category of vulnerable consumer, now based on the concept of cohabitation unit, formed by those people that live in the same home as a married couple, cohabiting partnership, second degree of consanguinity, affinity, adoption or a similar relationship. The basic threshold is 1.5 times the Public Index of Multiple Purpose Income (IPREM), divided into 14 payments, and will increase by 0.3 for each additional adult member and by 0.5 for each minor forming the cohabitation unit. Those receiving the minimum subsistence income will also form part of the group of recipients of the Social Bonus. The above thresholds will be increased by 1 in certain cases (significant dependence, gender violence, terrorism, etc.), and they will be reduced by 50% for severely vulnerable consumers;
- a loan of €75 million was granted in the 2022 General State Budget (GSB) to finance the increased coverage of the thermal social bonus;
- it establishes a new mechanism for financing the Social Bonus. In accordance with this new mechanism, the Social Bonus will be covered by all players in the electricity market (generation, transmission, distribution and suppliers, and by direct consumers), in line with the tax-free aggregated billings of each activity, based on which a unitary contribution value will be set for each activity. If the degree of coverage of contributions is 20% lower than the real financing needs, the National Commission for Markets and Competition (CNMC) will propose new contribution values. Royal Decree Law 6/2022 of 29 March 2022, temporarily set those unitary contribution values, until CNMC proposed the definitive unitary values for 2022, which were approved by Order TED/733/2022 of July 22. Finally, it establishes that the amounts that were paid by the reference suppliers, and recognized in a ruling, to finance the Social Bonus, will be assumed by the new taxpayers. On December 29, 2022, work began on drawing up the proposed unitary values for financing the Social Bonus for 2023.

On 19 October 2022, Royal Decree Law 18/2022 of October 18 was published, approving measures to reinforce the protection of energy consumers and to contribute to reducing natural gas consumption in application of the "Plan +Security for your energy (+SE)", as well as measures on the remuneration of public sector workers and to protect seasonal agricultural workers affected by the drought, which establishes the following measures relating to the Social Bonus:

- the discounts for recipients have been increased until December 31, 2023, from 60% to 65% in the case of vulnerable consumers, and from 70% to 80% for severely vulnerable consumers. Likewise, and for the same time period, the energy limit to which the discounts are applicable has been increased by 15%;

- in the same way, and for the same period, a new discount of 40% was created for working households covered by the PVPC with income between 1.5 and 2 times the IPREM, increased by 0.3 for each additional adult member and 0.5 for each additional minor member;
- the thermal social bonus was reinforced by doubling the GSB contribution.

Consumer protection measures: guarantee of electricity services

Royal Decree Law 20/2022 of December 27 on measures to respond to the economic and social consequences of the war in Ukraine and to support the reconstruction of the island of La Palma and other situations of vulnerability, as regards vulnerable customers and the Social Bonus, extended until December 31, 2023 the ban on suspending electricity, water and gas services to customers that are vulnerable, severely vulnerable or at risk of social exclusion.

Consumer protection measures: tax measures

Royal Decree Law 6/2022 of March 29, adopting certain measures as part of the Plan for the National Response to the economic and social consequences of the war in Ukraine, along with Royal Decree Law 11/2022 of June 25, adopting and extending certain measures to respond to the economic and social consequences of the war in Ukraine, to address situations of social and economic distress and to foster the economic and social recovery of the island of La Palma, reduced VAT for consumers with contract capacity equal to or less than 10 kW or recipients of the Social Bonus. The reduction was from 21% to 10% until June 30, 2022 and to 5% until December 31, 2022.
Likewise, the reduction in the special tax on electricity to 0.5% and the temporary suspension of the tax on the value of electricity production were also extended.
Extraordinary bonuses of €0.20/kg (€0.20/l) have been introduced until December 31, 2022 for selected energy products, such as petrol, diesel, liquefied petroleum gas (LPG), liquefied natural gas (LNG), compressed natural gas (CNG), biomethane and biodiesel.

Royal Decree Law 17/2022 of September 20 adopting urgent measures in the field of energy, in application of the remuneration system for cogeneration plants and temporarily reducing the Value Added Tax (VAT) rate applicable to intra-EU delivery, import and acquisition of certain fuels, reduces the VAT from 21% to 5% on supplies of natural gas, pellets, briquettes, and firewood until December 31, 2023.

Royal Decree Law 18/2022 of October 18, which approves measures to reinforce the protection of energy consumers and to contribute to reducing natural gas consumption in application of the "Plan +Security for your energy (+SE)", as well as measures on the remuneration of public sector workers and to protect seasonal agricultural workers affected by the drought, introduces or extends incentives for improving energy efficiency and investing in renewable energy.

Royal Decree Law 20/2022 of December 27 on measures to respond to the economic and social consequences of the war in Ukraine and to support the reconstruction of the island of La Palma and other situations of vulnerability, extends until December 31, 2023 the reductions in VAT on gas and electricity to 5%, the reduction in the special tax on electricity to 0.5% and the temporary suspension of the tax on the value of electricity production (as regards the last of these, the electricity system will be compensated with an equivalent amount to ensure that the revenue and costs associated with the charges are balanced).

Europe

Romania

The authorities have imposed fixed retail prices on suppliers of electricity based on the quantity of energy consumed monthly. The primary legislation allows suppliers to obtain a fixed margin per MWh by recouping, from the State, the difference between the real supply cost and the cost obtained by deducting from the fixed prices for end users the supply margin and the regulated transmission and distribution costs. This recovery is incomplete and delayed:

- ANRE calculates the maximum value of the weighted average electricity based on which the amounts to be settled on electricity suppliers is paid from the state budget, specifically RON 1,300/MWh: this cap is in effect as from September 1, 2022;
- price cap on final prices billed to consumers: different price cap rules apply to different types of customers (households and non-households); currently all retail prices in Romania are set by law, with a cap of RON 1,300/MWh;
- the authorities introduced a centralized acquisition mechanism, managed by the market operator (OPCOM), based on which producers sell electricity beyond that contracted to DSOs to cover grid losses, at a fixed price of RON 450/MWh (about €91/MWh), thereby slightly helping suppliers to keep total supply costs below the thresholds of RON 1,300/MWh.

Latin America

Free market

In all South American countries, distribution companies can supply electricity to their customers on a regulated basis, but may also do so under free market conditions if customers exceed particular limits.
The limits of the free market by country are as follows:

Country	kW limit
Argentina	>30 kW
Brazil	>1,000 kW or >500 kW[1]
Colombia	>100 kW or 55 MWh-month
Costa Rica	Not applicable[2]
Guatemala	>100 kW
Panama	>100 kW
Peru	>200 kW[3]

(1) The >500 kW limit applies if the electricity consumed is generated using renewable resources, which are subsidized by the government with a discount on rates.
(2) The concept of free-market customer does not exist in Costa Rica.
(3) DS 018-2016-EM established that:
- the installed capacity of customers who can choose between the regulated market and the free market (those with a capacity between 200 and 2,500 kW) is measured for each supply point;
- customers whose capacity per supply point is greater than 2,500 kW are free-market customers.



REPORT ON OPERATIONS

5.

Outlook

Enel is the world's largest private operator in the renewable energy sector

Investing in Enel means investing in a business model committed to achieving net-zero-emissions while leaving no one behind.

Enel is the largest privately owned electricity distribution company at a global level

Enel grids are the most advanced in the world in terms of digitization and will be the backbone of energy transition.

Enel manages the largest customer base among private companies

The electrification of energy consumption will allow Enel to create value for itself and for its customers.

A simple, predictable and attractive dividend policy

Enel confirms a dividend policy based on a fixed dividend for the period of the Plan, with the DPS for 2024 and 2025 to be considered a sustainable minimum.

Outlook

In November 2022, the Group presented its new Strategic Plan for 2023-2025, setting out a strategy for responding to the new global challenges, based on simplification and focusing on the geographical areas that will make it possible to fully seize the opportunities associated with the energy transition.
In particular, the Strategic Plan seeks to:

- focus on an integrated industrial supply chain towards sustainable electrification;
- achieve strategic repositioning of businesses and geographical areas of operation;
- ensure growth and financial soundness by combining the growth of ordinary profit with stronger credit metrics as early as 2023.

In pursuing these objectives, between 2023 and 2025 the Group expects to invest a total of around €37 billion, of which 60% in support of the Group's integrated commercial strategy (generation, customers and services) and 40% on grids, to support their role as enablers of the energy transition.
The Plan will focus on four strategic actions.

- **Balancing client demand and supply to optimize risk/reward profile.**
  By 2025, the Group expects to sell around 80% of its electricity volumes in the six core countries with fixed-price contracts. The Group also expects to satisfy 100% of fixed-price sales with its own generation and long-term power purchase agreements (PPAs), envisaging that around 90% be covered by carbon-free sources, to further ensure the evolution of the Group's margins.
- **Decarbonization to ensure competitiveness, sustainability and security.**
  By 2025, the Group expects to add approximately 21 GW of installed renewables capacity (of which some 19 GW in core countries), positioning itself well towards achieving its decarbonization objectives, in line with the Paris Agreement.
- **Strengthening, developing and digitalizing grids to enable the transition.**
  The Group's strategy for grids concerns five of the six core countries, namely Italy, Spain, Brazil, Chile and Colombia.
- **Rationalization of business portfolio and geographical areas.**
  The Group plans a further rationalization of its structure, exiting some businesses and geographical areas that are no longer aligned with its strategy, in order to redefine the Group structure, maximizing shareholder value.

As a result of the strategic actions described above, the Group's ordinary EBITDA is expected to reach €22.2-22.8 billion in 2025, compared with €19.7 billion in 2022.
Group ordinary profit is expected to grow to €7.0-7.2 billion in 2025, compared with €5.4 billion in 2022.
Enel's dividend policy remains simple and predictable, with a DPS of €0.43 in the 2023-2025 period, up from €0.40 in 2022. Furthermore, the DPS in 2024 and 2025 should be considered as a sustainable minimum.

The following are planned for 2023:

- a continuation of the investment policy in renewable energy to support industrial growth and as part of the decarbonization policies followed by the Group;
- further investments in distribution grids, especially in Italy, with the aim of improving service quality and increasing the flexibility and resilience of the grid;
- a continuation of the investment policy dedicated to the electrification of consumption, with the aim of enhancing the growth of the customer base, as well as continuous efficiency improvement through global business platforms.

In view of the foregoing, the financial targets on which the Group's 2023-2025 Plan is based are reported below.

Financial targets				
	2022	2023	2024	2025
Profit growth				
Ordinary EBITDA (€ billions)	19.7	20.4-21.0	21.4-22.0	22.2-22.8
Ordinary profit (€ billions)	5.4	6.1-6.3	6.7-6.9	7.0-7.2
Value creation				
Dividend per share (€)	0.40	0.43	0.43(1)	0.43(1)

(1) Minimum DPS.

Other information

Non-EU subsidiaries

At the date of approval by the Board of Directors of the financial statements of Enel SpA for 2022 – March 16, 2023 – the Enel Group meets the "conditions for the listing of shares of companies with control over companies established and regulated under the law of non-EU countries" (hereinafter "non-EU subsidiaries") established by CONSOB with Article 15 of the Markets Regulation (approved with Resolution no. 20249 of December 28, 2017).

Specifically, we report that:

- in application of the materiality criteria for the purposes of consolidation referred to in Article 15, paragraph 2, of the CONSOB Markets Regulation, 52 non-EU subsidiaries of the Enel Group have been identified to which the rules in question apply on the basis of the consolidated accounts of the Enel Group at December 31, 2021;
- they are: 1) Ampla Energia e Serviços SA (a Brazilian company belonging to Enel Américas SA); 2) Aurora Wind Project LLC (a United States company belonging to Enel North America Inc.); 3) Azure Sky Wind Project LLC (a United States company belonging to Enel North America Inc.); 4) Celg Distribuição SA - Celg-D (a Brazilian company that exited the scope of the Enel Group as from December 29, 2022); 5) Cimarron Bend Wind Holdings I LLC (a United States company belonging to Enel North America Inc.); 6) Codensa SA ESP (a Colombian company merged into Emgesa SA ESP on March 1, 2022); 7) Companhia Energética do Ceará - Coelce (a Brazilian company belonging to Enel Américas SA); 8) Dolores Wind SA de Cv (a Mexican company belonging to Enel Green Power SpA); 9) EGPNA Preferred Wind Holdings LLC (a United States company belonging to Enel North America Inc.); 10) Eletropaulo Metropolitana Eletricidade de São Paulo SA (a Brazilian company belonging to Enel Américas SA); 11) Emgesa SA ESP (a Colombian company belonging to Enel Américas SA, renamed Enel Colombia SA ESP on March 1, 2022); 12) Empresa Distribuidora Sur SA - Edesur (an Argentine company belonging to Enel Américas SA); 13) Enel Américas SA (a Chilean company directly controlled by Enel SpA); 14) Enel Argentina SA (an Argentine company belonging to Enel Américas SA); 15) Enel Brasil SA (a Brazilian company belonging to Enel Américas SA); 16) Enel Chile SA (a Chilean company directly controlled by Enel SpA); 17) Enel Distribución Chile SA (a Chilean company belonging to Enel Chile SA); 18) Enel Distribución Perú SAA (a Peruvian company belonging to Enel Américas SA); 19) Enel Finance America LLC (a United States company belonging to Enel North America Inc.); 20) Enel Fortuna SA (a Panamanian company belonging to Enel Américas SA); 21) Enel Generación Chile SA (a Chilean company belonging to Enel Chile SA); 22) Enel Generación Costanera SA (an Argentine company belonging to Enel Américas SA); 23) Enel Generación Perú SAA (a Peruvian company belonging to Enel Américas SA); 24) Enel Green Power Cachoeira Dourada SA (a Brazilian company belonging to Enel Américas SA); 25) Enel Green Power Chile SA (a Chilean company belonging to Enel Chile); 26) Enel Green Power Colombia SAS ESP (a Colombian company merged on March 1, 2022 into Emgesa SA ESP); 27) Enel Green Power Diamond Vista Wind Project LLC (a United States company belonging to Enel North America Inc.); 28) Enel Green Power México S de RL de Cv (a Mexican company belonging to Enel Green Power SpA); 29) Enel Green Power North America Development LLC (a United States company belonging to Enel North America Inc.); 30) Enel Green Power North America Inc. (a United States company belonging to Enel North America Inc.); 31) Enel Green Power Panamá Srl (a Panamanian company belonging to Enel Américas SA, renamed Enel Panamá CAM Srl on August 16, 2022); 32) Enel Green Power Perú SAC (a Peruvian company belonging to Enel Américas SA); 33) Enel Green Power Rattlesnake Creek Wind Project LLC (a United States company belonging to Enel North America Inc.); 34) Enel Green Power RSA (Pty) Ltd (a South African company belonging to Enel Green Power SpA); 35) Enel Green Power RSA 2 (RF) (Pty) Ltd (a South African company belonging to Enel Green Power SpA); 36) Enel Kansas LLC (a United States company belonging to Enel North America Inc.); 37) Enel North America Inc. (a United States company directly controlled by Enel SpA); 38) Enel Perú SAC (a Peruvian company belonging to Enel Américas SA); 39) Enel Rinnovabile SA de Cv (a Mexican company belonging to Enel Green Power SpA); 40) Enel Russia PJSC (a Russian company that exited the scope of the Enel Group on October 12, 2022); 41) Enel Trading North America LLC (a United States company belonging to Enel North America Inc.); 42) Enel Transmisión Chile SA (a Chilean company that exited the scope of the Enel Group on December 9, 2022); 43) Enel X North America Inc. (a United States company belonging to Enel North America Inc.); 44) Essa2 SpA (a Chilean company merged on March 1, 2022 into Emgesa SA ESP); 45) Geotérmica del Norte SA (a Chilean company belonging to Enel Chile SA); 46) High Lonesome Wind Power LLC (a United States company belonging to Enel North America Inc.); 47) Red Dirt Wind Project LLC (a United States company be-

longing to Enel North America Inc.); 48) Rock Creek Wind Project LLC (a United States company belonging to Enel North America Inc.); 49) Rockhaven Ranchland Holdings LLC (a United States company belonging to Enel North America Inc.); 50) Thunder Ranch Wind Project LLC (a United States company belonging to Enel North America Inc.); 51) Tradewind Energy Inc. (a United States company belonging to Enel North America Inc.); 52) White Cloud Wind Project LLC (a United States company belonging to Enel North America Inc.);

- the balance sheet and income statement of the above companies included in the reporting package used for the purpose of preparing the 2022 consolidated financial statements of the Enel Group will be made available to the public by Enel SpA (pursuant to Article 15, paragraph 1a) of the Markets Regulation) at least 15 days prior to the day scheduled for the Ordinary Shareholders' Meeting called to approve the 2022 financial statements of Enel SpA together with the summary statements showing the essential data of the latest annual financial statements of subsidiaries and associated companies (pursuant to the applicable provisions of Article 77, paragraph 2-*bis*, of the CONSOB Issuers Regulation approved with Resolution no. 11971 of May 14, 1999);
- the articles of association and composition and powers of the control bodies from all the above subsidiaries have been obtained by Enel SpA and are available in updated form to CONSOB where the latter should request such information for supervisory purposes (pursuant to Article 15, paragraph 1b) of the Markets Regulation);
- Enel SpA has verified that the above subsidiaries:
  - provide the auditor of the Parent, Enel SpA, with information necessary to perform annual and interim audits of Enel SpA (pursuant to Article 15, paragraph 1 (letter c-i) of the Markets Regulation);
  - use an administrative and accounting system appropriate for regular reporting to the management and auditor of the Parent, Enel SpA, of income statement, balance sheet and financial data necessary for preparation of the consolidated financial statements (pursuant to Article 15, paragraph 1 (letter c-ii) of the Markets Regulation).

Disclosures on financial instruments

The disclosures on financial instruments required by Article 2428, paragraph 2, no. 6-*bis* of the Italian Civil Code are reported in the following notes to the consolidated financial statements: 48 "Financial instruments by category", 49 "Risk management", 51 "Derivatives and hedge accounting" and 52 "Assets and liabilities measured at fair value".

Atypical or unusual operations

Pursuant to the CONSOB Notice of July 28, 2006, the Group did not carry out any atypical or unusual operations in 2022.

Such operations include transactions whose significance, size, nature of the counterparties, subject matter, method for calculating the transfer price or timing could give rise to doubts concerning the propriety and/or completeness of disclosure, conflicts of interest, preservation of company assets or protection of non-controlling shareholders.

Subsequent events

Significant events following the close of the year are discussed in note 59 "Events after the reporting period" to the consolidated financial statements.

Transactions with related parties

For more information on transactions with related parties, please see note 54 "Related parties" to the consolidated financial statements.

Reconciliation of equity and profit of Enel SpA and the corresponding consolidated figures

Pursuant to CONSOB Notice no. DEM/6064293 of July 28, 2006, the following table provides a reconciliation of Group profit for the year and equity with the corresponding figures for the Parent.

Millions of euro	Income statement	Equity	Income statement	Equity
	at Dec. 31, 2022		at Dec. 31, 2021	
Separate financial statements - Enel SpA	**7,157**	**38,342**	**4,762**	**34,967**
Carrying amount of and impairment losses on consolidated equity investments	1,828	(104,604)	(8,947)	(104,958)
Equity and profit (calculated using the same accounting policies) of the consolidated companies and groups and those accounted for using the equity method, net of non-controlling interests	4,616	88,502	13,089	94,975
Translation reserve	-	(5,912)	-	(8,125)
Goodwill	-	13,742	-	13,821
Intercompany dividends	(9,807)	-	(5,805)	-
Elimination of unrealized intercompany profits, net of tax effects and other minor adjustments	(2,112)	(1,413)	90	(1,027)
TOTAL ATTRIBUTABLE TO OWNERS OF THE PARENT	**1,682**	**28,657**	**3,189**	**29,653**
NON-CONTROLLING INTERESTS	**1,238**	**13,425**	**668**	**12,689**
CONSOLIDATED FINANCIAL STATEMENTS	**2,920**	**42,082**	**3,857**	**42,342**

CONSOLIDATED FINANCIAL STATEMENTS

6.

Consolidated financial statements

Increasing dividend

Total dividend proposed for 2022 equal to €0.40 per share, a 5.3% increase on dividend distributed for 2021.

Energy transition

The Group has continued the energy transition process by increasing investments in new renewable capacity and digitalization.

Climate change

Impacts deriving from climate change in the long term have been included in all evaluation processes of the Group.

Consolidated financial statements

Consolidated Income Statement

Millions of euro	Notes	2022		2021[1]	
			of which with related parties		*of which with related parties*
Revenue					
Revenue from sales and services	11.a	135,653	*12,939*	81,900	*7,010*
Other income	11.b	4,864	*389*	3,819	*6*
	[Subtotal]	**140,517**		**85,719**	
Costs					
Electricity, gas and fuel	12.a	96,896	*27,880*	47,702	*13,826*
Services and other materials	12.b	20,228	*3,800*	19,240	*3,152*
Personnel expenses	12.c	4,570		5,140	
Net impairment/(reversals) on trade receivables and other receivables	12.d	1,278		1,175	
Depreciation, amortization and other impairment losses	12.e	7,447		8,507	
Other operating costs	12.f	4,685	*581*	1,968	*218*
Capitalized costs	12.g	(3,415)		(3,041)	
	[Subtotal]	**131,689**		**80,691**	
Net results from commodity contracts	13	**2,365**	*50*	**2,523**	*24*
Operating profit		**11,193**		**7,551**	
Financial income from derivatives	14	3,118		2,717	
Other financial income	15	3,430	*154*	1,862	*138*
Financial expense from derivatives	14	3,414		1,256	
Other financial expense	15	5,880	*34*	6,087	*32*
Net income/(expense) from hyperinflation	15	290		20	
Share of profit/(loss) of equity-accounted investments	16	4		571	
Pre-tax profit		**8,741**		**5,378**	
Income taxes	17	3,523		1,620	
Profit from continuing operations		**5,218**		**3,758**	
Attributable to owners of the Parent		3,637		3,097	
Attributable to non-controlling interests		1,581		661	
Profit/(Loss) from discontinued operations	6	**(2,298)**		**99**	
Attributable to owners of the Parent		(1,955)		92	
Attributable to non-controlling interests		(343)		7	
Profit for the year (owners of the Parent and non-controlling interests)		**2,920**		**3,857**	
Attributable to owners of the Parent		1,682		3,189	
Attributable to non-controlling interests		1,238		668	
Earnings per share	18				
Basic earnings per share	18				
Basic earnings per share		*0.15*		*0.31*	
Basic earnings per share from continuing operations		*0.35*		*0.30*	
Basic earnings/(loss) per share from discontinued operations		*(0.20)*		*0.01*	
Diluted earnings per share	18				
Diluted earnings per share		*0.15*		*0.31*	
Diluted earnings per share from continuing operations		*0.35*		*0.30*	
Diluted earnings/(loss) per share from discontinued operations		*(0.20)*		*0.01*	

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Statement of Consolidated Comprehensive Income

Millions of euro	Notes	2022	2021[(1)]
Profit for the year		**2,920**	**3,857**
Other comprehensive income/(expense) that may be subsequently reclassified to profit or loss (net of taxes)			
Effective portion of change in the fair value of cash flow hedges		(1,677)	(735)
Change in the fair value of hedging costs		(70)	194
Share of the other comprehensive expense of equity-accounted investments		233	(645)
Change in the fair value of financial assets at FVOCI		(44)	11
Change in translation reserve		944	(85)
Cumulative other comprehensive income that may be subsequently reclassified to profit or loss in respect of non-current assets and disposal groups classified as held for sale/discontinued operations		(63)	6
Other comprehensive income/(expense) that may not be subsequently reclassified to profit or loss (net of taxes)			
Remeasurement of net liabilities/(assets) for defined benefit plans		303	29
Change in the fair value of equity investments in other companies		13	-
Cumulative other comprehensive income that may not be subsequently reclassified to profit or loss in respect of non-current assets and disposal groups classified as held for sale/discontinued operations		21	1
Total other comprehensive expense for the year	37	**(340)**	**(1,224)**
Comprehensive income/(expense) for the year		**2,580**	**2,633**
Attributable to:			
- owners of the Parent		1,658	2,562
- non-controlling interests		922	71

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Statement of Consolidated Financial Position

Millions of euro	Notes				
ASSETS		**at Dec. 31, 2022**		**at Dec. 31, 2021**	
			of which with related parties		*of which with related parties*
Non-current assets					
Property, plant and equipment	19	88,521		84,572	
Investment property	22	94		91	
Intangible assets	23	17,520		18,070	
Goodwill	24	13,742		13,821	
Deferred tax assets	25	10,925		11,034	
Equity-accounted investments	26	1,281		704	
Non-current financial derivative assets	27	3,970	-	2,772	*14*
Non-current contract assets	28	508		530	
Other non-current financial assets	29	8,359	*1,885*	5,704	*1,120*
Other non-current assets	31	2,486	-	3,268	*119*
	[Total]	**147,406**		**140,566**	
Current assets					
Inventories	33	4,853		3,109	
Trade receivables	34	16,605	*1,563*	16,076	*1,321*
Current contract assets	28	106		121	
Tax assets		561		530	
Current financial derivative assets	27	14,830	*5*	22,791	*32*
Other current financial assets	30	13,753	*104*	8,645	*157*
Other current assets	32	4,314	*153*	5,002	*123*
Cash and cash equivalents	35	11,041		8,858	
	[Total]	**66,063**		**65,132**	
Assets classified as held for sale	36	**6,149**		**1,242**	
TOTAL ASSETS		**219,618**		**206,940**	

Millions of euro	Notes	at Dec. 31, 2022		at Dec. 31, 2021	
LIABILITIES AND EQUITY			*of which with related parties*		*of which with related parties*
Equity attributable to owners of the Parent					
Share capital		10,167		10,167	
Treasury share reserve		(47)		(36)	
Other reserves		2,740		1,721	
Retained earnings		15,797		17,801	
	[Total]	**28,657**		**29,653**	
Non-controlling interests		**13,425**		**12,689**	
Total equity	37	**42,082**		**42,342**	
Non-current liabilities					
Long-term borrowings	38	68,191	*774*	54,500	*880*
Employee benefits	39	2,202		2,724	
Provisions for risks and charges (non-current portion)	40	6,055		7,197	
Deferred tax liabilities	25	9,542		9,259	
Non-current financial derivative liabilities	27	5,895	*9*	3,339	*1*
Non-current contract liabilities	28	5,747	*17*	6,214	*194*
Other non-current financial liabilities	41	-		120	
Other non-current liabilities	42	4,246		4,525	
	[Total]	**101,878**		**87,878**	
Current liabilities					
Short-term borrowings	38	18,392	*14*	13,306	*6*
Current portion of long-term borrowings	38	2,835	*110*	4,031	*109*
Provisions for risks and charges (current portion)	40	1,325		1,126	
Trade payables	44	17,641	*2,810*	16,959	*4,082*
Income tax liabilities		1,623		712	
Current financial derivative liabilities	27	16,141		24,607	
Current contract liabilities	28	1,775	*43*	1,433	*12*
Other current financial liabilities	45	853	*1*	625	*-*
Other current liabilities	43	11,713	*47*	12,959	*80*
	[Total]	**72,298**		**75,758**	
Liabilities included in disposal groups classified as held for sale	36	**3,360**		**962**	
Total liabilities		**177,536**		**164,598**	
TOTAL LIABILITIES AND EQUITY		**219,618**		**206,940**	

Statement of Changes in Consolidated Equity (note 37)

Millions of euro	Share capital and reserves attributable to owners of the Parent							
	Share capital	Share premium reserve	Treasury share reserve	Reserve for equity instruments – perpetual hybrid bonds	Legal reserve	Other reserves	Translation reserve	Hedging reserve
At December 31, 2020	**10,167**	**7,476**	**(3)**	**2,386**	**2,034**	**2,268**	**(7,046)**	**(1,917)**
Distribution of dividends	–	–	–	–	–	–	–	–
Coupons paid to holders of hybrid bonds	–	–	–	–	–	–	–	–
Reclassifications	–	20	(20)	–	–	–	–	–
Purchase of treasury shares	–	–	(13)	–	–	36	–	–
Reserve for share-based payments (LTI bonus)	–	–	–	–	–	9	–	–
Equity instruments - hybrid perpetual bonds	–	–	–	3,181	–	–	–	–
Monetary restatement (IAS 29)	–	–	–	–	–	–	–	–
Change in the consolidation scope	–	–	–	–	–	–	–	(10)
Transactions in non-controlling interests	–	–	–	–	–	–	(1,234)	18
Comprehensive income for the year	–	–	–	–	–	–	155	(359)
of which:								
- other comprehensive income/(expense)	–	–	–	–	–	–	*155*	*(359)*
- profit for the year	–	–	–	–	–	–	–	–
At December 31, 2021	**10,167**	**7,496**	**(36)**	**5,567**	**2,034**	**2,313**	**(8,125)**	**(2,268)**
Distribution of dividends	–	–	–	–	–	–	–	–
Coupons paid to holders of hybrid bonds	–	–	–	–	–	–	–	–
Reclassifications	–	–	–	–	–	–	–	–
Purchase of treasury shares	–	–	(14)	–	–	14	–	–
Payments of own shares	–	–	3	–	–	(3)	–	–
Reserve for share-based payments (LTI bonus)	–	–	–	–	–	8	–	–
Equity instruments - hybrid perpetual bonds	–	–	–	–	–	–	–	–
Monetary restatement (IAS 29)	–	–	–	–	–	–	–	–
Change in the consolidation scope	–	–	–	–	–	–	1,365	18
Transactions in non-controlling interests	–	–	–	–	–	–	(31)	(10)
Comprehensive income for the year	–	–	–	–	–	–	879	(1,293)
of which:								
- other comprehensive income/(expense)	–	–	–	–	–	–	*879*	*(1,293)*
- profit for the year	–	–	–	–	–	–	–	–
At December 31, 2022	**10,167**	**7,496**	**(47)**	**5,567**	**2,034**	**2,332**	**(5,912)**	**(3,553)**

Hedging costs reserve	Reserve from measurement of financial instruments at FVOCI	Reserve from equity-accounted investments	Actuarial reserve	Reserve from disposal of equity interests without loss of control	Reserve from acquisitions of non-controlling interests	Retained earnings	Equity attributable to owners of the Parent	Non-controlling interests	Total equity
(242)	**(1)**	**(128)**	**(1,196)**	**(2,381)**	**(1,292)**	**18,200**	**28,325**	**14,032**	**42,357**
–	–	–	–	–	–	(3,791)	**(3,791)**	**(1,266)**	**(5,057)**
–	–	–	–	–	–	(71)	**(71)**	**–**	**(71)**
–	–	–	–	–	–	–	**–**	**–**	**–**
–	–	–	–	–	–	(36)	**(13)**	**–**	**(13)**
–	–	–	–	–	–	–	**9**	**–**	**9**
–	–	–	–	–	–	–	**3,181**	**–**	**3,181**
–	–	–	–	–	–	318	**318**	**225**	**543**
–	–	55	–	–	–	–	**45**	**31**	**76**
–	–	–	(140)	3	449	(8)	**(912)**	**(404)**	**(1,316)**
203	11	(648)	11	–	–	3,189	**2,562**	**71**	**2,633**
203	*11*	*(648)*	*11*	–	–	–	***(627)***	***(597)***	***(1,224)***
–	–	–	–	–	–	*3,189*	***3,189***	***668***	***3,857***
(39)	**10**	**(721)**	**(1,325)**	**(2,378)**	**(843)**	**17,801**	**29,653**	**12,689**	**42,342**
–	–	–	–	–	–	(3,963)	**(3,963)**	**(937)**	**(4,900)**
–	–	–	–	–	–	(123)	**(123)**	**–**	**(123)**
–	–	–	–	–	–	–	**–**	**–**	**–**
–	–	–	–	–	–	(14)	**(14)**	**–**	**(14)**
–	–	–	–	–	–	3	**3**	**–**	**3**
–	–	–	–	–	–	–	**8**	**–**	**8**
–	–	–	–	–	–	–	**–**	**–**	**–**
–	(1)	–	–	–	–	411	**410**	**316**	**726**
5	–	21	14	4	(30)	–	**1,397**	**56**	**1,453**
5	–	–	(1)	(16)	(319)	–	**(372)**	**379**	**7**
(52)	(31)	224	249	–	–	1,682	**1,658**	**922**	**2,580**
(52)	*(31)*	*224*	*249*	–	–	–	***(24)***	***(316)***	***(340)***
–	–	–	–	–	–	*1,682*	***1,682***	***1,238***	***2,920***
(81)	**(22)**	**(476)**	**(1,063)**	**(2,390)**	**(1,192)**	**15,797**	**28,657**	**13,425**	**42,082**

Consolidated Statement of Cash Flows

Millions of euro	Notes	2022		2021	
			of which with related parties		*of which with related parties*
Profit for the year		**2,920**		**3,857**	
Adjustments for:					
Net impairment losses/(reversals) on trade receivables and other receivables	12.d	1,288		1,196	
Depreciation, amortization and other impairment losses	12.e	8,809		8,691	
Financial (income)/expense	14-15	2,499		2,751	
Net (gains)/losses from equity-accounted investments	16	(23)		(571)	
Income taxes		3,470		1,643	
Changes in net working capital:		(3,961)		(1,097)	
- inventories	33	(2,166)		(649)	
- trade receivables	34	(2,783)	*(242)*	(4,951)	*(458)*
- trade payables	44	1,333	*(1,272)*	4,357	*1,877*
- other contract assets	28	15		56	
- other contract liabilities	28	254	*31*	75	*(4)*
- other assets/liabilities		(614)	*(783)*	15	*31*
Accruals to provisions		803		1,578	
Utilization of provisions		(1,521)		(1,300)	
Interest income and other financial income collected[1]	14-15	2,622	*154*	1,365	*138*
Interest expense and other financial expense paid[1]	14-15	(5,016)	*(34)*	(4,277)	*(32)*
Net (income)/expense from measurement of commodities		(927)		(304)	
Income taxes paid	17	(1,934)		(1,846)	
Net capital gains		(355)		(1,771)	
Cash flows from operating activities (A)[1]		**8,674**		**9,915**	
of which: discontinued operations		*(391)*		*280*	
Investments in property, plant and equipment	19-22	(11,281)		(10,545)	
Investments in intangible assets	23	(1,961)		(1,656)	
Investments in non-current contract assets		(1,261)		(907)	
Investments in entities (or business units) less cash and cash equivalents acquired	8	(1,275)		(283)	
Disposals of entities (or business units) less cash and cash equivalents sold	8	2,032		61	
(Increase)/Decrease in other investing activities		120		2,455	
Cash flows used in investing activities (B)		**(13,626)**		**(10,875)**	
of which: discontinued operations		*(351)*		*(453)*	
New long-term borrowings	48.3	22,399		15,895	
Repayments of borrowings	48.3	(9,359)	*(97)*	(11,321)	*(118)*
Other changes in net financial debt		(620)		3,339	
Collections/(Payments) associated with derivatives connected with borrowings[1]		(25)		154	
Payments for acquisition of equity investments without change of control and other transactions in non-controlling interests		12		(1,295)	
Issues/(Redemptions) of hybrid bonds		-		2,213	
Purchase of treasury shares		(14)		(13)	
Dividends and interim dividends paid		(4,901)		(4,970)	
Coupons paid to holders of hybrid bonds		(123)		(71)	
Cash flows from financing activities (C)[1]		**7,369**		**3,931**	
of which: discontinued operations		*656*		*118*	
Impact of exchange rate fluctuations on cash and cash equivalents (D)		**136**		**17**	
Increase/(Decrease) in cash and cash equivalents (A+B+C+D)		**2,553**		**2,988**	
Cash and cash equivalents at the beginning of the year[2]		8,990		6,002	
Cash and cash equivalents at the end of the year[3]		11,543		8,990	

(1) In order to improve presentation of the 2021 figures, for comparative purposes only, realized financial income and expense connected solely with loans in currencies have been reclassified under a new item "Collections/(Payments) associated with derivatives connected with borrowings" in the section on cash flows from financing activities.

(2) Of which cash and cash equivalents equal to €8,315 million at January 1, 2022 (€5,266 million at January 1, 2021), short-term securities equal to €88 million at January 1, 2022 (€67 million at January 1, 2021), cash and cash equivalents pertaining to "Assets held for sale" in the amount of €44 million at January 1, 2022 (€29 million at January 1, 2021) and cash and cash equivalents pertaining to "Discontinued operations" equal to €543 million at January 1, 2022 (€640 million at January 1, 2021).

(3) Of which cash and cash equivalents equal to €11,041 million at December 31, 2022 (€8,315 million at December 31, 2021), short-term securities equal to €78 million at December 31, 2022 (€88 million at December 31, 2021) and cash and cash equivalents pertaining to "Assets held for sale" in the amount of €98 million at December 31, 2022 (€44 million at December 31, 2021) and to "Discontinued operations" equal to €326 million at December 31, 2022 (€543 million at December 31, 2021).

Notes to the consolidated financial statements

Basis of presentation

1. Form and content of the consolidated financial statements

Enel SpA has its registered office in Viale Regina Margherita 137, Rome, Italy, and since 1999 has been listed on the Milan stock exchange.
There were no changes in the company name in 2022.
Enel is an energy multinational and is one of the world's leading integrated operators in the electricity and gas industries, with a special focus on Europe and Latin America.
The consolidated financial statements as at and for the year ended December 31, 2022 comprise the financial statements of Enel SpA, its subsidiaries and Group holdings in associates and joint ventures, as well as the Group's share of the assets, liabilities, costs and revenue of joint operations ("the Group").
A list of the subsidiaries, associates, joint operations and joint ventures included in the consolidation scope is attached.
These consolidated financial statements were approved and authorized for publication by the Board of Directors on March 16, 2023.
These consolidated financial statements have been audited by KPMG SpA.

Basis of presentation

The consolidated financial statements as at and for the year ended December 31, 2022 have been prepared in accordance with international accounting standards (International Accounting Standards - IAS and International Financial Reporting Standards - IFRS) issued by the International Accounting Standards Board (IASB), the interpretations of the IFRS Interpretations Committee (IFRSIC) and the Standing Interpretations Committee (SIC), recognized in the European Union pursuant to Regulation (EC) no. 1606/2002 and in effect as of the close of the year. All of these standards and interpretations are hereinafter referred to as the "IFRS-EU".
The consolidated financial statements have also been prepared in conformity with measures issued in implementation of Article 9, paragraph 3, of Legislative Decree 38 of February 28, 2005.
The consolidated financial statements consist of the consolidated income statement, the statement of consolidated comprehensive income, the statement of consolidated financial position, the statement of changes in consolidated equity and the consolidated statement of cash flows and the related notes.
The assets and liabilities recognized in the statement of financial position are classified on a "current/non-current basis", with separate reporting of assets held for sale and liabilities included in disposal groups held for sale. Current assets, which include cash and cash equivalents, are assets that are intended to be realized, sold or consumed during the normal operating cycle of the Group; current liabilities are liabilities that are expected to be settled during the normal operating cycle of the Group.
The income statement classifies costs on the basis of their nature, with separate reporting of profit/(loss) from continuing operations and profit/(loss) from discontinued operations attributable to owners of the Parent and to non-controlling interests.
The consolidated cash flow statement is prepared using the indirect method, with separate reporting of any cash flows by operating, investing and financing activities associated with discontinued operations.
Note that the items reported in the cash flow statement also include any impacts deriving from companies classified as discontinued operations. In particular, although the Group does not diverge from the provisions of IAS 7 in the classification of items:

- cash flows from operating activities report cash flows from core operations, interest on loans granted and obtained and dividends received from associates or joint ventures;
- investing activities comprise investments in property, plant and equipment and intangible assets and disposals of such assets and contract assets related to service concession arrangements. They include, also, the effects of business combinations in which the Group acquires or loses control of companies, as well as other minor investments;
- cash flows from financing activities include cash flows generated by liability management transactions and leases, dividends and interim dividends paid to owners of

the Parent and non-controlling interests and the effects of transactions in non-controlling interests that do not change the status of control of the companies involved;
- a separate item is used to report the impact of exchange rates on cash and cash equivalents and their impact on profit or loss is eliminated in full in order to neutralize the effect on cash flows from operating activities.

For more information on cash flows as reported in the statement of cash flows, please see the note 46 "Cash flows".

The consolidated financial statements have been prepared on a going concern basis using the cost method, with the exception of items measured at fair value in accordance with IFRS, as explained in the measurement bases applied to each individual item, and of non-current assets and disposal groups classified as held for sale, which are measured at the lower of their carrying amount and fair value less costs to sell.

The consolidated financial statements are presented in euro, the functional currency of the Parent Enel SpA. All figures are shown in millions of euro unless stated otherwise.

The consolidated income statement, the statement of financial position and the consolidated statement of cash flows report transactions with related parties, the definition of which is given in note 2.2 "Significant accounting policies".

The consolidated financial statements provide comparative information in respect of the previous year.

2. Accounting policies

2.1 Use of estimates and management judgment

Preparing the consolidated financial statements under IFRS-EU requires management to take decisions and make estimates and assumptions that may impact the carrying amount of revenue, costs, assets and liabilities and the related disclosures concerning the items involved as well as contingent assets and liabilities at the reporting date. The estimates and management's judgments are based on previous experience and other factors considered reasonable in the circumstances. They are formulated when the carrying amount of assets and liabilities is not easily determined from other sources. The actual results may therefore differ from these estimates. The estimates and assumptions are periodically revised and the effects of any changes are reflected through profit or loss if they only involve that period. If the revision involves both the current and future periods, the change is recognized in the period in which the revision is made and in the related future periods.

In order to enhance understanding of the consolidated financial statements, the following sections examine the main items affected by the use of estimates and the cases that reflect management judgments to a significant degree, underscoring the main assumptions used by management in measuring these items in compliance with the IFRS-EU. The critical element of such valuations is the use of assumptions and professional judgments concerning issues that are by their very nature uncertain.

Changes in the conditions underlying the assumptions and judgments could have a substantial impact on future results.

The information included in the consolidated financial statements is selected on the basis of a materiality analysis carried out in accordance with the requirements of Practice Statement 2 "Making Materiality Judgments", issued by the International Accounting Standards Board (IASB).

With regard to the effects of climate change issues, the Group believes that climate change represents an implicit element in the application of the methodologies and models used to perform estimates in the valuation and/or measurement of certain accounting items. Furthermore, the Group has also taken account of the impact of climate change in the significant judgments made by management. In this regard, the main items included in the consolidated financial statements at December 31, 2022 affected by management's use of estimates and judgments refer to the impairment of non-financial assets and obligations connected with the energy transition, including those for decommissioning and site restoration of certain generation plants. For further details on these items, see note 19 "Property, plant and equipment", note 24 "Goodwill", and note 40 "Provisions for risks and charges".

Use of estimates

Revenue from contracts with customers

Revenue from supply of electricity and gas to end users is recognized at the time the electricity or gas is delivered and includes, in addition to amounts invoiced on the basis of periodic (and pertaining to the year) meter readings or on the volumes notified by distributors and transporters, an estimate of the electricity and gas delivered during the period but not yet invoiced that is equal to the difference between the amount of electricity and gas delivered to the distribution network and that invoiced in the period, taking account of any network losses. Revenue between the date of the last meter reading and the year-end is based on estimates of

the daily consumption of individual customers, primarily determined on their historical information, adjusted to reflect the climate factors or other matters that may affect the estimated consumption.
For more details on such revenue, see note 11.a "Revenue from sales and services".

Impairment of non-financial assets
When the carrying amount of property, plant and equipment, investment property, intangible assets, right-of-use assets, goodwill and investments in associates/joint ventures exceeds its recoverable amount, which is the higher of the fair value less costs to sell and the value in use, the assets are impaired.
Such impairments are carried out in accordance with the provisions of IAS 36, as described in greater detail in note 24 "Goodwill".
In order to determine the recoverable amount, the Group generally adopts the value in use criterion. Value in use is based on the estimated future cash flows generated by the asset, discounted to their present value using a pre-tax discount rate that reflects the current market assessment of the time value of money and of the specific risks of the asset.
Future cash flows used to determine value in use are based on the most recent Business Plan, approved by the management, containing forecasts for volumes, revenue, operating costs and investments. These projections cover the next three years. For subsequent years, account is taken of:

- assumptions concerning the long-term evolution of the main variables considered in the calculation of cash flows, as well as the average residual useful life of the assets or the duration of the concessions, based on the specific characteristics of the businesses;
- a long-term growth rate equal to the long-term growth of electricity demand and/or inflation (depending on the country and business) that does not in any case exceed the average long-term growth rate of the market involved.

The recoverable amount is sensitive to the estimates and assumptions used in the calculation of cash flows and the discount rates applied. Nevertheless, possible changes in the underlying assumptions on which the calculation of such amounts is based could generate different recoverable amounts. The analysis of each group of non-financial assets is unique and requires management to use estimates and assumptions considered prudent and reasonable in the specific circumstances.

In line with its business model and in the context of the acceleration of the decarbonization of the generation mix and driving the energy transition process, the Group has also carefully assessed whether climate change issues have affected the reasonable and supportable assumption used to estimated expected cash flows. In this regard, where necessary, the Group has also taken account of the long-term impact of climate change, in particular by considering in the estimation of the terminal value a long-term growth rate in line with the change in electricity demand determined using energy models for each country.
Information on the main assumptions used to estimate the recoverable amount of assets with reference to the impacts relating to climate change, as well as information on changes in these assumptions, is provided in note 24 "Goodwill".

Expected credit losses on financial assets
At the end of each reporting period, the Group recognizes a loss allowance for expected credit losses on trade receivables and other financial assets measured at amortized cost, debt instruments measured at fair value through other comprehensive income, contract assets and all other assets in scope.
Loss allowances for financial assets are based on assumptions about risk of default and on the measurement of expected credit losses. Management uses judgment in making these assumptions and selecting the inputs for the impairment calculation, based on the Group's past experience, current market conditions as well as forward-looking estimates at the end of each reporting period.
The expected credit loss (i.e., ECL) – determined considering probability of default (PD), loss given default (LGD), and exposure at default (EAD) – is the difference between all contractual cash flows that are due in accordance with the contract and all cash flows that are expected to be received (including all shortfalls) discounted at the original effective interest rate (EIR).
In particular, for trade receivables, contract assets and lease receivables, including those with a significant financial component, the Group applies the simplified approach, determining expected credit losses over a period corresponding to the entire life of the asset, generally equal to 12 months.
Based on the specific reference market and the regulatory context of the sector, as well as expectations of recovery after 90 days, for such assets, the Group mainly applies a default definition of 180 days past due to determine expected credit losses, as this is considered an effective indication of a significant increase in credit risk. Accordingly, financial assets that are more than 90 days past due are generally not considered to be in default, except for some specific regulated markets.
For trade receivables and contract assets the Group mainly applies a collective approach based on grouping trade receivables and contract assets into specific clusters, taking into account the specific regulatory and business context. Only if the trade receivables are deemed to be individually significant by management and there is specific information about any significant increase in credit risk, does the Group apply an analytical approach.

In case of individual assessment, PD is mainly obtained from an external provider.
Conversely, for collective assessment, trade receivables are grouped based on shared credit risk characteristics and past due information, considering a specific definition of default.

Based on each business and local regulatory framework as well as differences in customer portfolios also in terms of risk, default rates and recovery expectations, specific clusters are defined.
The contract assets are considered to have substantially the same risk characteristics as the trade receivables for the same types of contracts.

In order to measure the ECL for trade receivables on a collective basis, as well as for contract assets, the Group considers the following assumptions related to ECL parameters:

- PD, assumed as to be the average default rate, is calculated on a cluster basis and taking into consideration minimum 24-month historical data;
- LGD is function of the default bucket's recovery rates, discounted at the EIR; and
- EAD is estimated as the carrying exposure at the reporting date net of cash deposits, including invoices issued but not expired and invoices to be issued.

Based on specific management evaluations, the forward-looking adjustment can be applied considering qualitative and quantitative information in order to reflect possible future events and macroeconomic scenarios, which may affect the risk of the portfolio or the financial instrument.
For additional details on the key assumptions and inputs used please see note 48 "Financial instruments by category".

Depreciable amount of certain elements of Italian hydroelectric plants subsequent to enactment of Law 134/2012

Italian regulations governing large-scale hydroelectric concessions were significantly modified by the "Simplifications Decree" (Decree Law 135 of 2018 ratified with Law 12 of February 11, 2019). The regulations introduce a number of innovations which, if applied to existing concessions, would require a review of the useful lives of certain investments in hydroelectric plants in order to reflect the possibility that, at the end of the concession, some assets could be transferred free of charge to the new concession holder. However, in estimating the useful lives of these plants, management, with the support of a legal opinion, considered the foreseeable outcome of the appeals promptly lodged by the Company – and others – and the related constitutionality issues, which have also been raised by industrial associations. Consequently, we believe that the legislation raises serious constitutionality issues that will be effectively recognized in the appropriate fora. Accordingly, management deemed it appropriate not to reflect the changes introduced by the regulations and therefore has continued to measure the useful lives of the plants as has been done in previous years under the previous regulatory system, considering this to be the most realistic estimate.
Law 134 of August 7, 2012 containing "urgent measures for growth" (published in the *Gazzetta Ufficiale* of August 11, 2012), introduced a sweeping overhaul of the rules governing hydroelectric concessions. Among its various provisions, the law establishes that five years before the expiration of a major hydroelectric water diversion concession and in cases of lapse, relinquishment or revocation, where there is no prevailing public interest for a different use of the water, incompatible with its use for hydroelectric generation, the competent public entity shall organize a public call for tenders for the award for consideration of the concession for a period ranging from 20 to a maximum of 30 years.
In order to ensure operational continuity, the law also governs the methods of transferring ownership of the business unit necessary to operate the concession, including all legal relationships relating to the concession, from the outgoing concession holder to the new concession holder, in exchange for payment of a price to be determined in negotiations between the departing concession holder and the grantor agency, taking due account of the following elements:

- for intake and governing works, penstocks and outflow channels, which under the consolidated law governing waters and electrical plants are to be relinquished free of charge (Article 25 of Royal Decree 1775 of December 11, 1933), the revalued cost less government capital grants, also revalued, received by the concession holder for the construction of such works, depreciated for ordinary wear and tear;
- for other property, plant and equipment, the market value, meaning replacement value, reduced by estimated depreciation for ordinary wear and tear.

While acknowledging that the new regulations introduce important changes as to the transfer of ownership of the business unit with regard to the operation of the hydroelectric concession, the practical application of these principles faces difficulties, given the uncertainties that do not permit the formulation of a reliable estimate of the value that can be recovered at the end of existing concessions (residual value).
Accordingly, management has decided it could not produce a reasonable and reliable estimate of residual value.
The fact that the legislation requires the new concession holder to make a payment to the departing concession

holder prompted management to review the depreciation schedules for assets classified as to be relinquished free of charge prior to Law 134/2012 (until the year ended on December 31, 2011, given that the assets were to be relinquished free of charge, the depreciation period was equal to the closest date between the term of the concession and the end of the useful life of the individual asset), calculating depreciation no longer over the term of the concession but, if longer, over the useful life of the individual assets. If additional information becomes available to enable the calculation of residual value, the carrying amounts of the assets involved will be adjusted prospectively.

Determining the fair value of financial instruments

The fair value of financial instruments is determined on the basis of prices directly observable in the market, where available, or, for unlisted financial instruments, using specific valuation techniques (mainly based on present value) that maximize the use of observable market inputs. In rare circumstances where this is not possible, the inputs are estimated by management taking due account of the characteristics of the instruments being measured.

For more information on financial instruments measured at fair value, please see note 52 "Assets and liabilities measured at fair value".

In accordance with IFRS 13, the Group includes a measurement of credit risk, both of the counterparty (Credit Valuation Adjustment or CVA) and its own (Debit Valuation Adjustment or DVA), in order to adjust the fair value of financial instruments for the corresponding amount of counterparty risk, using the method discussed in note 52 "Assets and liabilities measured at fair value".

Changes in the assumptions made in estimating the input data could have an impact on the fair value recognized for those instruments, especially in current conditions where markets are volatile and the economic outlook is highly uncertain and subject to rapid change.

Development expenditure

In order to determine the recoverability of development expenditure, the recoverable amount is estimated making assumptions regarding any further cash outflow that is expected to be incurred before the asset is ready for use or sale, the discount rates to be applied and the expected period of benefits.

Pensions and other post-employment benefits

Some of the Group's employees participate in pension plans offering benefits based on their wage history and years of service. Certain employees are also eligible for other post-employment benefit schemes.

The expenses and liabilities of such plans are calculated on the basis of estimates carried out by consulting actuaries, who use a combination of statistical and actuarial elements in their calculations, including statistical data on past years and forecasts of future costs. Other components of the estimation that are considered include mortality and retirement rates as well as assumptions concerning future developments in discount rates, the rate of wage increases, the inflation rate and trends in healthcare cost.

These estimates can differ significantly from actual developments owing to changes in economic and market conditions, increases or decreases in retirement rates and the lifespan of participants, as well as changes in the effective cost of healthcare.

Such differences can have a substantial impact on the quantification of pension costs and other related expenses.

For more details on the main actuarial assumptions adopted, please see note 39.

Provisions for risks and charges

For more details on provisions for risks and charges, please see note 40 "Provisions for risks and charges".

Note 57 "Contingent assets and liabilities" also provides information regarding the most significant contingent assets and liabilities for the Group at year end.

Litigation

The Group is involved in various civil, administrative and tax disputes connected with the normal pursuit of its activities that could give rise to significant liabilities. It is not always objectively possible to predict the outcome of these disputes. The assessment of the risks associated with this litigation is based on complex factors whose very nature requires recourse to management judgments, even when taking account of the contribution of external advisors assisting the Group, about whether to classify them as contingent liabilities or liabilities.

Provisions have been recognized to cover all significant liabilities for cases in which legal counsel feels an adverse outcome is likely and a reasonable estimate of the amount of the expense can be made.

Obligations associated with generation plants, including decommissioning and site restoration

Generation activities may entail obligations for the operator with regard to future interventions that will have to be performed following the end of the operating life of the plant.

Such interventions may involve the decommissioning of plants and site restoration, or other obligations linked to the type of generation technology involved. The nature of such obligations may also have a major impact on the accounting treatment used for them.

In the case of nuclear power plants, where the costs regard both decommissioning and the storage of waste fuel and other radioactive materials, the estimation of the fu-

ture cost is a critical process, given that the costs will be incurred over a very long span of time, estimated at up to 100 years.
The obligation, based on financial and engineering assumptions, is calculated by discounting the expected future cash flows that the Group considers it will have to pay to meet the obligations it has assumed.
The discount rate used to determine the present value of the liability is the pre-tax risk-free rate and is based on the economic parameters of the country in which the plant is located.
That liability is quantified by management on the basis of the technology existing at the measurement date and is reviewed each year, taking account of developments in storage, decommissioning and site restoration technology, as well as the ongoing evolution of the legislative framework governing health and environmental protection.
Subsequently, the value of the obligation is adjusted to reflect the passage of time and any changes in estimates.
Please see note 40 "Provisions for risks and charges" for more information on discount rates, undiscounted estimated costs and their timing, which are used to calculate the plant decommissioning and site restoration provision.

Onerous contracts

In order to identify an onerous contract, the Group estimates the non-discretionary costs necessary to fulfil the obligations assumed (including any penalties) under the contract and the economic benefits that are presumed to be obtained from the contract.

Leases

When the interest rate implicit in the lease cannot be readily determined, the Group uses the incremental borrowing rate (IBR) at the lease commencement date to calculate the present value of the lease payments. This is the interest rate that the lessee would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the rightofuse asset in a similar economic environment. When no observable inputs are available, the Group estimates the IBR making assumptions to reflect the terms and conditions of the lease and certain lessee-specific estimates.
One of the most significant judgments for the Group is determining this IBR necessary to calculate the present value of the lease payments required to be paid to the lessor. The Group approach to determine an IBR is based on the assessment of the following three key components:

- the risk free rate, that consider the currency flows of the lease payments, the economic environment where the lease contract has been negotiated and also the lease term;
- the credit spread adjustment, in order to calculate an IBR that is specific for the lessee considering any underlying Parent or other guarantee;
- the lease related adjustments, in order to reflect into the IBR calculation the fact that the discount rate is directly linked to the type of the underlying asset, rather than being a general incremental borrowing rate. In particular, the risk of default is mitigated for the lessors as they have the right to reclaim the underlying asset itself.

For more information on lease liabilities, please see note 48 "Financial instruments by category".

Income tax

Recovery of deferred tax assets

At December 31, 2022, the consolidated financial statements report deferred tax assets in respect of tax losses or tax credits usable in subsequent years and income components whose deductibility is deferred in an amount whose future recovery is considered by management to be highly probable.
The recoverability of such assets is subject to the achievement of future profits sufficient to absorb such tax losses and to use the benefits of the other deferred tax assets.
Significant management judgment is required to assess the probability of recovering deferred tax assets, considering all negative and positive evidence, and to determine the amount that can be recognized, based upon the likely timing and the level of future taxable profits together with future tax planning strategies and the tax rates applicable at the date of reversal. However, where the Group should become aware that it is unable to recover all or part of recognized tax assets in future years, the consequent adjustment would be taken to profit or loss in the year in which this circumstance arises.
The recoverability of deferred tax assets is reviewed at the end of each period. Deferred tax assets not recognized are reassessed at each reporting date in order to verify the conditions for their recognition.

For more detail in deferred tax assets recognized or not recognized, please see note 25 "Deferred tax assets and liabilities".

Management judgment

Identification of cash generating units (CGUs)

For impairment testing, if the recoverable amount cannot be determined for an individual asset, the Group identifies the smallest group of assets that generate largely independent cash inflows. The smallest group of assets that generates cash inflows that are largely independent of the

cash inflows from other assets or group of assets is a CGU. Identifying such CGUs involves management judgments regarding the specific nature of the assets and the business involved (geographical segment, business segment, regulatory framework, etc.) and the evidence that the cash inflows of the group of assets are largely independent of those associated with other assets (or groups of assets).
The assets of each CGU are also identified on the basis of the manner in which management manages and monitors those assets within the business model adopted. In particular, the number and scope of the CGUs are updated systematically to reflect the impact of new business combinations and reorganizations carried out by the Group, and to take account of external factors that could influence the ability of assets to generate independent cash inflows.
In particular, if certain specific identified assets owned by the Group are impacted by adverse economic or operating conditions that undermine their capacity to contribute to the generation of cash flows, they can be isolated from the rest of the assets of the CGU, undergo separate analysis of their recoverability and be impaired where necessary.
The CGUs identified by management to which the goodwill recognized in these consolidated financial statements has been allocated and the criteria used to identify the CGUs are indicated in note 24 "Goodwill".

Determining the useful life of non-financial assets
In determining the useful life of property, plant and equipment and intangible assets with a finite useful life, the Group considers not only the future economic benefits – contained in the assets – obtained through their use, but also many other factors, such as physical wear and tear, the technical, commercial or other obsolescence of the product or service produced with the asset, legal or similar limits (e.g., safety, environmental or other restrictions) on the use of the asset, if the useful life of the asset depends on the useful life of other assets.
Furthermore, in estimating the useful lives of the assets concerned, the Group has taken account of its commitment under the Paris Agreement. For more information on this issue, please see note 19 "Property, plant and equipment".

Determination of the existence of control
Under the provisions of IFRS 10, control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Power is defined as the current ability to direct the relevant activities of the investee based on existing substantive rights.
The existence of control does not depend solely on ownership of a majority investment, but rather it arises from substantive rights that each investor holds over the investee. Consequently, management must use its judgment in assessing whether specific situations determine substantive rights that give the Group the power to direct the relevant activities of the investee in order to affect its returns.
For the purpose of assessing control, management analyzes all facts and circumstances including any agreements with other investors, rights arising from other contractual arrangements and potential voting rights (call options, warrants, put options granted to non-controlling shareholders, etc.). These other facts and circumstances could be especially significant in such assessment when the Group holds less than a majority of voting rights, or similar rights, in the investee.
Furthermore, even if it holds more than half of the voting rights in an entity, the Group considers all the relevant facts and circumstances in assessing whether it controls the investee.
The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the elements considered in verifying the existence of control.
As reported in Enel's consolidated financial statements at December 31, 2022, the Enel Group holds minor interests in Enel Green Power Rus LLC and Enel X Rus LLC.
In the wake of the Ukrainian conflict, a number of measures were adopted or undertaken that resulted in the termination of Enel's management and coordination role at the Russian companies in which the Group holds investments. These measures include: (i) the resignation of all non-independent directors and all managers of non-Russian nationality; (ii) the termination of intercompany contracts; and (iii) the modification of the organizational structure of the Enel Group in order to terminate reporting by the staff or business functions to Enel.
At December 31, 2022 the Enel Group continues to control the companies from an accounting point of view, in compliance with "IFRS 10 - Consolidated Financial Statements".

Determination of the existence of joint control and of the type of joint arrangement
Under the provisions of IFRS 11, a joint arrangement is an agreement where two or more parties have joint control. Joint control exists only when the decisions over the relevant activities require the unanimous consent of the parties that share joint control.
A joint arrangement can be configured as a joint venture or a joint operation. Joint ventures are joint arrangements whereby the parties that have joint control have rights to the net assets of the arrangement. Conversely, joint operations are joint arrangements whereby the parties that

have joint control have rights to the assets and obligations for the liabilities relating to the arrangement.
In order to determine the existence of the joint control and the type of joint arrangement, management must apply judgment and assess its rights and obligations arising from the arrangement. For this purpose, the management considers the structure and legal form of the arrangement, the terms agreed by the parties in the contractual arrangement and, when relevant, other facts and circumstances.
Following that analysis, the Group has considered its interest in Asociación Nuclear Ascó-Vandellós II as a joint operation.
The Group re-assesses whether or not it has joint control if facts and circumstances indicate that changes have occurred in one or more of the elements considered in verifying the existence of joint control and the type of the joint arrangement.
In the wake of the Ukrainian conflict, a number of measures were adopted or undertaken that resulted in the termination of Enel's management of Rusenergosbyt LLC (Group's associate). These measures include the resignation of all non-independent directors and all managers of non-Russian nationality and the termination of reporting by the staff or business functions to Enel.
At December 31, 2022 the Enel Group continues to exercise joint control of the company from an accounting point of view, in accordance with "IFRS 11 - Joint arrangements".
For more information on the Group's investments in joint ventures, please see note 26 "Equity-accounted investments".

Determination of the existence of significant influence over an associate

Associates are those in which the Group exercises significant influence, i.e., the power to participate in the financial and operating policy decisions of the investee but not exercise control or joint control over those policies. In general, it is presumed that the Group has a significant influence when it has an ownership interest of 20% or more.
In order to determine the existence of significant influence, management must apply judgment and consider all facts and circumstances.
The Group re-assesses whether or not it has significant influence if facts and circumstances indicate that there are changes to one or more of the elements considered in verifying the existence of significant influence.
For more information on the Group's equity investments in associates, please see note 26 "Equity-accounted investments".

Application of "IFRIC 12 - Service concession arrangements" to concessions

IFRIC 12 applies to "public-to-private" service concession arrangements, which can be defined as contracts under which the operator is obligated to provide public services, i.e., give access to major economic and social services for a certain period of time, on behalf of a public entity (the grantor). In these contracts, the grantor conveys to an operator the right to manage the infrastructure used to provide services.
More specifically, IFRIC 12 gives guidance on the accounting by operators for "public-to-private" service concession arrangements in the event that:

- the grantor controls or regulates what services the operator must provide with the infrastructure, to whom it must provide them, and at what price; and
- the grantor controls – through ownership, beneficial entitlement or otherwise – any significant residual interest in the infrastructure at the end of the term of the arrangement.

In assessing the applicability of these requirements for the Group, as operator, management carefully analyzed existing concessions.
On the basis of that analysis, the provisions of IFRIC 12 are applicable to some of the infrastructure of a number of companies that operate primarily in Brazil.
Further details about the infrastructure used in the service concession arrangements in the scope of IFRIC 12 are provided in note 20 "Infrastructure within the scope of 'IFRIC 12 - Service concession arrangements'".

Revenue from contracts with customers

In the process of applying IFRS 15, the Group has made the following judgments (further details about the most significant effect on the Group's revenue are provided in note 11.a "Revenue from sales and services").

The Group carefully analyzes the contractual terms and conditions on a jurisdictional level in order to determine when a contract exists and the terms of that contract's enforceability so as to apply IFRS 15 only to such contracts.

When a contract includes multiple promised goods or services, in order to assess if they should be accounted for separately or as a group, the Group considers both the individual characteristics of goods/services and the nature of the promise within the context of the contract, also evaluating all the facts and circumstances relating to the specific contract under the relevant legal and regulatory framework.
To evaluate when a performance obligation is satisfied, the Group evaluates when the control of the goods or services is transferred to the customer, assessed primarily from the perspective of the customer.

For each performance obligation, and in relation to the type of transaction:

- revenue is recognized over time on the basis of the progress towards complete satisfaction of the performance obligation, as in the case of the provision of services. The measurement of progress towards complete satisfaction of a performance obligation is carried out consistently for performance obligations and similar circumstances using an "output" or "input" method. In particular, the cost incurred method (cost-to-cost method) is considered appropriate for measuring progress except when a specific analysis of the contract counsels the use of an alternative method. If it should prove impossible to reasonably assess progress towards satisfaction of the performance obligation, the Group recognizes revenue only to the extent of the incurred costs that are considered recoverable;
- if, on the other hand, the performance obligation is satisfied at a given moment, as in the case of the supply of goods, revenue is recognized at the point in time in which the customer obtains the control of the goods, considering all relevant indicators.

The Group considers all relevant facts and circumstances in determining whether a contract includes variable consideration (i.e., consideration that may vary or depends upon the occurrence or non-occurrence of a future event). In estimating variable consideration, the Group uses the method that better predicts the consideration to which it will be entitled, applying it consistently throughout the contract and for similar contracts, also considering all available information, and updating such estimates until the uncertainly is resolved. The Group includes the estimated variable consideration in the transaction price only to the extent that it is highly probable that a significant reversal in the cumulative revenue recognized will not occur when the uncertainty is resolved.

The Group considers that it is an agent in some contracts in which it is not primarily responsible for fulfilling the contract and therefore it does not control goods or services before they are being transferred to customers. For example, the Group acts as an agent in some contracts for electricity/gas network connection services and other related activities depending on local legal and regulatory framework.

For contracts that have more than one performance obligation (e.g., "bundled" sale contracts), the Group generally allocates the transaction price to each performance obligation in proportion to its stand-alone selling price. The Group determines stand-alone selling prices considering all information and using observable prices when they are available in the market or, if not, using an estimation method that maximizes the use of observable inputs and applying it consistently to similar arrangements.
If the Group evaluates that a contract includes an option for additional goods or services (e.g., customer loyalty programs or renewal options) that represents a material right, it allocates the transaction price to this option since the option gives rise to an additional performance obligation.

The Group assesses recoverability of the incremental costs of obtaining a contract either on a contract-by-contract basis, or for a group of contracts if those costs are associated with the group of contracts.
The Group supports the recoverability of such costs on the basis of its experience with other similar transactions and evaluating various factors, including potential renewals, amendments and follow-on contracts with the same customer.
The Group amortizes such costs over the average customer term. In order to determine this expected period of benefit from the contract, the Group considers its past experience (e.g., "churn rate"), the predictive evidence from similar contracts and available information about the market.

Power Purchase Agreements

Power Purchase Agreements (PPAs), which provide for the physical delivery of energy and which do not comply with the requirements of IFRS 10 for the existence of control or joint control over a company or an asset, and IFRS 16 for the recognition of a lease, but which comply with the definition of a derivative under IFRS 9, are accounted for on the basis of the own use exemption when the relevant conditions are met.
For more information on Virtual PPAs complying with the definition of derivative pursuant to IFRS 9, please see note 51 "Derivatives and hedge accounting".

Classification and measurement of financial assets

At initial recognition, in order to classify financial assets as financial assets at amortized cost, at fair value through other comprehensive income and at fair value through profit or loss, management assesses both the contractual cash-flow characteristics of the instrument and the business model for managing financial assets in order to generate cash flows.
In order to evaluate the contractual cash-flow characteristics of the instrument, management performs the SPPI test at an instrument level, in order to determine if it gives rise to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding, performing specific assessment on the contractual clauses of the financial instruments, as well as quantitative analysis, if required.
The business model determines whether cash flows will

result from collecting contractual cash flows, selling the financial assets, or both.
For more details, please see note 48 "Financial instruments by category".

Hedge accounting
Hedge accounting is applied to derivatives in order to reflect into the financial statements the effect of risk management strategies.
Accordingly, at the inception of the transaction the Group documents the hedge relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy. The Group also assesses, both at hedge inception and on an ongoing basis, whether hedging instruments are highly effective in offsetting changes in the fair values or cash flows of hedged items.
On the basis of management's judgment, the effectiveness assessment based on the existence of an economic relationship between the hedging instruments and the hedged items, the dominance of credit risk in the changes in fair value and the hedge ratio, as well as the measurement of the ineffectiveness, is evaluated through a qualitative assessment or a quantitative computation, depending on the specific facts and circumstances and on the characteristics of the hedged items and the hedging instruments.
For cash flow hedges of forecast transactions designated as hedged items, management assesses and documents that they are highly probable and present an exposure to changes in cash flows that affect profit or loss.

For additional details on the key assumptions about effectiveness assessment and ineffectiveness measurement, please refer to note 51.1 "Derivatives designated as hedging instruments".

Leases
The complexity of the assessment of the lease contracts, and also their long-term expiring date, requires considerable professional judgments for application of IFRS 16. In particular, this regards:
- the application of the definition of a lease to the cases typical of the sectors in which the Group operates;
- the identification of the non-lease component into the lease arrangements;
- the evaluation of any renewable and termination options included in the lease in order to determine the term of leases, also considering the probability of their exercise and any significant leasehold improvements on the underlying asset, taking due consideration of recent interpretations issued by the IFRS Interpretations Committee;
- the identification of any variable lease payments that depend on an index or a rate to determine whether the changes of the latter impact the future lease payments and also the amount of the right-of-use asset;
- the estimate of the discount rate to calculate the present value of the lease payments; further details on assumptions about this rate are provided in the paragraph "Use of estimates".

For more information on leases, please see note 21 "Leases".

Uncertainty over income tax treatments
The Group determines whether to consider each uncertain income tax treatment separately or together with one or more other uncertain tax treatments as well as whether to reflect the effect of uncertainty by using the most likely amount or the expected value method, based on which approach better predicts the resolution of the uncertainty for each uncertain tax treatments, taking account of local tax regulations.
The Group makes significant use of professional judgment in identifying uncertainties about income tax treatments and reviews the judgments and estimates made in the event of a change in facts and circumstances that could change its assessment of the acceptability of a specific tax treatment or the estimate of the effects of uncertainty, or both.
For more information on income taxes, please see note 17 "Income taxes".

2.2 Significant accounting policies

Related parties
Related parties are mainly those that share the same controlling entity with Enel SpA, the companies that directly or indirectly are controlled by Enel SpA, the associates or joint ventures (including their subsidiaries) of Enel SpA, or the associates or joint ventures (including their subsidiaries) of any Group company. Related parties also include entities that operate post-employment benefit plans for employees of Enel SpA or its associates (specifically, the FOPEN and FONDENEL pension funds), as well as the members of the boards of statutory auditors, and their immediate family, and the key management personnel, and their immediate family, of Enel SpA and its subsidiaries. Key management personnel comprises management personnel who have the power and direct or indirect responsibility for the planning, management and control of the activities of the Company. They include directors (whether executive or not).

Subsidiaries
Subsidiaries are all entities over which the Group has control. The Group controls an entity, regardless of the nature of the formal relationship between them, when it is exposed, or has rights, to variable returns deriving from its involvement and has the ability, through the exercise of its power over the investee, to affect its returns.

The figures of the subsidiaries are consolidated on a full line-by-line basis as from the date control is acquired until such control ceases.

Consolidation procedures

The financial statements of subsidiaries used to prepare the consolidated financial statements were prepared at December 31, 2022 in accordance with the accounting policies adopted by the Group.

If a subsidiary uses different accounting policies from those adopted in preparing the consolidated financial statements for similar transactions and facts in similar circumstances, appropriate adjustments are made to ensure conformity with Group accounting policies.

Assets, liabilities, revenue and expenses of a subsidiary acquired or disposed of during the year are included in or excluded from the consolidated financial statements, respectively, from the date the Group gains control or until the date the Group ceases to control the subsidiary.

Profit or loss for the year and the other comprehensive income are attributed to the owners of the Parent and non-controlling interests, even if this results in a loss for non-controlling interests.

All intercompany assets and liabilities, equity item, revenue, expenses and cash flows relating to transactions between entities of the Group are eliminated in full.

Changes in ownership interest in subsidiaries that do not result in loss of control are accounted for as equity transactions, with the carrying amounts of the controlling and non-controlling interests adjusted to reflect changes in their interests in the subsidiary. Any difference between the amount to which non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized in consolidated equity.

When the Group ceases to have control over a subsidiary, any interest retained in the entity is remeasured to its fair value, recognized through profit or loss, at the date when control is lost, recognizing any gain or loss from the loss of control through profit or loss. In addition, any amounts previously recognized in other comprehensive income in respect of the former subsidiary are accounted for as if the Group had directly disposed of the related assets or liabilities.

Investments in associates and joint ventures

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in decisions concerning the financial and operating policies of the investee without having control or joint control over the investee.

A joint venture is a joint arrangement over which the Group exercises joint control and has rights to the net assets of the arrangement. Joint control is the sharing of control of an arrangement, whereby decisions about the relevant activities require unanimous consent of the parties sharing control.

The Group's investments in associates and joint ventures are accounted for using the equity method.

Under the equity method, these investments are initially recognized at cost and any goodwill arising from the difference between the cost of the investment and the Group's share of the net fair value of the investee's identifiable assets and liabilities at the acquisition date is included in the carrying amount of the investment.

After the acquisition date, their carrying amount is adjusted to recognize changes in the Group's share of profit or loss of the associate or joint venture in Group profit or loss. Adjustments to the carrying amount may also be necessary following changes in the Group's share in the associate or joint venture as a result of changes in the other comprehensive income of the investee. The Group's share of these changes is recognized in the Group's other comprehensive income.

Distributions received from joint venture and associates reduce the carrying amount of the investments.

Gains and losses resulting from transactions between the Group and the associates or joint ventures are eliminated to the extent of the interest in the associate or joint venture.

The financial statements of the associates or joint ventures are prepared for the same reporting period as the Group. When necessary, adjustments are made to bring the accounting policies in line with those of the Group.

After application of the equity method, the Group determines whether it is necessary to recognize an impairment loss on its investment in an associate or joint venture. If there is objective evidence of a loss of value, the entire carrying amount of the investment undergoes impairment testing pursuant to IAS 36 as a single asset. For more information on impairment, please see the section "Impairment of non-financial assets" in note 2.1 "Use of estimates and management judgment".

If the investment ceases to be an associate or a joint venture, the Group recognizes any retained investment at its fair value, through profit or loss. Any amounts previously recognized in other comprehensive income in respect of the former associate or joint venture are accounted for as if the Group had directly disposed of the related assets or liabilities.

If the ownership interest in an associate or a joint venture is reduced, but the Group continues to exercise a significant influence or joint control, the Group continues to apply the equity method and the share of the gain or loss that had previously been recognized in other comprehensive income relating to that reduction is accounted for as if the Group had directly disposed of the related assets or liabilities.

When a portion of an investment in an associate or joint venture meets the criteria to be classified as held for sale, any retained portion of an investment in the associate or joint venture that has not been classified as held for sale is accounted for using the equity method until disposal of the portion classified as held for sale takes place.

Joint operations are joint arrangements whereby the Group, which holds joint control, has rights to the assets and obligations for the liabilities relating to the arrangement. For each joint operation, the Group recognized assets, liabilities, costs and revenue on the basis of the provisions of the arrangement rather than the interest held.

Where there is an increase in the interest in a joint arrangement that meets the definition of a business:

- if the Group acquires control, and had rights over the assets and obligations for the liabilities of the joint arrangement immediately before the acquisition date, then the transaction represents a business combination achieved in stages. Consequently, the Group applies the requirements for a business combination achieved in stages, including the remeasurement of the interest it held previously in the joint operation at its fair value at the acquisition date;
- if the Group obtains joint control (i.e., it already had an interest in a joint operation without holding joint control), the interest previously held in the joint operation shall not be remeasured.

For more information on the Group's investments in associates and joint ventures, please see note 26 "Equity-accounted investments".

Translation of foreign currency items

Transactions in currencies other than the functional currency are initially recognized at the spot exchange rate prevailing on the date of the transaction.

Monetary assets and liabilities denominated in a foreign currency other than the functional currency are subsequently translated using the closing exchange rate (i.e., the spot exchange rate prevailing at the reporting date).

Non-monetary assets and liabilities denominated in foreign currency that are recognized at historical cost are translated using the exchange rate at the date of the transaction. Non-monetary assets and liabilities in foreign currency measured at fair value are translated using the exchange rate at the date the fair value was determined.

Any exchange differences are recognized through profit or loss.

In determining the spot exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a non-monetary asset or non-monetary liability relating to advance consideration in foreign currency paid or received, the date of the transaction is the date on which the Group initially recognizes the non-monetary asset or non-monetary liability associated with the advance consideration.

If there are multiple advance payments or receipts, the Group determines the transaction date for each payment or receipt of advance consideration.

Translation of financial statements denominated in a foreign currency

For the purposes of the consolidated financial statements, all revenue, expenses, assets and liabilities are stated in euro, which is the presentation currency of the Parent.

In order to prepare the consolidated financial statements, the financial statements of consolidated companies with functional currencies other than the presentation currency used in the consolidated financial statements are translated into euros by applying the closing exchange rate to the assets and liabilities, including goodwill and consolidation adjustments, and the average exchange rate for the period to the income statement items on the condition it approximates the exchange rates prevailing at the date of the respective transactions.

Any resulting exchange gains or losses are recognized as a separate component of equity in a special reserve. The gains and losses are recognized proportionately in the income statement on the disposal (partial or total) of the subsidiary.

When the functional currency of a consolidated company is the currency of a hyperinflationary economy, the Group restates the financial statements in accordance with IAS 29 before applying the specific conversion method set out below.

In order to consider the impact of hyperinflation on the local currency exchange rate, the financial position and performance (i.e., assets, liabilities, equity items, revenue and expenses) of a company whose functional currency is the currency of a hyperinflationary economy are translated into the Group's presentation currency (the euro) using the exchange rate prevailing at the reporting date, except for comparative amounts presented in the previous year's financial statements which are not adjusted for subsequent changes in the price level or subsequent changes in exchange rates.

Business combinations

Business combinations initiated before January 1, 2010 and completed within that financial year are recognized on the basis of IFRS 3 (2004).

Such business combinations were recognized using the purchase method, where the purchase cost is equal to the fair value at the date of the exchange of the assets acquired and the liabilities incurred or assumed, plus costs directly attributable to the acquisition. This cost was allocated by recognizing the assets, liabilities and identifiable

contingent liabilities of the acquired company at their fair values. Any positive difference between the cost of the acquisition and the fair value of the net assets acquired attributable to the owners of the Parent was recognized as goodwill. If the difference is negative, it is recognized through profit or loss.
The carrying amount of non-controlling interests was determined in proportion to the interest held by non-controlling shareholders in the net assets. In the case of business combinations achieved in stages, at the date of acquisition any adjustment to the fair value of the net assets acquired previously was recognized in equity; the amount of goodwill was determined for each transaction separately based on the fair values of the acquiree's net assets at the date of each exchange transaction.

Business combinations carried out as from January 1, 2010 are recognized on the basis of IFRS 3 (2008), which is referred to as IFRS 3 (Revised) hereafter.
More specifically, business combinations are recognized using the acquisition method, where the purchase cost (the consideration transferred) is equal to the fair value at the purchase date of the assets acquired and the liabilities incurred or assumed, as well as any equity instruments issued by the purchaser. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement.
Costs directly attributable to the acquisition are recognized through profit or loss.
The consideration transferred is allocated by recognizing the assets, liabilities and identifiable contingent liabilities of the acquired company at their fair values as at the acquisition date. The excess of the consideration transferred, measured at fair value as at the acquisition date, the amount of any non-controlling interest in the acquiree plus the fair value of any equity interest in the acquiree previously held by the Group (in a business combination achieved in stages) over the net amount of the identifiable assets acquired and the liabilities incurred or assumed measured at fair value is recognized as goodwill. If the difference is negative, the Group verifies whether it has correctly identified all the assets acquired and liabilities assumed and reviews the procedures used to determine the amounts to recognize at the acquisition date. If after this assessment the fair value of the net assets acquired still exceeds the total consideration transferred, this excess represents the profit on a bargain purchase and is recognized through profit or loss.
The carrying amount of non-controlling interests is determined either in proportion to the interest held by non-controlling shareholders in the net identifiable assets of the acquiree or at their fair value as at the acquisition date.
In the case of business combinations achieved in stages, at the date of acquisition of control the previously held equity interest in the acquiree is remeasured to fair value and any positive or negative difference is recognized in profit or loss.
Any contingent consideration is recognized at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration classified as an asset or a liability, or as a financial instrument within the scope of IFRS 9, are recognized in profit or loss. If the contingent consideration is not within the scope of IFRS 9, it is measured in accordance with the appropriate IFRS-EU. Contingent consideration that is classified as equity is not re-measured, and its subsequent settlement is accounted for within equity.
If the fair values of the assets, liabilities and contingent liabilities can only be calculated on a provisional basis, the business combination is recognized using such provisional values. Any adjustments resulting from the completion of the measurement process are recognized within 12 months of the date of acquisition, restating comparative figures.

Fair value measurement

For all fair value measurements and disclosures of fair value, that are either required or permitted by IFRS, the Group applies IFRS 13.
Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability, in an orderly transaction, between market participants, at the measurement date (i.e., an exit price).
The fair value measurement assumes that the transaction to sell an asset or transfer a liability takes place in the principal market, i.e., the market with the greatest volume and level of activity for the asset or liability. In the absence of a principal market, it is assumed that the transaction takes place in the most advantageous market to which the Group has access, i.e., the market that maximizes the amount that would be received to sell the asset or minimizes the amount that would be paid to transfer the liability.
The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest. Market participants are independent, knowledgeable sellers and buyers who are able to enter into a transaction for the asset or the liability and who are motivated but not forced or otherwise compelled to do so.
When measuring fair value, the Group considers the characteristics of the asset or liability, in particular:

- for a non-financial asset, a fair value measurement takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use;

- for liabilities and own equity instruments, the fair value reflects the effect of non-performance risk, i.e., the risk that an entity will not fulfill an obligation, including among others the credit risk of the Group itself;
- in the case of groups of financial assets and financial liabilities with offsetting positions in market risk or credit risk, managed on the basis of an entity's net exposure to such risks, it is permitted to measure fair value on a net basis.

In measuring the fair value of assets and liabilities, the Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

Property, plant and equipment

Property, plant and equipment is stated at cost, net of accumulated depreciation and accumulated impairment losses, if any. Such cost includes expenses directly attributable to bringing the asset to the location and condition necessary for its intended use.

The cost is also increased by the present value of the estimate of the costs of decommissioning and restoring the site on which the asset is located where there is a legal or constructive obligation to do so. The corresponding liability is recognized under provisions for risks and charges. The accounting treatment of changes in the estimate of these costs, the passage of time and the discount rate is discussed in note 40 "Provisions for risks and charges".

Property, plant and equipment transferred from customers to connect them to the electricity distribution network and/or to provide them with other related services is initially recognized at its fair value at the date on which control is obtained.

Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset, i.e., an asset that takes a substantial period of time to get ready for its intended use or sale, are capitalized as part of the cost of the assets themselves. Borrowing costs associated with the purchase/construction of assets that do not meet such requirement are expensed in the period in which they are incurred.

Certain assets that were revalued at the IFRS-EU transition date or in previous periods are recognized at their fair value, which is considered to be their deemed cost at the revaluation date.

Where individual items of major components of property, plant and equipment have different useful lives, the components are recognized and depreciated separately.

Subsequent costs are recognized as an increase in the carrying amount of the asset when it is probable that future economic benefits associated with the cost incurred to replace a part of the asset will flow to the Group and the cost of the item can be measured reliably. All other costs are recognized in profit or loss as incurred.

The cost of replacing part or all of an asset is recognized as an increase in the carrying amount of the asset and is depreciated over its useful life; the carrying amount of the replaced unit is derecognized through profit or loss.

Property, plant and equipment, net of its residual value, is depreciated on a straight-line basis over its estimated useful life, which is reviewed annually. Any changes in depreciation criteria shall be applied prospectively. For more information on estimating useful life, please see note 2.1 "Use of estimates and management judgment".

Depreciation begins when the asset is available for use.

The estimated useful life of the main items of property, plant and equipment is as follows:

Civil buildings	10-60 years
Buildings and civil works incorporated in plants	10-100 years
Hydroelectric power plants:	
- penstock	10-65 years
- mechanical and electrical machinery	10-65 years
- other fixed hydraulic works	10-100 years
Thermal power plants:	
- boilers and auxiliary components	20-40 years
- gas turbine components	10-40 years
- mechanical and electrical machinery	5-40 years
- other fixed hydraulic works	60 years
Nuclear power plants	50 years
Geothermal power plants:	
- cooling towers	20 years
- turbines and generators	10-50 years
- turbine parts in contact with fluid	10 years
- mechanical and electrical machinery	20-40 years
Wind power plants:	
- towers	20-30 years
- turbines and generators	20-30 years
- mechanical and electrical machinery	15-30 years
Solar power plants:	
- mechanical and electrical machinery	15-30 years
Public and artistic lighting:	
- public lighting installations	10-20 years
- artistic lighting installations	20 years
Transport lines	10-60 years
Transformer stations	20-55 years
Distribution plants:	
- high-voltage lines	10-60 years
- primary transformer stations	10-50 years
- low and medium-voltage lines	10-50 years
Meters:	
- electromechanical meters	5-40 years
- electricity balance measurement equipment	10 years
- electronic meters	15 years
Charging stations	7-15 years

The useful life of leasehold improvements is determined on the basis of the term of the lease or, if shorter, on the duration of the benefits produced by the improvements themselves.
Land is not depreciated as it has an indefinite useful life.
Assets recognized under property, plant and equipment are derecognized either upon their disposal (i.e., at the date the recipient obtains control) or when no future economic benefit is expected from their use or disposal. Any gain or loss, recognized through profit or loss, is calculated as the difference between the net disposal proceeds, determined in accordance with the transaction price requirements of IFRS 15, and the carrying amount of the derecognized assets.

Assets to be relinquished free of charge
The Group's plants include assets to be relinquished free of charge at the end of the concessions. These mainly regard major water diversion works and the public lands used for the operation of the thermal power plants.
Within the Italian regulatory framework in force until 2011, if the concessions are not renewed, at those dates all intake and governing works, penstocks, outflow channels and other assets on public lands were to be relinquished free of charge to the State in good operating condition. Accordingly, depreciation on assets to be relinquished was calculated over the shorter of the term of the concession and the useful life of the assets.
In the wake of the legislative changes introduced with Law 134 of August 7, 2012, the assets previously classified as assets "to be relinquished free of charge" connected with the hydroelectric water diversion concessions are now considered in the same manner as other categories of "Property, plant and equipment" and are therefore depreciated over the useful life of the asset (where this exceeds the term of the concession), as discussed in the section above on the "Depreciable amount of certain elements of Italian hydroelectric plants subsequent to enactment of Law 134/2012", which you are invited to consult for more details.

In accordance with Spanish laws 29/1985 and 46/1999, hydroelectric power stations in Spanish territory operate under administrative concessions at the end of which the plants will be returned to the government in good operating condition. The terms of the concessions extend up to 2078.
A number of generation companies that operate in Latin America hold administrative concessions with similar conditions to those applied under the Spanish concession system. These concessions will expire in Argentina in 2087, in Brazil in 2047, in Costa Rica in 2031, in Panama in 2060 and in Guatemala in 2062.

Infrastructure serving a concession not within the scope of "IFRIC 12 - Service concession arrangements"
As regards the distribution of electricity, the Group is a concession holder in Italy for this service. The concession, granted by the Ministry for Economic Development, was issued free of charge and terminates on December 31, 2030. If the concession is not renewed upon expiry, the grantor is required to pay an indemnity. The amount of the indemnity will be determined by agreement of the parties using appropriate valuation methods, based on both the carrying amount of the assets themselves and their profitability.
In determining the indemnity, such profitability will be represented by the present value of future cash flows. The infrastructure serving the concession is owned and available to the concession holder. It is recognized under "Property, plant and equipment" and is depreciated over the useful lives of the assets.
Enel also operates under administrative concessions for the distribution of electricity in other countries (including Spain and Romania). These concessions give the right to build and operate distribution networks for an indefinite period of time.

Infrastructure within the scope of "IFRIC 12 - Service concession arrangements"

Under a "public-to-private" service concession arrangement within the scope of "IFRIC 12 - Service concession arrangements" the operator acts as a service provider and, in accordance with the terms specified in the contract, it constructs/upgrades infrastructure used to provide a public service and/or operates and maintains that infrastructure for the years of the concession.
The Group, as operator, does not account for the infrastructure within the scope of IFRIC 12 as property, plant and equipment and it recognizes and measures revenue in accordance with IFRS 15 for the services it performs. In particular, when the Group provides construction or upgrade services, depending on the characteristics of the service concession arrangement, it recognizes:

- a financial asset, if the Group has an unconditional contractual right to receive cash or another financial asset from the grantor (or from a third party at the direction of the grantor), that is the grantor has little discretion to avoid payment. In this case, the grantor contractually guarantees to pay to the operator specified or determinable amounts or the shortfall between the amounts received from the users of the public service and specified or determinable amounts (defined by the contract), and such payments are not dependent on the usage of the infrastructure; and/or
- an intangible asset, if the Group receives the right (a license) to charge users of the public service provided. In

such a case, the operator does not have an unconditional right to receive cash because the amounts are contingent on the extent that the public uses the service.

If the Group (as operator) has a contractual right to receive an intangible asset (a right to charge users of public service), borrowing costs are capitalized using the criteria specified in note 19 "Property, plant and equipment".

However, for construction/upgrade services, both types of consideration are classified as a contract asset during the construction/upgrade period.

For more details about such consideration, please see note 11.a "Revenue from sales and services".

Leases

The Group holds property, plant and equipment for its various activities under lease contracts. At inception of a contract, the Group assesses whether a contract is, or contains, a lease.

For contracts entered into or changed on or after January 1, 2019, the Group has applied the definition of a lease under IFRS 16, that is met if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Conversely, for contracts entered into before January 1, 2019, the Group determined whether the arrangement was or contained a lease under IFRIC 4.

Group as a lessee

At commencement or on modification of a contract that contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the contract to each lease component on the basis of its relative stand-alone price.

The Group recognizes a right-of-use asset and a lease liability at the commencement date of the lease (i.e., the date the underlying asset is available for use).

The right-of-use asset represents a lessee's right to use an underlying asset for the lease term; it is initially measured at cost, which includes the initial amount of lease liability adjusted for any lease payments made at or before the commencement date less any lease incentives received, plus any initial direct costs incurred and an estimate of costs to retire and remove the underlying asset and to restore the underlying asset or the site on which it is located.

Right-of-use assets are subsequently depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the right-of-use assets, as follows:

	Average residual life (years)
Buildings	6
Ground rights of renewable energy plants	31
Vehicles and other means of transport	5

If the lease transfers ownership of the underlying asset to the Group at the end of the lease term or if the cost of the right-of-use asset reflects the fact that the Group will exercise a purchase option, depreciation is calculated using the estimated useful life of the underlying asset.

In addition, the right-of-use assets are subject to impairment and adjusted for any remeasurement of lease liabilities.

The lease liability is initially measured at the present value of lease payments to be made over the lease term. In calculating the present value of lease payments, the Group uses the lessee's incremental borrowing rate at the lease commencement date when the interest rate implicit in the lease is not readily determinable.

Variable lease payments that do not depend on an index or a rate are recognized as expenses in the period in which the event or condition that triggers the payment occurs.

After the commencement date, the lease liability is measured at amortized cost using the effective interest method and is remeasured upon the occurrence of certain events.

The Group applies the short-term lease recognition exemption to its lease contracts that have a lease term of 12 months or less from the commencement date. It also applies the low-value assets recognition exemption to lease contracts for which the underlying asset is of low-value whose amount is estimated not material. For example, the Group has leases of certain office equipment (i.e., personal computers, printing and photocopying machines) that are considered of low-value. Lease payments on short-term leases and leases of low-value assets are recognized as expense on a straight-line basis over the lease term.

The Group presents right-of-use assets that do not meet the definition of investment property in "Property, plant and equipment" and lease liabilities in "Borrowings".

Consistent with the requirement of the standard, the Group presents separately the interest expense on lease liabilities under "Other financial expense" and the depreciation charge on the right-of-use assets under "Depreciation, amortization and impairment losses".

Group as a lessor

When the Group acts as a lessor, it determines at the lease inception date whether each lease is a finance lease or an operating lease.

Leases in which the Group essentially transfers all the risks and rewards associated with ownership of the underlying asset are classified as finance leases; otherwise, they are classified as operating leases. To make this assessment, the Group considers the indicators provided by IFRS 16. If a contract contains lease and non-lease components, the Group allocates the consideration in the contract applying IFRS 15.

The Group accounts for rental income arising from operating leases on a straight-line basis over the lease terms and it recognizes it as other revenue.

Investment property

Investment property consists of the Group's real estate held to earn rentals and/or for capital appreciation rather than for use in the production or supply of goods and services.

Investment property is measured at acquisition cost less any accumulated depreciation and any accumulated impairment losses.

Investment property, excluding land, is depreciated on a straight-line basis over the useful lives of the related assets.

Impairment losses are determined on the basis of the criteria following described.

The breakdown of the fair value of investment property is detailed in note 52 "Assets and liabilities measured at fair value".

Investment property is derecognized either when it has been transferred (i.e., at the date the recipient obtains control) or when it is permanently withdrawn from use and no future economic benefit is expected from its disposal. Any gain or loss, recognized through profit or loss, is calculated as the difference between the net disposal proceeds, determined in accordance with the transaction price requirements of IFRS 15, and the carrying amount of the derecognized assets.

Transfers are made to (or from) investment property only when there is a change in use.

Intangible assets

Intangible assets are identifiable assets without physical substance controlled by the Group and capable of generating future economic benefits. They are measured at purchase or internal development cost when it is probable that the use of such assets will generate future economic benefits and the related cost can be reliably determined.

The cost includes any directly attributable expenses necessary to make the assets ready for their intended use.

Development expenditure is recognized as an intangible asset only when Group can demonstrate the technical feasibility of completing the asset, its intention and ability to complete development and to use or sell the asset and the availability of resources to complete the asset.

Research costs are recognized as expenses.

Intangible assets with a finite useful life are recognized net of accumulated amortization and any impairment losses.

Amortization is calculated on a straight-line basis over the asset's estimated useful life, which is reassessed at least annually; any changes in amortization policies are reflected on a prospective basis. For more information on estimating useful life, please see note 2.1 "Use of estimates and management judgment".

Amortization commences when the asset is ready for use. Consequently, intangible assets not yet available for use are not amortized, but are tested for impairment at least annually.

The Group's intangible assets have a finite useful life, with the exception of a number of concessions and goodwill.

Intangible assets with indefinite useful lives are not amortized, but are tested for impairment annually.

The assessment of indefinite useful life is reviewed annually to determine whether the indefinite useful life continues to be supportable. If not, the change in useful life from indefinite to finite is accounted for as a change in accounting estimate.

Intangible assets are derecognized either at the time of their disposal (at the date when the recipient obtains control) or when no future economic benefit is expected from their use or disposal. Any gain or loss, recognized through profit or loss, is calculated as the difference between the net consideration received in the disposal, determined in accordance with the provisions of IFRS 15 concerning the transaction price, and the carrying amount of the derecognized assets.

The estimated useful life of the main intangible assets, distinguishing between internally generated and acquired assets, is as follows:

Development expenditure:	
- internally generated	5 years
- acquired	3-26 years
Industrial patents and intellectual property rights:	
- internally generated	3-10 years
- acquired	3-10 years
Concessions, licenses, trademarks and similar rights:	
- internally generated	20 years
- acquired	10-18 years
Other:	
- internally generated	2-28 years
- acquired	3-15 years

The Group also presents costs to obtain a contract with a customer capitalized in accordance with IFRS 15 as intangible assets.

The Group recognized such costs as an asset only if:

- the costs are incremental, that is they are directly attributable to an identified contract and the Group would not have incurred them if the contract had not been obtained;
- the Group expects to recover them, through reimbursements (direct recoverability) or the margin (indirect recoverability).

In particular, the Group generally capitalizes trade fees and commissions paid to agents for such contracts if the capitalization criteria are met.

Capitalized customer contract costs are amortized on a systematic basis, consistent with the pattern of the transfer of the goods or services to which they relate, and undergo impairment testing to identify any impairment losses to the extent that the carrying amount of the asset recognized exceeds the recoverable amount.

The Group amortizes the capitalized customer contract costs on a straight-line basis over the expected period of benefit from the contract (i.e., the average term of the customer relationship); any changes in amortization policies are reflected on a prospective basis.

Goodwill

Goodwill represents the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized. For further details, please see the section of the accounting policies "Business combinations".

Goodwill arising on the acquisition of subsidiaries is recognized separately. After initial recognition, goodwill is not amortized, but is tested for impairment at least annually as part of the CGU to which it pertains.

For the purpose of impairment testing, goodwill is allocated, from the acquisition date, to each CGU that is expected to benefit from the synergies of the combination.

Goodwill relating to equity investments in associates and joint venture is included in their carrying amount.

Impairment of non-financial assets

At each reporting date, property, plant and equipment, investment property, intangible assets, right-of-use assets, goodwill and equity investments in associates/joint ventures are reviewed to determine whether there is evidence of impairment.

CGUs to which goodwill, intangible assets with an indefinite useful life and intangible assets not yet available for use are allocated are tested for recoverability annually or more frequently if there is evidence suggesting that the assets can be impaired.

If such evidence exists, the recoverable amount of any involved asset is estimated on the basis of the use of the asset and its future disposal, in accordance with the Group's most recent Business Plan. For the estimate of the recoverable amount, please see note 2.1 "Use of estimates and management judgment".

The recoverable amount is determined for an individual asset, unless the asset do not generate cash inflows that are largely independent of those from other assets or groups of assets and therefore it is determined for the CGU to which the asset belongs.

If the carrying amount of an asset or of a CGU to which it is allocated is greater than its recoverable amount, an impairment loss is recognized in profit or loss and presented under "Depreciation, amortization and other impairment losses".

Impairment losses of CGUs are firstly charged against the carrying amount of any goodwill attributed to it and then against the other assets, in proportion to their carrying amount.

If the reasons for a previously recognized impairment loss no longer apply, the carrying amount of the asset is restored through profit or loss, under "Depreciation, amortization and other impairment losses", in an amount that shall not exceed the carrying amount that the asset would have had if the impairment loss had not been recognized. The original amount of goodwill is not restored even if in subsequent years the reasons for the impairment no longer apply.

If certain specific identified assets owned by the Group are impacted by adverse economic or operating conditions that undermine their capacity to contribute to the generation of cash flows, they can be isolated from the rest of the assets of the CGU, undergo separate analysis of their recoverability and be impaired where necessary.

Inventories

Inventories are measured at the lower of cost and net realizable value except for inventories involved in trading activities, which are measured at fair value with recognition through profit or loss. Cost is determined on the basis of average weighted cost, which includes related ancillary charges. Net estimated realizable value is the estimated normal selling price net of estimated costs to sell or, where applicable, replacement cost.

For the portion of inventories held to discharge sales that have already been made, the net realizable value is determined on the basis of the amount established in the contract of sale.

Inventories include environmental certificates (for example, green certificates, energy efficiency certificates and European CO_2 emissions allowances and guarantees of origin) exceeding compliance in the reporting period. As regards CO_2 emissions allowances, inventories are allocated between the trading portfolio and the compliance portfolio, i.e., those used for compliance with greenhouse gas emissions requirements.

Inventories also include nuclear fuel stocks, use of which is determined on the basis of the electricity generated.

Materials and other consumables (including energy commodities) held for use in production are not written down if it is expected that the final product in which they will be incorporated will be sold at a price sufficient to enable recovery of the cost incurred.

Financial instruments

Financial instruments are any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity; they are recognized and measured in accordance with IAS 32 and IFRS 9.

A financial asset or liability is recognized in the consolidated financial statements when, and only when, the Group becomes party to the contractual provision of the instrument (i.e., the trade date).

Trade receivables arising from contracts with customers, in the scope of IFRS 15, are initially measured at their transaction price (as defined in IFRS 15) if such receivables do not contain a significant financing component or when the Group applies the practical expedient allowed by IFRS 15.
Conversely, the Group initially measures financial assets other than the above-mentioned trade receivables at their fair value plus, in the case of a financial asset not measured at fair value through profit or loss, transaction costs.
Financial assets are classified, at initial recognition, as financial assets at amortized cost, at fair value through other comprehensive income and at fair value through profit or loss, on the basis of both the Group's business model and the contractual cash-flow characteristics of the instrument.
For this purpose, the assessment to determine whether the instrument gives rise to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding is referred to as the SPPI test and is performed at an instrument level.
The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.
For purposes of subsequent measurement, financial assets are classified in four categories:

- financial assets measured at amortized cost (debt instruments);
- financial assets at fair value through OCI with reclassification of cumulative gains and losses (debt instruments);
- financial assets designated at fair value through OCI with no reclassification of cumulative gains and losses upon derecognition (equity instruments); and
- financial assets at fair value through profit or loss.

Financial assets measured at amortized cost

This category mainly includes trade receivables, other financial assets and loan assets.
Financial assets at amortized cost are held within a business model whose objective is to hold financial assets in order to collect contractual cash flows and whose contractual terms give rise, on specified dates, to cash flows that are solely payments of principal and interest on the principal amount outstanding.
Such assets are initially recognized at fair value, adjusted for any transaction costs, and subsequently measured at amortized cost using the effective interest method and are subject to impairment.
Gains and losses are recognized in profit or loss when the asset is derecognized, modified or impaired.

Financial assets at fair value through other comprehensive income (FVOCI) – Debt instruments

This category mainly includes:

- listed debt securities held by the Group reinsurance company and not classified as held for trading; and
- tax credits deriving from application of Decree Law 34/2020 (so-called "Revival Decree").

Financial assets at fair value through other comprehensive income are assets held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and whose contractual cash flows give rise, on specified dates, to cash flows that are solely payments of principal and interest on the principal amount outstanding.
Changes in fair value for these financial assets are recognized in other comprehensive income as well as loss allowances that do not reduce the carrying amount of the financial assets.
When a financial asset is derecognized (e.g., at the time of sale), the cumulative gains and losses previously recognized in equity (except impairment and foreign exchange gains and losses to be recognized in profit or loss) are reversed to profit or loss.

Financial assets at fair value through other comprehensive income (FVOCI) – Equity instruments

This category includes mainly equity investments in other entities irrevocably designated as such upon initial recognition.
Gains and losses on these financial assets are never reclassified to profit or loss. The Group may transfer the cumulative gain or loss within equity.
Equity instruments designated at fair value through OCI are not subject to impairment testing.
Dividends on such investments are recognized in profit or loss unless they clearly represent a recovery of a part of the cost of the investment.

Financial assets at fair value through profit or loss

This category mainly includes: securities, equity investments in other companies, financial investments in fund held for trading and financial assets designated as at fair value through profit or loss at initial recognition.
Financial assets at fair value through profit or loss are:

- financial assets with cash flows that are not solely payments of principal and interest, irrespective of the business model;
- financial assets held for trading because acquired or incurred principally for the purpose of selling or repurchasing in short term;

- debt instruments designated upon initial recognition, under the option allowed by IFRS 9 (fair value option), if doing so eliminates, or significantly reduces, an accounting mismatch;
- derivatives, including separated embedded derivatives, held for trading or not designated as effective hedging instruments.

Such financial assets are initially recognized at fair value with subsequent gains and losses from changes in their fair value recognized through profit or loss.

This category also includes listed equity investments which the Group had not irrevocably elected to classify at fair value through OCI. Dividends on such investments are also recognized as other income in the income statement when the right of payment has been established.

Financial assets that qualify as contingent consideration are also measured at fair value through profit or loss.

Impairment of financial assets

At each reporting date, the Group recognizes a loss allowance for expected credit losses on trade receivables and other financial assets measured at amortized cost, debt instruments measured at fair value through other comprehensive income (FVOCI), contract assets and all other assets within the scope of IFRS 9.

In compliance with IFRS 9, as from January 1, 2018, the Group adopted a new impairment model based on the determination of expected credit losses (ECL) using a forward-looking approach. In essence, the model provides for:

- the application of a single framework for all financial assets;
- the recognition of expected credit losses on an ongoing basis and the updating of the amount of such losses at the end of each reporting period, reflecting changes in the credit risk of the financial instrument;
- the measurement of expected losses on the basis of reasonable information, obtainable without undue cost, about past events, current conditions and forecasts of future conditions.

For trade receivables, contract assets and lease receivables, including those with a significant financial component, the Group adopts the simplified approach, determining expected credit losses over a period corresponding to the entire life of the asset, generally equal to 12 months.

For all financial assets other than trade receivables, contract assets and lease receivables, the Group applies the general approach under IFRS 9, based on the assessment of a significant increase in credit risk since initial recognition. Under such approach, a loss allowance on financial assets is recognized at an amount equal to the lifetime expected credit losses, if the credit risk on those financial assets has increased significantly, since initial recognition, considering all reasonable and supportable information, including also forward-looking inputs.

If at the reporting date the credit risk on financial assets has not increased significantly since initial recognition, the Group measures the loss allowance for those financial assets at an amount equal to 12-month expected credit losses.

For financial assets on which a loss allowance equal to lifetime expected credit losses has been recognized in the previous reporting period, the Group measures the loss allowance at an amount equal to 12-month expected credit losses when the condition regarding a significant increase in credit risk is no longer met.

The Group recognizes in profit or loss, as an impairment gain or loss, the amount of expected credit losses (or reversal) that is required to adjust the loss allowance at the reporting date to the amount that is required to be recognized in accordance with IFRS 9.

The Group applies the low credit risk exemption, avoiding the recognition of loss allowances at an amount equal to lifetime expected credit losses due to a significant increase in credit risk of debt securities at fair value through OCI, whose counterparty has a strong financial capacity to meet its contractual cash-flow obligations (e.g., investment grade).

For more information on the impairment of financial assets, please see note 48 "Financial instruments by category".

Cash and cash equivalents

This category includes deposits that are available on demand or at very short term, as well as highly liquid short-term financial investments that are readily convertible into a known amount of cash and which are subject to insignificant risk of changes in value.

In addition, for the purpose of the consolidated statement of cash flows, cash and cash equivalents do not include bank overdrafts at period-end.

Financial liabilities at amortized cost

This category mainly includes borrowings, trade payables, lease liabilities and debt instruments.

Financial liabilities, other than derivatives, are recognized when the Group becomes a party to the contractual clauses of the instrument and are initially measured at fair value adjusted for directly attributable transaction costs. Financial liabilities are subsequently measured at amortized cost using the effective interest rate method. The effective interest rate is the rate that exactly discounts the estimated future cash payments or receipts over the expected life of the financial instrument or a shorter period, where appropriate, to the carrying amount of the financial asset or liability.

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by IFRS 9. Separated embedded derivatives are also classified as at fair value through profit or loss unless they are designated as effective hedging instruments.

Gains or losses on liabilities at fair value through profit or loss are recognized through profit or loss.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated at the initial date of recognition, only if the criteria in IFRS 9 are satisfied.

In this case, the portion of the change in fair value attributable to own credit risk is recognized in other comprehensive income.

The Group has not designated any financial liability as at fair value through profit or loss, upon initial recognition.

Financial liabilities that qualify as contingent consideration are also measured at fair value through profit or loss.

Derecognition of financial assets and liabilities

Financial assets are derecognized whenever one of the following conditions is met:

- the contractual right to receive the cash flows associated with the asset expires;
- the Group has transferred substantially all the risks and rewards associated with the asset, transferring its rights to receive the cash flows of the asset or assuming a contractual obligation to pay such cash flows to one or more beneficiaries under a contract that meets the requirements provided by IFRS 9 (the "pass through test");
- the Group has not transferred or retained substantially all the risks and rewards associated with the asset but has transferred control over the asset.

Financial liabilities are derecognized when they are extinguished, i.e., when the contractual obligation has been discharged, cancelled or expired.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in profit or loss.

Derivative financial instruments

A derivative is a financial instrument or another contract:

- whose value changes in response to the changes in an underlying variable such as an interest rate, commodity or security price, foreign exchange rate, a price or rate index, a credit rating or other variable;
- that requires no initial net investment, or one that is smaller than would be required for a contract with similar response to changes in market factors;
- that is settled at a future date.

Derivative instruments are classified as financial assets or liabilities depending on the positive or negative fair value and they are classified as "held for trading" within "Other business models" and measured at fair value through profit or loss, except for those designated as effective hedging instruments.

All derivatives held for trading are classified as current assets or liabilities.

Derivatives not held for trading purposes, but measured at fair value through profit or loss since they do not qualify for hedge accounting, and derivatives designated as effective hedging instruments are classified as current or not current on the basis of their maturity date and the Group intention to hold the financial instrument till maturity or not.

For more details about derivatives and hedge accounting, please see note 51 "Derivatives and hedge accounting".

Embedded derivatives

An embedded derivative is a derivative included in a "combined" contract (the so-called "hybrid instrument") that contains another non-derivative contract (the so-called host contract) and gives rise to some or all of the combined contract's cash flows.

The main Group contracts that may contain embedded derivatives are contracts to buy or sell non-financial items with clauses or options that affect the contract price, volume or maturity.

A derivative embedded in a hybrid contract containing a financial asset host is not accounted for separately. The financial asset host together with the embedded derivative is required to be classified in its entirety as a financial asset at fair value through profit or loss.

Contracts that do not represent financial instruments to be measured at fair value are analyzed in order to identify any embedded derivatives, which are to be separated and measured at fair value. This analysis is performed when the Group becomes party to the contract or when the contract is renegotiated in a manner that significantly changes the original associated cash flows.

Embedded derivatives are separated from the host contract and accounted for as derivatives when:

- the host contract is not a financial instrument measured at fair value through profit or loss;

- the economic risks and characteristics of the embedded derivative are not closely related to those of the host contract;
- a separate contract with the same terms as the embedded derivative would meet the definition of a derivative.

Embedded derivatives that are separated from the host contract are recognized in the consolidated financial statements at fair value with changes recognized in profit or loss (except when the embedded derivative is part of a designated hedge relationship).

Contracts to buy or sell non-financial items

In general, contracts to buy or sell non-financial items that are entered into and continue to be held for receipt or delivery in accordance with the Group's normal expected purchase, sale or usage requirements are out of the scope of IFRS 9 and then recognized as executory contracts, according to the "own use exemption".

A contract to buy or sell non-financial items is classified as "normal purchase or sale" if it is entered into:

- for the purpose of the physical settlement;
- in accordance with the entity's expected purchase, sale or usage requirements.

Moreover, contracts to buy or sell non-financial items with physical settlement (for example, fixed-price forward contracts on energy commodities) that do not qualify for the own use exemption are recognized as derivatives measured at fair value from the trade date only if:

- they can be settled net in cash; and
- they are not entered into in accordance with the Group's expected purchase, sale or usage requirements.

Trading contracts are valued at fair value through profit or loss; the results of the measurement of changes in the fair value of contracts still outstanding at the reporting date are recognized on a net basis under the item "Net results from commodity contracts", while at the settlement date:

- the results of the measurement of changes in the fair value of closed contracts for the sale of energy commodities as well as the related revenue, together with the impact on profit or loss of the derecognition of the derivative, are recognized under "Revenue from sales and services";
- the results of the measurement of changes in the fair value of closed contracts for the purchase of energy commodities as well as the related cost, together with the impact on profit or loss of the derecognition of the derivative, are recognized under "Electricity, gas and fuel" and "Services and other materials".

Contracts to buy or sell non-financial items falling within the scope of application of IFRS 9 can also be subsequently designated as hedging instruments if they satisfy the requirements for hedge accounting.

The Group analyzes all contracts to buy or sell non-financial assets on an ongoing basis, with a specific focus on forward purchases and sales of electricity and energy commodities, in order to determine if they shall be classified and treated in accordance with IFRS 9 or if they have been entered into for "own use".

Offsetting financial assets and liabilities

The Group offsets financial assets and liabilities when:

- there is a legally enforceable right to set off the recognized amounts; and
- there is the intention of settling on a net basis or realizing the asset and settling the liability simultaneously.

Hyperinflation

In a hyperinflationary economy, the Group adjusts non-monetary items, equity and items deriving from index-linked contracts up to the limit of recoverable amount, using a price index that reflects changes in general purchasing power.

The effects of initial application are recognized in equity net of tax effects. Conversely, during the hyperinflationary period (until it ceases), the gain or loss resulting from adjustments is recognized in profit or loss and disclosed separately in financial income and expense.

Starting from 2018, this standard applies to the Group's transactions in Argentina, whose economy has been declared hyperinflationary from July 1, 2018.

Non-current assets (or disposal groups) classified as held for sale and discontinued operations

Non-current assets (or disposal groups) are classified as held for sale if their carrying amount will be recovered principally through a sale transaction, rather than through continuing use.

This classification criterion is applicable only when non-current assets (or disposal groups) are available in their present condition for immediate sale and the sale is highly probable.

If the Group is committed to a sale plan involving loss of control of a subsidiary and the requirements provided for under IFRS 5 are met, all the assets and liabilities of that subsidiary are classified as held for sale when the classification criteria are met, regardless of whether the Group will retain a non-controlling interest in its former subsidiary after the sale.

The Group applies these classification criteria as envisaged in IFRS 5 to an investment, or a portion of an investment, in an associate or a joint venture. Any retained portion of an investment in an associate or a joint venture that has not been classified as held for sale is accounted for using the equity method until disposal of the portion that is classified as held for sale takes place.

Non-current assets (or disposal groups) and liabilities of disposal groups classified as held for sale are presented

separately from other assets and liabilities in the statement of financial position.
The amounts presented for non-current assets or for the assets and liabilities of disposal groups classified as held for sale are not reclassified or re-presented for prior periods presented.
Immediately before the initial classification of non-current assets (or disposal groups) as held for sale, the carrying amounts of such assets (or disposal groups) are measured in accordance with the accounting standard applicable to those assets or liabilities. Non-current assets (or disposal groups) classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell.
Impairment losses for any initial or subsequent write-down of the assets (or disposal groups) to fair value less costs to sell and gains for their reversals are recognized in profit or loss from continuing operations.
Non-current assets are not depreciated (or amortized) while they are classified as held for sale or while they are part of a disposal group classified as held for sale.
If the classification criteria are no longer met, the Group ceases to classify the non-current assets (or disposal group) as held for sale. In this case they are measured at the lower of:

- the carrying amount before the asset (or disposal group) was classified as held for sale, adjusted for any depreciation, amortization or reversals of impairment losses that would have been recognized if the asset (or disposal group) had not been classified as held for sale; and
- the recoverable amount, which is equal to the greater of its fair value net of costs to sell and its value in use, as calculated at the date of the subsequent decision not to sell.

Any adjustment to the carrying amount of a non-current asset that ceases to be classified as held for sale is included in profit or loss from continuing operations.
A discontinued operation is a component of the Group that either has been disposed of, or is classified as held for sale, and:

- represents a separate major business line or geographical segment;
- is part of a single coordinated plan to dispose of a separate major business line or geographical segment; or
- is a subsidiary acquired exclusively with a view to resale.

The Group presents, in a separate line item of the income statement, a single amount comprising the total of:

- the post-tax profit or loss of discontinued operations; and
- the post-tax gain or loss recognized on the measurement at fair value less costs to sell or on the disposal of the assets or disposal groups constituting the discontinued operation.

The corresponding amount is restated in the income statement for prior periods presented in the financial statements, so that the disclosures relate to all operations that are discontinued by the end of the current reporting period. If the Group ceases to classify a component as held for sale, the results of the component previously presented in discontinued operations are reclassified and included in profit or loss from continuing operations for all periods presented.

Environmental certificates

Some Group companies are affected by national regulations governing green certificates, guarantees of origin and energy efficiency certificates (so-called white certificates), as well as the European "Emissions Trading System".
Green certificates and guarantees of origin accrued in proportion to electricity generated by renewable energy plants and energy efficiency certificates accrued in proportion to energy savings achieved that have been certified by the competent authority are treated as non-monetary government operating grants and are recognized at fair value, under other operating profit, with recognition of an asset under other non-financial assets, if the certificates are not yet credited to the ownership account, or under inventories, if the certificates have already been credited to that account.
At the time the certificates are credited to the ownership account, they are reclassified from other assets to inventories.
Revenue from the sale of such certificates is recognized under revenue, with a corresponding decrease in inventories.
For the purposes of accounting for charges arising from such regulatory requirements, the Group uses the "net liability approach".
Under this accounting policy, any environmental certificates received free of charge and those self-produced as a result of Group's operations that will be used for compliance purposes are recognized at nominal value (nil). In addition, charges incurred for obtaining (in the market or in some other transaction for consideration) any missing certificates to fulfil compliance requirements for the reporting period are recognized through profit or loss on an accrual basis under other operating costs, as they represent "system charges" consequent to compliance with a regulatory requirement.

Employee benefits

Liabilities related to employee benefits paid upon or after ceasing employment in connection with defined benefit plans or other long-term benefits accrued during the employment period are determined separately for each plan, using actuarial assumptions to estimate the amount of the future benefits that employees have accrued at the reporting date (using the projected unit credit method). More specifically, the present value of the defined benefit obligation is calculated by using a discount rate determined on the basis of market yields at the end of the reporting

period on high-quality corporate bonds. If there is no deep market for high-quality corporate bonds in the currency in which the bond is denominated, the corresponding yield of government securities is used.
The liability, net of any plan assets, is recognized on an accrual basis over the vesting period of the related rights. These appraisals are performed by independent actuaries.
If the plan assets exceed the present value of the related defined benefit obligation, the surplus (up to the limit of any cap) is recognized as an asset.
As regards the liabilities/(assets) of defined benefit plans, the cumulative actuarial gains and losses from the actuarial measurement of the liabilities, the return on the plan assets (net of the associated interest income) and the effect of the asset ceiling (net of the associated interest) are recognized in other comprehensive income when they occur.
For other long-term benefits, the related actuarial gains and losses are recognized through profit or loss.
In the event of a change being made to an existing defined benefit plan or the introduction of a new plan, any past service cost is recognized immediately in profit or loss.
In addition, the Group is involved in defined contribution plans under which it pays fixed contributions to a separate entity (a fund) and has no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods. Such plans are usually aimed to supplement pension benefits due to employees post-employment. The related costs are recognized through profit or loss on the basis of the amount of contributions paid in the period.

Termination benefits
Liabilities for benefits due to employees for the early termination of employee service arise out of the Group's decision to terminate an employee's employment before the normal retirement date or an employee's decision to accept an offer of benefits in exchange for the termination of employment. The event that gives rise to an obligation is the termination of employment rather than employee service. Termination benefits are recognized at the earlier of the following dates:

- when the entity can no longer withdraw its offer of benefits; and
- when the entity recognizes a cost for a restructuring that is within the scope of IAS 37 and involves the payment of termination benefits.

The liabilities are measured on the basis of the nature of the employee benefits. More specifically, when the benefits represent an enhancement of other post-employment benefits, the associated liability is measured in accordance with the rules governing that type of benefits. Otherwise, if the termination benefits due to employees are expected to be settled wholly before 12 months of the close of the period in which the benefits are recognized, the entity measures the liability in accordance with the requirements for short-term employee benefits; if they are not expected to be settled wholly before 12 months of the close of period in which the benefits are recognized, the entity measures the liability in accordance with the requirements for other long-term employee benefits.

Share-based payments
The Group undertakes share-based payment transactions settled with equity instruments as part of the remuneration policy adopted for the Chief Executive Officer/General Manager and for key management personnel.
The most recent long-term incentive plans provide for the grant to recipients of an incentive represented by an equity component (settled with equity instruments) and a monetary component (paid in cash), which will accrue if specific conditions are met. The monetary component is classified as a cash-settled transaction if it is based on the price (or value) of the equity instruments of the company that issued the plan or, in other cases, as another long-term employee benefit.
In order to settle the equity component through the bonus award of Enel shares, a program for the purchase of treasury shares to support these plans was approved. For more details on share-based incentive plans, please see note 53 "Share-based payments".
For the equity component, the Group recognizes the services rendered by employees as personnel expenses over the period in which the conditions for remaining in service and for achieving certain results must be satisfied (vesting period) and indirectly estimates their value, and the corresponding increase in a specific equity item, on the basis of the fair value of the equity instruments (i.e., the issuer shares) at the grant date. This fair value is based on the observable market price of the share, taking account of the terms and conditions under which the shares were granted (with the exception of vesting conditions excluded from the measurement of fair value).
The overall expense recognized is adjusted at each reporting date until the vesting date to reflect the best estimate available to the Group of the number of equity instruments for which the service and performance conditions other than market conditions will be satisfied, so that the amount recognized at the end is based on the effective number of equity instruments that satisfy the service and performance conditions other than market conditions at the vesting date.
No expense is recognized for awards which ultimately do not vest because the performance conditions other than market conditions and/or the service conditions have not been satisfied. Conversely, the transactions are considered to have vested irrespective of whether the market or non-vesting conditions are satisfied, provided that all other vesting conditions are met.
If the incentive based on equity instruments is paid in cash,

the Group recognizes the services rendered by employees as personnel expenses over the vesting period and a corresponding liability measured at the fair value of the liability incurred. Subsequently, and until its extinction, the liability is remeasured at fair value at each reporting date, considering the best possible estimate of the incentive that will vest, with changes in fair value recognized under personnel expenses. If the right to receive the monetary incentive does not vest because one or more conditions are not met, the related liability is reversed.

Provisions for risks and charges

Provisions are recognized where there is a legal or constructive obligation as a result of a past event at the end of the reporting period, the settlement of which is expected to result in an outflow of resources whose amount can be reliably estimated. Where the impact is significant, the accruals are determined by discounting expected future cash flows using a pre-tax discount rate that reflects the current market assessment of the time value of money and, if applicable, the risks specific to the liability.

If the provision is discounted, the periodic adjustment of the present value for the time factor is recognized as a financial expense.

When the Group expects some or all charges to be reimbursed, the reimbursement is recognized as a separate asset, but only when the reimbursement is virtually certain. Where the liability relates to decommissioning and/or site restoration in respect of property, plant and equipment, the initial recognition of the provision is made against the related asset and the expense is then recognized in profit or loss through the depreciation of the asset involved.

Where the liability regards the treatment and storage of nuclear waste and other radioactive materials, the provision is recognized against the related operating costs.

A liability for restructuring refers to a program planned and controlled by management that materially changes the scope of a business undertaken by the Group or the manner in which the business is conducted. Such a liability is recognized when a constructive obligation is established, i.e., when the Group has approved a detailed formal restructuring plan and has started to implement the plan or has announced its main features to those affected by it.

Provisions do not include liabilities in respect of uncertain income tax treatments that are recognized as tax liabilities.

The Group could provide a warranty in connection with the sale of a product (whether a good or service) from contracts with customers in the scope of IFRS 15, in accordance with the contract, the law or its customary business practices. In this case, the Group assesses whether the warranty provides the customer with assurance that the related product will function as the parties intended because it complies with agreed-upon specifications or whether the warranty provides the customer with a service in addition to the assurance that the product complies with agreed-upon specifications.

After the assessment, if the Group establishes that an assurance warranty is provided, it recognizes a separate warranty liability and corresponding expense when transferring the product to the customer, as additional costs of providing goods or services, without attributing any of the transaction price (and therefore revenue) to the warranty. The liability is measured and presented as a provision.

Otherwise, if the Group determines that a service warranty is provided, it accounts for the promised warranty as a performance obligation in accordance with IFRS 15, recognizing the contract liability as revenue over the period the warranty service is provided and the costs associated as they are incurred.

Finally, if the warranty includes both an assurance element and a service element and the Group cannot reasonably account for them separately, then it accounts for both of the warranties together as a single performance obligation.

In the case of contracts in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it (onerous contracts), the Group recognizes a provision as the lower of the excess of unavoidable costs of meeting the obligations (i.e., costs that relate directly to the contract, whether incremental or resulting from an allotment of other costs) under the contract over the economic benefits expected to be received under it and any compensation or penalty arising from failure to fulfil it.

Changes in estimates of accruals to the provisions addressed here are recognized through profit or loss in the period in which the changes occur, with the exception of those in the costs of decommissioning, retiring and/or restoration resulting from changes in the timetable and costs necessary to extinguish the obligation or from a change in the discount rate. These changes increase or decrease the carrying amount of the related assets and are taken to profit or loss through depreciation. Where they increase the carrying amount of the assets, it is also determined whether the new carrying amount of the assets is fully recoverable. If this is not the case, a loss equal to the unrecoverable amount is recognized through profit or loss.

Decreases in estimates are recognized up to the carrying amount of the assets. Any excess is recognized immediately in profit or loss.

For more information on the estimation criteria adopted in determining provisions for retiring and/or restoration of property, plant and equipment, especially those associated with decommissioning nuclear power plants and storage of waste fuel and other radioactive materials, please see note 2.1 "Use of estimates and management judgment".

Revenue from contracts with customers

The Group recognizes revenue from contracts with customers at an amount that reflects the consideration at

which the Group expects to be entitled in exchange for those goods or services, using the five-step model envisaged by IFRS 15:

- identify the contract with the customer (step 1) as from when the contract is legally enforceable. If the criteria envisaged for step 1 are not met, any consideration received from the customer is generally recognized as an advance;
- identify the performance obligations in the contract (step 2), that is, all goods or services promised in the contract, separating them into performance obligations to account for separately, if they are both capable of being distinct and distinct within the context of the contract, or, as an exception, as a single performance obligation, if they are a series of distinct goods or services that are substantially the same and that have the same pattern of transfer to the customer over time.
  For each distinct good or service identified, the Group determines whether it acts as a principal or agent. When the Group acts as agent, it recognizes revenue (corresponding to any fee or commission) on a net basis;
- determine the transaction price at inception of the contract (step 3) considering:
  - the amount of consideration to which the Group expects to be entitled in exchange for transferring goods or services to a customer, excluding amounts collected on behalf of third parties (e.g., some sale taxes and value-added taxes);
  - variable consideration, non-cash consideration received from a customer, consideration payable to a customer and a significant financing component. The transaction price is updated each reporting period for any changes in circumstances;
- allocate the transaction price (step 4) at contract inception to each separate performance obligation, including any option to acquire additional goods or services that represents a material right (deferring the relative revenue until those future goods or services are transferred or the option expires), generally on the basis of the relative stand-alone selling price of each distinct good or service promised in the contract;
- recognize revenue (step 5), when (or as) each performance obligation is satisfied by transferring the promised good or service to the customer.

The Group does not disclose the information about the remaining performance obligations in existing contracts if the performance obligation is part of a contract that has an original expected duration of one year or less and if the Group recognizes revenue in the amount to which it has a right to invoice the customer.

More information on the application of this revenue recognition model is provided in note 2.1 "Use of estimates and management judgment" and in note 11.a "Revenue from sales and services".

Other revenue

The Group recognizes revenue other than that deriving from contracts with customers mainly referring to:

- revenue from the sale of energy commodities based on contracts with physical settlement, which do not qualify for the own use exemption and therefore is recognized at FVTPL in accordance with IFRS 9;
- changes in the fair value of settled contracts to sell energy commodities with physical settlement, which do not qualify for the own use exemption and therefore are recognized at FVTPL in accordance with IFRS 9;
- operating lease revenue accounted for on an accrual basis in accordance with the substance of the relevant lease agreement.

Other operating income

Other operating income primarily includes gains on disposal of assets that are not an output of the Group's ordinary activities and government grants.

Government grants, including non-monetary grants at fair value, are recognized where there is reasonable assurance that they will be received and that the Group will comply with all conditions attaching to them as set by the government, government agencies and similar bodies whether local, national or international.

When loans are provided by governments at a below-market rate of interest, the benefit is regarded as a government grant. The loan is initially recognized and measured at fair value and the government grant is measured as the difference between the initial carrying amount of the loan and the funds received. The loan is subsequently measured in accordance with the requirements for financial liabilities.

Government grants are recognized in profit or loss on a systematic basis over the periods in which the Group recognizes as expenses the costs that the grants are intended to compensate.

Where the Group receives government grants in the form of a transfer of a non-monetary asset for the use of the Group, it accounts for both the grant and the asset at the fair value of the non-monetary asset received at the date of the transfer.

Capital grants, including non-monetary grants at fair value, i.e., those received to purchase, build or otherwise acquire non-current assets (for example, an item of property, plant and equipment or an intangible asset), are deducted from the carrying amount of the asset and are recognized in profit or loss over the depreciable/amortizable life of the asset as a reduction in the depreciation/amortization charge. If there is insufficient information to enable adequate attribution to the fixed assets to which they refer, capital grants are recognized as deferred income under other liabilities, and credited to profit or loss on a systematic basis over the useful life of the asset.

Financial income and expense from derivatives

Financial income and expense from derivatives include:

- income and expense from derivatives measured at fair value through profit or loss on interest rate and currency risk;
- income and expense from fair value hedge derivatives on interest rate risk;
- income and expense from cash flow hedge derivatives on interest rate and currency risks.

Other financial income and expense

For all financial assets and liabilities measured at amortized cost and interest-bearing financial assets classified as at fair value through other comprehensive income, interest income and expense are recognized using the effective interest rate method.

Interest income is recognized to the extent that it is probable that the economic benefits will flow to the Group and the amount can be reliably measured.

Other financial income and expense include also changes in the fair value of financial instruments other than derivatives.

Dividends

Dividends are recognized when the unconditional right to receive payment is established.

Dividends and interim dividends payable to the Parent's shareholders and non-controlling interests are recognized as changes in equity in the period in which they are approved by the Shareholders' Meeting and the Board of Directors, respectively.

Income taxes

Current income taxes

Current income taxes for the year, which are recognized under "Income tax liabilities" net of payments on account, or under "Tax assets" where there is a credit balance, are determined using an estimate of taxable income and in conformity with the applicable regulations.

Such liabilities and assets are determined using the tax rates and tax laws that are enacted or substantively enacted by the end of the reporting period in the countries where taxable income has been generated.

Current income taxes are recognized in profit or loss with the exception of current income taxes related to items recognized outside profit or loss that are recognized in equity.

Deferred tax

Deferred tax liabilities and assets are calculated on the temporary differences between the carrying amounts of liabilities and assets in the financial statements and their corresponding amounts recognized for tax purposes on the basis of tax rates in effect on the date the temporary difference will reverse, which is determined on the basis of tax rates that are enacted or substantively enacted as at the end of the reporting period.

Deferred tax liabilities are recognized for all taxable temporary differences, except when such liability arises from the initial recognition of goodwill or in respect of taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, when the Group can control the timing of the reversal of the temporary differences and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognized for all deductible temporary differences, the carry forward of tax losses and any unused tax credits. For more information concerning the recoverability of such assets, please see the appropriate section of the discussion of estimates.

Deferred taxes and liabilities are recognized in profit or loss, with the exception of those in respect of items recognized outside profit or loss that are recognized in equity.

Deferred tax assets and deferred tax liabilities are offset only if there is a legally enforceable right to offset current tax assets with current tax liabilities and when they relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Uncertainty over income tax treatments

In defining "uncertainty", it shall be considered whether a particular tax treatment will be accepted by the relevant taxation authority. If it is deemed probable that the tax treatment will be accepted (where the term "probable" is defined as "more likely than not"), then the Group recognizes and measures its current/deferred tax asset or liabilities applying the requirements in IAS 12.

Conversely, when the Group feels that it is not likely that the taxation authority will accept the tax treatment for income tax purposes, the Group reflects the uncertainty in the manner that best predicts the resolution of the uncertain tax treatment. The Group determines whether to consider each uncertain tax treatment separately or together with one or more other uncertain tax treatments based on which approach provides better predictions of the resolution of the uncertainty. In assessing whether and how the uncertainty affects the tax treatment, the Group assumes that a taxation authority will accept or not an uncertain tax treatment supposing that the taxation authority

will examine amounts it has a right to examine and have full knowledge of all related information when making those examinations. The Group reflects the effect of uncertainty in accounting for current and deferred tax using the expected value or the most likely amount, whichever method better predicts the resolution of the uncertainty.
Since uncertain income tax positions meet the definition of income taxes, the Group presents uncertain tax liabilities/assets as current tax liabilities/assets or deferred tax liabilities/assets.

3. New and amended standards and interpretations

The Group has applied the following standards, interpretations and amendments that took effect as from January 1, 2022:

- "*Amendments to IFRS 3 - Reference to the Conceptual Framework*" issued in May 2020. The amendments are intended to replace a reference to the definitions of assets and liabilities provided by the Revised Conceptual Framework for Financial Reporting issued in March 2018 (Conceptual Framework) without significantly changing its provisions.
  The amendments also add to IFRS 3 a requirement that, for transactions and other events within the scope of "IAS 37 - Provisions, contingent liabilities and contingent assets" or "IFRIC 21 - Levies", an acquirer applies IAS 37 or IFRIC 21 (instead of the Conceptual Framework) to identify the liabilities it has assumed in a business combination.
  Finally, the amendments clarify the existing guidelines in IFRS 3 for contingent assets acquired in a business combination, specifying that, if it is not sure that an asset exists at the acquisition date, the contingent asset shall not be recognized.
- "*Amendments to IAS 16 - Property, Plant and Equipment: Proceeds before Intended Use*", issued in May 2020. The amendments prohibit a company from deducting from the cost of property, plant and equipment amounts received from selling items produced while the company is preparing the asset for its intended use. Instead, a company will recognize such sales proceeds and related cost in profit or loss.
- "*Amendments to IAS 37 - Onerous Contracts - Costs of Fulfilling a Contract*", issued in May 2020. The amendments specify which costs an entity includes in determining the cost of fulfilling a contract for the purpose of assessing whether the contract is onerous. To this end, the cost of fulfilling a contract comprises the costs that relate directly to the contract. These consist of the incremental costs of fulfilling that contract or the allotment of other costs that relate directly to fulfilling contracts.
- "*Annual improvements to IFRS Standards 2018-2020*", issued in May 2020. The document mainly comprises amendments to the following standards:
  - *First-Time Adoption of International Financial Reporting Standards*"; the amendment simplifies the application of IFRS 1 by an investee (subsidiary, associate or joint venture) that becomes a first-time adopter of IFRS Standards after its parent has already adopted them. More specifically, if the investee adopts the IFRSs after its parent and applies IFRS 1.D16 (a), then the investee can elect to measure the cumulative translation differences for all foreign operations at the amounts that would be included in the parent's consolidated financial statements, based on parent's date of transition to the IFRSs;
  - "*IFRS 9 - Financial Instruments*"; with regard to fees included in the "10 per cent" test for derecognition of financial liabilities, the amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. In determining those fees paid net of fees received, the borrower shall include only fees paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other party's behalf;
  - "*IFRS 16 - Leases*"; the International Accounting Standards Board amended Illustrative Example 13 accompanying "IFRS 16 - Leases". Specifically, the amendment eliminates the potential for confusion in the application of IFRS 16 created by the way in which Illustrative Example 13 had illustrated the requirements for lease incentives. The example had included a reimbursement relating to leasehold improvements without explaining whether the reimbursement qualified as a lease incentive. The amendment removes the illustration of a reimbursement relating to leasehold improvements from the example;
  - "*IAS 41 - Agriculture*"; the amendment removes the requirement for entities to exclude cash flows for taxation when measuring fair value. Accordingly, entities shall use pre-tax cash flows and a pre-tax rate to discount those cash flows.

The application of the amendments for 2022 did not have a material impact on these consolidated financial statements.

4. Argentina – Hyperinflationary economy: impact of the application of IAS 29

As from July 1, 2018, the Argentine economy has been considered hyperinflationary based on the criteria established by "IAS 29 - Financial reporting in hyperinflationary economies". This designation is determined following an assessment of a series of qualitative and quantitative circumstances, including the presence of a cumulative inflation rate of more than 100% over the previous three years.

For the purposes of preparing the consolidated financial statements at December 31, 2022, and in accordance with IAS 29, certain items of the statements of financial position of the investees in Argentina have been remeasured by applying the general consumer price index to historical data in order to reflect changes in the purchasing power of the Argentine peso at the reporting date for those companies.

Bearing in mind that the Enel Group acquired control of the Argentine companies on June 25, 2009, the remeasurement of the non-monetary financial statement figures was conducted by applying the inflation indices starting from that date. In addition to being already reflected in the opening statement of financial position, the accounting effects of that remeasurement also include changes during the period. More specifically, the effect of the remeasurement of non-monetary items, the equity items and the income statement items recognized in 2022 was recognized in a specific line of the income statement under financial income and expense. The associated tax effect was recognized in taxes for the year.

In order to also take account of the impact of hyperinflation on the exchange rate of the local currency, the income statement balances expressed in the hyperinflationary currency have been translated into the Group's presentation currency (euro) applying, in accordance with IAS 21, the closing exchange rate rather than the average rate for the year in order to adjust these amounts to present values.

The cumulative changes in the general price indices from December 31, 2018 until December 31, 2022 are shown in the following table:

Periods	Cumulative change in general consumer price index
From July 1, 2009 to December 31, 2018	346.30%
From January 1, 2019 to December 31, 2019	54.46%
From January 1, 2020 to December 31, 2020	35.41%
From January 1, 2021 to December 31, 2021	49.73%
From January 1, 2022 to December 31, 2022	97.08%

In 2022, the application of IAS 29 generated net financial income (gross of tax) of €290 million.

The following tables report the effects of IAS 29 on the balance at December 31, 2022 and the impact of hyperinflation on the main income statement items for 2022, differentiating between that concerning the revaluation on the basis of the general consumer price index and that due to the application of the closing exchange rate rather than the average exchange rate for the period, in accordance with the provisions of IAS 21 for hyperinflationary economies.

Millions of euro

	Cumulative hyperinflation effect at Dec. 31, 2021	Hyperinflation effect for the period	Exchange differences	Cumulative hyperinflation effect at Dec. 31, 2022
Total assets	1,366	1,183	(560)	1,989
Total liabilities	346	359	(150)	555
Equity	1,020	824[(1)]	(410)	1,434

(1) The figure includes profit for year equal to €98 million.

Millions of euro

	IAS 29 effect	IAS 21 effect	Total effect at Dec. 31, 2022
Revenue	254	(356)	(102)
Costs	280[(1)]	(449)[(2)]	(169)
Operating profit	**(26)**	**93**	**67**
Net financial income/(expense)	(46)	(1)	(47)
Net income/(expense) from hyperinflation	290	-	290
Pre-tax profit/(loss)	**218**	**92**	**310**
Income taxes	120	(3)	117
Loss for the year (owners of the Parent and non-controlling interests)	**98**	**95**	**193**
Attributable to owners of the Parent	73	51	124
Attributable to non-controlling interests	25	44	69

(1) Includes impact on depreciation, amortization and impairment losses of €42 million.
(2) Includes impact on depreciation, amortization and impairment losses of €(169) million.

5. Climate change disclosures

The move towards "net zero" is under way worldwide and the processes of decarbonization and electrification of the global economy are crucial to avoiding the serious consequences of an increase in temperatures of over 1.5 °C.

With this outlook, the Group has set its strategic guidelines as follows:

- allocate capital to support a decarbonized electricity supply;
- enable the electrification of customers' energy demand;
- leverage the creation of value along the value chain;
- bring forward achievement of the sustainable "net-zero" goals to 2040.

Considering the risks related to climate change and the commitments established under the Paris Agreement, the Group has decided to achieve the carbon neutrality objectives in advance and reflect its impact on assets, liabilities, and profit or loss, highlighting its significant and foreseeable impacts as required under the Conceptual Framework of the international accounting standards.
In this regard, in accordance with the provisions of the document published by the IFRS Foundation on November 20, 2020, the Group provides explicit information in the notes to these consolidated financial statements regarding how climate change is reflected in our accounts.
For a more effective and comprehensive communication concerning climate change disclosures prepared as part of the notes to these consolidated financial statements, we have mapped this disclosure as shown below, providing references to the various sections where issues associated with climate change are addressed.

Topic	Note	Content
Estimates and judgments concerning climate change	Note 2.1 "Use of estimates and management judgment"	• Reference to management's use of estimates and judgments with regard to climate change (taking account of their materiality within financial reporting). • Focus on estimating expected cash flows from specific assets/CGUs (section: "Impairment of non-financial assets"). • Focus of the effects of the Group's commitments under the Paris Agreement and their impact on the estimation of the useful life of the assets involved (section "Determining the useful life of non-financial assets").
Sustainable investment	Note 19 "Property, plant and equipment" Note 23 "Intangible assets"	• Focus on assets involved in renewable generation, infrastructure connected with the development of the grid and investment in expanding the e-Mobility, e-City, e-Industries, and e-Home businesses. • Focus on the development of intellectual property for achieving strategic objectives such as decarbonization, electrification and the development of platform models.
Measurement of non-financial assets	Note 12.e "Depreciation, amortization and other impairment losses" Note 19 "Property, plant and equipment" Note 24 "Goodwill"	• Focus on the effects related to the commitments of the Group in line with the Paris Agreement with regard to the measurement of non-financial assets, with particular regard to the residual useful life of certain assets and impairment testing.
Provisions	Note 40 "Provisions for risks and charges"	• Focus on the impact of climate change on provisions for risks and charges, in particular generation plants, including those for decommissioning and restoration of sites, and provisions for restructuring plans linked to the energy transition (which include decarbonization and digitization).
Sustainable finance	Note 48.3 "Borrowings" Note 59 "Events after the reporting period"	Focus on: • issues of sustainability-linked bonds connected with the achievement of sustainability objectives in line with the SDGs issued by the United Nations; • green bonds used to finance specific sustainable Group projects and initiatives; • sustainable loans connected with the achievement of Sustainable Development Goals (SDGs).
Share-based payments	Note 53 "Share-based payments"	• Description of long-term incentive plans anchored to achievement of specific climate-related targets.
Environmental compliance	Note 12.f "Other operating expenses"	• Description of costs relating to environmental compliance required by national and international regulations, in particular for greenhouse gas emission quotas, green certificates and energy efficiency certificates.
	Note 40 "Provisions for risks and charges"	• Description of costs generated by not having sufficient environmental certificates to meet environmental compliance regulations.
	Note 2.2 "Significant accounting policies"	• Description of accounting treatment of environmental certificates (sections: "Environmental certificates" and "Inventories").

6. Discontinued operations

Within the European area, the Enel Group has decided to dispose of important business lines, particularly in Russia, Romania and Greece, leading to their assets being reclassified as discontinued operations for the purposes of "IFRS 5 - Non-current assets held for sale and discontinued operations".
The consolidated income statement reports the profit/(loss) result from discontinued operations in a separate line.
In accordance with the provisions of IFRS 5, which governs the presentation in the financial statements of profit or loss and the disclosures to be provided in the explanatory note on non-current assets held for sale and discontinued operations, the income statement below reports the results of discontinued operations for 2022 and 2021.
The items are shown net of intercompany transactions which have been completely eliminated.
The figures for 2021, presented for comparative purposes only, pursuant to "IFRS 5 - Non-current assets held for sale and discontinued operations", have been restated to ensure they are uniform and comparable with those for 2022.

Millions of euro

	2022	2021	Change
Revenue	3,562	2,288	1,274
Costs	4,858	2,166	2,692
Pre-tax profit/(loss) from discontinued operations	(1,296)	122	(1,418)
Income taxes	(52)	23	(75)
Capital gains/(losses) from disposal of discontinued operations	(1,054)	-	(1,054)
Profit/(Loss) from discontinued operations	(2,298)	99	(2,397)

In accordance with the provisions of IFRS 5, the facts and circumstances that led to the reclassification are described below.

Russia
On June 16, 2022, Enel SpA signed two separate agreements with PJSC Lukoil and the Closed Combined Mutual Investment Fund "Gazprombank-Frezia" for the sale of the entire stake held in PJSC Enel Russia, equal to 56.43% of the share capital of the latter.

Following the agreements of June 16, 2022, on October 12, 2022, Enel SpA finalized the sale of the entire stake held in PJSC Enel Russia, equal to 56.43% of the share capital of the latter, to PJSC Lukoil and the Closed Combined Mutual Investment Fund "Gazprombank-Frezia", for a total of about €137 million. The transaction was closed with the fulfillment of the conditions to which the sale was subject, including authorization of the operation by the President of the Russian Federation pursuant to paragraph 5 of Decree 520 of August 5, 2022.
Upon completion of the sale, Enel sold all power generation assets in Russia, which include approximately 5.6 GW of conventional capacity and approximately 300 MW of wind capacity at various stages of development, ensuring continuity for its employees and customers.

The overall transaction had a negative impact on the Group's profit of about €1,551 million, mainly reflecting the release of the translation reserve of €1,054 million, and the value adjustment of about €497 million.

For more information, please see the section on "Business combinations".

Romania
On December 14, 2022, Enel SpA entered into an Exclusivity Agreement with Greek company Public Power Corporation SA (PPC) in relation to the potential disposal of all the equity stakes held by Enel Group in Romania. In this regard, the value of the net assets of Enel Romania was adjusted to the expected sale price, with recognition of a value adjustment of €696 million. On February 4, 2023, Enel SpA, following the announcement released on December 14, 2022, announced that the period of exclusive negotiations with Greek company PPC in relation to the potential disposal of all the equity stakes held by Enel Group in Romania had been extended.

Greece

Enel Green Power has begun the process of finding a potential investor interested in a partnership for the management and development of Enel Green Power Hellas within the Stewardship business model.

The status of the negotiations under way suggest that a sale is highly probable. Accordingly, the requirements established by "IFRS 5 - Non-current assets held for sale and discontinued operations" have been met for the classification of the Greek assets as "discontinued operations".

For more details on the financial position by business line and geographical area of assets classified as discontinued operations, please see the section "Performance by primary segment (Business Line) and secondary segment (Geographical Area)".

The details of cash flows relating to discontinued operations are provided below, as already separately shown in the cash flows statement.

Millions of euro			
	2022	**2021**	**Change**
Cash flows from operating activities - discontinued operations	(391)	280	(671)
Cash flows used in investing activities - discontinued operations	(351)	(453)	102
Cash flows from/(used in) financing activities - discontinued operations	656	118	538
Cash flows - discontinued operations	**(86)**	**(55)**	**(31)**

7. Restatement of comparative disclosures

Discontinued operations

The 2021 consolidated income statement and statement of consolidated comprehensive income have been adjusted to take account of the presentation of discontinued operations as required by the "IFRS 5 - Non-current assets held for sale and discontinued operations".

For more details, please refer to the note "Discontinued operations".

Impact on the consolidated income statement

Millions of euro			
	2021	**IFRS 5**	**2021 restated**
Revenue	**88,006**	**(2,287)**	**85,719**
Costs	**82,848**	**(2,157)**	**80,691**
Net results from commodity contracts	**2,522**	**1**	**2,523**
Operating profit	**7,680**	**(129)**	**7,551**
Financial income from derivatives	2,718	(1)	2,717
Other financial income	1,882	(20)	1,862
Financial expense from derivatives	1,257	(1)	1,256
Other financial expense	6,114	(27)	6,087
Net income from hyperinflation	20	-	20
Share of profit/(loss) of equity-accounted investments	571	-	571
Pre-tax profit	**5,500**	**(122)**	**5,378**
Income taxes	1,643	(23)	1,620
Profit/(Loss) from continuing operations	**3,857**	**(99)**	**3,758**
Attributable to owners of the Parent	3,857	(760)	3,097
Attributable to non-controlling interests	-	661	661
Profit/(Loss) from discontinued operations	**-**	**99**	**99**
Attributable to owners of the Parent	-	92	92
Attributable to non-controlling interests	-	7	7
Profit/(Loss) for the year (owners of the Parent and non-controlling interests)	**3,857**	**-**	**3,857**

Impact on the consolidated comprehensive income

Millions of euro

	2021	IFRS 5	2021 restated
Profit for the year	**3,857**		**3,857**
Other comprehensive income/(expense) that may be subsequently reclassified to profit or loss (net of taxes)			
Effective portion of change in the fair value of cash flow hedges	(725)	(10)	(735)
Change in the fair value of hedging costs	195	(1)	194
Share of the other comprehensive expense of equity-accounted investments	(645)	-	(645)
Change in the fair value of financial assets at FVOCI	11	-	11
Change in translation reserve	(90)	5	(85)
Cumulative other comprehensive income that may be subsequently reclassified to profit or loss in respect of non-current assets and disposal groups classified as held for sale/discontinued operations		6	6
Other comprehensive income/(expense) that may not be subsequently reclassified to profit or loss (net of taxes)			
Remeasurement of net liabilities/(assets) for defined benefit plans	30	(1)	29
Change in fair value of equity investments in other companies	-	-	-
Cumulative other comprehensive income that may not be subsequently reclassified to profit or loss in respect of non-current assets and disposal groups classified as held for sale/discontinued operations		1	1
Total other comprehensive expense for the year	**(1,224)**	**-**	**(1,224)**
Comprehensive income/(expense) for the year	**2,633**	**-**	**2,633**
Attributable to:			
- owners of the Parent	2,562		2,562
- non-controlling interests	71		71

The figures presented in the comments and the tables of the notes to these consolidated financial statements at December 31, 2022 are uniform and comparable with each other.

Segment reporting

Figures at December 31, 2021 for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way, which are shown under "Holding, Services and Other". This change affected segment reporting but did not produce any changes in the overall figures for the Group, although a number reclassifications of values were made within the various business lines.

The figures presented in the comments and the tables of the notes to these consolidated financial statements at December 31, 2022 are uniform and comparable with each other.

Changes in the consolidation scope

8. Main acquisitions and disposals during the year

In the two periods under review, the consolidation scope changed as a result of a number of transactions.

2021

- On January 8, 2021, 100% of Tynemouth Energy Storage was sold for €1 million. The sale did not have any significant impact on profit or loss.
- On January 20, 2021, Enel Green Power Bulgaria was sold for a total €35 million. The sale did not have any significant impact on profit or loss.
- On March 10, 2021, Enel Green Power Italia acquired 100% of e-Solar Srl, the owner of a photovoltaic project with an authorized capacity of 170.11 MW, for €2.7 million.
- On March 29, 2021, Enel X Srl acquired 100% of CityPoste Payment SpA, an Italian company that offers consumers access to payment services through both physical and digital channels, enabling them to carry out numerous types of transactions with private- and public-sector entities.
- In the 1st Quarter of 2021, the consolidation scope changed with the global consolidation of Australian renewable energy companies previously accounted for using the equity method due to a change in governance arrangements at the companies, without the acquisition of an additional interest. The purchase price allocation process was completed in December 2021 and essentially confirmed the carrying amount of the net assets acquired following an impairment loss of about €9 million.
- On May 13, 2021, EGP Solar 1 LLC was sold for a total of about €4 million.
- In the first nine months of 2021, Enel Green Power España acquired 100% of 30 renewables companies for a total of €86 million.
- On September 8, 2021, Genability was sold by Enel X North America for about €6 million.
- The purchase price allocation process for Viva Labs AS, acquired on September 17, 2020 by Enel X International, was completed in September, following which the carrying amounts recognized at the acquisition date were confirmed.

Other changes

In addition to the above changes in the consolidation scope, the following transactions, although they do not represent transactions involving the acquisition or loss of control, gave rise to a change in the interest held by the Group in the investees:

- on March 15, Enel SpA launched a partial voluntary tender offer for up to a maximum of 7,608,631,104 shares of Enel Américas, equal to 10% of the share capital at that date. The offer period began on March 15 and ended on April 13, 2021.The tender offer was subject to the effectiveness of the merger of EGP Américas SpA into Enel Américas SA, which took place on April 1, 2021. The total price was €1,271 million. Following completion of the partial voluntary tender offer and the completion of the EGP Américas merger, Enel owns about 82.3% of the outstanding share capital of Enel Américas;
- on November 24, Enel Green Power RSA 2 (Pty) Ltd sold a stake in the investments held in Oyster Bay Wind Farm, Garob Wind Farm, Aced Renewables Hidden Valley and Soetwater Wind Farm for a total of ZAR 340 million, corresponding to about €19 million. Following the transaction, the Group's interest in those companies decreased from 60% to 55%;
- on December 3, Enel SpA finalized the sale of the entire stake held in Open Fiber SpA, equal to 50% of the latter's share capital, to Macquarie Asset Management and CDP Equity SpA for a total of about €2,733 million. The capital gain realized by the Group on a consolidated basis came to about €1,763 million.

2022

- On January 3, 2022, Enel Produzione SpA acquired 100% of ERG Hydro Srl (subsequently renamed Enel Hydro Appennino Centrale Srl and merged into Enel Produzione SpA on December 1, 2022), owner of generation plants with an installed capacity of about 527 MW and an annual output of approximately 1.5 TWh, for a consideration of about €1,267 million; in December 2022, the identification of the fair value of the acquired assets and liabilities was completed, with the recognition of goodwill of approximately €349 million.
- On February 17, 2022, Enel Green Power España acquired 100% of Stonewood Desarrollos SLU for about €14 million representing the licenses acquired for the development and construction of photovoltaic systems. The acquisition had no impact on profit or loss.
- On March 3, 2022, Enel X Germany sold its entire stake in Cremzow KG and Cremzow Verwaltungs for about €12 million.
- On June 30, 2022, Enel Green Power SpA sold to Al Rayyan Holding LLC (controlled by the Qatar Investment Authority) 50% of its stake in EGP Matimba NewCo 1 Srl, indirect owner of six companies in South Africawith an

installed capacity of about 740 MW, for about €108 million, which has been paid in full.

- On July 25, 2022, Enel X Srl sold to Mooney SpA, for about €140 million, settled in the form of financial receivables, its entire stakes in Enel X Financial Services, CityPoste Payment, PayTipper and Junia Insurance and their subsidiaries.
- On August 24, 2022, Enel Brasil SA, a subsidiary of Enel Américas, closed the sale of its entire stake in CGTF - Central Geradora Termelétrica Fortaleza SA to ENEVA SA for a consideration of about €89 million. The transaction had a negative impact on profit or loss of about €210 million, including impairment losses on assets of €73 million, a capital loss of €135 million and transaction costs connected with the sale of €2 million.
- In the first nine months of 2022, Enel Green Power Romania acquired 100% of Prowind Windfarm Bogdanesti, Prowind Windfarm Deleni, Prowind Windfarm Ivesti and Prowind Windfarm Viisoara for a total of about 35 million.
- On October 12, 2022, Enel finalized the sale of its entire stake in PJSC Enel Russia, equal to 56.43% of the latter's share capital, to PJSC Lukoil and the Closed Combined Mutual Investment Fund "Gazprombank-Frezia", for a total of about €137 million. The transaction had a negative impact on reported Group profit of around €1.5 billion, mainly reflecting the release of a currency translation.
- On December 9, 2022, Enel Chile SA finalized the sale of its entire 99.09% stake in the share capital of listed Chilean power transmission company Enel Transmisión Chile SA to Sociedad Transmisora Metropolitana SpA, controlled by Inversiones Grupo Saesa Ltda, for about €1.3 billion. The transaction generated a capital gain of about €1.1 billion.
- On December 22, 2022, Enel closed the sale of a 50% quota in its wholly-owned subsidiary Gridspertise Srl to the international private equity fund CVC Capital Partners Fund VIII for a total of approximately €300 million. The transaction had a positive impact on profit or loss of about €520 million.
- On December 23, 2022, Enel Green Power India Private Limited finalized an agreement with Norfund following which the latter made an investment in Avikiran Surya India Private Limited by subscribing shares issued by the company totaling 49% of the paid-up share capital. The transaction had a negative impact of about €4 million on profit or loss, of which €2 million from the remeasurement at fair value of the residual interest and a capital loss of €2 million.
- On December 29, 2022, Enel Brasil SA, a subsidiary of Enel Américas SA, finalized the sale of its entire stake in the Brazilian power distribution company Celg Distribuição SA - Celg-D (Enel Goiás), equal to about 99.9% of the latter's share capital, to Equatorial Participações e Investimentos SA, a subsidiary of Equatorial Energia SA, for a total of about €1.5 billion (of which about €269 million for the equity portion and about €1.2 billion as repayment of intercompany loans). The transaction had a negative impact on profit or loss of about €1 billion.

Other changes

In addition to the above changes in the consolidation scope, the following transactions, although they do not represent transactions involving the acquisition or loss of control, gave rise to a change in the interest held by the Group in the investees:

- on March 1, 2022, the merger between Emgesa SA ESP (acquiring entity), Codensa SA ESP, Enel Green Power Colombia SAS ESP and ESSA 2 (merged entities) was completed. The new name of the surviving company is Enel Colombia SA ESP. Following the transaction, the Group's stake in Emgesa SA ESP (now Enel Colombia SA ESP) increased from 39.89% to about 47.18%;
- on March 24, 2022, Enel X International Srl finalized an agreement with a holding company controlled by Sixth Cinven Fund and a holding company controlled by Seventh Cinven Fund to indirectly acquire about 79.4% of the share capital of Ufinet Latam SLU (for €1,320 million) and at the same time sold 80.5% of the share capital of that company to Seventh Cinven Fund (for €1,186 million). Enel X International also received about €207 million from Ufinet as a distribution of available reserves. Consequently, Enel X International now holds an indirect stake of 19.5% in Ufinet, of which it had previously held 20.6%. The transaction generated a positive net cash flow of about €73 million and had a positive impact on operating performance of about €220 million;
- on June 15, 2022, Enel Kansas LLC sold 50% of its stake in Rocky Caney Holdings LLC for about €34 million. Following the transaction, the interest of Enel Kansas LLC in Rocky Caney Holdings LLC decreased from 20% to 10%. The transaction generated a capital gain of about €7 million;
- on June 16, 2022, EGPNA REP Holdings LLC sold 50% of its stake in EGPNA Renewable Energy Partners LLC for about €60 million. Following the transaction, EGPNA REP Holdings LLC holds 10% of EGPNA Renewable Energy Partners LLC. The transaction generated a capital loss of about €7 million;
- on July 14, 2022, Enel, acting through its wholly-owned subsidiary Enel X, acquired 50% of the share capital of Mooney SpA. Based on an enterprise value of 100% for Mooney of €1,385 million, Enel X paid a total of about €225 million (including price adjustment) for the equity portion and about €125 million for the purchase of an existing claim of Schumann Investments SA against Mooney;
- on December 2022, Enel Green Power Hellas SA sold the entire stake held in associated companies of the Cy-

clades. The transaction did not have a significant impact on profit or loss;

- on December 6, 2022, Enel X Chile SpA sold its entire stake in Sociedad de Inversiones K Cuatro SpA, Suministradora de buses K Cuatro SpA and Enel X AMPCI Ebus Chile SpA for about €35 million (uncollected as of December 31, 2022). The transaction did not have a significant impact on profit or loss;
- on December 30, 2022, Enel Green Power Canada Inc. sold its 49% stake in Pincher Creek LP and Riverview LP for about €56 million. The transaction did not result in the loss of control in the companies.

Acquisition of ERG Hydro Srl

On January 3, 2022, Enel Produzione SpA acquired 100% of ERG Hydro Srl (subsequently renamed Enel Hydro Appennino Centrale Srl and merged into Enel Produzione SpA on December 1, 2022), owner of generation plants with an installed capacity of about 527 MW and an annual output of approximately 1.5 TWh, for about €1,267 million.
At December 2022, the identification of the fair value of the acquired assets and liabilities was completed, with the recognition of goodwill of €349 million.

Millions of euro	Carrying amount before January 3, 2022	Adjustments for purchase price allocation	Amount recognized at January 3, 2022
Property, plant and equipment	605	167	772
Intangible assets	1	170	171
Other non-current assets	15	10	25
Cash and cash equivalents	69	-	69
Other current assets	94	-	94
Deferred tax liabilities	(4)	(102)	(106)
Provisions for risk and charges and employee benefits	(35)	(7)	(42)
Current liabilities	(65)	-	(65)
Net assets acquired	**680**	**238**	**918**
Cost of the acquisition	**1,267**	**-**	**1,267**
(of which paid in cash)	*1,265*	-	*1,265*
Goodwill	587	(238)	349

Sale of Ufinet

On March 24, 2022 Enel X International Srl sold 1.1% of Ufinet.

The financial effects of the transaction are as follows.

Millions of euro		
Price for acquisition of 79.4% through exercise of call option with Sixth Cinven Fund	(1,320)	
Distribution of Ufinet reserves	207	
Price for sale of 80.5% to Seventh Cinven Fund	1,186	
Net cash flow of transaction	**73**	
Capital gain on sale of interest (1.1%)	**(6)**	
Release of OCI reserve	**(24)**	
Net capital gain on sale		**43**
Fair value measurement of interest already held (19.5%)		**177**
Total financial impact		**220**

Following the transaction, the residual investment in Ufinet was classified under other investments measured at fair value through other comprehensive income. Previously it had been accounted for using the equity method.

Sale of EGP Matimba NewCo 1

On June 30, 2022, Enel Green Power SpA sold to Al Rayyan Holding LLC (controlled by the Qatar Investment Authority) 50% of its stake in EGP Matimba NewCo 1 Srl, indirect owner of six projects in South Africa, for about €108 million, which has been paid in full.

Millions of euro	
Total net assets held for sale with loss of control	220
Interest sold (50%)	**110**
Sale price	**108**
Gain/(Loss) on sale	**(2)**
Fair value measurement of interest already held	**(2)**
Total financial impact	**(4)**

Following the transaction, the residual equity investment in EGP Matimba 1 and its subsidiaries was classified among equity-accounted investments and it was remeasured at fair value with a negative impact on profit or loss of about €2 million. Following this remeasurement, the value of the residual equity investment is €108 million.

Sale of Enel X Financial Services, CityPoste Payment, PayTipper and Junia Insurance

On July 25, 2022, Enel X Srl sold to Mooney SpA, for about €140 million, settled in the form of financial receivables, its entire stakes in Enel X Financial Services, CityPoste Payment, PayTipper and Junia Insurance and their subsidiaries.

Millions of euro	
Value of the transaction	140
Net assets sold	(73)
Capital gain on sale	**67**

The transaction produced a capital gain of €67 million.

Sale of Central Geradora Termelétrica Fortaleza SA

On August 24, 2022, Enel Brasil SA, a subsidiary of Enel Américas, sold its entire stake in CGTF - Central Geradora Termelétrica Fortaleza SA to ENEVA SA for €89 million.
During 2022, in line with the provisions of "IFRS 5 - Non-current assets held for sale and discontinued operations", the net assets of CGTF - Central Geradora Termelétrica Fortaleza SA were classified as held for sale and their value was adjusted to the expected sale price in the amount of €73 million.

Millions of euro	
Sale price	**89**
Net assets sold	**125**
Reversal of OCI reserve	**(99)**
Capital loss	**(135)**
Adjustment of pre-sale plant value	(73)
Financial impact	**(208)**

With the closing of the sale, a capital loss of about €135 million was recognized, mainly due to the release of the translation reserve, plus other transaction costs of €2 million and the associated tax impact of €37 million.

Sale of PJSC Enel Russia

On October 12, 2022, Enel finalized the sale of the entire stake held in PJSC Enel Russia, equal to 56.43% of the share capital of the latter, to PJSC Lukoil and the Closed Combined Mutual Investment Fund "Gazprombank-Frezia", for a total of about €137 million. The sale had an overall negative impact on profit or loss of about €1,551 million, mainly due to the release of the translation reserve, in the amount of about €1,054 million. The financial effects of the transaction are as follows.

Millions of euro	
Sale price	**137**
Net assets sold	**137**
Reversal of OCI reserve	**(1,054)**
Capital loss	**(1,054)**
Adjustment of pre-sale plant value	(497)
Financial impact	**(1,551)**

For more information on the transaction, please see the section "Discontinued operations".

Sale of Enel Transmisión Chile SA

On December 9, 2022, Enel Chile SA finalized the sale of its entire 99.09% stake in the share capital of listed Chilean power transmission company Enel Transmisión Chile SA to Sociedad Transmisora Metropolitana SpA, controlled by Inversiones Grupo Saesa Ltda, for a total amount of €1,342 million. The financial effects of the transaction are as follows.

Millions of euro	
Sale price	**1,342**
Net assets sold	**230**
Goodwill	**61**
Capital gain on sale	**1,051**

The transaction had a tax effect of €347 million.

Sale of Gridspertise Srl

On December 22, 2022, Enel SpA, acting through Enel Grids Srl, closed the sale of a 50% quota in its wholly-owned subsidiary Gridspertise Srl to the international private equity fund CVC Capital Partners Fund VIII for a total of approximately €300 million. The financial effects of the transaction are as follows.

Millions of euro	
Total net assets held for sale with loss of control	80
Interest sold (50%)	**40**
Sale price	**299**
Release of OCI reserve	**2**
Capital gain	**261**
Fair value measurement of residual interest	**259**
Total financial impact	**520**

Following the transaction, the residual investment in in Gridspertise Srl and its subsidiaries was accounted using the equity method. After fair value measurement, the value of the residual investment is €259 million.
The transaction had a tax effect of €8 million.

Sale of Celg Distribuição SA

On December 29, 2022, Enel Brasil SA, a subsidiary of Enel Américas SA, finalized the sale of its entire stake in the Brazilian power distribution company Celg Distribuição SA - Celg-D (Enel Goiás), equal to about 99.9% of the latter's share capital, to Equatorial Participações e Investimentos SA, a subsidiary of Equatorial Energia SA, for a total of about €1,548 million, of which €269 million for the equity portion and €1,279 million as repayment of intercompany loans. The financial effects of the transaction are as follows.

Millions of euro	
Sale price	**269**
Net assets sold	**269**
Release of OCI reserve	**(208)**
Capital loss on disposal	**(208)**
Adjustment of pre-sale value	(827)
Financial impact	**(1,035)**

The sale had a negative impact on profit or loss of about €1,035 million, of which about €208 million mainly attributable to the release of the OCI reserve and €827 million in respect of impairment losses (of which €85 million relating to goodwill).

The sale generated transaction costs of €4 million and a tax effect of €8 million.

9. Disclosure of impact of Russia-Ukraine conflict and assets operated in Russia

Impact of the Russian invasion of Ukraine on the Integrated Annual Report at December 31, 2022

During 2022, the Enel Group constantly monitored the effects of the international crisis on its business activities in Russia (with particular regard to provisioning of materials, services and labor), also assessing developments in market variables (e.g., exchange rates, interest rates). The Enel Group also took account of developments connected with the counter-sanctions envisaged by Russia targeting investments held in the country.
In addition, the Enel Group assessed the indirect impacts of the war in Ukraine on business activities, the financial situation and economic performance in the main euro-area countries in which it operates, with particular regard to shortages of raw materials from the areas affected by the conflict and the generalized increase in commodity prices. In consideration of the various recommendations of national and supranational supervisory bodies[46] concerning this issue and in a constantly evolving scenario, characterized by considerable regulatory uncertainty and high and volatile prices, the Enel Group is constantly monitoring the macroeconomic and business variables that enable a best estimate of the potential impacts associated with regulatory changes, sanctions and restrictions on asset holdings, as well as on suppliers and contracts applicable to the Enel Group.

In this regard, it should be noted that no significant impacts related to the Russia-Ukraine conflict have emerged at December 31, 2022.

Enel sells entire holding of 56.43% in PJSC Enel Russia

On June 16, 2022, Enel SpA signed two separate agreements with PJSC Lukoil and the Closed Combined Mutual Investment Fund "Gazprombank-Frezia" for the sale of the entire stake held in PJSC Enel Russia, equal to 56.43% of the share capital of the latter, for a total of about €137 million.

During the 2nd Quarter of 2022, in order to reduce the risk

(46) ESMA Public Statements no. 71-99-1864 of March 14, 2022 and no. 32-63-1277 of May 13, 2022 and no. 32-63-1320 of October 28, 2022; CONSOB warning notices in the weekly notices of March 9-14, 2022 and March 10-21, 2022, and no. 3/22 of May 19, 2022.

for Enel SpA of the measures issued by the European Union, the United States and Russia regarding Russian sanctions and counter-sanctions, a number of measures have been taken to terminate Enel SpA's management and coordination role with Enel Russia. These measures included: (i) the designation by Enel of only independent directors, of Russian nationality, at the recent election of the company's board of directors; (ii) the appointment of a new general manager, also of Russian nationality, who reports exclusively to the board of directors; (iii) the termination, where possible, of intercompany contracts; (iv) the modification of the organizational structure of the Enel Group in order to terminate reporting by the staff or business functions of Enel Russia to their Enel counterparts; and (v) the consequent interruption of any reporting flows between Enel SpA and Enel Russia.

The transaction was closed and the consideration paid in October 2022, following the fulfillment of certain conditions to which the sale is subject, including approval of the transaction by the President of the Russian Federation in accordance with paragraph 5 of Decree 520 of August 5, 2022.

The accounting effects of the sale of the PJSC Enel Russia Group are shown in note 8 "Main acquisitions and disposals during the year".

It should also be noted that the Enel Group continues to hold the following equity investments in Russia:

- Enel Green Power Rus LLC (a 100% indirect subsidiary of Enel SpA), a company that provides services for the development of renewable projects and which holds 100% interests in four renewable generation companies;
- Enel X Rus LLC (a 99% indirect subsidiary of Enel SpA);
- an investment, equal to 49.5%, in a joint venture (Rusenergosbyt LLC) operating in the End-user Markets Business Line.

10. Performance and financial position by primary segment (Business Line) and secondary segment (Geographical Area)

The representation of financial position and performance by business line and geographical area presented here is based on the approach used by management in monitoring Group performance for the two years being compared.

Performance by primary segment (Business Line)

Results for 2022[1]

Millions of euro	Thermal Generation and Trading	Enel Green Power	Enel Grids	End-user Markets	Enel X	Holding, Services and Other	Total reporting segment	Eliminations and adjustments	Total
Revenue and other income from third parties	53,239	6,669	19,806	58,478	2,143	182	140,517	-	140,517
Revenue and other income from transactions with other segments	23,096	2,498	3,226	3,674	66	2,053	34,613	(34,613)	-
Total revenue	**76,335**	**9,167**	**23,032**	**62,152**	**2,209**	**2,235**	**175,130**	**(34,613)**	**140,517**
Total costs	71,189	5,873	13,918	62,517	1,544	2,503	157,544	(34,580)	122,964
Net results from commodity contracts	551	183	-	1,608	(13)	(5)	2,324	41	2,365
Depreciation and amortization	802	1,456	2,852	498	223	255	6,086	-	6,086
Impairment losses	562	53	1,047	1,177	102	17	2,958	-	2,958
Impairment gains	(52)	(2)	(117)	(132)	(17)	1	(319)	-	(319)
Operating profit/(loss)	**4,385**	**1,970**	**5,332**	**(300)**	**344**	**(546)**	**11,185**	**8**	**11,193**
Capital expenditure	**990[2]**	**6,386[3]**	**5,547[4]**	**721**	**371[5]**	**332**	**14,347**	**-**	**14,347**

(1) Segment revenue includes both revenue from third parties and revenue from transactions with other segments.
(2) Does not include €2 million regarding units classified as held for sale or discontinued operations.
(3) Does not include €42 million regarding units classified as held for sale or discontinued operations.
(4) Does not include €110 million regarding units classified as held for sale or discontinued operations.
(5) Does not include €2 million regarding units classified as held for sale or discontinued operations.

Results for 2021[(1) (2) (3)]

Millions of euro	Thermal Generation and Trading	Enel Green Power	Enel Grids	End-user Markets	Enel X	Holding, Services and Other	Total reporting segment	Eliminations and adjustments	Total
Revenue and other income from third parties	22,334	7,011	16,994	36,097	1,372	1,911	85,719	-	85,719
Revenue and other income from transactions with other segments	10,269	2,161	3,248	1,302	56	2,101	19,137	(19,137)	-
Total revenue	**32,603**	**9,172**	**20,242**	**37,399**	**1,428**	**4,012**	**104,856**	**(19,137)**	**85,719**
Total costs	32,327	4,547	13,142	36,372	1,102	2,649	90,139	(19,130)	71,009
Net results from commodity contracts	537	(55)	-	2,006	-	(3)	2,485	38	2,523
Depreciation and amortization	902	1,237	2,612	399	202	240	5,592	-	5,592
Impairment losses	2,561	387	192	1,067	36	52	4,295	-	4,295
Impairment gains	(8)	(5)	(30)	(156)	(6)	-	(205)	-	(205)
Operating profit/(loss)	**(2,642)**	**2,951**	**4,326**	**1,723**	**94**	**1,068**	**7,520**	**31**	**7,551**
Capital expenditure	**822**	**5,662[(4)]**	**5,296**	**643**	**285**	**289**	**12,997**	**-**	**12,997**

(1) Segment revenue includes both revenue from third parties and revenue from transactions with other segments.
(2) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.
(3) The figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way, which are shown under "Holding, Services and Other".
(4) Does not include €111 million regarding units classified as held for sale or discontinued operations.

Performance by secondary segment (Geographical Area)

Results for 2022[(1)]

Millions of euro	Italy	Iberia	Latin America	Europe	North America	Africa, Asia and Oceania	Other, eliminations and adjustments	Total
Revenue and other income from third parties	83,337	32,725	20,949	77	2,183	266	980	140,517
Revenue and other income from transactions with other segments	171	108	385	10	31	-	(705)	-
Total revenue	**83,508**	**32,833**	**21,334**	**87**	**2,214**	**266**	**275**	**140,517**
Total costs	81,880	25,388	14,811	66	1,126	174	(481)	122,964
Net results from commodity contracts	4,679	(2,215)	56	6	(148)	(9)	(4)	2,365
Depreciation and amortization	2,209	1,784	1,393	2	430	75	193	6,086
Impairment losses	886	478	1,553	1	18	5	17	2,958
Impairment gains	(39)	(271)	(7)	-	-	-	(2)	(319)
Operating profit/(loss)	**3,251**	**3,239**	**3,640**	**24**	**492**	**3**	**544**	**11,193**
Capital expenditure	**4,640**	**2,316**	**4,289[(2)]**	**224[(3)]**	**2,491**	**164[(4)]**	**223[(5)]**	**14,347**

(1) Segment revenue includes both revenue from third parties and revenue from transactions with other segments.
(2) Does not include €94 million regarding units classified as held for sale.
(3) Does not include €4 million regarding units classified as held for sale or discontinued operations.
(4) Does not include €40 million regarding units classified as held for sale or discontinued operations.
(5) Does not include €18 million regarding units classified as held for sale or discontinued operations.

Results for 2021[(1) (2)]

Millions of euro	Italy	Iberia	Latin America	Europe	North America	Africa, Asia and Oceania	Other, eliminations and adjustments	Total
Revenue and other income from third parties	44,282	20,800	16,956	49	1,479	240	1,913	85,719
Revenue and other income from transactions with other segments	1,135	252	1	(35)	34	1	(1,388)	-
Total revenue	**45,417**	**21,052**	**16,957**	**14**	**1,513**	**241**	**525**	**85,719**
Total costs	40,751	17,412	12,867	59	748	135	(963)	71,009
Net results from commodity contracts	1,967	543	53	40	(81)	4	(3)	2,523
Depreciation and amortization	2,107	1,754	1,177	4	356	65	129	5,592
Impairment losses	1,747	1,797	536	1	161	32	21	4,295
Impairment gains	(22)	(170)	(9)	(2)	-	-	(2)	(205)
Operating profit/(loss)	**2,801**	**802**	**2,439**	**(8)**	**167**	**13**	**1,337**	**7,551**
Capital expenditure	**3,842**	**2,202**	**3,722**	**456**	**2,293**	**217[(3)]**	**265**	**12,997**

(1) Segment revenue includes both revenue from third parties and revenue from transactions with other segments.
(2) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.
(3) Does not include €111 million regarding units classified as held for sale or discontinued operations.

Financial position by primary segment (Business Line)

At December 31, 2022

Millions of euro	Thermal Generation and Trading	Enel Green Power	Enel Grids	End-user Markets	Enel X	Holding, Services and Other	Total reporting segment	Eliminations and adjustments	Total
Property, plant and equipment	8,530	41,519	40,377	44	553	805	91,828	(3)	91,825
Intangible assets	397	5,723	20,035	4,172	647	623	31,597	-	31,597
Non-current and current contract assets	-	50	500	-	72	53	675	(11)	664
Trade receivables	7,667	3,730	5,706	8,426	618	1,304	27,451	(9,715)	17,736
Other	7,928	540	2,551	2,716	480	2,535	16,750	(7,897)	8,853
Operating assets	**24,522**[1]	**51,562**[2]	**69,169**[3]	**15,358**[4]	**2,370**[5]	**5,320**	**168,301**	**(17,626)**	**150,675**
Trade payables	8,034	4,173	4,297	8,647	705	1,394	27,250	(9,187)	18,063
Non-current and current contract liabilities	95	323	7,527	76	10	22	8,053	(89)	7,964
Sundry provisions	3,979	921	3,263	380	101	1,095	9,739	(68)	9,671
Other	3,475	1,802	6,691	6,740	300	4,454	23,462	(7,908)	15,554
Operating liabilities	**15,583**[6]	**7,219**[7]	**21,778**[8]	**15,843**[9]	**1,116**[10]	**6,965**[11]	**68,504**	**(17,252)**	**51,252**

(1) Of which €190 million regarding units classified as held for sale or discontinued operations.
(2) Of which €1,951 million regarding units classified as held for sale or discontinued operations.
(3) Of which €1,855 million regarding units classified as held for sale or discontinued operations.
(4) Of which €1,160 million regarding units classified as held for sale or discontinued operations.
(5) Of which €80 million regarding units classified as held for sale or discontinued operations.
(6) Of which €87 million regarding units classified as held for sale or discontinued operations.
(7) Of which €185 million regarding units classified as held for sale or discontinued operations.
(8) Of which €390 million regarding units classified as held for sale or discontinued operations.
(9) Of which €476 million regarding units classified as held for sale or discontinued operations.
(10) Of which €11 million regarding units classified as held for sale or discontinued operations.
(11) Of which €4 million regarding units classified as held for sale or discontinued operations.

At December 31, 2021[1]

Millions of euro	Thermal Generation and Trading	Enel Green Power	Enel Grids	End-user Markets	Enel X	Holding, Services and Other	Total reporting segment	Eliminations and adjustments	Total
Property, plant and equipment	9,384	36,205	38,635	49	486	713	85,472	-	85,472
Intangible assets	216	5,016	21,473	4,030	670	631	32,036	-	32,036
Non-current and current contract assets	1	1	525	-	60	21	608	43	651
Trade receivables	4,814	2,601	6,731	6,533	559	1,347	22,585	(6,493)	16,092
Other	4,319	826	2,614	3,812	345	2,287	14,203	(6,107)	8,096
Operating assets	**18,734**[2]	**44,649**[3]	**69,978**	**14,424**	**2,120**[4]	**4,999**	**154,904**	**(12,557)**	**142,347**
Trade payables	5,730	3,701	4,390	7,129	695	1,259	22,904	(5,920)	16,984
Non-current and current contract liabilities	102	216	7,316	62	13	13	7,722	(75)	7,647
Sundry provisions	4,586	936	3,810	466	52	1,297	11,147	(89)	11,058
Other	4,125	1,901	8,104	4,575	141	3,659	22,505	(6,245)	16,260
Operating liabilities	**14,543**	**6,754**[5]	**23,620**	**12,232**	**901**[6]	**6,228**	**64,278**	**(12,329)**	**51,949**

(1) The figures for the Business Line Enel X have been adjusted to take account of the transfer of certain net assets and related revenue and expenses to the new Business Line Enel X Way, which are shown under "Holding, Services and Other".
(2) Of which €2 million regarding units classified as held for sale or discontinued operations.
(3) Of which €999 million regarding units classified as held for sale or discontinued operations.
(4) Of which €136 million regarding units classified as held for sale or discontinued operations.
(5) Of which €28 million regarding units classified as held for sale or discontinued operations.
(6) Of which €57 million regarding units classified as held for sale or discontinued operations.

Financial position by secondary segment (Geographical Area)

At December 31, 2022

Millions of euro	Italy	Iberia	Latin America	Europe	North America	Africa, Asia and Oceania	Other, eliminations and adjustments	Total
Property, plant and equipment	30,327	23,167	21,099	2,397	13,722	1,002	111	91,825
Intangible assets	3,200	16,173	10,534	331	602	129	628	31,597
Non-current and current contract assets	73	9	493	48	19	16	6	664
Trade receivables	7,086	4,369	5,037	1,127	268	66	(217)	17,736
Other	4,947	2,929	1,498	294	250	63	(1,128)	8,853
Operating assets	**45,633**[1]	**46,647**	**38,661**[2]	**4,197**[3]	**14,861**	**1,276**[4]	**(600)**	**150,675**
Trade payables	9,595	3,220	4,813	483	1,261	119	(1,428)	18,063
Non-current and current contract liabilities	4,188	3,351	35	443	-	1	(54)	7,964
Sundry provisions	3,008	3,458	2,378	69	97	32	629	9,671
Other	4,323	3,144	4,480	637	1,893	66	1,011	15,554
Operating liabilities	**21,114**[5]	**13,173**	**11,706**[6]	**1,632**[7]	**3,251**	**218**[8]	**158**	**51,252**

(1) Of which €251 million regarding units classified as held for sale or discontinued operations.
(2) Of which €307 million regarding units classified as held for sale or discontinued operations.
(3) Of which €4,125 million regarding units classified as held for sale or discontinued operations.
(4) Of which €553 million regarding units classified as held for sale or discontinued operations.
(5) Of which €64 million regarding units classified as held for sale or discontinued operations.
(6) Of which €76 million regarding units classified as held for sale or discontinued operations.
(7) Of which €961 million regarding units classified as held for sale or discontinued operations.
(8) Of which €52 million regarding units classified as held for sale or discontinued operations.

At December 31, 2021

Millions of euro	Italy	Iberia	Latin America	Europe	North America	Africa, Asia and Oceania	Other, eliminations and adjustments	Total
Property, plant and equipment	27,335	23,075	18,671	3,440	10,853	1,948	150	85,472
Intangible assets	2,313	16,071	11,414	772	557	179	730	32,036
Non-current and current contract assets	94	5	517	-	18	13	4	651
Trade receivables	7,372	3,886	4,414	583	215	51	(429)	16,092
Other	4,555	2,474	1,398	217	259	140	(947)	8,096
Operating assets	**41,669**[1]	**45,511**	**36,414**	**5,012**	**11,902**	**2,331**[2]	**(492)**[3]	**142,347**
Trade payables	9,684	2,509	4,333	481	1,208	136	(1,367)	16,984
Non-current and current contract liabilities	4,109	3,109	30	438	-	-	(39)	7,647
Sundry provisions	3,395	4,211	2,426	130	120	32	744	11,058
Other	5,749	3,945	4,509	328	1,482	64	183	16,260
Operating liabilities	**22,937**[4]	**13,774**	**11,298**	**1,377**	**2,810**	**232**[5]	**(479)**[6]	**51,949**

(1) Of which €2 million regarding units classified as held for sale or discontinued operations.
(2) Of which €999 million regarding units classified as held for sale or discontinued operations.
(3) Of which €136 million regarding units classified as held for sale or discontinued operations.
(4) Of which €6 million regarding units classified as held for sale or discontinued operations.
(5) Of which €22 million regarding units classified as held for sale or discontinued operations.
(6) Of which €57 million regarding units classified as held for sale or discontinued operations.

The following table reconciles segment assets and liabilities and the consolidated figures.

Millions of euro		
	at Dec. 31, 2022	**at Dec. 31, 2021**
Total assets	**219,618**	**206,940**
Equity-accounted investments	1,281	704
Non-current financial derivative assets	3,970	2,772
Other non-current financial assets	8,359	5,704
Non-current tax assets included in "Other non-current assets"	1,674	2,286
Other current financial assets	13,753	8,645
Current financial derivative assets	14,830	22,791
Cash and cash equivalents	11,041	8,858
Deferred tax assets	10,925	11,034
Tax assets	2,159	1,694
Financial and tax assets of "Assets held for sale"	951	105
Segment assets	**150,675**	**142,347**
Total liabilities	**177,536**	**164,598**
Long-term borrowings	68,191	54,500
Non-current financial derivative liabilities	5,895	3,339
Other non-current financial liabilities	-	120
Short-term borrowings	18,392	13,306
Current portion of long-term borrowings	2,835	4,031
Other current financial liabilities	853	625
Current financial derivative liabilities	16,141	24,607
Deferred tax liabilities	9,542	9,259
Income tax liabilities	1,623	712
Other tax liabilities	1,047	1,274
Financial and tax liabilities of "Liabilities included in disposal groups held for sale"	1,765	876
Segment liabilities	**51,252**	**51,949**

Information on the consolidated income statement

Revenue

11.a Revenue from sales and services – *€135,653 million*

Millions of euro				
	2022	2021[1]	Change	
Sale of electricity	69,340	45,053	24,287	53.9%
Transport of electricity	11,096	10,606	490	4.6%
Fees from network operators	979	800	179	22.4%
Transfers from institutional market operators	1,667	833	834	-
Sale of gas	8,970	4,744	4,226	89.1%
Transport of gas	80	599	(519)	-86.6%
Sale of fuel	5,605	1,791	3,814	-
Fees for connection to electricity and gas networks	826	769	57	7.4%
Construction contracts[1]	1,672	1,268	404	31.9%
Sale of environmental certificates	111	107	4	3.7%
Sale of value-added services	1,384	1,092	292	26.7%
Other sales and services	918	785	133	16.9%
Total IFRS 15 revenue	**102,648**	**68,447**	**34,201**	**50.0%**
Sale of commodities under contracts with physical settlement	37,247	24,314	12,933	53.2%
Gain/(Loss) on the measurement of commodity sales contracts with physical settlement closed during the period	(4,260)	(10,893)	6,633	60.9%
Other revenue	18	32	(14)	-43.8%
Total revenue from sales and services	**135,653**	**81,900**	**53,753**	**65.6%**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Revenue from the "Sale of electricity" amounted to €69,340 million, an increase of €24,287 million compared with the previous year (+53.9%). The increase mainly reflects higher sales volumes and prices, mainly in Italy (€14,852 million) and Spain (€8,076 million).

"Transfers from institutional market operators" increased by €834 million compared with the previous year, mainly in Iberia due to an increase in costs incurred for the purchase of commodities used in thermal generation plants in the Canary Islands, taking account of the rise in prices on international markets.

Revenue from the "Sale of gas" in 2022 amounted to €8,970 million (€4,744 million in 2021), an increase of €4,226 million compared with the previous year. The increase is mainly attributable to higher sales volumes at higher average prices especially in Spain (€2,253 million) and Italy (€1,781 million).

Revenue from the "Sale of fuel" increased by €3,814 million, especially by Enel Global Trading due to the rise in gas sales.

The increase in the "Sale of commodities under contracts with physical settlement" (€12,933 million) and of performance of the measurement of contracts settled in 2022 (€6,633 million) mainly involve gas contracts.

Revenue from contracts with customers (IFRS 15) breaks down into "point in time" and "over time" revenue as indicated in the following tables.

Millions of euro	2022															
	Italy		Iberia		Latin America		Europe		North America		Africa, Asia and Oceania		Other, eliminations and adjustments		Total	
	Over time	Point in time	Over time	Point in time	Over time	Point in time	Over time	Point in time	Over time	Point in time	Over time	Point in time	Over time	Point in time	Over time	Point in time
Total IFRS 15 revenue	**47,650**	**2,068**	**30,984**	**1,425**	**17,686**	**1,227**	**52**	**4**	**1,109**	**33**	**214**	**43**	**10**	**143**	**97,705**	**4,943**

	2021															
	Italy		Iberia		Latin America		Europe		North America		Africa, Asia and Oceania		Other, eliminations and adjustments		Total	
	Over time	Point in time	Over time	Point in time	Over time	Point in time	Over time	Point in time	Over time	Point in time	Over time	Point in time	Over time	Point in time	Over time	Point in time
Total IFRS 15 revenue[1]	**29,187**	**1,178**	**19,707**	**402**	**16,525**	**245**	**46**	**2**	**805**	**17**	**194**	**26**	**-**	**113**	**66,464**	**1,983**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

The following table shows the net results on contracts for the sale or purchase of commodities with physical settlement measured at fair value through profit or loss within the scope of IFRS 9.

Millions of euro	2022	2021	Change	
Fair value gain/(loss) on contracts for energy commodities with physical settlement (within the scope of IFRS 9) closed in the period				
Sales contracts				
Sale of electricity	5,436	4,368	1,068	24.5%
Fair value gain/(loss) on closed contracts	(795)	(1,705)	910	53.4%
Total electricity	**4,641**	**2,663**	**1,978**	**74.3%**
Sale of gas	30,924	19,576	11,348	58.0%
Fair value gain/(loss) on closed contracts	(3,600)	(9,335)	5,735	61.4%
Total gas	**27,324**	**10,241**	**17,083**	**-**
Sale of emissions allowances	875	366	509	-
Fair value gain/(loss) on closed contracts	131	146	(15)	-10.3%
Total emissions allowances	**1,006**	**512**	**494**	**96.5%**
Sale of guarantees of origin	12	4	8	-
Fair value gain/(loss) on closed contracts	4	1	3	-
Total guarantees of origin	**16**	**5**	**11**	**-**
Total revenue	**32,987**	**13,421**	**19,566**	**-**
Purchase contracts				
Purchase of electricity	6,161	3,677	2,484	67.6%
Fair value gain/(loss) on closed contracts	(200)	(1,220)	1,020	83.6%
Total electricity	**5,961**	**2,457**	**3,504**	**-**
Purchase of gas	33,092	19,951	13,141	65.9%
Fair value gain/(loss) on closed contracts	(1,940)	(8,057)	6,117	75.9%
Total gas	**31,152**	**11,894**	**19,258**	**-**
Purchase of emissions allowances	843	806	37	4.6%
Fair value gain/(loss) on closed contracts	132	144	(12)	-8.3%
Total emissions allowances	**975**	**950**	**25**	**2.6%**
Purchase of guarantees of origin	25	4	21	-
Fair value gain/(loss) on closed contracts	3	1	2	-
Total guarantees of origin	**28**	**5**	**23**	**-**
Total costs	**38,116**	**15,306**	**22,810**	**-**
Net revenue/(costs) on contracts for energy commodities with physical settlement (within the scope of IFRS 9) closed in the period	**(5,129)**	**(1,885)**	**(3,244)**	**-**
Gain/(Loss) from measurement of outstanding contracts for energy commodities with physical settlement (within the scope of IFRS 9)				
Sales contracts				
Electricity	(134)	(1,606)	1,472	91.7%
Gas	4,841	(16,285)	21,126	-
Emissions allowances	490	(487)	977	-
Guarantees of origin	(15)	(8)	(7)	-87.5%
Total	**5,182**	**(18,386)**	**23,568**	**-**
Purchase contracts				
Electricity	(124)	(2,169)	2,045	94.3%
Gas	3,879	(13,801)	17,680	-
Emissions allowances	627	(520)	1,147	-
Guarantees of origin	(72)	12	(84)	-
Total	**4,310**	**(16,478)**	**20,788**	**-**
Gain/(Loss) from measurement of outstanding contracts for energy commodities with physical settlement (within the scope of IFRS 9)	**872**	**(1,908)**	**2,780**	**-**
Total net revenue/(costs) on contracts with physical settlement (within the scope of IFRS 9)	**(4,257)**	**(3,793)**	**(464)**	**-12.2%**

The table below gives a breakdown of revenue from sales and services by geographical segment.

Millions of euro		
	2022	**2021[1]**
Italy	57,859	33,304
Europe		
Iberia	30,535	18,896
France	3,086	970
Switzerland	6,791	2,918
Germany	1,676	1,085
Austria	189	245
Slovenia	146	195
Romania	3	-
Greece	15	-
Bulgaria	-	-
Belgium	834	522
Czech Republic	321	435
Hungary	7	12
Russia	-	3
Netherlands	38	96
United Kingdom	11,841	3,736
Other European countries	1,551	1,160
Americas		
United States	779	601
Canada	53	33
Mexico	313	202
Brazil	9,064	9,381
Chile	4,434	3,151
Peru	1,449	1,111
Colombia	2,725	2,188
Argentina	966	887
Panama	177	150
Costa Rica	17	14
Guatemala	83	67
Other		
Africa	132	114
Asia	521	371
Oceania	48	53
Total	**135,653**	**81,900**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Performance obligations

The following table provides information about the Group's performance obligations arising from contracts with customers with reference to the main revenue streams only, with a summary of the specific judgments made and the related revenue recognition policies.

For information on the use of estimates with revenue from contracts with customers, please see note 2.1 "Use of estimates and management judgment".

Type of product/ service	Nature and timing of satisfaction of performance obligation	Accounting policies
Sale of electricity produced by the Group	In order to determine the nature of the promise contained in these contracts with customers for the sale of electricity, the Group carefully analyzes the facts and circumstances applicable to each contract. For the sale of electricity on power exchanges, the facts and circumstances (including the intrinsic characteristics of the commodity, contractual terms, information regarding infrastructure and other delivery mechanisms) generally indicate that the performance obligation is a service in which the customer simultaneously receives and consumes the benefits of the commodity as it is delivered. Thus, the Group identifies a performance obligation satisfied over time as part of a series of distinct goods/services (i.e., each unit of commodity) that are substantially the same and have the same pattern of transfer to the customer.	The Group applies an output method to recognize revenue from the sale of electricity on power exchanges, recognized over time, so as to recognize revenue in the amount to which it has a right to invoice the customer if that amount corresponds directly with the value to the customer of the performance completed to date, i.e., at the price defined in the market (without variable consideration).
Network connection services	The network connection fees received from customers for connecting them to the electricity/gas distribution networks require a specific Group assessment to take into consideration all terms and conditions of the connection arrangements. This assessment is intended to determine whether the contract includes other distinct goods or services, such as for example the right to obtain ongoing access to the infrastructure in order to receive the commodity or, when the connection fee is a "non-refundable up-front fee" paid at or near contract inception, a material right that gives rise to a performance obligation. In particular, in some countries in which the Group operates, it has determined that the nature of the consideration received represents a "non-refundable up-front fee" whose payment provides a material right to the customer. In order to determine if the period over which this material right should be recognized extends beyond the initial contractual period, the Group takes into consideration the applicable local legal and regulatory framework applicable to the contract and affecting the parties. In such cases, if there is an implied assignment of the material right and an obligation from the initial customer to the new customer, the Group recognizes the connection fee over a period beyond the relationship with the initial customer, considering the concession terms as the period during which the initial customer and any future customer can benefit from the ongoing access without paying an additional connection fee. As a consequence, the fee is recognized over the period for which the payment creates an obligation for the Group to make the lower prices available to future customers (i.e., the period during which the customer is expected to benefit from the ongoing access service without having to pay an "up-front fee" upon renewal).	Revenue from monetary and in-kind fees for connection to the electricity and gas distribution network is recognized on the basis of the satisfaction of the performance obligations included in the contract. The identification of distinct goods or services requires a careful analysis of the terms and conditions of the connection arrangements, which could vary from country to country based on the local context, regulations and law. In order to finalize this assessment, the Group considers not only the characteristics of the goods/services themselves (i.e., the good or service is capable of being distinct) but also the implied promises for which the customer has a valid expectation as it views those promises as part of the negotiated exchange, that is goods/services that the customer expects to receive and has paid for (i.e., the promise to transfer the good or service to the customer is separately identifiable from other promises in the contract). Furthermore, the Group acts as an agent in some contracts for electricity/gas network connection services and other related activities, depending on local legal and regulatory framework. In such cases, it recognizes revenue on a net basis, corresponding to any fee or commission to which it expects to be entitled.
Sale/transport of electricity/gas to end users	An electricity/gas supply agreement signed with an end user includes a single performance obligation (sale and transport of the commodity) because the Group has determined that the contract does not provide distinct goods/services and the promise is satisfied by transferring control over the commodity to the customer when it is delivered at the point of delivery. In order to determine the nature of the promise included in such contracts, the Group carefully analyzes the facts and circumstances applicable to each contract and commodity. However, the Group considers that the performance obligation provided for in a repetitive service contract, such as a supply or transport contract for the provision of electricity/gas to end users, is typically satisfied over time (because the customer simultaneously receives and consumes the benefits of the commodity as it is delivered) as part of a series of distinct goods/services (i.e., each unit of commodity) that are substantially the same and have the same pattern of transfer to the customer.	The Group applies an output method to recognize revenue from the sale and transport of electricity/gas to end users, so as to recognize revenue in the amount to which it has a right to invoice the customer if that amount corresponds directly with the value to the customer of the performance completed to date, i.e., the quantities provided during the period, even if these have not yet been invoiced; this revenue is determined using estimates as well as periodic meter readings. Where applicable, this revenue is based on the rates and related restrictions established by law or by the Regulatory Authority for Energy, Networks and the Environment (ARERA) and analogous foreign authorities during the applicable period.

Construction contracts	The construction contracts typically include a performance obligation satisfied over time. For these contracts, the Group generally considers it appropriate to use an input method for measuring progress, except when a specific contract analysis suggests the use of an alternative method that better depicts the Group's performance obligation fulfilled at the reporting date.	For construction contracts that include a performance obligation satisfied over time, the Group recognizes revenue over time by measuring progress toward the complete satisfaction of that performance obligation. The cost-to-cost method is generally considered the best method to depict the Group's performance obligation fulfilled at the reporting date. The amount due from customers under a construction contract is presented as a contract asset; the amount due to customers under a construction contract is presented as a contract liability.
Concession service arrangements (within the scope of IFRIC 12)	The Group, as concession holder, provides services for the construction/upgrade of the infrastructure used for the provision of public services and/or services for the operation and maintenance of the infrastructure itself for the period of the concession. For performance obligations related to infrastructure construction and improvement, please refer to the section "Construction contracts". As far as revenue from operating services is concerned, please refer to the sections "Sale of electricity produced by the Group" and "Sale/transport of electricity/gas to end users".	When the Group provides construction/upgrade services, it recognizes intangible assets and/or financial assets, depending on the characteristics of the service concession arrangement. The amounts received or receivable relating to both components are initially recognized as revenue from contracts with customers. For more details on revenue recognition, please refer to the section "Construction contracts". Furthermore, the component recognized in profit or loss deriving from the remeasurement at fair value of the financial assets in respect of service concession agreements for the distribution business in Brazil is also classified as revenue, in order to adequately reflect the business model in line with the related concession agreement. Revenue from management and maintenance activities is recognized as revenue from the sale of electricity on the market or to end users (please refer to sections "Sale of electricity produced by the Group" and "Sale/transport of electricity/gas to end users", respectively).

11.b Other income – *€4,864 million*

Millions of euro

	2022	2021[1]	Change	
Operating grants	28	33	(5)	-15.2%
Grants for environmental certificates	220	249	(29)	-11.6%
Capital grants (electricity and gas business)	28	26	2	7.7%
Sundry reimbursements	314	300	14	4.7%
Gains on the disposal of subsidiaries, associates, joint ventures, joint operations and non-current assets held for sale	1,876	1,781	95	5.3%
Gains on the disposal of property, plant and equipment, and intangible assets	64	59	5	8.5%
Service continuity bonuses	31	48	(17)	-35.4%
Other income	2,303	1,323	980	74.1%
Total	**4,864**	**3,819**	**1,045**	**27.4%**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

"Grants for environmental certificates" came to €220 million, a decrease of €29 million compared with the previous year, mainly reflecting the decrease in grants for white certificates obtained from distribution operations in Italy. This effect was partially offset by the increase in grants for guarantees of origin in Spain.

Gains on the disposal of entities amounted to €1,876 million in 2022, mainly reflecting the recognition gains on the disposal by Enel X International of 1.1% of the investment in Ufinet (€220 million), the sale by Enel X Srl of financial companies to Mooney (€67 million), the sale of 50% of the investment held by Enel Grids in Gridspertise (€520 million) and the sale of Enel Chile's interest in Enel Transmisión Chile.

In 2021 the item included the capital gain on the sale of Enel SpA's interest in Open Fiber (€1,763 million).

"Other income" increased by €980 million, mainly due to the increase of income in Chile (€503 million) following a modification of the existing contractual agreement with Shell, in terms of volumes committed by the supplier, and the increase in Enel Green Power North America of income from tax partnership (€319 million).

The following tables show a breakdown of total revenue by business line based on the approach used by management to monitor the Group's performance during the two years being compared.

Millions of euro	2022								
	Thermal Generation and Trading	**Enel Green Power**	**Enel Grids**	**End-user Markets**	**Enel X**	**Holding, Services and Other**	**Total reporting segment**	**Eliminations and adjustments**	**Total**
Total IFRS 15 revenue	**37,154**	**7,863**	**20,854**	**61,711**	**1,782**	**2,167**	**131,531**	**(28,883)**	**102,648**
Sale of commodities under contracts with physical settlement	42,667	-	-	26	-	-	42,693	(5,446)	37,247
Gain/(Loss) on the measurement of commodity sales contracts with physical settlement closed during the period	(4,240)	-	-	(20)	-	-	(4,260)	-	(4,260)
Other revenue	-	6	13	-	1	21	41	(23)	18
Total revenue from sales and services	**75,581**	**7,869**	**20,867**	**61,717**	**1,783**	**2,188**	**170,005**	**(34,352)**	**135,653**
Other income	**754**	**1,298**	**2,165**	**435**	**426**	**47**	**5,125**	**(261)**	**4,864**
TOTAL REVENUE	**76,335**	**9,167**	**23,032**	**62,152**	**2,209**	**2,235**	**175,130**	**(34,613)**	**140,517**

Millions of euro	2021[1]								
	Thermal Generation and Trading	**Enel Green Power**	**Enel Grids**	**End-user Markets**	**Enel X**	**Holding, Services and Other**	**Total reporting segment**	**Eliminations and adjustments**	**Total**
Total IFRS 15 revenue	**16,673**	**8,533**	**19,681**	**36,933**	**1,277**	**2,189**	**85,286**	**(16,839)**	**68,447**
Sale of commodities under contracts with physical settlement	26,691	-	-	14	-	-	26,705	(2,391)	24,314
Gain/(Loss) on the measurement of commodity sales contracts	(10,895)	-	-	1	-	-	(10,894)	1	(10,893)
Other revenue	5	6	15	-	3	31	60	(28)	32
Total revenue from sales and services	**32,474**	**8,539**	**19,696**	**36,948**	**1,280**	**2,220**	**101,157**	**(19,257)**	**81,900**
Other income	**129**	**633**	**546**	**451**	**148**	**1,792**	**3,699**	**120**	**3,819**
TOTAL REVENUE	**32,603**	**9,172**	**20,242**	**37,399**	**1,428**	**4,012**	**104,856**	**(19,137)**	**85,719**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Costs

12.a Electricity, gas and fuel – *€96,896 million*

Millions of euro	2022	2021[1]	Change	
Electricity	47,155	28,624	18,531	64.7%
- of which purchases under contracts with physical settlement (IFRS 9)	*6,161*	*3,677*	*2,484*	*67.6%*
Gas	47,930	26,614	21,316	80.1%
- of which purchases under contracts with physical settlement (IFRS 9)	*33,092*	*19,951*	*13,141*	*65.9%*
Fair value gain/(loss) on contracts for purchase of electricity and gas with physical settlement closed during the period	(2,140)	(9,277)	7,137	76.9%
Nuclear fuel	111	107	4	3.7%
Other fuels	3,840	1,634	2,206	-
Total	**96,896**	**47,702**	**49,194**	**-**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Costs for the purchase of "Electricity" mainly increased due to a rise in volumes purchased in an environment of increasing average prices compared with the previous year, mainly attributable to Italy (€15,396 million) and Spain (€3,563 million).

The increase in costs for the purchase of "Gas" mainly reflects the increase in quantities handled, mainly due to a rise in generation, as well as the increase in the cost of purchasing gas from third parties.

The gain/(loss) from the fair value measurement of closed contracts with physical settlement showed an increase of €7,137 million compared with the previous year, of which €6,117 million attributable to gas and €1,020 million to electricity.

The increase in "Other fuels" is mainly attributable to the increase in the volume of generation and the rise in commodity prices.

12.b Services and other materials – *€20,228 million*

Millions of euro	2022	2021[1]	Change	
Wheeling	8,247	8,921	(674)	-7.6%
Maintenance and repairs	1,067	1,364	(297)	-21.8%
Telephone and postal costs	181	177	4	2.3%
Communication services	117	123	(6)	-4.9%
IT services	872	959	(87)	-9.1%
Leases and rentals	503	126	377	-
Other services	5,707	4,160	1,547	37.2%
Purchase of environmental certificates	963	1,256	(293)	-23.3%
- of which relating to purchases from contracts with physical delivery (IFRS 9)	*868*	*810*	*58*	*7.2%*
Fair value gain/(loss) on contracts for purchase of environmental certificates with physical settlement closed during the period	135	145	(10)	-6.9%
Change in inventories of environmental certificates	97	32	65	-
Other materials	2,533	2,041	492	24.1%
Total	**20,228**	**19,240**	**988**	**5.1%**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Costs for services and other materials amounted to €20,228 million in 2022, an increase of €988 million compared with 2021. This change essentially reflected:

- an increase in costs for leases and rentals, mainly reflecting the closure, in 2021, of a dispute in Spain, which permitted the reversal of provisions previously recognized in the amount of about €300 million;
- an increase of €1,547 million in "Other services", essentially reflecting the increase in costs for services connected with the electricity and gas business (€720 million), those related to concessions in Brazil (€281 million), those related to the value-added services business (€119 million) and expenses for professional and technical services (€156 million);
- an increase in "Other materials" mainly attributable to higher procurement costs of raw materials and higher production volumes;
- a decline in costs for wheeling, mainly in Italy and Spain, attributable to a decline in the average price applied, partially offset by an increase of those in Latin America due to the increase in traded volumes;
- lower provisions for costs connected with the conversion of plants in Italy for the purposes of the energy transition;
- a decrease in costs for systems assistance, computer maintenance and IT development, mainly in Italy.

IPL

12.c Personnel expenses – *€4,570 million*

Millions of euro				
	2022	**2021[1]**	**Change**	
Wages and salaries	3,442	3,122	320	10.2%
Social security contributions	924	844	80	9.5%
Italian post-employment benefits	107	104	3	2.9%
Post-employment and other long-term benefits	73	86	(13)	-15.1%
Early retirement incentives	(20)	10	(30)	-
Early retirement incentives connected with restructuring agreements	(151)	795	(946)	-
Other costs	195	179	16	8.9%
Total	**4,570**	**5,140**	**(570)**	**-11.1%**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Personnel expenses in 2022 amounted to €4,570 million, a decrease of €570 million.

The Group's workforce decreased by 1,155 employees, mainly reflecting the positive balance between new hires and terminations (1,998 employees), more than offset by changes in the consolidation scope (-3,153 employees), essentially attributable to:

- the acquisition of Enel Hydro Appennino Centrale Srl in Italy;
- the acquisition of Melita Italia Srl in Italy;
- the sale of PayTipper SpA in Italy;
- the sale of CityPoste Payment SpA in Italy;
- the sale of PayTipper Network Srl in Italy;
- the sale of FlagPay Srl in Italy;
- the sale of Gridspertise Srl in Italy;
- the sale of Central Geradora Termelétrica Fortaleza SA, Celg Distribuição SA - Celg-D and Gridspertise Latam SA in Brazil;
- the sale of PJSC Enel Russia and subsidiaries in Russia;
- the sale of Enel Transmisión SA in Chile.

The increase in "Wages and salaries" substantially reflects the cost incurred as a result of new hiring at companies in Italy, the United States, Brazil, Spain and Argentina.

The €13 million decrease in in "Post-employment and other long-term benefits" is mainly attributable to Spain.

The decrease in "Early retirement incentives connected with restructuring agreements" is mainly attributable to an increase in costs in Italy in 2021 as a result of the signing of a new framework agreement in application of Article 4, paragraphs 1-7-*ter*, of Law 92/2012, for which provisions of €557 million were recognized for restructuring and digitalization. In 2022 the provision was adjusted according to the developments of the period and changes underlying the actuarial assumptions.

The table below shows the average number of employees by category, along with a comparison with the previous year, and the headcount as of December 31, 2022.

No.	Average[1]		Headcount[1]
	2022	2021	at Dec. 31, 2022
Senior managers	1,389	1,386	1,366
Middle managers	12,528	11,797	12,645
Office staff	35,676	35,449	34,634
Blue collar	16,883	17,344	16,479
Total	**66,476**	**65,976**	**65,124**

(1) For companies consolidated on a proportionate basis, the headcount corresponds to Enel's percentage share of the total.

12.d Net impairment/(reversals) on trade receivables and other receivables – *€1,278 million*

IPL ICF

Millions of euro				
	2022	2021[1]	Change	
Impairment losses on trade receivables	1,375	1,285	90	7.0%
Impairment losses on other financial assets	169	93	76	81.7%
Total impairment losses on trade receivables and other financial assets	**1,544**	**1,378**	**166**	**12.0%**
Impairment gains on trade receivables	(265)	(202)	(63)	-31.2%
Impairment gains on other financial assets	(1)	(1)	-	-
Total impairment gains on trade receivables and other financial assets	**(266)**	**(203)**	**(63)**	**-31.0%**
NET IMPAIRMENT/(REVERSALS) ON TRADE RECEIVABLES AND OTHER FINANCIAL ASSETS	**1,278**	**1,175**	**103**	**8.8%**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

The item, equal to €1,278 million, includes impairment losses and reversals on trade receivables and other financial assets. The net impairment losses on trade receivables increased by a total of €90 million, essentially reflecting the effect of the increase in trade receivables which led to an increase in the provision for bad debts in order to guarantee adequate coverage of the new receivable.

12.e Depreciation, amortization and other impairment losses – *€7,447 million*

IPL ICF

Millions of euro				
	2022	2021[1]	Change	
Property, plant and equipment	4,472	4,259	213	5.0%
Investment property	2	3	(1)	-33.3%
Intangible assets	1,612	1,330	282	21.2%
Other impairment losses	1,414	2,917	(1,503)	-51.5%
Other reversals of impairment losses	(53)	(2)	(51)	-
Total	**7,447**	**8,507**	**(1,060)**	**-12.5%**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

The decrease in "Depreciation, amortization and other impairment losses" in 2022 essentially reflected:

- the effect of impairment losses recognized in 2021 on certain plants or CGUs in Italy (€989 million), Spain (€1,488 million), Mexico (€155 million), Chile (€32 million) and Australia (€30 million);

- the effect of the impairment losses recognized in 2021 in Costa Rica (€126 million) on the hydroelectric plant operated under a concession arrangement by PH Chucas.

These effects were partially offset by:

- an increase in depreciation and amortization in Italy due to an acceleration of the depreciation rates for first-generation electronic meters (1G) in order to reflect the planned installation schedule for 2G meters provided for in the Open Meter plan;
- the depreciation of tangible assets due to new investments made in recent years in the renewable energy sector in South America, North America and Spain;
- the value adjustments of the net assets of Enel Generación Costanera SA (€174 million) and Central Dock Sud SA (€116 million) in Argentina, and Celg Distribuição SA - Celg-D (€827 million) and CGT Fortaleza in Brazil (€73 million).

12.f Other operating costs – *€4,685 million*

Millions of euro				
	2022	**2021[1]**	**Change**	
System charges - emissions allowances	2,216	41	2,175	-
System charges - energy efficiency certificates	182	239	(57)	-23.8%
System charges - purchases of green certificates	-	-	-	-
System charges - guarantees of origin	112	26	86	-
Losses on disposal of property, plant and equipment, and intangible assets	166	75	91	-
Taxes and duties	1,107	1,099	8	0.7%
Other	902	488	414	84.8%
Total	**4,685**	**1,968**	**2,717**	**-**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Other operating costs increased by €2,717 million compared with the previous year, mainly reflecting:

- the increase in environmental compliance charges in Italy and Spain (€2,178 million) reflecting the increase in the price of CO_2 and of thermal generation mainly attributable to the need to compensate for low water levels during the period;
- the capital losses recognized for the sale of Celg Distribuição SA - Celg-D (Enel Goiás) (€208 million) and CGT Fortaleza in Brazil (€135 million).

12.g Capitalized costs – *€(3,415) million*

Millions of euro				
	2022	**2021[1]**	**Change**	
Personnel	(1,184)	(998)	(186)	-18.6%
Materials	(1,258)	(1,079)	(179)	-16.6%
Other	(973)	(964)	(9)	-0.9%
Total	**(3,415)**	**(3,041)**	**(374)**	**-12.3%**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Capitalized costs increased by €374 million, mainly reflecting:

- greater investment in renewable plants in Italy, Spain and North America;
- greater investment in distribution lines in Latin America;
- greater investment in the distribution sector in Italy, for an increase in new customer connections and an increase in investment in service quality (e-grid and DSO 4.0 projects).

13. Net results from commodity contracts – *€2,365 million*

Millions of euro	2022	2021[1]	Change	
Commodity derivatives:				
- income from settled derivatives	23,124	11,456	11,668	-
- expense from settled derivatives	18,929	9,331	9,598	-
Net income/(expense) from settled commodity derivatives:	**4,195**	**2,125**	**2,070**	**97.4%**
- income from outstanding derivatives	(2,479)	4,572	(7,051)	-
- expense from outstanding derivatives	223	2,266	(2,043)	-90.2%
Net income/(expense) from outstanding commodity derivatives	**(2,702)**	**2,306**	**(5,008)**	**-**
Outstanding contracts for energy commodities with physical settlement:				
- results from outstanding contracts to sell energy commodities with physical settlement	5,182	(18,386)	23,568	-
- results from outstanding contracts to purchase energy commodities with physical settlement	(4,310)	16,478	(20,788)	-
Net results from outstanding contracts for energy commodities with physical settlement	**872**	**(1,908)**	**2,780**	**-**
NET RESULTS FROM COMMODITY CONTRACTS	**2,365**	**2,523**	**(158)**	**-6.3%**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Net results from commodity contracts showed net income of €2,365 million in 2022 (net income of €2,523 million in 2021), and break down as follows:

- net income from commodity derivatives totaling €1,493 million (net income of €4,431 million in 2021), including derivatives designated as cash flow hedges and derivatives measured at fair value through profit or loss. More specifically, net income from derivatives settled in the period amounted to €4,195 million (net income of €2,125 million in 2021) and net expense from the fair value measurement of outstanding derivatives came to €2,702 million (net income of €2,306 million in 2021);
- net income from the fair value measurement through profit or loss of energy commodity contracts with physical settlement still outstanding at the reporting date amounting to €872 million (net expense of €1,908 million in 2021).

For more information on derivatives, please see note 51 "Derivatives and hedge accounting".

14. Net financial income/(expense) from derivatives – *€(296) million*

Millions of euro	2022	2021[1]	Change	
Income:				
- income from derivatives designated as hedging derivatives	1,442	2,097	(655)	-31.2%
- income from derivatives at fair value through profit or loss	1,676	620	1,056	-
Total income	**3,118**	**2,717**	**401**	**14.8%**
Expense:				
- expense from derivatives designated as hedging derivatives	(1,744)	(599)	(1,145)	-
- expense from derivatives at fair value through profit or loss	(1,670)	(657)	(1,013)	-
Total expense	**(3,414)**	**(1,256)**	**(2,158)**	**-**
NET FINANCIAL INCOME/(EXPENSE) FROM DERIVATIVES	**(296)**	**1,461**	**(1,757)**	**-**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

In 2022, net expense from derivatives on interest and exchange rates amounted to €296 million (net income of €1,461 million in 2021) and break down as follows:

- net expense from derivatives designated as hedging derivatives in the amount of €302 million (net income of €1,498 million in 2021) mainly in regard of cash flow hedges;
- net income from derivatives at fair value through profit or loss in the amount of €6 million (net expense of €37 million in 2021).

The net balances recognized in 2022 and 2021 on both hedging derivatives and those at fair value through profit or loss mainly referred to the hedging of exchange rate risk. For more information on derivatives, see note 51 "Derivatives and hedge accounting".

15. Net other financial income/(expense) – *€(2,160) million*

PL CF

Other financial income

Millions of euro

	2022	2021[1]	Change	
Interest income from financial assets (current and non-current):				
- interest income at effective rate on non-current securities and financial assets	158	117	41	35.0%
- interest income at effective rate on current financial investments	201	80	121	-
Total interest income at the effective interest rate	**359**	**197**	**162**	**82.2%**
Financial income on non-current financial assets designated at fair value through profit or loss	**-**	**-**	**-**	**-**
Exchange gains	**2,289**	**1,212**	**1,077**	**88.9%**
Income on equity investments	**1**	**6**	**(5)**	**-83.3%**
Income from hyperinflation	**1,739**	**824**	**915**	**-**
Other income	**781**	**447**	**334**	**74.7%**
TOTAL OTHER FINANCIAL INCOME	**5,169**	**2,686**	**2,483**	**92.4%**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Other financial income amounted to €5,169 million, an increase of €2,483 million compared with the previous year. The increase mainly reflects the following factors:

- an increase in income from exchange gains (€1,077 million), mainly relating to Enel Finance International (€728 million) and Enel Américas (€222 million);
- an increase in income from hyperinflation (€915 million), recognized by the Argentine companies as a result of the application of IAS 29 on financial reporting in hyperinflationary economies; for more information, see note 4 of these consolidated financial statements at 31 December, 2022;
- an increase in interest income at the effective rate (€162 million), mainly relating to short-term financial investments;
- an increase in other income mainly deriving from the value adjustment of hedged liabilities in fair value hedge relationships (€123 million).

Other financial expense

Millions of euro

	2022	2021[1]	Change	
Interest expense on financial debt (current and non-current):				
- interest on bank borrowings	509	322	187	58.1%
- interest expense on bonds	1,884	1,877	7	0.4%
- interest expense on other borrowings	235	134	101	75.4%
Total interest expense	**2,628**	**2,333**	**295**	**12.6%**
Financial expense on debt management transactions	**-**	**702**	**(702)**	**-**
Exchange losses	**2,179**	**2,551**	**(372)**	**-14.6%**
Adjustment to post-employment and other employee benefits	**145**	**105**	**40**	**38.1%**
Adjustment to other provisions	**201**	**126**	**75**	**59.5%**
Expense from equity investments	**-**	**-**	**-**	**-**
Expense from hyperinflation	**1,449**	**804**	**645**	**80.2%**
Other expenses	**727**	**270**	**457**	**-**
TOTAL OTHER FINANCIAL EXPENSE	**7,329**	**6,891**	**438**	**6.4%**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Other financial expense amounted to €7,329 million, an overall increase of €438 million compared with 2021, essentially reflecting the following factors:

- an increase in expense from hyperinflation of €645 million, recognized by the Argentine companies as a result of the application of IAS 29 on financial reporting in hyperinflationary economies; for more information, see note 4 of these consolidated financial statements at 31 December 2022;
- an increase in interest expense of €295 million, mainly attributable to the increase in interest rates due to the restrictive monetary policies implemented to face growing inflationary pressures;
- an increase in other expenses, in the amount of €63 million, in Argentina, mainly attributable to the increase in financial expense in respect of CAMMESA (€65 million), in Brazil, for higher costs deriving from the PIS/COFINS dispute, as well as €43 million at Enel Produzione for greater financial expense connected with the impairment loss on the receivable in respect of the sale of Slovak Power Holding.

These effects were substantially offset by the reduction in financial expense associated with the recognition of expense on debt management operations (€702 million) in 2021.

16. Share of profit/(loss) of equity-accounted investments – *€4 million*

IPL
ICF

Millions of euro

	2022	2021	Change	
Share of profit of associates	145	624	(479)	-76.8%
Share of loss of associates	(141)	(53)	(88)	-
Total	**4**	**571**	**(567)**	**-99.3%**

The share of profit/(loss) of equity-accounted investments in 2022 came to €4 million, a decrease of €567 million compared with the previous year.

The change was essentially due to a decrease in the share of profit/(loss) pertaining to the Group of Slovak Power Holding (€587 million), heavily penalized by the sharp rise in electricity prices on the spot market, slightly offset by the increase in the share of profit/(loss) of the Spanish companies (€20 million) and Rusenergosbyt (€19 million).

17. Income taxes – *€3,523 million*

IPL ICF

Millions of euro	2022	2021[(1)]	Change	
Current taxes	3,025	2,007	1,018	50.7%
Adjustments for income taxes relating to prior years	(233)	145	(378)	-
Total current taxes	**2,792**	**2,152**	**640**	**29.7%**
Deferred tax expense	342	304	38	12.5%
Deferred tax income	389	(836)	1,225	-
TOTAL	**3,523**	**1,620**	**1,903**	**-**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

The tax rate for 2022 came to 40%, compared with 30% in 2021. The increase essentially reflects the following factors:

- the change in the tax impact of impairment losses and gains and losses on mergers and acquisitions in the period compared with the previous year;
- higher costs incurred in Italy for the extraordinary tax funding program to shield users from higher energy costs envisaged under Law 51/2022 (about €121 million) and the solidarity tax provided for by Law 197/2022 (about €599 million);
- the effect of foreign tax rates exceeding the theoretical Italian rate;
- a decrease in the tax credit to eliminate dual taxation of dividends at Enel Iberia (€60 million);
- the tax effect of the application of hyperinflation accounting in Argentina (€30 million).

These adverse factors were partly offset by:

- the tax impact of the disposal of the interest in Ufinet, Gridspertise and Mooney (€190 million);
- the tax impact of the regime di Patent Box in Italy (€65 million);
- deferred tax assets recognized on the carve-out of Enel X Way in North America (€60 million).

For more information on changes in deferred tax assets and liabilities, see note 25.

The following table provides a reconciliation of the theoretical tax rate and the effective tax rate.

Millions of euro	2022		2021[(1)]	
Pre-tax profit	**8,741**		**5,378**	
Theoretical taxes	2,098	24%	1,291	24%
Change in tax effect on impairment losses, capital gains and negative goodwill	399		(229)	
Net effect on deferred taxation recognized with timing mismatch	-		70	
Tax reforms in Argentina and Colombia	-		166	
Adjustment of tax credit of Enel Iberia	-		211	
Preferential tax treatment of Open Fiber capital gain	-		(401)	
Preferential tax treatment of Ufinet, Gridspertise and Mooney capital gain	(190)		-	
Deferred tax assets recognized on the carve-out of Enel X Way	(60)		-	
Patent Box in Italy	(65)		-	
Deferred tax assets not recognized on tax losses	-		75	
Sundry tax effects of hyperinflation accounting in Argentina	30		49	
Tax effect for non-deductible Matimba capital loss	20		-	
Reversal of tax credit for Astrid operation	-		25	
Tax effect of provisions for non-deductible risks in Spain	30		-	
IRAP	260		276	
Extraordinary energy cost tax	121		-	
Solidarity tax	599		-	
Other differences, effect of different tax rates abroad compared with the theoretical rate in Italy, and other minor items	281		81	
Effect of restatement of comparative figures of discontinued operations	-		6	
Total	**3,523**		**1,620**	

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

18. Basic and diluted earnings per share

Both of these indicators are calculated on the basis of the average number of ordinary shares for the year, equal to 10,166,679,946, adjusted by the average number of treasury shares held.

The number of treasury shares, with a par value of €1 each, held at December 31, 2022 was equal to 7,153,795 (4,889,152 at December 31, 2021).

Millions of euro		
	2022	**2021**
Profit for the year attributable to owners of the Parent (basic)	**1,682**	**3,189**
of which from:		
- continuing operations	*3,637*	*3,097*
- discontinued operations	*(1,955)*	*92*
Effect of preference rights on dividends (e.g., preference shares)	-	-
Dividends on equity instruments (e.g., hybrid bonds)	(123)	(71)
Other	-	-
Profit for the year attributable to ordinary owners of the Parent (basic)	**1,559**	**3,118**
of which from:		
- continuing operations	*3,514*	*3,026*
- discontinued operations	*(1,955)*	*92*
Number of shares (units)		
Number of ordinary shares issued at 1 January	10,166,679,946	10,166,679,946
Effect of treasury shares held	(6,287,027)	(4,111,452)
Effect of share options exercised	145,119	-
Other	-	-
Weighted average number of ordinary shares outstanding (total) for basic earnings per share	**10,160,538,038**	**10,162,568,494**
Profit for the year attributable to ordinary owners of the Parent (basic)	**1,559**	**3,118**
Effect of dilution:		
- interest on convertible bonds	-	-
- other	-	-
Profit for the year attributable to ordinary owners of the Parent (diluted)	**1,559**	**3,118**
of which:		
- continuing operations	*3,514*	*3,026*
- discontinued operations	*(1,955)*	*92*
Number of shares (units)		
Weighted average number of ordinary shares outstanding (total) for basic earnings per share	**10,160,538,038**	**10,162,568,494**
Effect of conversion of convertible notes	-	-
Other	-	-
Weighted average number of ordinary shares outstanding (total) for diluted earnings per share	**10,160,538,038**	**10,162,568,494**
Basic earnings per share		
Basic earnings per share	0.15	0.31
Basic earnings per share from continuing operations	0.35	0.30
Basic earnings per share from discontinued operations	(0.20)	0.01
Diluted earnings per share		
Diluted earnings per share	0.15	0.31
Diluted earnings per share from continuing operations	0.35	0.30
Diluted earnings per share from discontinued operations	(0.20)	0.01

Information on the statement of consolidated financial position

19. Property, plant and equipment – *€88,521 million*

IBS ICF

The breakdown of and changes in property, plant and equipment for 2022 is given below.

Millions of euro	Land	Buildings	Plant and machinery	Industrial and commercial equipment	Other assets	Leased assets	Leasehold improvements	Assets under construction and advances	Total
Cost net of accumulated impairment losses	643	11,115	163,443	547	1,551	3,722	482	11,819	193,322
Accumulated depreciation	-	5,650	100,069	396	1,188	1,093	354	-	108,750
Balance at Dec. 31, 2021	**643**	**5,465**	**63,374**	**151**	**363**	**2,629**	**128**	**11,819**	**84,572**
Capital expenditure	3	43	2,125	32	115	-	7	8,905	11,230
Assets entering service	27	804	5,078	7	22	27	49	(6,014)	-
Exchange differences	(2)	163	322	1	(20)	86	1	133	684
Change in the consolidation scope	4	46	700	-	2	(9)	-	(122)	621
Disposals	(1)	(12)	(89)	(1)	(8)	(96)	-	(63)	(270)
Depreciation	-	(215)	(3,893)	(24)	(90)	(336)	(43)	-	(4,601)
Impairment losses	1	-	(153)	-	(1)	-	-	(49)	(202)
Impairment gains	(1)	-	47	-	-	-	-	-	46
Other changes	1	23	714	2	38	552	(3)	345	1,672
Reclassifications from/to assets held for sale	(46)	(430)	(3,540)	(5)	(129)	(91)	-	(990)	(5,231)
Total changes	**(14)**	**422**	**1,311**	**12**	**(71)**	**133**	**11**	**2,145**	**3,949**
Cost net of accumulated impairment losses	629	11,606	165,370	572	1,439	4,021	547	13,964	198,148
Accumulated depreciation	-	5,719	100,685	409	1,147	1,259	408	-	109,627
Balance at Dec. 31, 2022	**629**	**5,887**	**64,685**	**163**	**292**	**2,762**	**139**	**13,964**	**88,521**

Plant and machinery included assets to be relinquished free of charge with a carrying amount of €8,409 million (€7,946 million at December 31, 2021), largely regarding power plants in Iberia and Latin America amounting to €3,456 million (€3,672 million at December 31, 2021), and the electricity distribution grid in Latin America totaling €4,228 million (€3,506 million at December 31, 2021).

For more information on "Leased assets", please see note 21 below.

The types of capital expenditure made during 2022 are summarized below by class of asset. These expenditures, totaling €13,329 million, increased by €1,128 million on 2021, increases that were particularly concentrated in solar power plants.

Millions of euro	2022	2021	Change	
Power plants:				
- thermal	661	550	111	20.2%
- hydroelectric	435	402	33	8.2%
- geothermal	121	120	1	0.8%
- nuclear	134	157	(23)	-14.6%
- alternative energy sources	5,189	4,947	242	4.9%
Total power plants	**6,540**	**6,176**	**364**	**5.9%**
Electricity distribution grids[(1)]	4,483	4,389	94	2.1%
Enel X (e-City, e-Industries, e-Home)	373	285	88	30.9%
Enel X Way (e-Mobility)	113	82	31	37.8%
Retail customers	721	643	78	12.1%
Other	1,099	626	473	75.6%
TOTAL[(2)]	**13,329**	**12,201**	**1,128**	**9.2%**

(1) The figure for 2022 does not include €1,174 million in respect of infrastructure investments within the scope of IFRIC 12 (€907 million in 2021).
(2) The figure for 2022 includes €156 million regarding units classified as held for sale (€111 million in 2021).

The Enel Group, in line with the Paris Agreement on CO_2 emissions reductions and guided by energy efficiency and energy transition objectives, has invested above all in generation plants that exploit alternative energy sources. Capital expenditure on generation plants mainly regard solar plants in the United States, Italy, Spain, Colombia, Peru, Chile, Brazil, South Africa and Australia.
In order to respond to ever more variable climate developments and, therefore, enhance the resilience of grids, the Group continued to invest in the distribution business line (€4,483 million). The €94 million increase is mainly attributable to greater investments in Italy, Brazil and Peru, mainly for corrective maintenance and grid reliability.
Capital expenditure of Enel X increased mainly in Italy, in the e-City and e-Home businesses, in North America and Australia, reflecting higher industrial capex of the Battery Energy Storage business for the implementation of new projects, in Brazil due to higher expenditure in the Smart Lighting, e-Home and Distributed Energy businesses (launch of new PV-Photovoltaic projects), in Peru in the Public Lighting business, in Colombia with the launch of new projects in the Distributed Energy business (PV-Photovoltaic) and in Spain, in the e-Home business.
The growth of capital expenditure of Enel X Way refers to deployment of new charging points for electric mobility mainly in Spain.
The change in "Other" mainly includes investments in the period in Battery Energy Storage Systems (BESS) in Italy and North America.

Exchange gains amounted to €684 million.

The "Change in the consolidation scope" in 2022 mainly refers to the acquisition of ERG Hydro Srl (now merged in Enel Produzione) in Italy and the sale of Thar Surya 1 Private Limited in India.

"Impairment losses" amounted to €202 million and are mainly attributable to the value adjustment of the Spanish generation plants of Baleares, Canarias, Ceuta Melilla and Terminal Portuario de Los Barrios, and in Colombia to Sociedad Portuaria Central Cartagena SA, controlled by Enel Colombia, which will terminate commercial operations from November 2023. For that reason, at December 31, 2022, the carrying amount of "Plant and machinery" was written down.
This item was also affected by impairment losses on Enel Produzione's assets of coal-fired power plants in Torrevaldaliga Nord, Fusina and Brindisi Sud.

"Reclassifications from/to assets held for sale" refer mainly to all the assets of the Romanian, Greek companies and of Enel Russia, which was sold during the 4th Quarter of 2022. It also refers to the reclassification to assets held for sale of Enel Generación Costanera SA and Central Dock Sud SA in Argentina, 3SUN Srl in Italy, Avikiran Solar India Private Limited in India and Bungala in Australia.

"Other changes" include the provision for plant retiring and site restoration costs in the amount of a negative €302 million, mainly in Spain and North America, new leases of €585 million, impairment losses on the property, plant and equipment of the Argentine companies operating in a hyperinflationary economy in the amount of €1,081 million and the effect of capitalizing interest on loans specifically dedicated to capital expenditure on property, plant and equipment of €260 million (€182 million in 2021) breaking down as follows.

Millions of euro						
	2022	**Rate %**	**2021**	**Rate %**	**Change**	
EGP North America	83	0.5%	17	0.2%	66	-
EGP México	14	7.0%	10	4.3%	4	40.0%
EGP South Africa	22	6.3%	61	6.3%	(39)	-63.9%
Enel Américas Group	50	3.2%	23	3.7%	27	-
Enel Chile Group	91	6.1%	80	7.0%	11	13.8%
Endesa Group	5	1.4%	4	1.5%	1	25.0%
Enel Russia Group	-		18	8.5%	(18)	-
EGP India Group	7	9.9%	8	8.3%	(1)	-12.5%
EGP Australia Group	-		1	0.2%	(1)	-
Enel Produzione	1	2.1%	2	2.1%	(1)	-50.0%
C&C Uno Energy Srl	1	3.1%	-		1	-
Nuove Energie	2	1.6%	1	0.5%	1	-
Enel Green Power Italia	6	3.6%	5	3.3%	1	20.0%
Enel Finance International	-		12	1.8%	(12)	-
Total[(1)]	**282**		**242**		**40**	**16.5%**

(1) The total for 2022 also includes €22 million pertaining to assets held for sale (the total for 2021 includes -€5 million in capitalized financial expense in respect of intangible assets, €4 million in other non-current assets and €61 million pertaining to assets held for sale).

At December 31, 2022, contractual commitments to purchase property, plant and equipment amounted to €2,926 million.

20. Infrastructure within the scope of "IFRIC 12 - Service concession arrangements"

Service concession arrangements, which are recognized in accordance with IFRIC 12, regard certain infrastructure serving concessions for electricity distribution in Brazil and Costa Rica.

The following table summarizes the salient details of those concessions.

Millions of euro

	Grantor	Activity	Country	Concession period	Concession period remaining	Renewal option	Amount recognized among contract assets at Dec. 31, 2022	Amount recognized among financial assets at Dec. 31, 2022	Amount recognized among intangible assets at Dec. 31, 2022
Enel Distribuição Rio de Janeiro	Brazilian government	Electricity distribution	Brazil	1996-2026	4 years	Yes	116	1,138	453
Enel Distribuição Ceará	Brazilian government	Electricity distribution	Brazil	1998-2028	6 years	Yes	86	876	459
Enel Green Power Mourão	Brazilian government	Electricity generation	Brazil	2016-2046	24 years	No	-	5	-
Enel Green Power Paranapanema	Brazilian government	Electricity generation	Brazil	2016-2046	24 years	No	-	26	-
Enel Green Power Volta Grande	Brazilian government	Electricity generation	Brazil	2017-2047	25 years	No	-	276	-
Enel Distribuição São Paulo	Brazilian government	Electricity distribution	Brazil	1998-2028	6 years	Yes	290	1,318	544
PH Chucas	Costa Rican Electricity Institute	Hydroelectric plant	Costa Rica	2012-2031	9 years	No	-	103	44
Total							**492**	**3,742**	**1,500**

The assets classified under financial assets are measured at fair value at the end of the concessions. For more information, see note 52 "Assets and liabilities measured at fair value".

21. Leases

The table below shows changes in right-of-use assets in 2022.

Millions of euro	Leased land	Leased buildings	Leased plants	Other leased assets	Total
Total at Dec. 31, 2021	**1,147**	**517**	**441**	**524**	**2,629**
Increases	289	172	(1)	138	598
Exchange differences	63	6	11	6	86
Depreciation	(48)	(120)	(36)	(132)	(336)
Other changes	(139)	(62)	9	(23)	(215)
Total at Dec. 31, 2022	**1,312**	**513**	**424**	**513**	**2,762**

Lease liabilities and changes during the year are shown in the table below.

Millions of euro	
Total at Dec. 31, 2021	**2,547**
Increases	445
Payments	(310)
Other changes	(10)
Total at Dec. 31, 2022	**2,672**
of which medium to long term	*2,409*
of which short term	*263*

Millions of euro	
	2022
Depreciation of right-of-use assets	327
Interest expense on lease liabilities	96
Expense relating to short-term leases (included in costs for services and other materials)	59
Expense relating to leases of low-value assets (included in costs for services and other materials)	-
Variable lease payments (included in costs for services and other materials)	32
Total	**514**

22. Investment property – *€94 million*

Millions of euro	
Cost net of accumulated impairment losses	129
Accumulated depreciation	38
Balance at Dec. 31, 2021	**91**
Exchange differences	1
Depreciation	(2)
Impairment losses	-
Other changes	4
Total changes	**3**
Cost net of accumulated impairment losses	116
Accumulated depreciation	22
Balance at Dec. 31, 2022	**94**

Investment property at December 31, 2022 amounted to €94 million, an increase of €3 million on 2021.

The Group's investment property consists of properties in Italy, Spain, Brazil and Chile, which are free of restrictions on their sale or the remittance of income and proceeds of disposal. In addition, the Group has no contractual obligations to purchase, construct or develop investment property or for repairs, maintenance or enhancements.

The change in 2021 was mainly due to impairment losses recognized on a number of assets in Spain and accumulated depreciation.

For more information on the valuation of investment property, see notes 52 "Assets and liabilities measured at fair value", and 52.2 "Assets not measured at fair value in the statement of financial position".

23. Intangible assets – *€17,520 million*

A breakdown of and changes in intangible assets for 2022 are shown below.

Millions of euro	Development expenditure	Industrial patents & intellectual property rights	Concessions, licenses, trademarks and similar rights	Service concession arrangements	Other	Leasehold improvements	Assets under development and advances	Contract costs	Total
Cost net of accumulated impairment losses	43	3,512	12,842	5,781	5,092	-	1,760	2,063	31,093
Accumulated amortization	23	2,771	1,721	3,683	3,708	-	-	1,117	13,023
Balance at Dec. 31, 2021	**20**	**741**	**11,121**	**2,098**	**1,384**	**-**	**1,760**	**946**	**18,070**
Capital expenditure	49	82	151	-	131	-	784	746	1,943
Assets entering service	19	263	14	-	396	-	(694)	2	-
Exchange differences	-	(7)	250	234	14	-	(3)	-	488
Change in the consolidation scope	-	1	171	-	-	-	2	-	174
Disposals	-	(1)	-	(15)	(1)	-	(50)	-	(67)
Amortization	(4)	(326)	(216)	(381)	(356)	-	-	(375)	(1,658)
Impairment losses	-	-	(1)	-	(6)	-	(6)	-	(13)
Impairment gains	-	-	-	-	-	-	-	-	-
Other changes	3	(23)	10	481	44	-	42	11	568
Reclassifications from/to assets held for sale	(8)	(67)	(705)	(917)	(174)	-	(88)	(26)	(1,985)
Total changes	**59**	**(78)**	**(326)**	**(598)**	**48**	**-**	**(13)**	**358**	**(550)**
Cost net of accumulated impairment losses	101	3,697	12,646	5,261	5,279	-	1,747	2,831	31,562
Accumulated amortization	22	3,034	1,851	3,761	3,847	-	-	1,527	14,042
Balance at Dec. 31, 2022	**79**	**663**	**10,795**	**1,500**	**1,432**	**-**	**1,747**	**1,304**	**17,520**

Enel's intellectual property (IP) portfolio comprises a set of critical information for sustainable growth. The Open Innovability® ecosystem generates innovation through the creation and sharing of internal and external solutions that give life to a stream of inventions that are protected and monetized with the support of intellectual property protection mechanisms.

At December 31, 2022 the Group had applied for 883 patents for industrial inventions, in 163 patent families; of these, 711 have been granted and 172 are pending. The portfolio ensures protection in all the markets in which the Group is present. Enel's portfolio also includes 23 utility models and 194 design registrations. Together with patents, utility models and designs, IP rights also include industrial secrets of both a technical and commercial nature which are constantly codified and maintained in line with the provisions of the Trade Secrets Management procedure. The Group also owns 2,027 trademarks, of which 1,642 have already been registered with 385 applications pending.

Enel has consolidated the processes for managing the generation and exploitation of intellectual property rights within the Intellectual Property Management and Trade Secrets Management organizational procedures. Both procedures look at human capital as an essential element in the creation of IP and seek to encourage employee participation in the inventive process, emphasizing the strategic importance of all inventions.

During 2022, the activity of coding and protection of intellectual property continued in all global business lines. More specifically:

- Enel X Global Retail focused its activity on strategic platforms, coding copyrights on the Big Data Platform, a container of strategic data for all Enel X and X Customer business units, and global management system for Enel X customers. With regard to the circular economy, Enel X has protected its circularity schemes under copyright law together with the related scores and operating mechanisms. In the field of telemedicine, a multiple design has been registered in the European Union for the graphic interfaces of the "Smart Axistance eWell" app, which offers users a complete wellness package.
- Enel Green Power and Thermal Generation report the following developments for the year:
  - in the photovoltaic sector, (i) a patent application for an industrial invention and a design application for a solution that automates the process of installing photovoltaic panels in the field, reducing installation times and costs and increasing operator safety; (ii) a patent application jointly owned with the Commissar-

iat à l'Énergie Atomique et aux Énergies Alternatives (CEA) concerning a system for optimizing the removal and automatic insertion of the wafer bar holder of the cassette used to process wafers in fume cupboards. Furthermore, the generation and protection of the technological know-how necessary for the Gigafactory project continues at the 3SUN factory, mainly in the form of trade secrets;
  - in hydroelectric generation, a patent application for a utility model for a robotic solution that facilitates plant control, allowing the inspection of difficult-to-access locations, such as hydroelectric spirals, distributor vanes or small-diameter hydroelectric pipelines.
- Enel Grids filed two patent applications for inventions in 2022: one in the field of asset recognition and anomaly detection for grids and grid events (Project ODIN) and the other in the field of safety devices for workers working at height. We also note (i) the registration of a design for a new sustainable road cab, which will be implemented using recycled materials to reduce the environmental impact and (ii) the filing of a patent application for a utility model in the safety field, consisting of a method for the delimitation of road construction sites. Also during the year, Gridspertise consolidated its IP portfolio by filing a patent application relating to the Quantum Edge - Qed® device, which exploits edge computing to digitalize the physical components of secondary substations, reduces installation, training and operating and maintenance costs and increases network reliability.
- Global e-Mobility has protected the JuiceBox DC and JuiceBox 4.0 smart home charging devices respectively using: (i) an international design registered in the European Union, the United Kingdom and the United States and (ii) an international design registered in Canada, Mexico and the United States. Intellectual property protection for electric vehicle charging stations has also been extended to the registration in the European Union and in the United States of the designs of the JuiceMedia 2.0 and JuiceMod products.
- Enel Global Services filed a patent application in Italy for an industrial invention on the innovation management method, also protected as the trademark ENEL OOPS...! INNOVATION®. This method is based on the improvement of industrial processes using Open Innovability® tools.

More generally, the Group continues to invest resources in the development of solutions with a high IP density, which is mainly expressed in the forms of copyright protection and trade secrets for databases and forecasting algorithms for the electricity and gas markets, advanced quantitative models that use scenario data to evaluate the impact of climate change on specific assets/production activities. In particular, this activity includes development models designed to: (i) characterize the ability of an asset to "resist" the possible effects of climate change; (ii) quantify the probability that an event or a combination of climate events will damage a plant; and (iii) provide an index of "weakness" for the asset, including in distributed form, with a specific technical approach to prioritize actions/fields for improvement.

The following table reports service concession arrangements that do not fall within the scope of IFRIC 12 and had a balance as at December 31, 2022.

Millions of euro

	Grantor	Activity	Country	Concession period	Concession period remaining	Renewal option	at Dec. 31, 2022	Initial fair value
Endesa Distribución Eléctrica	-	Electricity distribution	Spain	Indefinite	Indefinite	-	5,678	5,673
Enel Colombia (formerly Codensa)	Republic of Colombia	Electricity distribution	Colombia	Indefinite	Indefinite	-	1,047	1,839
Enel Distribución Chile (formerly Chilectra)	Republic of Chile	Electricity distribution	Chile	Indefinite	Indefinite	-	1,331	1,667
Enel Distribución Perú (formerly Empresa de Distribución Eléctrica de Lima Norte)	Republic of Peru	Electricity distribution	Peru	Indefinite	Indefinite	-	584	548

Assets with an indefinite useful life amounted to €8,640 million (€8,633 million at December 31, 2021) essentially accounted for by concessions for distribution activities in Spain (€5,678 million), Colombia (€1,047 million), Chile (€1,331 million) and Peru (€584 million), for which there was no statutory or currently predictable expiration date.

On the basis of the forecasts developed, cash flows for each CGU, with which the various concessions are associated, were sufficient to recover the carrying amount. The change during the year was essentially attributable to changes in exchange rates. For more information on service concession arrangements, see note 20.

The change in the consolidation scope for 2022 mainly reflected the acquisition by Enel Produzione of ERG Hydro Srl (now merged in Enel Produzione) in Italy, with an increase in the value of hydroelectric concessions of €170 million.

Impairment losses amounted to €13 million in 2022, and mainly regarded projects for assets under development that management has decided to abandon. For more information, see note 12.e.

"Other changes" mainly reported the design costs connected with the acquisition of a number of Brazilian vehicle companies and impairment losses on intangible assets of Argentine companies operating in a hyperinflationary economy.

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24. Goodwill – *€13,742 million*

Millions of euro	at Dec. 31, 2021			Change in consol. scope	Exchange differences	Impairment losses	Offsetting cost with accum. impairment losses	Reclassifications from/to assets held for sale	Other changes	at Dec. 31, 2022		
	Cost	Cumulative impairment	Net carrying amount							Cost	Cumulative impairment	Net carrying amount
Iberian Peninsula	11,177	(2,392)	8,785	–	–	–	–		–	11,177	(2,392)	8,785
Chile	1,209	–	1,209	–	42	–	–	(61)	(42)	1,148	–	1,148
Argentina	275	(253)	22	–	(1)	–	–	–	–	274	(253)	21
Peru	566	–	566	–	4	–	–	–	1	571	–	571
Colombia	527	–	527	–	(9)	–	–	–	–	518	–	518
Brazil	1,303	–	1,303	–	95	–	–	(85)	–	1,313	–	1,313
Central America	25	–	25	–	2	–	–	–	(1)	26	–	26
Mexico	18	(18)	–	–	–	–	–	–	–	–	–	–
Enel Green Power North America	70	–	70	–	–	–	–	–	–	70	–	70
Enel X North America	199	–	199	–	13	–	–	–	(70)	142	–	142
Enel X Way North America	–	–	–	–	–	–	–		70	70	–	70
Enel X Asia Pacific	84	–	84	–	–	–	–	–	–	84	–	84
Enel X Rest of Europe[(1)]	46	(3)	43	–	–	–	–	–	–	43	–	43
Enel X Italy	–	–	–	–	–	–	–	–	–	–	–	–
Market Italy[(2)]	580	–	580	1	–	–	–	–	–	581	–	581
Enel Green Power Italy	21	–	21	–	–	–	–	–	–	21	–	21
Enel Produzione Italy	–	–	–	349	–	–	–	–	–	349	–	349
Romania	400	(13)	387	17	1	–	–	(404)	(1)	–	–	–
Total	**16,500**	**(2,679)**	**13,821**	**367**	**147**	**–**	**–**	**(550)**	**(43)**	**16,387**	**(2,645)**	**13,742**

(1) Includes Viva Labs.
(2) Includes Enel Energia.

Goodwill matrix at Dec. 31, 2022

Millions of euro	Thermal Generation and Trading	Enel Green Power	Enel Grids	End-user Markets	Enel X	Holding, Services and Other	Total
Enel Green Power Italy	-	21	-	-	-	-	21
Market Italy[1]	-	-	-	581	-	-	581
Enel Produzione Italy	-	349	-	-	-	-	349
Iberian Peninsula	-	1,190	5,788	1,807	-	-	8,785
Argentina	-	2	19	-	-	-	21
Brazil	-	478	835	-	-	-	1,313
Chile	-	996	152	-	-	-	1,148
Colombia	-	295	223	-	-	-	518
Peru	44	207	320	-	-	-	571
Central America	-	26	-	-	-	-	26
Enel Green Power North America	-	70	-	-	-	-	70
Enel X North America	-	-	-	-	142	-	142
Enel X Way North America	-	-	-	-	-	70	70
Enel X Asia Pacific	-	-	-	-	84	-	84
Enel X Rest of Europe[2]	-	-	-	-	43	-	43
Total	**44**	**3,634**	**7,337**	**2,388**	**269**	**70**	**13,742**

(1) Includes Enel Energia.
(2) Includes Viva Labs.

Goodwill matrix at Dec. 31, 2021

Millions of euro	Thermal Generation and Trading	Enel Green Power	Enel Grids	End-user Markets	Enel X	Holding, Services and Other	Total
Enel Green Power Italy	-	21	-	-	-	-	21
Market Italy[1]	-	-	-	580	-	-	580
Iberian Peninsula	-	1,190	5,788	1,807	-	-	8,785
Argentina	-	3	19	-	-	-	22
Brazil	-	423	880	-	-	-	1,303
Chile	-	996	213	-	-	-	1,209
Colombia	-	304	223	-	-	-	527
Peru	44	202	320	-	-	-	566
Central America	-	25	-	-	-	-	25
Romania	-	-	330	57	-	-	387
Enel Green Power North America	-	70	-	-	-	-	70
Enel X North America	-	-	-	-	199	-	199
Enel X Asia Pacific	-	-	-	-	84	-	84
Enel X Rest of Europe[2]	-	-	-	-	43	-	43
Total	**44**	**3,234**	**7,773**	**2,444**	**326**	**-**	**13,821**

(1) Includes Enel Energia.
(2) Includes Viva Labs.

The decrease of €79 million in goodwill was mainly attributable to "reclassifications from/to assets classified as held for sale" (-€550 million), regarding Romania (-€404 million) for classification as discontinued operations, Brazil (-€85 million) and Chile (-€61 million) for reclassification as assets held for sale of Celg Distribuição SA - Celg-D (Enel Goiás) and Enel Transmisión Chile, respectively (which were sold in 2022). The negative effect was partially offset by the increase in the consolidation scope mainly reflecting the acquisition of Enel Hydro Appennino Centrale Srl (€349 million) and "Exchange differences" (a positive €147 million) mainly regarding Brazil, Chile and the United States.

The criteria used to identify the cash generating units (CGUs) are based on revenue separation, which is considered the main criterion in view of the nature of our business, taking due account of the operational rules and regulations of the markets in which they operate and the corporate organization. For the purposes of impairment testing of goodwill, the CGUs are grouped on the basis of expected synergies, consistent with management's strategic and operational vision, within the operating segments identified for segment reporting purposes.

Note also that in 2022 the existing CGUs underwent extensive analysis to assess the possible presence of significant changes pursuant to IAS 36, paragraph 72.
This analysis led to the modification of the existing CGUs only for Enel X Way, a new global business established from the spin-off of electric mobility operations from Enel X.
In particular, the new Enel X North America CGU was identified.

The recoverable amount of the goodwill recognized was estimated by calculating the value in use of the CGUs or groups of CGUs using discounted cash flow models, which involve estimating expected future cash flows and applying an appropriate discount rate, selected on the basis of market inputs such as risk-free rates, betas and market-risk premiums.
Cash flows were determined on the basis of the best information available at the time of the estimate, taking account of the specific risks of individual CGU or groups of CGUs, and drawn:

- for the explicit period, from the Business Plan approved by the Board of Directors of the Parent on November 21, 2022, containing forecasts for volumes, revenue, operating costs, capital expenditure, industrial and commercial organization and developments in the main macroeconomic variables (inflation, nominal interest rates and exchange rates) and commodity prices. The explicit period of cash flows considered in impairment testing was three years;
- for subsequent years, from assumptions concerning long-term developments in the main variables that determine cash flows, the average residual useful life of assets or the duration of the concessions.

More specifically, the terminal value is calculated based on the specific characteristics of the businesses related to the various CGUs or groups of CGUs subject to impairment testing:

- perpetuity, for the businesses of large-hydro (LH) power generation and of distribution, in which the licenses and public concessions are of a long-term nature and are easily renewable; as well as for the Enel X and Enel X Way businesses, as they feature the development of specific know-how that is sustainable over the long term;
- annuity, for CGUs or groups of CGUs that are predominantly characterized by retail business, for which the residual life is, therefore, essentially correlated with the average duration of the customer relationships; as well as for businesses of conventional thermal power generation (Generation and Trading). This method is also used for the renewable energy (Enel Green Power) businesses to take account of: (i) the value resulting from the remaining useful lives of the plants; and (ii) the residual value, in the event of plant decommissioning, associated with licensing rights, the competitiveness of the production facilities (in terms of natural resources), and network interconnectivity.

The nominal growth rate (g-rate) is equal to the long-term rate of growth in electricity and/or inflation (depending on the country and business involved) and in any case no higher than the average long-term growth rate of the reference market.

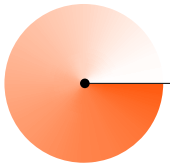
The Group therefore confirmed its strategic direction based on the trends associated with the energy transition. The use of capital has been focused on:

- decarbonization through the gradual development of generation assets that use renewable sources and the simultaneous exit from coal and gas-fired electricity production (by 2040);
- electrification of energy consumption, with the incentive of new products and services for end users and the simultaneous gradual exit from gas sales to end users (by 2040);
- digitization and upgrading of distribution networks, to cope with the energy transition under way and guarantee quality of service to customers.

GHG target	Primary business activity	Sources of covered GHG (GHG Protocol)[1]	Time frame	GHG target	Climate scenario	Primary drivers and actions
Scope 1 GHG emission intensity related to power generation	Electricity generation	**98.2%** **of Scope 1 GHG** emissions[2]	●○○› Short term (2025)	130 gCO_{2eq}/kWh	1.5 °C[3]	• Gradual phase out of coal-fired capacity in 2023-2025 (percentage weight of coal capacity out of total consolidated capacity reduced from about 7% in 2022 to below 0.5% in 2025). • Invest €15 billion to accelerate the development of renewable energy by installing 17 GW of new renewables capacity (13 GW of which at the consolidated level) and 4 GW in BESS in 2023-2025, reaching 75 GW of renewables capacity (including 4 GW of BESS) by 2025.
			●●○› Medium term (2030)	72 gCO_{2eq}/kWh (-80% compared to 2017 base year)	1.5 °C (SBTi certified)	• Continue the process of decarbonizing electricity generation, implementing a Group-wide investment plan that will remain at the annual levels of the 2023-2025 plan, reaching a managed capacity of over 130 GW by 2030, thereby bringing total generation capacity to be made up of around 85% renewables. • Exit from coal-fired generation, which is expected to take place by 2027 globally.
			●●●› Long term (2040)	0 gCO_{2eq}/kWh (-100% compared to 2017 base year) Zero emissions	1.5 °C (SBTi certified)	• Exit from the business of thermal electricity generation, achieving a 100% renewable energy mix. • No use of carbon-removal technologies.
Scope 1 and 3 GHG emission intensity related to integrated power	Sale of electricity	**98.2%** **of Scope 1 GHG** emissions **73.4%** **of Scope 3 GHG** emissions - category 3 (Fuel and energy-related activities)	●○○› Short term (2025)	135 gCO_{2eq}/kWh	1.5 °C[3]	• Increase the percentage of renewable energy sold to customers, while increasing Group's renewables production. • Increase the share of fixed-price energy sales covered by carbon-free sources in core countries from around 70% in 2022 to about 90% by 2025, while increasing volumes of electricity sold at a fixed price from about 185 TWh in 2022 to around 200 TWh by 2025.
			●●○› Medium term (2030)	73 gCO_{2eq}/kWh (-78% compared to 2017 base year)	1.5 °C (SBTi certified)	• Increase the share of renewable energy sold to customers by increasing the Group's renewables generation, reaching a managed capacity of over 130 GW by 2030, thereby bringing total generation capacity to be made up of around 85% renewables. • Continue the strategy of balancing supply and demand and increase the share of electricity sold at a fixed price covered by carbon-free generation.
			●●●› Long term (2040)	0 gCO_{2eq}/kWh (-100% compared to 2017 base year) Zero emissions	1.5 °C (SBTi certified)	• By 2040, reach 100% of the energy sales covered by renewables. • No use of carbon-removal technologies.

GHG target	Primary business activity	Sources of covered GHG (GHG Protocol)[1]	Time frame	GHG target	Climate scenario	Primary drivers and actions
Scope 3 GHG emissions related to sale of natural gas on end-user market	Sale of gas to end users	**100% of Scope 3 GHG** emissions - category 11 (Use of sold products)	●○○› Short term (2025)	20.9 $MtCO_{2eq}$	n/a[4]	• Encourage customers (especially residential customers) to switch from gas to electricity by promoting efficient electricity technologies (e.g., heat pumps for home heating or induction cooktops in kitchens), increasing the electrification rate of our customers in Italy and Spain from 17% in 2022 to over 20% by 2025. • Promote services to customers that enable electrification: increase in behind-the-meter storage capacity from around 99 MW in 2022 to about 352 MW by 2025; increase in the capacity of photovoltaic panels installed at end users from around 100 MW in 2022 to roughly 300 MW by 2025; and increase in demand response capacity from around 8.4 GW in 2022 to about 12.4 GW by 2025. • Reduce the volumes of gas sold to customers from around 10.2 bcm in 2022 to about 4.3 bcm by 2025. • Optimize the gas portfolio of customers (especially industrial customers), reducing customers of the retail gas business from around 6.5 million in 2022 to roughly 4.4 million by 2025.
			●●○› Medium term (2030)	11.4 $MtCO_{2eq}$ (-55% compared to 2017 base year)	1.5 °C (SBTi certified)	• Encourage customers (especially residential customers) to switch from gas to electricity by promoting efficient electricity technologies (e.g., heat pumps for home heating or induction cooktops in kitchens), increasing the electrification rate of our customers in Italy and Spain from 17% in 2022 to over 30% by 2030. • Continue with the short-term strategic actions, while continuing to promote services to customers that enable the electrification of consumption and reaching a demand response capacity of over 20 GW by 2030. • Optimize the gas portfolio of customers (especially industrial customers), continuing to reduce the volumes of gas sold to around 3 bcm by 2030.
			●●●› Long term (2040)	0 $MtCO_{2eq}$ (-100% compared to 2017 base year) Zero emissions	1.5 °C (SBTi certified)	• Aim to achieve sale of 100% renewable energy to end users by 2040. • Exit from the sale of gas to retail customers by 2040. • No use of carbon-removal technologies.

GHG target	Primary business activity	Sources of covered GHG (GHG Protocol)[1]	Time frame	GHG target	Climate scenario	Primary drivers and actions
Additional emissions Scopes 1-2-3	• Electricity distribution (Scopes 1 and 2) • Management of vehicle fleet, buildings and other assets (Scopes 1 and 2) • Supply chain management (Scope 3) • Purchasing of fuels (Scope 3)	**0.4%** **of Scope 1 GHG** emissions **100%** **of Scope 2 GHG** emissions **28.6%** **of Scope 3 GHG** emissions - category 1 (Purchase of goods and services) for the 2030 target and 43% for the 2040 target[5] **26.6%** **of Scope 3 GHG** emissions - category 3 (Fuel and energy-related activities)	●●○› Medium term (2030)	10.4 $MtCO_{2eq}$ (-55% compared to 2017 base year)	1.5 °C (SBTi certified)	• Invest a total of €15 billion in grids over the period 2023-2025, of which 11% to increase digitalization and 47% to improve grid resilience and quality, thereby helping to reduce grid losses and related greenhouse gas emissions. Replace existing distribution network infrastructure components with SF_6-free solutions. • Electrify fleet and buildings by 2030. • Implement a circular procurement approach; increase the number of contracts that include the measurement of the carbon footprint of the products and services purchased by Enel, encouraging their reduction in a collaborative decarbonization process with our suppliers. Strengthen dialogue with raw material producers and other utilities to define shared and effective long-term decarbonization strategies. • Phase out coal-fired generation by 2027, mitigating all GHG emissions related to coal supply.
			●●●› Long term (2040)	<2.5 $MtCO_{2eq}$ (-90% compared to 2017 base year) Net-zero emissions	1.5 °C (SBTi certified)	• Promote grid digitalization and replace existing distribution network infrastructure components with SF_6-free solutions. • Implement a circular procurement approach; increase the number of contracts that include the measurement of the carbon footprint of the products and services purchased by Enel, encouraging their reduction in a collaborative decarbonization process with our suppliers. Strengthen dialogue with raw material producers and other utilities to define shared and effective long-term decarbonization strategies. • Zero out emissions associated with gas extraction, as the Group will have completely exited both the gas-fired generation of electricity and the sale of gas to end users.



Total coverage of Scopes 1-2-3 emissions in 2022

- 98.6% of Scope 1 GHG emissions (2025, 2030 and 2040 targets)
- 100% of Scope 2 GHG emissions (2030 and 2040 targets)
- 87% (2030 target) and 90% (2040 target) of Scope 3 GHG emissions[5]

(1) Percentages based on total GHG emissions in 2022.
(2) Excludes marginal Scope 1 GHG emissions not directly related to the combustion of fossil fuels in electricity generation at thermal plants, which accounted for 1.4% of total Scope 1 emissions in 2022. In any event, GHG emissions covered by all of the above targets are equal, on the whole, to 98.7% of total Scope 1 and 2 emissions in 2022, and therefore exceed the threshold of 95% required under the Science Based Target initiative.
(3) The target is in line with the path to 1.5 °C set by the SBTi for the electrical services industry (Sectoral Decarbonization Approach, or SDA), although it could not be officially validated because the SBTi does not certify targets over a time frame of less than five years from the presentation date.
(4) The target could not be officially validated because the SBTi does not certify targets over a time frame of less than five years from the presentation date. In addition, the SBTi has not defined a Sectoral Decarbonization Approach for these types of emissions, so the ambition level cannot be verified.
(5) Two different percentage limits have been set for the target for Scope 3 GHG emissions by the supply chain, as allowed under the SBTi approach, which required coverage of at least 67% of Scope 3 emissions for the 2030 target, and at least 90% for the 2040 target.

Regarding the assumptions for commodity price developments, the use of Paris reference scenarios is confirmed.

More specifically, the price of CO_2 is assumed to rise rapidly through 2030, driven by the gradual reduction in the supply of allowances in the face of growing demand, while coal prices are projected to stabilize due to falling demand. Gas price tensions are expected to ease in the coming years in light of a realignment between supply and demand at the global level. Finally, the price of oil is expected to stabilize, with peak demand coming around 2030.

Note also that the Group has used sensitivity analyses to take account of the impacts of climate change in the long term. More specifically:

- we consider a long-term growth rate in the estimation of the terminal value that is in line with the change in electricity demand over the 2026-2050 period, based on the specific features of the businesses concerned, adopting certain assumptions concerning the increase in temperature due to climate change and trends connected with the energy transition;
- we consider changes in the hydroelectric, wind and photovoltaic generation levels of our portfolio assets, associated with each projection of underlying climate and weather variables (for example, temperature, irradiance, wind speed and precipitation);
- we assume that the Group will incur the costs provisioned for decommissioning fossil fuel generation plants in line with the goal of zero direct (Scope 1) and indirect emissions from retail activities (Scope 3).

In order to verify the robustness of the value in use of the CGUs, sensitivity analyses were conducted for the main value drivers, in particular WACC, the long-term growth rate.
In these circumstances as well, the results were consistent with the evidence described above, finding that the value of all the CGUs analyzed exceeded the carrying amount, thus ensuring the full recoverability of their carrying amount in the consolidated financial statements of the Enel Group at December 31, 2022.

The table below reports the composition of the main goodwill values for the companies within each CGU, along with the discount rates applied and the time horizon over which the expected cash flows have been discounted.

Millions of euro	Amount of goodwill	Growth rate[1]	Pre-tax WACC discount rate[2]	Explicit period of cash flows	Terminal value[3]	Amount of goodwill	Growth rate[1]	Pre-tax WACC discount rate[2]	Explicit period of cash flows	Terminal value[3]
	at Dec. 31, 2022					at Dec. 31, 2021				
Iberian Peninsula	8,785	2.47%	6.10%	3 years	Perpetuity/25 years EGP/13 years G&T	8,785	1.64%	3.93%	3 years	Perpetuity/25 years EGP/14 years G&T
Chile	1,148	2.00%	8.45%	3 years	Perpetuity/26 years EGP/5 years G&T	1,209	2.02%	6.58%	3 years	Perpetuity/25 years EGP/6 years G&T
Argentina	21	45.70%	71.78%	3 years	Perpetuity	22	24.11%	46.75%	3 years	Perpetuity/8 years G&T
Peru	571	2.25%	8.75%	3 years	Perpetuity/25 years EGP/8 years G&T	566	2.31%	6.64%	3 years	Perpetuity/23 years EGP/9 years G&T
Colombia	518	3.20%	11.79%	3 years	Perpetuity/26 years EGP/15 years G&T	527	3.11%	8.82%	3 years	Perpetuity/28 years EGP/16 years G&T
Brazil	1,313	3.58%	11.22%	3 years	Perpetuity/25 years EGP	1,303	3.30%	9.09%	3 years	Perpetuity/26 years EGP/7 years G&T
Central America	26	2.02%	9.66%	3 years	18 years	25	2.03%	7.85%	3 years	19 years
Enel Green Power North America	70	2.02%	6.48%	3 years	25 years	70	2.03%	5.01%	3 years	26 years
Enel X North America	142	2.02%	9.71%	3 years	Perpetuity	199	2.03%	7.62%	3 years	Perpetuity
Enel X Way North America	70	2.02%	11.53%	3 years	Perpetuity	n.a.	n.a.	n.a.	n.a.	n.a.
Enel X Asia Pacific	84	2.02%	10.39%	3 years	Perpetuity	84	2.03%	8.81%	3 years	Perpetuity
Enel X Rest of Europe	43	1.62%	8.82%	3 years	Perpetuity	43	1.70%	8.24%	3 years	Perpetuity
Enel Green Power Italy	21	1.62%	6.39%	3 years	Perpetuity/24 years	21	1.52%	4.94%	3 years	Perpetuity/23 years
Market Italy	581	2.38%	10.88%	3 years	15 years	580	1.48%	9.14%	3 years	15 years
Enel Produzione Italy	349	1.64%	7.70%	3 years	Perpetuity/15 years	n.a.	n.a.	n.a.	n.a.	n.a.
Romania	n.a.	n.a.	n.a.	n.a.	n.a.	387	2.06%	7.56%	3 years	Perpetuity/25 years
CGUs with no recognized goodwill but that underwent impairment testing given the presence of the indicators provided for in IAS 36										
Iberia - NPT (Non-Peninsular Territories)	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	3.42%	5 years	5 years
Australia	n.a.	n.a.	n.a.	n.a.	n.a.	-	0.91%	5.50%	3 years	25 years
Mexico	n.a.	n.a.	n.a.	n.a.	n.a.	-	3.36%	8.77%	3 years	24 years

(1) Perpetual growth rate for cash flows after the explicit forecast period.
(2) Pre-tax WACC calculated using the iterative method: the discount rate that ensures that the value in use calculated with pre-tax cash flows is equal to that calculated with post-tax cash flows discounted with the post-tax WACC.
(3) The terminal value has been estimated on the basis of a perpetuity or an annuity with a rising yield for the years indicated in the column (G&T = Generation & Trading, EGP = Enel Green Power, LH = Large Hydro).

25. Deferred tax assets and liabilities – *€10,925 million and €9,542 million*

The following tables detail changes in deferred tax assets and liabilities by type of timing difference and calculated based on the tax rates established by applicable regulations, as well as the amount of deferred tax assets offsettable, where permitted, with deferred tax liabilities.

Millions of euro	at Dec. 31, 2021	Increase/ (Decrease) taken to profit or loss	Increase/ (Decrease) taken to equity	Change in the consolidation scope	Exchange differences	Other changes	Reclassifications of assets held for sale	at Dec. 31, 2022
Deferred tax assets:								
- differences in the carrying amount of intangible assets, property, plant and equipment	2,469	(90)	1	5	12	(10)	(74)	2,313
- accruals to provisions for risks and charges and impairment losses with deferred deductibility	2,035	13	-	10	45	(19)	(128)	1,956
- tax loss carried forward	785	158	-	-	46	3	(206)	786
- measurement of financial instruments	2,248	91	522	4	2	67	(20)	2,914
- employee benefits	871	(70)	(78)	-	45	40	(10)	798
- other items	2,626	(464)	6	1	(7)	136	(140)	2,158
Total	**11,034**	**(362)**	**451**	**20**	**143**	**217**	**(578)**	**10,925**
Deferred tax liabilities:								
- differences on non-current and financial assets	5,538	148	2	110	(97)	273	(255)	5,719
- measurement of financial instruments	1,527	28	(159)	-	2	110	(2)	1,506
- other items	2,194	188	6	(3)	38	78	(184)	2,317
Total	**9,259**	**364**	**(151)**	**107**	**(57)**	**461**	**(441)**	**9,542**

Non-offsettable deferred tax assets	**6,194**
Non-offsettable deferred tax liabilities	**4,612**
Excess net deferred tax liabilities after any offsetting	**199**

Deferred tax assets recognized at December 31, 2022, as the recovery of such assets is considered reasonably certain, totaled €10,925 million (€11,034 million at December 31, 2021). Deferred tax assets decreased by €109 million during the year, essentially due to:

- the reversal of deferred tax assets by Enel Iberia, the parent company of the tax consolidation group in Spain;
- reversals of deferred tax assets on the differences in the value of non-current assets mainly in Italy and Latin America;
- the reclassification of deferred tax assets relating to companies classified as available for sale and discontinued operations in the period.

These factors were partly offset by the effect of deferred tax assets connected with developments in the fair value of cash flow hedge derivatives, the impact of exchange differences in Latin America and deferred tax assets recognized following the corporate reorganization of the new e-Mobility Business Line in North America and Spain.

Note that deferred tax assets have not been assessed on tax losses carried forward and for the year (€1,129 million) in the amount of €352 million because, as based on current estimates of future taxable income, their recoverability is not considered probable.

Deferred tax liabilities amounted to €9,542 million at December 31, 2022 (€9,259 million at December 31, 2021). They essentially include the determination of the tax effects of the adjustments to assets acquired as part of the final allocation of the cost of acquisitions made in the various years and the deferred taxation in respect of the differences between depreciation charged for tax purposes, including accelerated depreciation, and depreciation based on the estimated useful lives of assets.

Deferred tax liabilities increased by a total of €283 million, due, in particular, to:

- the impact of tax reforms and hyperinflation in Argentina;
- the tax effect of the allocation of the goodwill on the merger of Enel Hydro Appennino Centrale Srl.

These effects were partially offset by the effect of deferred tax assets connected with developments in the fair value of cash flow hedge derivatives, the impact of exchange differences in Latin America and the reclassification of deferred tax liabilities relating to companies classified as available for sale and discontinued operations during the year.

26. Equity-accounted investments – *€1,281 million*

The following table shows changes in the main investments in joint ventures and associated companies accounted for using the equity method.

Millions of euro		% held	Impact on profit or loss	Change in consolidation scope	Dividends	Reclassifications from/to assets held for sale	Other changes		% held
	at Dec. 31, 2021							at Dec. 31, 2022	
Joint ventures									
Gridspertise Srl	–	–	–	299	–	–	–	299	50.0%
Mooney Group SpA	–	–	(17)	305	–	–	(69)	219	50.0%
Slovak Power Holding	–	50.0%	(65)	–	–	–	155	90	50.0%
Zacapa Topco Sàrl	114	20.6%	1	(114)	–	–	(1)	–	–
Matimba project companies	–	–	(3)	108	–	–	3	108	50.0%
Kino project companies	21	20.0%	(18)	–	–	–	13	16	20.0%
Tejo Energia Produção e Distribuição de Energia Eléctrica	12	43.8%	–	–	(7)	–	–	5	43.8%
Ewiva Srl	22	50.0%	(2)	–	–	–	–	20	50.0%
Drift Sand Wind Project	40	50.0%	2	–	–	–	3	45	50.0%
Front Marítim del Besòs	33	61.4%	(2)	–	–	–	–	31	61.4%
Rusenergosbyt	51	49.5%	64	–	(11)	–	(13)	91	49.5%
Energie Electrique de Tahaddart	18	32.0%	2	–	(2)	–	(7)	11	32.0%
PowerCrop	–	50.0%	16	–	–	–	(2)	14	50.0%
Total joint ventures	**311**		**(22)**	**598**	**(20)**	**–**	**82**	**949**	

Millions of euro		% held	Impact on profit or loss	Change in consolidation scope	Dividends	Reclassifications from/to assets held for sale	Other changes		% held
	at Dec. 31, 2021							at Dec. 31, 2022	
Associates									
CESI	59	42.7%	(3)	-	-	-	2	58	42.7%
Elecgas SA	15	50.0%	7	-	(15)	-	23	30	50.0%
GNL Chile SA	6	33.3%	7	-	-	-	1	14	33.3%
Energías Especiales del Bierzo	4	50.0%	3	-	(2)	-	7	12	50.0%
Tecnatom	27	45.0%	-	-	-	(27)	-	-	-
Gorona del Viento El Hierro SA	13	23.2%	1	-	(1)	-	-	13	23.2%
Suministradora Eléctrica de Cádiz	10	33.5%	4	-	(5)	-	-	9	33.5%
Compañía Eólica Tierras Altas	8	37.5%	3	-	(3)	-	(1)	7	37.5%
Cogenio Srl	12	20.0%	(1)	-	(4)	-	2	9	20.0%
Avikiran Surya India	-	-	-	28	-	-	(1)	27	51.0%
Sociedad de Inversiones K Cuatro SpA	-	-	-	(30)	-	-	30	-	-
Enel X AMPCI Ebus Chile SpA	4	20.0%	-	(5)	-	-	1	-	-
EGPNA Renewable Energy Partners	121	20.0%	5	(59)	-	-	10	77	10.0%
Rocky Caney Holding	50	20.0%	5	(30)	-	-	(3)	22	10.0%
Other	64		(5)	(12)	(7)	-	14	54	
Total associates	**393**		**26**	**(108)**	**(37)**	**(27)**	**85**	**332**	
TOTAL	**704**		**4**	**490**	**(57)**	**(27)**	**167**	**1,281**	

The increase in equity-accounted investments in 2022 mainly reflected:

- the positive impact of changes in the consolidation scope, mainly regarding:
  - the acquisition of a stake in Mooney; more specifically, with the closing of the transaction between Enel X Srl and Banca 5 both companies have acquired a 50% stake in Mooney putting it under the joint control of both parties. Subsequently, all the activities related to Enel X's financial service business in Italy, marketed under the brand Enel X Pay, were sold to Mooney, creating a European-based fintech company;
  - the recognition of the interest in Gridspertise Srl following the disposal of a 50% stake in the company, previously wholly owned, to the international private equity fund CVC Capital Partners Fund VIII (CVC);
  - the recognition of the interest in the joint venture holding the companies of the Matimba project, previously controlled by the Enel Group;
  - the recognition of the interest in the previously controlled Indian company Avikiran Surya India Private Limited;
  - the reclassification of the investment in Zacapa Topco (€114 million) under "Investments in other entities", following the sale by Enel X International of 1.1% of the interest in Ufinet. Following the transaction, Enel X International retains an indirect stake of 19.5% in the share capital of Ufinet;
  - the sale by Enel X Chile SpA of the entire stake held in the associates Sociedad de Inversiones K Cuatro SpA and Enel X AMPCI Ebus Chile SpA;
  - the sale of 50% of the stakes held in EGPNA Renewable Energy Partners and in Rocky Caney Holding (which, following the transaction, go from 20% to 10%);
- the profits attributable to the Group of equity-accounted companies (€4 million), mainly accounted for by the profit contributed by Rusenergosbyt, PowerCrop and Spanish companies;
- changes in the OCI reserves mainly relating to Slovak Power Holding, following the positive developments in the fair value of cash flow hedge derivatives, and the Spanish companies.

These positive effects were mainly offset by:

- dividends distributed in the period in the amount of €57 million, mainly by Rusenergosbyt and certain Spanish companies;

- the reclassification of the investment in Tecnatom (€27 million) as held for sale.

The following tables provide a summary of financial information for the main joint ventures and associates of the Group not classified as held for sale in accordance with IFRS 5.

Millions of euro	Non-current assets		Current assets		Total assets	
	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021
Joint ventures						
Slovak Power Holding	12,376	12,194	1,444	1,854	13,820	14,048
Gridspertise Srl	94	-	192	-	286	-
Rusenergosbyt	3	3	285	141	288	144
Matimba project companies	114	-	-	-	114	-
Mooney Group SpA	880	-	449	-	1,329	-
Ewiva Srl	40	44	-	-	40	44
Associates						
CESI	191	198	25	28	216	226
Elecgas SA	332	370	222	188	554	558

Millions of euro	Total revenue		Pre-tax profit/(loss)		Profit/(Loss) from continuing operations	
	2022	2021	2022	2021	2022	2021
Joint ventures						
Slovak Power Holding	5,184	3,417	(320)	190	(223)	137
Gridspertise Srl	334	-	12	-	8	-
Rusenergosbyt	2,919	2,288	170	112	137	90
Matimba project companies	34	-	(22)	-	(15)	-
Mooney Group SpA	224	-	(33)	-	(33)	-
Ewiva Srl	-	-	(4)	-	(4)	-
Associates						
CESI	155	140	(4)	(7)	(1)	(8)
Elecgas SA	26	25	20	15	14	11

Non-current liabilities		Current liabilities		Total liabilities		Equity	
at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021
4,950	6,762	6,620	5,369	11,570	12,131	2,250	1,917
9	-	198	-	207	-	79	-
-	-	165	120	165	120	123	24
-	-	-	-	-	-	114	-
1,086	-	575	-	1,661	-	(332)	-
-	-	-	-	-	-	40	44
24	25	90	-	114	25	102	201
327	408	167	120	494	528	60	30

27. Derivatives

Millions of euro	Non-current		Current	
	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021
Derivative financial assets	3,970	2,772	14,830	22,791
Derivative financial liabilities	5,895	3,339	16,141	24,607

For more information on derivatives classified as non-current financial assets, please see note 51 for hedging derivatives and trading derivatives.

28. Current/Non-current contract assets/(liabilities)

Millions of euro	Non-current		Current	
	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021
Contract assets	508	530	106	121
Contract liabilities	5,747	6,214	1,775	1,433

Non-current assets deriving from contracts with customers (contract assets) refer mainly to assets under development resulting from public-to-private service concession arrangements recognized in accordance with IFRIC 12 and which have an expiration of beyond 12 months (€492 million). These cases arise when the concession holder has not yet obtained full right to recognize the asset from the grantor, in that there remains a contractual obligation to ensure that the asset is completed and can be remunerated through rates. The figure at December 31, 2022 includes investments for the year in the amount of €1,174 million.

Current contract assets mainly concern construction contracts in progress (€80 million to be invoiced, payments on which are subject to the fulfillment of a performance obligation).

The value at December 31, 2022 of non-current contract liabilities is mainly attributable to distribution operations in Italy (€3,127 million) and Spain (€2,620 million) as a result of the accounting treatment of revenue from connections of new customers, which are deferred over the average duration of the associated contracts.

Current contract liabilities include the contractual liabilities related to revenue from connections to the electricity grid expiring within 12 months in the amount of €1,234 million, mainly recognized in Italy and Spain, as well as liabilities for construction contracts in progress (€509 million).
As required under IFRS 15, the following table reports the reversal to profit or loss of contract liabilities by time band.

Millions of euro		
	at Dec. 31, 2022	at Dec. 31, 2021
Within 1 year	1,775	1,433
Within 2 years	516	498
Within 3 years	517	480
Within 4 years	516	479
Within 5 years	515	477
More than 5 years	3,683	4,280
Total	**7,522**	**7,647**

29. Other non-current financial assets – *€8,359 million*

Millions of euro	at Dec. 31, 2022	at Dec. 31, 2021	Change	
Equity investments in other companies measured at fair value	366	72	294	-
Financial assets and securities included in net financial debt (see note 29.1)	4,213	2,692	1,521	56.5%
Service concession arrangements	3,732	2,890	842	29.1%
Non-current financial prepayments	48	50	(2)	-4.0%
Total	**8,359**	**5,704**	**2,655**	**46.5%**

"Other non-current financial assets" increased by €2,655 million mainly reflecting:

- the increase in financial assets included in net financial debt, as detailed in note 29.1;
- the increase in financial assets in respect of service concession arrangements, mainly in Brazil;
- the recognition of the investment in Zacapa Topco, following the sale by Enel X International of a 1.1% share in Ufinet which resulted in the loss of joint control over Zacapa Topco.

The following is a breakdown of equity investments in other companies measured at fair value.

Millions of euro	at Dec. 31, 2022	% held	at Dec. 31, 2021	% held	Change
Empresa Propietaria de la Red SA	7	11.1%	5	11.1%	2
European Energy Exchange AG	22	2.4%	13	2.4%	9
Athonet Srl	7	16.0%	7	16.0%	-
Korea Line Corporation	1	0.3%	1	0.3%	-
Hubject GmbH	11	12.5%	10	12.5%	1
Termoeléctrica José de San Martín SA	11	4.2%	11	4.2%	-
Termoeléctrica Manuel Belgrano SA	9	4.7%	12	4.7%	(3)
Zacapa Topco Sàrl	288	19.5%	-	-	288
Other	10		13		(3)
Total	**366**		**72**		**294**

29.1 Other non-current financial assets included in net financial debt – *€4,213 million*

Millions of euro	at Dec. 31, 2022	at Dec. 31, 2021	Change	
Securities	447	403	44	10.9%
Other financial assets	3,766	2,289	1,477	64.5%
Total	**4,213**	**2,692**	**1,521**	**56.5%**

"Securities" are represented by financial instruments in which the Dutch insurance companies invest a portion of their liquidity. The increase in "Other financial assets" is mainly attributable to an increase in financial assets for security deposits.

30. Other current financial assets – *€13,753 million*

Millions of euro	at Dec. 31, 2022	at Dec. 31, 2021	Change	
Current financial assets included in net financial debt (see note 30.1)	13,501	8,467	5,034	59.5%
Other	252	178	74	41.6%
Total	**13,753**	**8,645**	**5,108**	**59.1%**

"Other current financial assets" increased by €5,108 million, mainly reflecting the increase in current financial assets included in net financial debt, as detailed in note 30.1.

30.1 Other current financial assets included in net financial debt – *€13,501 million*

Millions of euro	at Dec. 31, 2022	at Dec. 31, 2021	Change	
Current portion of long-term financial assets	2,838	1,538	1,300	84.5%
Securities at FVTPL	-	1	(1)	-
Securities at FVOCI	78	87	(9)	-10.3%
Financial assets and cash collateral	8,319	6,485	1,834	28.3%
Other	2,266	356	1,910	-
Total	**13,501**	**8,467**	**5,034**	**59.5%**

The increase in the item is mainly attributable to:

- €1,300 million in respect of an increase in the current portion of long-term financial assets, which essentially reflects the increase in financial assets relating to the deficit of the Spanish electricity system;
- €1,834 million in respect of an increase in cash collateral paid to counterparties for derivatives transactions;
- an increase in "Other", mainly reflecting the increase in short-term financial assets of Enel X Italia in respect of the assignment of tax credits for building renovations under the "eco-sisma bonus" program (€557 million) and the increase in financial assets in Brazil (€1,210 million) essentially relating to the sale of Celg Distribuição SA - Celg-D (Enel Goiás).

31. Other non-current assets – *€2,486 million*

Millions of euro	at Dec. 31, 2022	at Dec. 31, 2021	Change	
Amounts due from institutional market operators	282	242	40	16.5%
Net assets of personnel programs	8	-	8	-
Other	2,196	3,026	(830)	-27.4%
Total	**2,486**	**3,268**	**(782)**	**-23.9%**

Amounts due from institutional market operators increased by €40 million, mainly in Spain as a result of the remuneration of distribution operations.

Other assets at December 31, 2022 included tax assets in the amount of €1,674 million (€2,286 million at December 31, 2021) and security deposits in the amount of €301 million (€340 million at the end of 2021).

The change for the year mainly reflected the decline in tax assets previously recognized in Brazil, connected with the PIS/COFINS dispute in the amount of €253 million, and a decrease in assets connected with the sale of a number of Brazilian companies in the amount of €976 million, only partially offset by positive exchange rate developments in the amount of €543 million.

32. Other current assets – *€4,314 million*

Millions of euro

	at Dec. 31, 2022	at Dec. 31, 2021	Change	
Amounts due from institutional market operators	1,033	2,205	(1,172)	-53.2%
Advances to suppliers	332	326	6	1.8%
Amounts due from employees	30	29	1	3.4%
Amounts due from others	1,056	1,071	(15)	-1.4%
Sundry tax assets	1,598	1,164	434	37.3%
Current accrued income and prepayments	265	207	58	28.0%
Total	**4,314**	**5,002**	**(688)**	**-13.8%**

Amounts due from institutional market operators mainly include amounts due in respect of the Italian system in the amount of €617 million (€1,519 million at December 31, 2021) and the Spanish system in the amount of €388 million (€667 million at December 31, 2021). The decrease was essentially attributable to the decrease in amounts receivable in Italy in respect of the Energy and Environmental Services Fund, mainly held by e-distribuzione (€429 million) and Servizio Elettrico Nazionale (€106 million), primarily connected with equalization mechanisms.

The increase of €434 million in sundry tax assets is mainly attributable to an increase in credits for indirect taxes and duties in Italy (€216 million), Latin America (€100 million) and in the parent company Enel SpA (€282 million), partially offset by a decline in such items in Spain (€115 million) and North America (€93 million).

33. Inventories – *€4,853 million*

Millions of euro

	at Dec. 31, 2022	at Dec. 31, 2021	Change	
Raw and ancillary materials, and consumables:				
- fuels	2,396	1,023	1,373	-
- materials, equipment and other inventories	2,155	1,793	362	20.2%
Total	**4,551**	**2,816**	**1,735**	**61.6%**
Environmental certificates:				
- CO_2 emissions allowances	152	139	13	9.4%
- green certificates	-	3	(3)	-
- energy efficiency certificates	6	16	(10)	-62.5%
Total	**158**	**158**	**-**	**-**
Buildings held for sale	47	49	(2)	-4.1%
Payments on account	97	86	11	12.8%
TOTAL	**4,853**	**3,109**	**1,744**	**56.1%**

Raw and ancillary materials, and consumables consist of materials and equipment used to operate, maintain, and construct power plants and distribution networks, as well as fuel inventories to cover the Group's requirements for generation and trading activities.

The overall increase in inventories in 2022 (€1,744 million) is mainly attributable to an increase in inventories of fuel and materials, devices and other inventories recorded above all in Italy (€1,221 million), Spain (€506 million) and Latin America (€69 million), notably gas inventories to meet the needs of the Group plants and an increase in stocks of low- and medium-voltage materials, partially offset by the decrease in inventories in Russia and Romania (€100 million).

34. Trade receivables – *€16,605 million*

Millions of euro	at Dec. 31, 2022	at Dec. 31, 2021	Change	
Customers:				
- electricity sales and transport	10,216	10,111	105	1.0%
- distribution and sale of gas	3,026	2,658	368	13.8%
- other assets	3,118	3,158	(40)	-1.3%
Total trade receivables due from customers	**16,360**	**15,927**	**433**	**2.7%**
Trade receivables due from associates and joint ventures	245	149	96	64.4%
TOTAL	**16,605**	**16,076**	**529**	**3.3%**

Trade receivables due from customers are recognized net of loss allowances, which totaled €3,783 million at the end of the year, compared with a balance of €3,663 million at the end of the previous year.

Specifically, the increase in 2022, totaling €529 million, mainly recognized in Spain (€530 million) and Latin America (€554 million), was partially offset by the decrease recognized in Italy (€106 million) and Romania (€500 million), which, in line with the provisions of "IFRS 5 - Non-current assets held for sale and discontinued operations", was classified as held for sale.

The change in the period is attributable to receivables for electricity and gas sales and transport recognized in the year, as well as the increase in allocations net of releases in respect of bad debt provisions in Italy and Latin America.

For more information on trade receivables, see note 48 "Financial instruments by category".

35. Cash and cash equivalents – *€11,041 million*

Cash and cash equivalents, detailed in the following table, increased by €2,183 million due to proceeds from the sale in December 2022 of Enel Transmisión Chile, Gridspertise and Celg Distribuição SA - Celg-D (Enel Goiás).

Millions of euro	at Dec. 31, 2022	at Dec. 31, 2021	Change	
Bank and postal deposits	8,968	8,118	850	10.5%
Cash and cash equivalents on hand	35	8	27	-
Other investments of liquidity	2,038	732	1,306	-
Total	**11,041**	**8,858**	**2,183**	**24.6%**

36. Assets and liabilities included in disposal groups classified as held for sale – *€6,149 million and €3,360 million*

Changes in assets held for sale in 2022 break down as follows.

Millions of euro	at Dec. 31, 2021	Reclassification from/to current and non-current assets	Disposals and change in consolidation scope	Impairment	Exchange differences	Investments	Other changes	at Dec. 31, 2022
Property, plant and equipment	899	5,231	(1,848)	(1,102)	18	47	59	3,304
Intangible assets	144	1,985	(1,136)	(797)	23	17	98	334
Goodwill	1	550	(62)	(488)	(42)	-	41	-
Deferred tax assets	16	578	(408)	-	-	-	25	211
Equity-accounted investments	4	27	(2)	(1)	-	-	(1)	27
Non-current contract assets	-	227	(233)	-	(2)	84	(76)	-
Other non-current assets	40	750	(639)	-	-	-	(26)	125
Non-current financial assets	-	208	(144)	-	(12)	-	86	138
Current financial assets and securities	-	113	(65)	-	-	-	(5)	43
Other current financial assets	-	75	-	-	8	-	(74)	9
Cash and cash equivalents	44	587	(287)	-	(4)	-	85	425
Inventories, trade receivables and other current assets	94	2,353	(1,054)	-	(8)	-	148	1,533
Total	**1,242**	**12,684**	**(5,878)**	**(2,388)**	**(19)**	**148**	**360**	**6,149**

Developments in liabilities break down as follows.

Millions of euro	at Dec. 31, 2021	Reclassification from/to current and non-current liabilities	Disposals and change in consolidation scope	Exchange differences	Other changes	at Dec. 31, 2022
Long-term borrowings	782	1,160	(1,259)	33	59	775
Provisions for risks and charges, non-current portion	10	272	(242)	1	(8)	33
Deferred tax liabilities	46	441	(207)	-	(40)	240
Post-employment and other employee benefits	-	65	(42)	-	-	23
Non-current financial liabilities	40	123	(5)	(10)	(79)	69
Non-current contract liabilities	-	447	(5)	(2)	2	442
Other non-current liabilities	5	649	(597)	(3)	125	179
Short-term borrowings	2	651	(17)	(9)	15	642
Long-term borrowings, current portion	-	137	(1,328)	(29)	1,238	18
Provisions for risks and charges, current portion	-	47	(14)	-	-	33
Other current financial liabilities	6	28	(57)	(1)	36	12
Trade payables and other current liabilities	71	1,663	(828)	4	(16)	894
Total	**962**	**5,683**	**(4,601)**	**(16)**	**1,332**	**3,360**

The item essentially includes assets measured at the lower of cost, understood as their net carrying amount, and the estimated realizable value, which, due to management decisions, meet the requirements of "IFRS 5 - Non-current assets held for sale and discontinued operations" for their classification in this item.

The balances of assets and liabilities held for sale and discontinued operations at December 31, 2022 came to, respectively, €6,149 million and €3,360 million and mainly refer to:

- Romania: on December 14, 2022, Enel SpA announced that it had entered into an Exclusivity Agreement with Greek company Public Power Corporation SA (PPC) in relation to the potential disposal of all the equity stakes held by Enel Group in Romania. The value of the net assets held in Romania was thus adjusted to the expected sale price, with the recognition of an impairment loss of about €696 million, and the same were classified as "discontinued operations";
- Enel Green Power Hellas: the parent company Enel Green Power has started a process aimed at finding an investor interested in a partnership for the management and development of the renewable energy business in Greece. The status of negotiations suggests that the sale is highly probable as at December 31, 2022. Accordingly, the requirements established by "IFRS 5 - Non-current assets held for sale and discontinued operations" for the classification of Greek assets as "discontinued operations" have been met;
- Enel Green Power Australia: considering the status of negotiations, the two subholding companies held in Australia and their subsidiaries have been reclassified under non-current assets held for sale and discontinued operations, in accordance with IFRS 5, with the aim of reaching an agreement with third parties within the Stewardship business model in the next 12 months;
- Central Dock Sud and Enel Generación Costanera in Argentina: the Enel Group, through its subsidiary Enel Argentina, started negotiations for the sale of the Group's 75.7% stake in the thermal generation company Enel Generación Costanera. Negotiations also covered the sale of the Group's 41.2% stake in the thermal generation company Central Dock Sud. The net assets of the interests were classified as available for sale and their value was adjusted to the expected sale price (€97 million), with the recognition of an impairment loss of about €290 million. The transaction was finalized in the 1st Quarter of 2023;
- Avikiran Solar India Private Limited in India: following the agreements signed for the partial sale to a new shareholder, the investment satisfies the requirements of "IFRS 5 - Non-current assets held for sale and discontinued operations", for classification of the net assets as available for sale. The disposal is expected to be finalized in the 1st Half of 2023;
- 3SUN in Italy: based on the negotiation process for the sale of a 50% stake in the share capital of 3SUN Srl, its net assets were reclassified at December 31, 2022 as non-current assets held for sale and discontinued operations, in line with IFRS 5.

Assets previously classified as held for sale disposed of in 2022 include:

- renewable companies in South Africa sold in the 1st Half of 2022;
- CGT Fortaleza in Brazil and companies belonging to the financial sector of Enel X in Italy sold in the 3rd Quarter;
- the interest held by Enel SpA in Enel Russia sold in October 2022, thus completing the disposal of all electricity generation assets in Russia. For more information on the economic effects of the transaction, please refer to the paragraph "Discontinued operations";
- the subsidiary Enel Chile SA completed the sale of the entire investment, equal to 99.09% of the share capital, held in the Chilean electricity transmission company Enel Transmisión Chile SA, while the subsidiary Enel Brasil SA finalized the sale of the entire interest held in the Brazilian power distribution company Celg Distribuição SA - Celg-D in December 2022.

For more information on the financial effects of the above transactions, please refer to the note "Business combinations".

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37. Equity – *€42,082 million*

37.1 Equity attributable to owners of the Parent – *€28,657 million*

Millions of euro	2022	2021	Change
Share capital	**10,167**	**10,167**	**-**
Treasury share reserve	**(47)**	**(36)**	**(11)**
Other reserves	**2,740**	**1,721**	**1,019**
Share premium reserve	7,496	7,496	-
Reserve for equity instruments - perpetual hybrid bonds	5,567	5,567	-
Legal reserve	2,034	2,034	-
Other reserves	2,332	2,313	19
Translation reserve	(5,912)	(8,125)	2,213
Hedging reserve	(3,553)	(2,268)	(1,285)
Hedging costs reserve	(81)	(39)	(42)
Reserve from measurement of financial instruments at FVOCI	(22)	10	(32)
Reserve from equity-accounted investments	(476)	(721)	245
Actuarial reserve	(1,063)	(1,325)	262
Reserve from disposal of equity interests without loss of control	(2,390)	(2,378)	(12)
Reserve from acquisitions of non-controlling interests	(1,192)	(843)	(349)
Retained earnings	**15,797**	**17,801**	**(2,004)**
Equity attributable to owners of the Parent	**28,657**	**29,653**	**(996)**

Share capital – *€10,167 million*

At December 31, 2022, the fully subscribed and paid-up share capital of Enel SpA totaled €10,166,679,946, represented by the same number of ordinary shares with a par value of €1.00 each. Enel SpA's share capital was unchanged compared with the amount reported at December 31, 2021.

At December 31, 2022, based on the shareholders register and the notices submitted to CONSOB and received by the Parent pursuant to Article 120 of Legislative Decree 58 of February 24, 1998, as well as other available information, shareholders with interests of greater than 3% in the Parent's share capital were the Ministry for the Economy and Finance (with a 23.585% stake) and BlackRock Inc. (with a 5.114% stake held for asset management purposes).

Treasury share reserve – *€(47) million*

At December 31, 2022, treasury shares are represented by 7,153,795 ordinary shares of Enel SpA with a par value of €1.00 each (4,889,152 at December 31, 2021), purchased through an authorized intermediary for a total of €47 million.

Other reserves – *€2,740 million*

Share premium reserve – *€7,496 million*

Pursuant to Article 2431 of the Italian Civil Code, the share premium reserve contains, in the case of the issue of shares at a price above par, the difference between the issue price of the shares and their par value, including those resulting from conversion from bonds. The reserve, which is a capital reserve, may not be distributed until the legal reserve has reached the threshold established under Article 2430 of the Italian Civil Code.

Reserve for equity instruments – perpetual hybrid bonds – *€5,567 million*

This reserve reports the nominal value, net of transaction costs, of the non-convertible subordinated perpetual hybrid bonds denominated in euros for international investors.

In 2022, the Group paid €123 million in coupons to holders of perpetual hybrid bonds.

Legal reserve – *€2,034 million*

The legal reserve is formed of the part of profits that, pursuant to Article 2430 of the Italian Civil Code, cannot be distributed as dividends.

Other reserves – *€2,332 million*

These include €2,215 million related to the remaining portion of the adjustments carried out when Enel was transformed from a public entity to a joint-stock company.
Pursuant to Article 47 of the Consolidated Income Tax Code (*Testo Unico Imposte sul Reddito*, or "TUIR"), this amount does not constitute taxable income when distributed.

Translation reserve – *€(5,912) million*

The increase for the year, of €2,213 million, was mainly due to the change in the consolidation scope connected with the sale of PJSC Enel Russia, Central Geradora Termelétrica Fortaleza and Celg Distribuição SA - Celg-D (Enel Goiás), and the net appreciation of the functional currencies used by the foreign subsidiaries, mainly in Latin America and the United States, against the Group presentation currency (the euro).

Hedging reserve – *€(3,553) million*

This includes the net expense recognized in equity from the measurement of cash flow hedge derivatives. The change in 2022 is mainly attributable to developments in commodity prices.

Hedging costs reserve – *€(81) million*

In application of IFRS 9, this reserve includes the fair value gains and losses on currency basis points and forward points. The change in 2022 is mainly attributable to developments in commodity prices.

Reserve from measurement of financial instruments at FVOCI – *€(22) million*

This includes net unrealized fair value losses on financial assets.

Reserve from equity-accounted investments – *€(476) million*

The reserve reports the share of comprehensive income to be recognized directly in equity of equity-accounted investees. The change in 2022 is mainly attributable to the change in the hedging reserve of Slovak Power Holding.

Actuarial reserve – *€(1,063) million*

This reserve includes actuarial gains and losses in respect of employee benefit liabilities, net of tax effects.

Reserve from disposal of equity interests without loss of control – *€(2,390) million*

This item mainly reports:

- the gain posted on the public offering of Enel Green Power shares, net of expenses associated with the disposal and the related taxation;
- the sale of non-controlling interests recognized as a result of the Enersis (now Enel Américas and Enel Chile) capital increase;
- the capital loss, net of expenses associated with the disposal and the related taxation, from the public offering of 21.92% of Endesa;
- the disposal to third parties of the non-controlling interest in Enel Green Power North America Renewable Energy Partners;
- the effects of the merger into Enel Américas of Endesa Américas and Chilectra Américas.

The change in the reserve in 2022 is associated with the sale of the 49% stake held by Enel Green Power Canada in Pincher Creek LP and Riverview LP.

Reserve from acquisitions of non-controlling interests – *€(1,192) million*

This reserve mainly includes the surplus of acquisition prices with respect to the carrying amount of the equity acquired following the acquisition from third parties of further interests in companies already controlled in Latin America.
The change for the year (-€349 million) mainly reflects the effects of the merger between Emgesa SA ESP (acquiring entity), Codensa SA ESP, Enel Green Power Colombia SAS ESP and ESSA 2 (merged entities), following which the Group's interest in Emgesa SA ESP (now Enel Colombia SA ESP) increased from 39.89% to 47.18%, and the sale by Endesa X Servicios SLU to Enel X Way Srl of 51% of Endesa X Way SL increasing the interest held by the Group in the latter from 70.11% to 85.35%.

Retained earnings – *€15,797 million*

This reserve reports earnings from previous years that have not been distributed or allocated to other reserves.

The table below shows the changes in gains and losses recognized directly in other comprehensive income, including non-controlling interests, with specific reporting of the related tax effects.

Millions of euro

	at Dec. 31, 2021			Change						at Dec. 31, 2022		
	Total	*Of which owners of the Parent*	*Of which non-controlling interests*	Gains/ (Losses) recognized in equity during the year	Released to profit or loss	Taxes	Total	*Of which owners of the Parent*	*Of which non-controlling interests*	Total	*Of which owners of the Parent*	*Of which non-controlling interests*
Translation reserve	**(11,790)**	*(6,303)*	*(5,487)*	890	–	–	**890**	*879*	*11*	**(10,900)**	*(5,424)*	*(5,476)*
Hedging reserve	**(2,961)**	*(2,280)*	*(681)*	(3,605)	1,323	587	**(1,695)**	*(1,293)*	*(402)*	**(4,656)**	*(3,573)*	*(1,083)*
Hedging costs reserve	**(49)**	*(39)*	*(10)*	(40)	(31)	9	**(62)**	*(52)*	*(10)*	**(111)**	*(91)*	*(20)*
Reserve from measurement of financial instruments at FVOCI	**11**	*12*	*(1)*	(51)	–	7	**(44)**	*(44)*	–	**(33)**	*(32)*	*(1)*
Share of OCI of equity-accounted associates	**(820)**	*(825)*	*5*	256	–	(22)	**234**	*224*	*10*	**(586)**	*(601)*	*15*
Reserve from measurement of equity investments in other companies	**(32)**	*(32)*	–	13	–	–	**13**	*13*	–	**(19)**	*(19)*	–
Actuarial reserve	**(1,798)**	*(1,265)*	*(533)*	403	–	(79)	**324**	*249*	*75*	**(1,474)**	*(1,016)*	*(458)*
Total gains/ (losses) recognized in equity	**(17,439)**	***(10,732)***	***(6,707)***	**(2,134)**	**1,292**	**502**	**(340)**	***(24)***	***(316)***	**(17,779)**	***(10,756)***	***(7,023)***

37.2 Dividends

	Amount distributed (millions of euro)	Dividend per share (euro)
Dividends distributed in 2021		
Dividends for 2020	3,638	0.358
Interim dividends for 2021[(1)]	–	–
Special dividends	–	–
Total dividend distributed in 2021	**3,638**	**0.358**
Dividends distributed in 2021		
Dividends for 2022	3,861	0.380
Interim dividends for 2022[(2)]	–	–
Special dividends	–	–
Total dividend distributed in 2022	**3,861**	**0.380**

(1) Approved by the Board of Directors on November 4, 2021 and paid as from January 26, 2022 (interim dividend of €0.19 per share for a total of €1,932 million).
(2) Approved by the Board of Directors on November 3, 2022 and paid as from January 25, 2023 (interim dividend of €0.20 per share for a total of €2,033 million).

Dividends distributed are shown net of amounts due to treasury shares at the respective "record dates". These shares were waived for collection and allocated to "retained earnings".

The dividend for 2022 is equal to €0.40 per share, for a total of €4,067 million (of which €0.20 per share for a total of €2,033 million already paid as an interim dividend). It will be proposed to the Shareholders' Meeting of May 10, 2023 at single call.

These consolidated financial statements do not take account of the effects of the distribution to shareholders of the dividend for 2022, except for the liability in respect of shareholders for the interim dividend for 2022, which was approved by the Board of Directors on November 3, 2022 for a potential maximum of €2,033 million, and paid as from January 25, 2023 net of the portion pertaining to the 7,153,795 treasury shares held as at the record date of January 24, 2023.

In 2022, the Group also paid €123 million in coupons to holders of perpetual hybrid bonds.

Capital management

The Group's objectives for managing capital comprise safeguarding the business as a going concern, creating value for stakeholders and supporting the development of the Group. In particular, the Group seeks to maintain an adequate capitalization that enables it to achieve a satisfactory return for shareholders and ensure access to external sources of financing, in part by maintaining an adequate rating.

In this context, the Group manages its capital structure and adjusts that structure when changes in economic conditions so require. There were no substantive changes in objectives, policies or processes in 2022.

To this end, the Group constantly monitors developments in the level of its debt in relation to equity. The situation at December 31, 2022 and 2021 is summarized in the following table.

Millions of euro			
	at Dec. 31, 2022	**at Dec. 31, 2021**	**Change**
Non-current financial debt	68,191	54,620	13,571
Net current financial position	(3,315)	24	(3,339)
Non-current financial assets and long-term securities	(4,213)	(2,692)	(1,521)
Net exchange rate derivatives associated with borrowings[(1)]	(595)	(259)	(336)
Net financial debt[(1)]	**60,068**	**51,693**	**8,375**
Equity attributable to owners of the Parent	28,657	29,653	(996)
Non-controlling interests	13,425	12,689	736
Equity	**42,082**	**42,342**	**(260)**
Debt/equity ratio	**1.43**	**1.22**	**0.21**

(1) In order to improve the reporting of net financial debt, so as to take account of exchange risk hedging, in its determination the Group has decided to include the fair value of the cash flow hedge and fair value hedge derivatives used to hedge the exchange rate risk on borrowings. Accordingly, in order to improve the comparability of the figures, it was necessary to recalculate net financial debt at December 31, 2021.

The increase in the debt/equity ratio, which measures financial leverage, is essentially attributable to the increase in net financial debt, mainly reflecting the funding requirements of investments in the year, the payment of dividends, and the acquisition of ERG Hydro.

See note 47 for a breakdown of the individual items in the table.

37.3 Non-controlling interests – *€13,425 million*

The following table presents the composition of non-controlling interests by geographical area.

Millions of euro	**Non-controlling interests**		**Profit for the year attributable to non-controlling interests**	
	at Dec. 31, 2022	**at Dec. 31, 2021**	**at Dec. 31, 2022**	**at Dec. 31, 2021**
Italy	1	1	-	-
Iberia	5,321	5,238	713	193
Latin America	7,422	6,511	857	467
Europe	328	635	(342)	5
North America	218	151	10	6
Africa, Asia and Oceania	135	153	-	(3)
Total	**13,425**	**12,689**	**1,238**	**668**

The change in non-controlling interests mainly reflects the appreciation of the functional currencies of the foreign subsidiaries against the euro (especially in Latin America), the results for the period, the effect of the corporate transaction in Colombia and the impact of hyperinflation. These effects were partly offset by the dividends distributed and the value adjustment of cash flow hedge instruments.

The financial disclosure requirements of IFRS 12 for subsidiaries with significant non-controlling interests are reported below.

Millions of euro	Non-current assets		Current assets		Total assets	
	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021
Subsidiaries						
Enel Américas	29,600	28,959	5,430	4,711	35,030	33,670
Enel Chile	10,985	9,887	1,541	(642)	12,526	9,245
Endesa	45,018	43,217	11,166	3,853	56,184	47,070

Millions of euro	Non-current liabilities		Current liabilities		Total liabilities		Equity		Equity attributable to owners of the Parent		Non-controlling interests	
	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021
Subsidiaries												
Enel Américas	11,534	11,320	6,208	6,073	17,742	17,393	17,288	16,277	12,136	11,556	5,152	4,721
Enel Chile	4,113	3,356	2,460	1,178	6,573	4,534	5,953	4,711	3,683	2,921	2,270	1,790
Endesa	18,414	15,196	17,372	11,449	35,786	26,645	20,398	20,425	15,083	15,187	5,315	5,238

Millions of euro	Total revenue		Pre-tax profit		Profit from continuing operations		Profit attributable to owners of the Parent		Profit attributable to non-controlling interests	
	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
Subsidiaries										
Enel Américas	14,696	13,581	1,015	1,516	221	757	(90)	337	311	420
Enel Chile	6,450	3,114	1,971	128	1,458	104	913	57	545	47
Endesa	32,714	20,217	3,055	769	2,244	589	1,534	396	710	193

38. Borrowings

Millions of euro	Non-current		Current	
	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021
Long-term borrowings	68,191	54,500	2,835	4,031
Short-term borrowings	-	-	18,392	13,306
Total	**68,191**	**54,500**	**21,227**	**17,337**

For more information on the nature of borrowings, see note 48 "Financial instruments by category".

39. Employee benefits – *€2,202 million*

The Group provides its employees with a variety of benefits, including deferred compensation benefits, additional months' pay for having reached age limits or eligibility for old-age pension, loyalty bonuses for achievement of seniority milestones, supplemental retirement and healthcare plans, residential electricity discounts and similar benefits. More specifically:

- for Italy, the item "Pension benefits" regards estimated accruals made to cover benefits due under the supplemental retirement schemes of retired executives and the benefits due to personnel under law or contract at the time the employment relationship is terminated. For the foreign companies, the item refers to post-employment benefits, of which the most material regard the pension benefit schemes of Endesa in Spain, which break down into three types that differ on the basis of employee seniority and company. In general, under the framework agreement of October 25, 2000, employees participate in a specific defined contribution pension plan and, in cases of disability or death of employees in service, a defined benefit plan which is covered by appropriate insurance policies. In addition, the group has two other limited-enrollment plans (i) for current and retired Endesa employees covered by the electricity industry collective bargaining agreement prior to the changes introduced with the framework agreement noted earlier and (ii) for employees of the Catalan companies merged in the past (Fecsa/Enher/HidroEmpordà). Both are defined benefit plans and benefits are fully ensured, with the exception of the former plan for benefits in the event of the death of a retired employee. Finally, the Brazilian companies have also established defined benefit plans;
- the item "Electricity discount" comprises benefits regarding electricity supply associated in particular with foreign companies;
- the item "Health insurance" refers to benefits for current or retired employees covering medical expenses;
- the item "Other benefits" mainly regards the loyalty bonus, which is adopted in various countries and for Italy is represented by the estimated liability for the benefit entitling employees covered by the electricity workers national collective bargaining agreement to a bonus for achievement of seniority milestones (25th and 35th year of service). It also includes other incentive plans, which provide for the award to certain Company managers of a monetary bonus subject to specified conditions.

The following table reports changes in the defined benefit obligation for post-employment and other long-term employee benefits at December 31, 2022, and December 31, 2021, respectively, as well as a reconciliation of that obligation with the actuarial liability.

Millions of euro	2022					2021				
	Pension benefits	Electricity discount	Health insurance	Other benefits	Total	Pension benefits	Electricity discount	Health insurance	Other benefits	Total
CHANGES IN ACTUARIAL OBLIGATION										
Change in actuarial obligation previous year										
Actuarial obligation at the start of the year	**4,240**	**410**	**206**	**190**	**5,046**	**4,408**	**403**	**217**	**222**	**5,250**
Current service cost	13	1	5	13	32	17	2	4	28	51
Interest expense	320	7	8	5	340	214	3	7	3	227
Actuarial (gains)/losses arising from changes in demographic assumptions	-	-	-	-	-	192	-	(6)	-	186
Actuarial (gains)/losses arising from changes in financial assumptions	(533)	(93)	(38)	(18)	(682)	(664)	(14)	6	(1)	(673)
Experience adjustments	119	(80)	8	1	48	452	31	(9)	-	474
Past service cost	(3)	-	-	-	(3)	(17)	-	-	(3)	(20)
(Gains)/Losses arising from settlements	(163)	-	-	-	(163)	(4)	-	-	-	(4)
Exchange differences	335	-	6	(1)	340	14	(1)	(1)	-	12
Employer contributions	-	-	-	-	-	-	-	-	-	-
Employee contributions	-	-	-	-	-	-	-	-	-	-
Benefits paid	(470)	(15)	(13)	(44)	(542)	(379)	(15)	(12)	(58)	(464)
Other changes	-	-	-	(6)	(6)	7	1	-	(1)	7
Reclassification to assets	8	-	-	-	8	-	-	-	-	-
Liabilities included in disposal groups classified as held for sale	(101)	(6)	(20)	(22)	(149)	-	-	-	-	-
Actuarial obligation at year-end (A)	**3,765**	**224**	**162**	**118**	**4,269**	**4,240**	**410**	**206**	**190**	**5,046**
CHANGES IN PLAN ASSETS										
Fair value of plan assets at the start of the year	**2,348**	**-**	**-**	**-**	**2,348**	**2,299**	**-**	**-**	**-**	**2,299**
Interest income	193	-	-	-	193	121	-	-	-	121
Expected return on plan assets excluding amounts included in interest income	(184)	-	-	-	(184)	38	-	-	-	38
Exchange differences	213	-	-	-	213	17	-	-	-	17
Employer contributions	286	15	13	22	336	252	15	12	28	307
Employee contributions	-	-	-	-	-	-	-	-	-	-
Benefits paid	(470)	(15)	(13)	(22)	(520)	(379)	(15)	(12)	(28)	(434)
Other payments	(163)	-	-	-	(163)	-	-	-	-	-
Changes in the consolidation scope	(99)	-	-	-	(99)	-	-	-	-	-
Fair value of plan assets at year-end (B)	**2,124**	**-**	**-**	**-**	**2,124**	**2,348**	**-**	**-**	**-**	**2,348**
EFFECT OF ASSET CEILING										
Asset ceiling at the start of the year	**26**	**-**	**-**	**-**	**26**	**13**	**-**	**-**	**-**	**13**
Interest income	2	-	-	-	2	1	-	-	-	1
Changes in asset ceiling	27	-	-	-	27	12	-	-	-	12
Exchange differences	2	-	-	-	2	-	-	-	-	-
Changes in the consolidation scope	-	-	-	-	-	-	-	-	-	-
Asset ceiling at year-end (C)	**57**	**-**	**-**	**-**	**57**	**26**	**-**	**-**	**-**	**26**
Net liability in statement of financial position (A-B+C)	**1,698**	**224**	**162**	**118**	**2,202**	**1,918**	**410**	**206**	**190**	**2,724**

The liability recognized came to €2,202 million, a decrease of €522 million on 2021. Change in 2022 reflects the reclassification as held for sale of the actuarial liabilities of Enel Generación Costanera SA and Central Dock Sud SA in Argentina, 3SUN Srl in Italy, all the companies in Romania and Greece and PJSC Enel Russia and its subsidiaries, the latter sold in the last quarter of 2022. Furthermore, the actuarial measurement of a plan of Asociación Nuclear Ascó-Vandellós II AIE in Spain showed a surplus with respect to the obligation assumed by the company, and was thus reclassified in a specific asset item of the balance sheet.

Millions of euro		
	2022	**2021**
(Gains)/Losses taken to profit or loss		
Service cost and past service cost	22	9
Net interest expense	149	107
(Gains)/Losses arising from settlements	-	(4)
Actuarial (gains)/losses on other long-term benefits	7	22
Other changes	(20)	1
Total	**158**	**135**

Millions of euro		
	2022	**2021**
Change in (gains)/losses in OCI		
Expected return on plan assets excluding amounts included in interest income	184	(38)
Actuarial (gains)/losses on defined benefit plans	(614)	(13)
Changes in asset ceiling excluding amounts included in interest income	27	12
Other changes	-	(1)
Total	**(403)**	**(40)**

The change in the cost recognized in profit or loss was equal to €23 million. The impact on the income statement is, therefore, greater but essentially in line with 2021.
The liability recognized in the statement of financial position at the end of the year is reported net of the fair value of plan assets, amounting to €2,124 million at December 31, 2022. Those assets, which are entirely in Spain and Brazil, break down as follows:

	2022	**2021**
Investments quoted in active markets		
Equity instruments	10%	8%
Fixed-income securities	66%	54%
Investment property	3%	3%
Other	21%	-
Unquoted investments		
Assets held by insurance undertakings	-	-
Other	-	35%
Total	**100%**	**100%**

The main actuarial assumptions used to calculate the liabilities in respect of employee benefits and the plan assets, which are consistent with those used the previous year, are set out in the following table.

	Italy	Iberia	Latin America	Other countries	Italy	Iberia	Latin America	Other countries
	2022				2021			
Discount rate	3.60%-3.70%	3.57%-3.77%	5.40%-10.40%	3.75%-7.65%	0.00%-0.80%	0.00%-1.16%	5.60%-9.67%	0.80%-8.40%
Inflation rate	2.30%	2.78%	3.00%-8.00%	2.40%-3.50%	1.50%	2.20%	3.00% -8.00%	1.50%-4.01%
Rate of wage increases	2.30%-4.30%	2.78%	3.80%-8.49%	3.00% -10.00%	0.80%-1.80%	2.20%	3.80%-8.00%	2.50%-10.00%
Rate of increase in healthcare costs	3.30%	4.98%	7.12%-10.00%	-	2.50%	4.40%	7.12%-8.00%	-
Expected rate of return on plan assets	-	3.76%-3.77%	10.40%	7.40%	-	0.57%	9.30% -9.46%	-

The following table reports the outcome of a sensitivity analysis that demonstrates the effects on the defined benefit obligation of changes reasonably possible at the end of the year in the actuarial assumptions used in estimating the obligation.

	Pension benefits	Electricity discount	Health insurance	Other benefits	Pension benefits	Electricity discount	Health insurance	Other benefits
	at Dec. 31, 2022				at Dec. 31, 2021			
Decrease of 0.5% in discount rate	185	2	6	(17)	225	27	11	-
Increase of 0.5% in discount rate	(118)	(22)	(9)	(23)	(184)	(30)	(14)	(10)
Increase of 0.5% in inflation rate	16	(11)	(8)	(21)	2	(4)	(2)	(6)
Decrease of 0.5% in inflation rate	37	(10)	6	(16)	28	(2)	9	(2)
Increase of 0.5% in remuneration	29	(10)	(2)	(17)	14	(3)	(2)	-
Increase of 0.5% in pensions currently being paid	28	(10)	(2)	(20)	14	(3)	(2)	(5)
Increase of 1% in healthcare costs	-	-	(147)	-	-	-	20	1
Increase of 1 year in life expectancy of active and retired employees	55	(9)	5	(17)	98	(3)	14	(5)

The sensitivity analysis used an approach that extrapolates the effect on the defined benefit obligation of reasonable changes in an individual actuarial assumption, leaving the other assumptions unchanged.

The contributions expected to be paid into defined benefit plans in the subsequent year amount to €221 million.

The following table reports expected benefit payments in the coming years for defined benefit plans.

Millions of euro		
	at Dec. 31, 2022	at Dec. 31, 2021
Within 1 year	427	392
In 1-2 years	397	364
In 2-5 years	1,124	1,077
More than 5 years	1,826	1,714

Expected payments are increasing in general. This is mainly due to Brazil and Argentina.

40. Provisions for risks and charges – *€7,380 million*

Millions of euro	at Dec. 31, 2022			at Dec. 31, 2021		
	Non-current	Current	Total	Non-current	Current	Total
Provision for litigation, risks and other charges:						
- nuclear decommissioning	581	-	581	666	-	666
- site retirement, removal and restoration	2,686	247	2,933	3,066	203	3,269
- litigation	652	51	703	790	44	834
- environmental certificates	-	292	292	-	32	32
- taxes and duties	313	26	339	267	28	295
- other	803	316	1,119	821	347	1,168
Total	**5,035**	**932**	**5,967**	**5,610**	**654**	**6,264**
Provision for early retirement incentives and other restructuring plans	231	192	423	435	293	728
Provision for restructuring programs connected with the energy transition	789	201	990	1,152	179	1,331
TOTAL	**6,055**	**1,325**	**7,380**	**7,197**	**1,126**	**8,323**

Millions of euro	at Dec. 31, 2021	Accrual	Reversal	Utilization	Discounting	Provisions for site retirement and restoration	Change in consolidation scope	Exchange differences	Other changes	Reclassifications of liabilities included in disposal groups held for sale	at Dec. 31, 2022
Provision for litigation, risks and other charges:											
- nuclear decommissioning	666	-	-	-	8	(93)	-	-	-	-	581
- site retirement, removal and restoration	3,269	201	(135)	(167)	(12)	(207)	(2)	16	(1)	(29)	2,933
- litigation	834	239	(123)	(162)	59	-	-	42	35	(221)	703
- environmental certificates	32	345	(24)	(8)	-	-	-	-	(35)	(18)	292
- taxes and duties	295	45	(30)	(10)	8	-	8	10	13	-	339
- other	1,168	375	(79)	(309)	11	(2)	39	(3)	(38)	(43)	1,119
Total	**6,264**	**1,205**	**(391)**	**(656)**	**74**	**(302)**	**45**	**65**	**(26)**	**(311)**	**5,967**
Provision for early retirement incentives and other restructuring plans	728	4	(32)	(244)	(26)	-	-	-	(4)	(3)	423
Provision for restructuring programs connected with the energy transition	1,331	51	(177)	(157)	(51)	-	-	2	(4)	(5)	990
TOTAL	**8,323**	**1,260**	**(600)**	**(1,057)**	**(3)**	**(302)**	**45**	**67**	**(34)**	**(319)**	**7,380**

Nuclear decommissioning provision

At December 31, 2022 the provision reflected solely the costs that would be incurred at the time of decommissioning of nuclear plants by Enresa, a Spanish public entity responsible for such activities in accordance with Royal Decree 1349/2003 and Law 24/2005. In general, the costs are quantified on the basis of a standard contract between Enresa and the electricity companies approved by the Ministry for the Economy in September 2001, which regulates the retirement and closing of nuclear power plants. The time horizon envisaged, three years, corresponds to the period from the termination of power generation to the transfer of plant management to Enresa (so-called post-operational costs) and takes account, among the various assumptions used to estimate the amount, of the quantity of unused nuclear fuel expected at the date of closure of each of the Spanish nuclear plants on the basis of the provisions of the concession agreement.

Site retirement, removal and restoration provision

This provision represents the present value of the estimated cost for the retirement and removal of non-nuclear plants where there is a legal or constructive obligation to do so. The provision mainly regarded the Endesa Group and Enel Produzione. The change in the provision in 2022

was mainly linked to the redetermination of the future retirement costs of certain plants in Iberia and North America as well as the uses and releases of provisions set aside in previous years to deal with the decarbonization process.

The following table summarizes the temporal breakdown of payments connected with the site retirement, removal and restoration provision.

Millions of euro

	Payments by time bracket (nominal value)	Discounted amount
Within 1 year	248	247
In 1-5 years	1,221	1,134
More than 5 years	2,275	1,552
Total	**3,744**	**2,933**

Litigation provision

The litigation provision covers contingent liabilities in respect of pending litigation and other disputes. It includes an estimate of the potential liability relating to disputes that arose during the year, as well as revised estimates of the potential costs associated with disputes initiated in prior years, based on the indications of internal and external consultants. The balance for litigation mainly regards the companies in Latin America (€395 million), Spain (€169 million) and Italy (€127 million).

The decrease compared with the previous year, equal to €131 million, mainly reflects the decrease in the provision in Brazil following the deconsolidation of Celg-D.

Provision for environmental certificates

The provision for environmental certificates covers costs in respect of shortfalls in the environmental certificates need for compliance with national or supranational environmental protection requirements and mainly regards Iberia (Endesa Energía and Endesa Generación SA).

Provision for taxes and duties

The provision for taxes and duties covers the estimated liability deriving from tax disputes concerning direct and indirect taxes.

The balance of the provision also includes the provision for current and potential disputes concerning local property tax (whether the *Imposta Comunale sugli Immobili* (ICI) or the *Imposta Municipale Unica* (IMU)) in Italy. In Italy, the Group has taken due account of developments in land registry regulations (which with effect from January 1, 2016 excluded machinery, devices, equipment and other plant specific to a production process from the calculation of the imputed rent for buildings classified in land registry group D, which includes generation plants) in estimating the liability for such taxes, both for the purposes of quantifying the probable risk associated with pending litigation and generating a reasonable valuation of probable future charges on positions that have not yet been assessed by the Revenue Agency and municipalities.

Other provisions

Other provisions cover various risks and charges, mainly in connection with regulatory disputes and disputes with local authorities regarding various duties and fees or other charges.

The decrease of €49 million in other provisions is mainly attributable to Enel Global Trading for uses of provisions for insurance compensation.

Provision for early retirement incentives and other restructuring plans

The provision for early retirement incentives and other restructuring plans includes the estimated charges related to binding agreements for the voluntary termination of employment contracts in response to organizational needs. The reduction of €305 million for the year mainly reflects uses of provisions for incentives established in previous period in Spain (*Acuerdo de Salida Voluntaria*) and Italy to cover the early termination of employment for certain employees.

Provision for restructuring programs connected with the energy transition

Enel, in its role as a leader of the energy transition, has placed decarbonization and growth of renewables around the world at the center of its strategy.

In this context, Enel has begun restructuring the activities associated with the energy transition process, which involves thermal generation plants in all the geographical areas in which the Group operates. The consequent revision of processes and operating models will require changes in the roles and skills of employees, which the Group intends to implement with highly sustainable plans based on redeployment programs, with major upskilling and reskilling plans and voluntary individual early retirement agreements.

The energy transition is also based on the progressive and expansive development of digital tools, as digitization is essential to responding to multiple external forces and making informed and well-considered decisions at every level within the Group.

A provision was therefore established in 2020 for restructuring programs, which at December 31, 2022 amounted to €990 million, which is mainly attributable to Spain and Italy, and represents the estimated costs that the Group will incur following the acceleration of the energy transition, for all direct and indirect activities related to the review of processes and operating models and the roles and skills of employees.

41. Other non-current financial liabilities – *€ - million*

Millions of euro				
	at Dec. 31, 2022	**at Dec. 31, 2021**	**Change**	
Other non-current financial liabilities	-	120	(120)	-
Total	**-**	**120**	**(120)**	**-**

The change in "Other non-current financial liabilities" came to €120 million and regards the decrease in the non-current portion of liabilities in respect of the Spanish electrical system deficit, which were included in net financial debt.

42. Other non-current liabilities – *€4,246 million*

Millions of euro				
	at Dec. 31, 2022	**at Dec. 31, 2021**	**Change**	
Accrued operating expenses and deferred income	347	498	(151)	-30.3%
Other items	3,899	4,027	(128)	-3.2%
Total	**4,246**	**4,525**	**(279)**	**-6.2%**

The change in "Other items" reflected the decrease of €45 million in "Other tax liabilities beyond 12 months", as well as the decrease of €351 million in "Other liabilities" relating to the outcome of the PIS/COFINS dispute in Brazil (already discussed under "Other non-current assets"), only partially offset by the increase of €323 million in "Liabilities for tax partnerships" in North America.

43. Other current liabilities – *€11,713 million*

Millions of euro				
	at Dec. 31, 2022	**at Dec. 31, 2021**	**Change**	
Amounts due to customers	2,094	1,950	144	7.4%
Amounts due to institutional market operators	2,115	2,961	(846)	-28.6%
Amounts due to employees	519	471	48	10.2%
Other tax liabilities	1,046	1,274	(228)	-17.9%
Amounts due to social security institutions	215	205	10	4.9%
Contingent consideration	46	45	1	2.2%
Put options granted to non-controlling shareholders	-	4	(4)	-
Current accrued expenses and deferred income	441	395	46	11.6%
Dividends	2,228	2,191	37	1.7%
Other liabilities	3,009	3,463	(454)	-13.1%
Total	**11,713**	**12,959**	**(1,246)**	**-9.6%**

The change in "Other current liabilities" mainly reflects:

- the decrease in "Amounts due to institutional market operators", mainly attributable to Italy, with the decrease in amounts due to the Energy and Environmental Services Fund, determined by the update of rate in force for 2022 with the Regulatory Authority for Energy, Networks and Environment (ARERA) Resolutions no. 35/2022, 141/2022, 295/2022 and 462/2022, which completely zeroed system charges rates for all types of users as from January 1, 2022;

- the decrease in "Other tax liabilities", mainly attributable to Italy following the start in 2021 of the Group settlement mechanism for VAT obligations by the Parent, Enel SpA;
- the decrease in "Other liabilities", mainly attributable to Italy in respect of expired derivatives on energy commodities.

44. Trade payables – *€17,641 million*

The item amounted to €17,641 million (€16,959 million at December 31, 2021) and includes payables in respect of electricity supplies, fuel, materials, equipment associated with tenders, and other services.

More specifically, trade payables falling due in less than 12 months amounted to €17,605 million (€16,865 million at December 31, 2021), while those falling due in more than 12 months amounted to €36 million (€94 million at December 31, 2021).

45. Other current financial liabilities – *€853 million*

Millions of euro				
	at Dec. 31, 2022	**at Dec. 31, 2021**	**Change**	
Accrued financial expense and deferred financial income	710	539	171	31.7%
Other items	143	86	57	66.3%
Total	**853**	**625**	**228**	**36.5%**

The increase in other current financial liabilities is mainly attributable to the increase of €171 million in accrued financial expense and deferred financial income, as a result of higher accrued expenses on bond issues.
Other items mainly regard liabilities for accrued interest.

Information on the consolidated statement of cash flows

46. Cash flows

Millions of euro	2022	2021	Change
Cash and cash equivalents at the beginning of the year[1]	**8,990**	**6,002**	**2,988**
Cash flows from operating activities[2]	8,674	9,915	(1,241)
of which discontinued operations	*(391)*	*280*	
Cash flows from/(used in) investing activities	(13,626)	(10,875)	(2,751)
of which discontinued operations	*(351)*	*(453)*	
Cash flows from financing activities[2]	7,369	3,931	3,438
of which discontinued operations	*656*	*118*	
Impact of exchange rate fluctuations on cash and cash equivalents	136	17	119
Cash and cash equivalents at the end of the year[3]	**11,543**	**8,990**	**2,553**

(1) Of which cash and cash equivalents equal to €8,315 million at January 1, 2022 (€5,266 million at January 1, 2021), short-term securities equal to €88 million at January 1, 2022 (€67 million at January 1, 2021) and cash and cash equivalents pertaining to "Assets held for sale" in the amount of €44 million at January 1, 2022 (€29 million at January 1, 2021) and cash and cash equivalents pertaining to "discontinued operations" equal to €543 million at January 1, 2022 (€640 million at January 1, 2021).

(2) In order to improve presentation, for comparative purposes only, realized financial income and expense connected solely with loans in currencies have been reclassified under a new item "Collections/(Payments) associated with derivatives connected with borrowings" in the section on cash flows from financing activities.

(3) Of which cash and cash equivalents equal to €11,041 million at December 31, 2022 (€8,315 million at December 31, 2021), short-term securities equal to €78 million at December 31, 2022 (€88 million at December 31, 2021) and cash and cash equivalents pertaining to "Assets held for sale" in the amount of €98 million at December 31, 2022 (€44 million at December 31, 2021) and to "discontinued operations" equal to €326 million at December 31, 2022 (€543 million at December 31, 2021).

Cash flows from operating activities in 2022 was a positive €8,674 million, a decrease of €1,241 million on 2021, mainly attributable to increased cash requirements connected with changes in net working capital.

Cash flows used in investing activities in 2022 came to €13,626 million, from €10,875 million in 2021.
More specifically, investments in property, plant and equipment, intangibles, property investment and contract assets came to €14,503 million (including €156 million classified as available for sale), an increase on 2021.

Investments in companies or business units, net of cash and cash equivalents acquired, amount to €1,275 million and mainly refer to the acquisition by Enel Produzione SpA of 100% of ERG Hydro Srl (now Enel Hydro Appennino Centrale Srl), for €1,196 million net of cash and cash equivalents acquired of €69 million.

Disposals of businesses or business units, net of cash and cash equivalents sold, amount to €2,032 million and mainly refer to:

- the sale by EGP SpA to Al Rayyan Holding LLC (controlled by the Qatar Investment Authority) of a 50% interest in EGP Matimba NewCo 1 Srl, indirect owner of six projects in South Africa (for €102 million net of cash and cash equivalents sold of €6 million);
- the sale by Enel X Germany of the entire interest held in Cremzow KG and Cremzow Verwaltungs (for €8 million net of cash and cash equivalents sold of €4 million);
- the sale by Enel Brasil SA of the entire interest held in CGTF - Central Geradora Termelétrica Fortaleza SA (for €29 million net of cash and cash equivalents sold of €60 million);
- the sale of the entire interest held in Enel SpA in PJSC Enel Russia, equal to 56.43% of the share capital of the latter, to PJSC Lukoil and Closed Combined Mutual Investment Fund "Gazprombank-Frezia" (for €20 million net of cash and cash equivalents sold of €117 million);
- the sale of the entire interest held by Enel Chile SA in Chilean power transmission company Enel Transmisión Chile SA, to Sociedad Transmisora Metropolitana SpA, controlled by Inversiones Grupo Saesa Ltda, for a total consideration of €1,342 million;
- the sale of a 50% quota in its wholly-owned subsidiary Gridspertise Srl, to the international private equity fund CVC Capital Partners Fund VIII, for €272 million net of cash and cash equivalents sold of €27 million;
- the sale of the entire interest held by Enel Américas in the Brazilian electricity distribution company Celg Distribuição SA - Celg-D (Enel Goiás), equal to 99.9% of the share capital of the latter, to Equatorial Participações e Investimentos SA, controlled by Equatorial Energia SA, for a total consideration of €259 million net of cash and cash equivalents sold of €10 million.

Cash flows from/(used in) other investing activities in 2022 came to 120 million and mainly reflects:

- the sale of a 1.1% interest held by Enel X International in Ufinet, for €73 million;
- the sale by Enel Kansas LLC of a 50% interest held in Rocky Caney Holdings LLC and EGPNA Renewable Energy Partners for €94 million;
- the acquisition of 50% of the share capital of Mooney for €225 million;
- the sale by Enel Green Power Canada Inc. of a 49% interest held in Pincher Creek LP and Riverview LP for €56 million;
- minor disposals mainly in Italy, Iberia, North America and Latin America.

Cash flows from financing activities came to a total €7,369 million, from €3,931 million used in 2021, mainly reflecting:

- the net increase as the balance between repayments, new borrowings and other changes in financial payables for €12,420 million;
- distribution of dividends in the amount of €4,901 million, plus €123 million paid to holders of perpetual hybrid bonds;
- capital increases in subsidiaries with non-controlling interests for €12 million, particularly in Australia.

In 2022, cash flows used in investing activities in the amount of €13,626 million fully absorbed the cash flows from operating activities for €8,674 million, with the difference coming from financing activities in the amount of €7,369 million. The difference is reflected in an increase in cash and cash equivalents at December 31, 2022 to €11,543 million, from €8,990 million at the end of 2021. The change was also affected by effects associated with the positive developments in the exchange rates of local currencies against the euro, in the amount of €136 million.

47. Net financial position and long-term financial assets and securities – *€60,068 million*

The following table shows the net financial position and long-term financial assets and securities on the basis of the items on the statement of consolidated financial position.

Millions of euro

	Notes	at Dec. 31, 2022	at Dec. 31, 2021	Change	
Long-term borrowings	38	68,191	54,500	13,691	25.1%
Other non-current financial borrowings[1]	41	-	120	(120)	-
Short-term borrowings	38	18,392	13,306	5,086	38.2%
Other current financial borrowings[2]		-	12	(12)	-
Current portion of long-term borrowings	38	2,835	4,031	(1,196)	-29.7%
Other non-current financial assets included in net financial debt	29.1	(4,213)	(2,692)	(1,521)	-56.5%
Other current financial assets included in net financial debt	30.1	(13,501)	(8,467)	(5,034)	-59.5%
Cash and cash equivalents	35	(11,041)	(8,858)	(2,183)	-24.6%
Net exchange rate derivatives associated with borrowings[3]		(595)	(259)	(336)	-
Total[3]		**60,068**	**51,693**	**8,375**	**16.2%**

(1) The item "Other non-current financial borrowings" is represented by "Other non-current financial liabilities" in the statement of financial position.
(2) The item "Other current financial borrowings" is included under "Other current financial liabilities" in the statement of financial position.
(3) In order to improve the comparability of the figures, it was necessary to recalculate net financial debt at December 31, 2021 in accordance with the new representation of net financial debt by the Enel Group.

The financial position is reported in compliance with Guideline 39, issued on March 4, 2021 by ESMA and applicable as from May 5, 2021, and with warning notice no. 5/2021 issued by CONSOB on April 29, 2021, which replaced the references to the CESR Recommendations and the references in Communication no. DEM/6064293 of July 28, 2006 regarding the net financial position.
The net financial debt of the Enel Group at December 31, 2022 and December 31, 2021 is reconciled with net financial debt as provided for in the presentation methods of the Enel Group.

Millions of euro				
	at Dec. 31, 2022	at Dec. 31, 2021	Change	
Liquidity				
Cash and cash equivalents on hand	35	8	27	-
Bank and post office deposits	8,968	8,118	850	10.5%
Liquid assets	**9,003**	**8,126**	**877**	**10.8%**
Cash equivalents	**2,038**	**732**	**1,306**	**-**
Securities	78	88	(10)	-11.4%
Short-term loan assets	10,585	6,841	3,744	54.7%
Current portion of long-term loan assets	2,838	1,538	1,300	84.5%
Other current financial assets	**13,501**	**8,467**	**5,034**	**59.5%**
Liquidity	**24,542**	**17,325**	**7,217**	**41.7%**
Current financial debt				
Bank debt	(1,320)	(1,329)	9	0.7%
Commercial paper	(13,838)	(10,708)	(3,130)	-29.2%
Other short-term borrowings[1]	(3,234)	(1,281)	(1,953)	-
Current financial debt (including debt instruments)	**(18,392)**	**(13,318)**	**(5,074)**	**-38.1%**
Current portion of long-term bank borrowings	(890)	(989)	99	10.0%
Bonds issued (current portion)	(1,612)	(2,700)	1,088	40.3%
Other borrowings (current portion)	(333)	(342)	9	2.6%
Non-current financial debt (current portion)	**(2,835)**	**(4,031)**	**1,196**	**29.7%**
Current financial debt	**(21,227)**	**(17,349)**	**(3,878)**	**-22.4%**
Net current financial debt	**3,315**	**(24)**	**3,339**	**-**
Non-current financial debt				
Bank borrowings	(15,261)	(12,579)	(2,682)	-21.3%
Other borrowings[2]	(2,851)	(2,942)	91	3.1%
Non-current financial debt (excluding current portion and debt instruments)	**(18,112)**	**(15,521)**	**(2,591)**	**-16.7%**
Bonds	**(50,079)**	**(39,099)**	**(10,980)**	**-28.1%**
Trade payables and other non-interest-bearing non-current liabilities with a significant financing component	**-**	**-**	**-**	**-**
Non-current financial position	**(68,191)**	**(54,620)**	**(13,571)**	**-24.8%**
Financial assets in respect of "Assets classified as held for sale"	**543**	**85**	**458**	**-**
Financial liabilities in respect of "Liabilities included in disposal groups classified as held for sale"	**(1,435)**	**(784)**	**(651)**	**-83.0%**
Net financial position as per CONSOB instructions	**(65,768)**	**(55,343)**	**(10,425)**	**-18.8%**
Long-term financial receivables and securities	**4,213**	**2,692**	**1,521**	**56.5%**
Net exchange rate derivatives associated with borrowings[3]	**595**	**259**	**336**	**-**
(-) Financial assets in respect of "Assets classified as held for sale"	**(543)**	**(85)**	**(458)**	**-**
(-) Financial liabilities in respect of "Liabilities included in disposal groups classified as held for sale"	**1,435**	**784**	**651**	**83.0%**
NET FINANCIAL DEBT[3]	**(60,068)**	**(51,693)**	**(8,375)**	**-16.2%**

(1) Includes current financial borrowings included in "Other current financial liabilities" in the statement of financial position.
(2) Includes other non-current financial borrowings presented under "Other non-current financial liabilities" in the statement of financial position.
(3) In order to improve the comparability of the figures, it was necessary to recalculate net financial debt at December 31, 2021 in accordance with the new representation of net financial debt by the Enel Group.

The net position as per CONSOB instructions does not include derivatives designated as hedges for hedge accounting purposes or entered into for trading purposes as they are used for hedging.

At December 31, 2022, those financial assets and liabilities are reported separately in the statement of financial position under the following items: "Non-current financial derivative assets" in the amount of €3,970 million (€2,772 million at December 31, 2021), "Current financial derivative assets" in the amount of €14,830 million (€22,791 million at December 31, 2021), "Non-current financial derivative liabilities" in the amount of €5,895 million (€3,339 million at December 31, 2021), and "Current financial derivative liabilities" in the amount of €16,141 million (€24,607 million at December 31, 2021).
Furthermore, for the purpose of better representing the Enel Group's net financial debt, it includes the fair value of the cross currency swaps entered into to hedge foreign currency loans to external counterparties. For more information on the classification of such derivatives, please see note 51 "Derivatives and hedge accounting".

Financial instruments

48. Financial instruments by category

This note provides disclosures necessary for users to assess the significance of financial instruments for the Group's financial position and performance.

48.1 Financial assets by category

The following table reports the carrying amount for each category of financial asset provided for under IFRS 9, broken down into current and non-current financial assets, showing hedging derivatives and derivatives measured at fair value through profit or loss separately.

Millions of euro		Non-current		Current	
	Notes	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021
Financial assets at amortized cost	48.1.1	**5,731**	**4,092**	**40,057**	**34,671**
Financial assets at FVOCI	48.1.2	**901**	**706**	**279**	**144**
Financial assets at fair value through profit or loss					
Derivative financial assets at FVTPL	48.1.3	473	277	12,075	19,664
Other financial assets at FVTPL	48.1.3	3,442	2,662	1,049	141
Total financial assets at fair value through profit or loss		**3,915**	**2,939**	**13,124**	**19,805**
Derivative financial assets designated as hedging instruments					
Fair value hedge derivatives	48.1.4	37	61	-	-
Cash flow hedge derivatives	48.1.4	3,460	2,434	2,755	3,127
Total derivative financial assets designated as hedging instruments		**3,497**	**2,495**	**2,755**	**3,127**
TOTAL		**14,044**	**10,232**	**56,215**	**57,747**

For more information on the recognition and classification of current and non-current derivative assets, please see note 51 "Derivatives and hedge accounting".

For more information on fair value measurement, see note 52 "Assets and liabilities measured at fair value".

48.1.1 Financial assets measured at amortized cost

The following table reports financial assets measured at amortized cost by nature, broken down into current and non-current financial assets.

Millions of euro		Non-current			Current	
	Notes	at Dec. 31, 2022	at Dec. 31, 2021	Notes	at Dec. 31, 2022	at Dec. 31, 2021
Cash and cash equivalents		-	-	35	10,169	8,759
Trade receivables	34	1,388	1,301	34	15,217	14,775
Current portion of long-term loan assets		-	-	30.1	2,838	1,538
Cash collateral		-	-	30.1	8,319	6,485
Other financial assets	29.1	3,766	2,289	30.1	2,090	315
Financial assets from service concession arrangements at amortized cost	29	295	260	29	12	64
Other financial assets at amortized cost		282	242		1,412	2,735
Total		**5,731**	**4,092**		**40,057**	**34,671**

Impairment of financial assets at amortized cost

Financial assets measured at amortized cost amounted to €45,788 million at December 31, 2022 (€38,763 million at December 31, 2021) and are recognized net of allowances for expected credit losses totaling €4,087 million at December 31, 2022 (€4,051 million at the end of the previous year).

The Group mainly has the following types of financial assets measured at amortized cost subject to impairment testing:

- cash and cash equivalents;
- trade receivables and contract assets;
- loan assets;
- other financial assets.

While cash and cash equivalents are also subject to the impairment requirements of IFRS 9, the identified impairment loss was immaterial.

The expected credit loss (ECL) – determined using probability of default (PD), loss given default (LGD) and exposure at default (EAD) – is the difference between all contractual cash flows that are due in accordance with the contract and all cash flows that are expected to be received (i.e., all shortfalls) discounted at the original effective interest rate (EIR).

For calculating ECL, the Group applies two different approaches:

- the general approach, for financial assets other than trade receivables, contract assets and lease receivables. This approach, based on an assessment of any significant increase in credit risk since initial recognition, is performed comparing the PD at origination with PD at the reporting date, at each reporting date.
  Then, based on the results of the assessment, a loss allowance is recognized based on 12-month ECL or lifetime ECL (i.e., staging):
  - 12-month ECL, for financial assets for which there has not been a significant increase in credit risk since initial recognition;
  - lifetime ECL, for financial assets for which there has been a significant increase in credit risk or which are credit impaired (i.e., defaulted based on past due information);
- the simplified approach, for trade receivables, contract assets and lease receivables with or without a significant financing component, based on lifetime ECL without tracking changes in credit risk.

A forward-looking adjustment can be applied considering qualitative and quantitative information in order to reflect future events and macroeconomic developments that could impact the risk associated with the portfolio or financial instrument.

Depending on the nature of the financial assets and the credit risk information available, the assessment of the increase in credit risk can be performed on:

- an individual basis, if the receivables are individually significant and for all receivables which have been individually identified for impairment based on reasonable and supportable information;
- a collective basis, if no reasonable and supportable information is available without undue cost or effort to measure expected credit losses on an individual instrument basis.

When there is no reasonable expectation of recovering a financial asset in its entirety or a portion thereof, the gross carrying amount of the financial asset shall be reduced.

A write-off represents a derecognition event (e.g., the right to cash flows is legally or contractually extinguished, transferred or expired).

The following table reports expected credit losses on financial assets measured at amortized cost on the basis of the general simplified approach.

Millions of euro	at Dec. 31, 2022			at Dec. 31, 2021		
	Gross amount	Expected credit loss allowance	Total	Gross amount	Expected credit loss allowance	Total
Cash and cash equivalents	10,169	-	10,169	8,759	-	8,759
Trade receivables	20,388	3,783	16,605	19,739	3,663	16,076
Loan assets	17,261	248	17,013	10,861	234	10,627
Other financial assets at amortized cost	2,057	56	2,001	3,455	154	3,301
Total	**49,875**	**4,087**	**45,788**	**42,814**	**4,051**	**38,763**

To measure expected losses, the Group assesses trade receivables and contract assets with the simplified approach, both on an individual basis (e.g., government entities, authorities, financial counterparties, wholesale sellers, traders and large companies, etc.) and a collective basis (e.g., retail customers).

In the case of individual assessments, PD is generally obtained from external providers.

Otherwise, in the case of collective assessments, trade receivables are grouped on the basis of their shared credit risk characteristics and information on past due positions, considering a specific definition of default.

Based on each business and local regulatory framework, as well as differences between customer portfolios, including their default and recovery rates (comprising expectations for recovery beyond 90 days):

- the Group mainly defines a defaulted position as one that is 180 days past due. Accordingly, beyond this time limit, trade receivables are presumed to be credit impaired); and
- specific clusters are defined on the basis of specific markets, business and risk characteristics.

Contract assets substantially have the same risk characteristics as trade receivables for the same types of contracts.

In order to measure the ECL for trade receivables on a collective basis, as well as for contract assets, the Group uses the following assumptions regarding the ECL parameters:

- PD, assumed equal to the average default rate, is calculated by cluster and considering historical data from at least 24 months;
- LGD is a function of the recovery rates for each cluster, discounted using the effective interest rate; and
- EAD is estimated as equal to the carrying amount at the reporting date net of cash deposits, including invoices issued but not past due and invoices to be issued.

Despite the deterioration in the collection status of certain customer segments, which was taken into consideration in determining impairment of trade receivables, the Group's portfolio has so far demonstrated resilience to the macroeconomic context and the current price scenario. This reflects the expansion of digital collection channels and a solid diversification of commercial customers.

The following table reports changes in the allowance for expected credit losses on loan assets in accordance with the general approach.

Millions of euro	ECL 12-month allowance	ECL lifetime allowance
Opening balance at Jan. 1, 2021	**65**	**143**
Accruals	-	9
Uses	-	-
Reversals to profit or loss	(25)	(9)
Other changes	25	26
Closing balance at Dec. 31, 2021	**65**	**169**
Opening balance at Jan. 1, 2022	**65**	**169**
Accruals	22	5
Uses	-	-
Reversals to profit or loss	-	(11)
Other changes	(58)	56
Closing balance at Dec. 31, 2022	**29**	**219**

The following table reports changes in the allowance for expected credit losses on trade receivables in accordance with the simplified approach.

Millions of euro	
Opening balance at Jan. 1, 2021	**3,287**
Accruals	1,285
Uses	709
Reversals to profit or loss	(202)
Other changes	(1,416)
Closing balance at Dec. 31, 2021	**3,663**
Opening balance at Jan. 1, 2022	**3,663**
Accruals	1,375
Uses	(766)
Reversals to profit or loss	(265)
Other changes	(224)
Closing balance at Dec. 31, 2022	**3,783**

The following table reports changes in the allowance for expected credit losses on other financial assets at amortized cost in accordance with the simplified approach.

Millions of euro	**ECL lifetime allowance**
Opening balance at Jan. 1, 2021	**129**
Accruals	94
Uses	-
Reversals to profit or loss	(1)
Other changes	(68)
Closing balance at Dec. 31, 2021	**154**
Opening balance at Jan. 1, 2022	**154**
Accruals	180
Uses	-
Reversals to profit or loss	(1)
Other changes	(277)
Closing balance at Dec. 31, 2022	**56**

Note 49 "Risk management" provides additional information on the exposure to credit risk and expected losses.

48.1.2 Financial assets at fair value through other comprehensive income

The following table shows financial assets at fair value through other comprehensive income by nature, broken down into current and non-current financial assets.

Millions of euro		**Non-current**			**Current**	
	Notes	**at Dec. 31, 2022**	**at Dec. 31, 2021**	**Notes**	**at Dec. 31, 2022**	**at Dec. 31, 2021**
Investments in other companies at FVOCI	29	360	40		-	-
Securities	29.1	447	403	30.1	78	87
Receivables and other financial assets at FVOCI		94	263		201	57
Total		**901**	**706**		**279**	**144**

Changes in financial assets at FVOCI

Investments in other companies

Millions of euro	Non-current	Current
Opening balance at Jan. 1, 2021	**40**	**-**
Purchases	2	-
Sales	-	-
Changes in fair value through OCI	-	-
Other changes	(2)	-
Closing balance at Dec. 31, 2021	**40**	**-**
Opening balance at Jan. 1, 2022	**40**	**-**
Purchases	149	-
Sales	-	-
Changes in fair value through OCI	11	-
Other changes	160	-
Closing balance at Dec. 31, 2022	**360**	**-**

Securities and other receivables at FVOCI

Millions of euro	Non-current	Current
Opening balance at Jan. 1, 2021	**551**	**102**
Purchases	165	-
Sales	(87)	-
Changes in fair value through OCI	2	-
Reclassifications	(85)	85
Other changes	120	(43)
Closing balance at Dec. 31, 2021	**666**	**144**
Opening balance at Jan. 1, 2022	**666**	**144**
Purchases	225	-
Sales	(41)	(14)
Changes in fair value through OCI	(38)	-
Reclassifications	(102)	102
Other changes	(168)	47
Closing balance at Dec. 31, 2022	**541**	**279**

48.1.3 Financial assets at fair value through profit or loss

The following table shows financial assets at fair value through profit or loss by nature, broken down into current and non-current financial assets.

Millions of euro		Non-current			Current	
	Notes	at Dec. 31, 2022	at Dec. 31, 2021	Notes	at Dec. 31, 2022	at Dec. 31, 2021
Derivatives at FVTPL	51	473	277	51	12,075	19,664
Investments in liquid assets		-	-	35	872	99
Financial assets at FVTPL		-	-	30, 30.1	176	41
Securities		-	-	30.1	-	1
Equity investments in other companies at FVTPL	29	6	32		-	-
Financial assets from service concession arrangements at FVTPL	29	3,436	2,630		-	-
Total		**3,915**	**2,939**		**13,123**	**19,805**

48.1.4 Derivative financial assets designated as hedging instruments

For more information on derivative financial assets, please see note 51 "Derivatives and hedge accounting".

48.2 Financial liabilities by category

The following table shows the carrying amount for each category of financial liability provided for under IFRS 9, broken down into current and non-current financial liabilities, showing hedging derivatives and derivatives measured at fair value through profit or loss separately.

Millions of euro		Non-current		Current	
	Notes	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021
Financial liabilities measured at amortized cost	48.2.1	**68,432**	**54,914**	**45,697**	**42,330**
Financial liabilities at fair value through profit or loss					
Derivative financial liabilities at FVTPL	48.4	588	169	11,642	19,696
Total financial liabilities at fair value through profit or loss		**588**	**169**	**11,642**	**19,696**
Derivative financial liabilities designated as hedging instruments					
Fair value hedge derivatives	48.4	191	5	-	-
Cash flow hedge derivatives	48.4	5,116	3,165	4,499	4,911
Total derivative financial liabilities designated as hedging instruments		**5,307**	**3,170**	**4,499**	**4,911**
TOTAL		**73,158**	**58,253**	**63,007**	**66,937**

For more information on fair value measurement, please see note 52 "Assets and liabilities measured at fair value".

48.2.1 Financial liabilities measured at amortized cost

The following table shows financial liabilities at amortized cost by nature, broken down into current and non-current financial liabilities.

Millions of euro		Non-current			Current	
	Notes	at Dec. 31, 2022	at Dec. 31, 2021	Notes	at Dec. 31, 2022	at Dec. 31, 2021
Long-term borrowings	48.3	68,191	54,500	48.3	2,835	4,031
Short-term borrowings		-	-	48.3	18,392	13,306
Trade payables	44	36	94	44	17,605	16,865
Other financial liabilities		205	320		6,865	8,128
Total		**68,432**	**54,914**		**45,697**	**42,330**

48.3 Borrowings

48.3.1 Long-term borrowings (including the portion falling due within 12 months) – *€71,026 million*

The following table reports the nominal value, carrying amount, and fair value of long-term borrowings including the portion falling due within 12 months.

Long-term borrowings by category and type of interest rate[1]

Millions of euro	Nominal value	Carrying amount	Current portion	Portion due in more than 12 months	Fair value	Nominal value	Carrying amount	Current portion	Portion due in more than 12 months	Fair value	Changes in carrying amount 2022-2021
	at Dec. 31, 2022					at Dec. 31, 2021					
Bonds:											
- listed, fixed rate	30,355	29,892	978	28,914	27,468	27,857	27,413	2,119	25,294	30,279	2,479
- listed, floating rate	2,569	2,547	537	2,010	2,473	2,574	2,557	434	2,123	2,545	(10)
- unlisted, fixed rate	18,959	18,727	-	18,727	17,249	11,293	11,207	50	11,157	12,670	7,520
- unlisted, floating rate	525	525	97	428	600	622	622	97	525	728	(97)
Total bonds	**52,408**	**51,691**	**1,612**	**50,079**	**47,790**	**42,346**	**41,799**	**2,700**	**39,099**	**46,222**	**9,892**
Bank borrowings:											
- fixed rate	3,367	3,273	211	3,062	3,021	2,414	2,405	238	2,167	2,298	868
- floating rate	12,884	12,848	677	12,171	12,570	10,139	10,109	751	9,358	10,037	2,739
- use of revolving credit lines	30	30	2	28	26	1,054	1,054	-	1,054	1,054	(1,024)
Total bank borrowings	**16,281**	**16,151**	**890**	**15,261**	**15,617**	**13,607**	**13,568**	**989**	**12,579**	**13,389**	**2,583**
Leases:											
- fixed rate	2,630	2,630	251	2,379	2,630	2,477	2,477	242	2,235	2,477	153
- floating rate	42	42	10	32	42	70	70	17	53	70	(28)
Total leases	**2,672**	**2,672**	**261**	**2,411**	**2,672**	**2,547**	**2,547**	**259**	**2,288**	**2,547**	**125**
Other non-bank borrowings:											
- fixed rate	504	504	70	434	504	571	595	69	526	569	(91)
- floating rate	8	8	2	6	12	34	22	14	8	25	(14)
Total other non-bank borrowings	**512**	**512**	**72**	**440**	**516**	**605**	**617**	**83**	**534**	**594**	**(105)**
Total fixed-rate borrowings	**55,815**	**55,026**	**1,510**	**53,516**	**50,872**	**44,612**	**44,097**	**2,718**	**41,379**	**48,293**	**10,929**
Total floating-rate borrowings	**16,058**	**16,000**	**1,325**	**14,675**	**15,723**	**14,493**	**14,434**	**1,313**	**13,121**	**14,459**	**1,566**
TOTAL	**71,873**	**71,026**	**2,835**	**68,191**	**66,595**	**59,105**	**58,531**	**4,031**	**54,500**	**62,752**	**12,495**

(1) Does not include other non-current financial borrowings reported under "Other non-current financial liabilities" in the statement of financial position that are included in long-term financial debt.

The following table reports long-term financial debt by currency and interest rate.

Long-term financial debt by currency and interest rate[1]

Millions of euro	Carrying amount	Nominal value	Carrying amount	Nominal value	Current average nominal interest rate	Current effective interest rate	Current average nominal interest rate	Current effective interest rate
	at Dec. 31, 2022		at Dec. 31, 2021		at Dec. 31, 2022		at Dec. 31, 2021	
Euro	**34,993**	**35,383**	**32,041**	**32,387**	**1.9%**	**2.1%**	**1.6%**	**1.9%**
US dollar	26,930	27,209	17,518	17,629	4.8%	5.1%	4.2%	4.3%
Pound sterling	4,470	4,610	3,901	3,976	4.6%	4.8%	5.0%	5.2%
Colombian peso	1,310	1,310	1,341	1,341	10.3%	10.3%	6.5%	6.5%
Brazilian real	1,899	1,926	1,720	1,753	10.0%	10.2%	8.8%	8.9%
Swiss franc	359	360	343	344	1.8%	1.8%	1.8%	1.8%
Chilean peso/UF	526	531	423	428	5.1%	5.2%	5.2%	5.2%
Peruvian sol	429	429	415	415	5.3%	5.3%	5.2%	5.2%
Russian ruble	-	-	427	427			6.8%	7.3%
Other currencies	110	115	402	405				
Total non-euro currencies	**36,033**	**36,490**	**26,490**	**26,718**				
TOTAL	**71,026**	**71,873**	**58,531**	**59,105**				

(1) Does not include other non-current financial borrowings reported under "Other non-current financial liabilities" in the statement of financial position.

Long-term financial debt denominated in currencies other than the euro increased by €9,543 million, largely attributable to the changes in debt denominated in US dollars.

Change in the nominal value of long-term debt[1]

Millions of euro	Nominal value	Repayments	Change in the consolidation scope	New borrowings	Other changes	Exchange differences	Nominal value
	at Dec. 31, 2021						at Dec. 31, 2022
Bonds	42,346	(2,788)	(37)	12,390	-	497	52,408
Borrowings	16,759	(6,571)	(1,016)	10,009	-	284	19,465
- of which leases	*2,547*	*(310)*	*(88)*	*445*	-	*78*	*2,672*
Total financial debt	**59,105**	**(9,359)**	**(1,053)**	**22,399**	**-**	**781**	**71,873**

(1) Does not include changes in the nominal value of other non-current financial borrowings reported under "Other non-current financial liabilities" in the statement of financial position.

The nominal value of long-term debt amounted to €71,873 million at December 31, 2022, an increase of €12,768 million compared with December 31, 2021. The increase in debt reflected new borrowing of €22,399 million and exchange losses of €781 million, only partially offset by repayments of €9,359 million and the deconsolidation of debt of various companies, in particular that resulting from the sale of the equity investment in Enel Russia, equal to €1,053 million.

Repayments in 2022 involved bonds in the amount of €2,788 million and loans in the amount of €6,571 million.

Specifically, repayments of bonds in 2022 included:

- €50 million in respect of a fixed-rate bond issued by Enel Finance International, maturing in February 2022;
- €50 million in respect of a floating-rate bond issued by Enel Finance International maturing in February 2022;
- €50 million in respect of a floating-rate bond issued by Enel Finance International maturing in February 2022;

- 270,000 million Colombian pesos (equivalent to €52 million at December 31, 2022) in respect of a fixed-rate bond issued by Enel Colombia, maturing in March 2022;
- €1,949 million in respect of a fixed-rate bond issued by Enel Finance International, maturing in September 2022;
- 300,000 million Colombian pesos (equivalent to €58 million at December 31, 2022) in respect of a fixed-rate bond issued by Enel Colombia, maturing in September 2022;
- €50 million in respect of a floating-rate bond issued by Enel Finance International maturing in November 2022;
- 300,000 million Colombian pesos (equivalent to €58 million at December 31, 2022) in respect of a fixed-rate bond issued by Enel Colombia, maturing in December 2022.

The main repayments of loans made during the year included:

- €5,250 million in respect of floating-rate revolving credit lines of Enel SpA;
- €264 million in respect of Endesa loans, of which €132 million in sustainable loans;
- €504 million in respect of sustainable loans of Group's Italian companies;
- the equivalent of €354 million relating to South American companies.

New borrowings in 2022 involved €12,390 million in bonds and €10,009 million in loans.

The table below shows the main characteristics of financial transactions carried out in 2022 and translated into euros at the exchange rate prevailing at December 31, 2022.

Issuer/Borrower	Issue/Grant date	Amount in millions of euro	Currency	Interest rate	Interest rate type	Maturity
Bonds						
Enel Finance International	17.01.2022	1,250	EUR	0.25%	Fixed rate	17.11.2025
Enel Finance International	17.01.2022	750	EUR	0.88%	Fixed rate	17.01.2031
Enel Finance International	17.01.2022	750	EUR	1.25%	Fixed rate	17.01.2035
Enel Finance International	11.04.2022	845	GBP	2.88%	Fixed rate	11.04.2029
Enel Finance International	15.06.2022	703	USD	4.25%	Fixed rate	15.06.2025
Enel Finance International	15.06.2022	703	USD	4.63%	Fixed rate	15.06.2027
Enel Finance International	15.06.2022	937	USD	5.00%	Fixed rate	15.06.2032
Enel Finance International	15.06.2022	937	USD	5.50%	Fixed rate	15.06.2052
Enel Finance International	09.09.2022	1,000	EUR	3.88%	Fixed rate	09.03.2029
Enel Finance International	14.10.2022	703	USD	6.80%	Fixed rate	14.10.2025
Enel Finance International	14.10.2022	1,171	USD	7.50%	Fixed rate	14.10.2032
Enel Finance International	14.10.2022	937	USD	7.75%	Fixed rate	14.10.2052
Enel Finance America	14.10.2022	937	USD	7.10%	Fixed rate	14.10.2027
Enel Distribuição São Paulo	12.05.2022	142	BRL	IPCA + 6.14%	Floating rate	15.04.2032
Enel Distribuição Ceará	30.05.2022	106	BRL	IPCA + 6.21%	Floating rate	17.05.2032
Total bonds		**11,871**				
Bank borrowings						
Enel SpA	07.03.2022	200	EUR	Euribor + 0.38%	Floating rate	03.05.2024
Enel SpA	14.09.2022	200	EUR	Euribor + 0.38%	Floating rate	03.05.2024
Enel SpA	30.09.2022	350	EUR	Euribor + 0.45%	Floating rate	26.07.2025
Enel SpA	30.09.2022	648	EUR	Euribor + 0.40%	Floating rate	12.05.2025
Enel SpA	30.09.2022	1,852	EUR	Euribor + 0.40%	Floating rate	05.03.2026
Enel SpA	30.09.2022	1,000	EUR	Euribor + 0.52%	Floating rate	02.10.2024
e-distibuzione	05.08.2022	300	EUR	Euribor + 0.473%	Floating rate	05.08.2037
Enel Italia	29.07.2022	60	EUR	Euribor 6M + 0.462%	Floating rate	29.07.2037
Enel Finance America	06.10.2022	403	USD	USD SOFR 6M CMP + 1.22%	Floating rate	15.05.2034
Enel Finance America	03.11.2022	187	USD	USD TERM SOFR 3M + 1.25%	Floating rate	05.08.2024
Enel Finance America	13.12.2022	141	USD	USD TERM SOFR 3M + 1.25%	Floating rate	05.08.2024
Enel Finance America	21.12.2022	141	USD	USD TERM SOFR 3M + 1.25%	Floating rate	05.08.2024
Endesa	17.01.2022	300	EUR	Euribor 6M + 0.53%	Floating rate	20.12.2033
Endesa	25.03.2022	400	EUR	Euribor 3M + 0.72%	Floating rate	31.07.2024
Endesa	28.03.2022	250	EUR	Euribor 6M + 0.368%	Floating rate	30.03.2037
Endesa	30.03.2022	50	EUR	Euribor 6M + 0.45%	Floating rate	31.07.2024
Endesa	31.03.2022	250	EUR	Euribor 3M + 0.85%	Floating rate	31.07.2024
Endesa	31.03.2022	275	EUR	Euribor 3M + 1.20%	Floating rate	31.07.2024
Endesa	31.03.2022	75	EUR	1.405%	Fixed rate	01.04.2027
Endesa	08.04.2022	50	EUR	1.967%	Fixed rate	13.05.2027
Endesa	29.04.2022	50	EUR	1.967%	Fixed rate	13.05.2027
Endesa	10.05.2022	100	EUR	Euribor 3M + 0.65%	Floating rate	31.07.2024
Endesa	25.05.2022	500	EUR	1.895%	Fixed rate	13.05.2027
Endesa	19.10.2022	200	EUR	Euribor 3M + 1.30%	Floating rate	31.07.2024
Endesa	18.11.2022	250	EUR	Euribor 6M + 0.582%	Floating rate	18.11.2037
Enel Colombia	05.04.2022	93	COP	COP IBR 3M + 2.05%	Floating rate	05.04.2028
Enel Colombia	28.07.2022	79	COP	COP IBR 3M + 1.6%	Floating rate	28.07.2028
Enel Colombia	30.11.2022	70	COP	COP IBR 3M + 2.98%	Floating rate	30.11.2029
Enel Distribución Perú	04.04.2022	52	PEN	6.96%	Fixed rate	19.03.2025
Enel Distribuição Ceará	24.03.2022	51	USD	USD SOFR CMP + 0.91%	Floating rate	21.03.2025
Enel Distribuição São Paulo	01.09.2022	88	USD	3.61%	Fixed rate	01.09.2037
Total bank borrowings		**8,665**				

The following table reports the impact on gross long-term debt of hedges to mitigate currency risk.

Millions of euro	at Dec. 31, 2022						at Dec. 31, 2021[1]					
	Initial debt structure			Impact of hedge	Debt structure after hedging		Initial debt structure			Impact of hedge	Debt structure after hedging	
	Carrying amount	Nominal value	%				Carrying amount	Nominal value	%			
Euro	**34,993**	**35,383**	**49.2%**	**23,473**	**58,856**	**81.9%**	**32,041**	**32,387**	**54.8%**	**16,657**	**49,044**	**83.0%**
US dollar	26,930	27,209	37.9%	(19,741)	7,468	10.4%	17,518	17,629	29.8%	(13,423)	4,206	7.1%
Pound sterling	4,470	4,610	6.4%	(4,610)	-	-	3,901	3,976	6.7%	(3,976)	-	-
Colombian peso	1,310	1,310	1.8%	-	1,310	1.8%	1,341	1,341	2.3%	-	1,341	2.3%
Brazilian real	1,899	1,926	2.7%	1,187	3,113	4.4%	1,720	1,753	3.0%	1,028	2,781	4.7%
Swiss franc	359	360	0.5%	(360)	-	-	343	344	0.6%	(344)	-	-
Chilean peso/UF	526	531	0.7%	-	531	0.7%	423	428	0.7%	-	428	0.7%
Peruvian sol	429	429	0.6%	-	429	0.6%	415	415	0.7%	-	415	0.7%
Russian ruble	-	-	-	-	-	-	427	427	0.7%	-	427	0.7%
Other currencies	110	115	0.2%	51	166	0.2%	402	405	0.7%	58	463	0.8%
Total non-euro currencies	**36,033**	**36,490**	**50.8%**	**(23,473)**	**13,017**	**18.1%**	**26,490**	**26,718**	**45.2%**	**(16,657)**	**10,061**	**17.0%**
TOTAL	**71,026**	**71,873**	**100.0%**	**-**	**71,873**	**100.0%**	**58,531**	**59,105**	**100.0%**	**-**	**59,105**	**100.0%**

(1) Does not include other non-current financial borrowings reported under "Other non-current financial liabilities" in the statement of financial position.

The amount of floating-rate debt that is not hedged against interest rate risk is the main risk factor that could adversely impact profit or loss (raising borrowing costs) in the event of an increase in market interest rates.

Millions of euro	2022				2021			
	Pre-hedge	%	Post-hedge	%	Pre-hedge	%	Post-hedge	%
Floating rate	34,450	38.2%	31,353	34.7%	27,811	38.4%	22,478	31.0%
Fixed rate	55,815	61.8%	58,912	65.3%	44,612	61.6%	49,945	69.0%
Total	**90,265**		**90,265**		**72,423**		**72,423**	

At December 31, 2022, 38.2% of long and medium-term financial debt was floating rate (38.4% at December 31, 2021). Taking account of hedges of interest rates considered effective pursuant to the IFRS-EU, 34.7% of long and medium-term net financial debt at December 31, 2022 was exposed to interest rate risk (31% at December 31, 2021). These figures are in line with the limits established in the risk management policy.

The following table shows the impact of the IBOR reform on long-term financial debt for the main indices (for more details, please see the section "Reform of benchmarks for the determination of interest rates - IBOR reform" in note 51.1).

Millions of euro	at Dec. 31, 2022		at Dec. 31, 2021	
Notional amount	**Phase 1**	**Phase 2**	**Phase 1**	**Phase 2**
USD LIBOR/SOFR	1,310	-	888	-
GBP LIBOR/SONIA	-	-	-	-
Total	**1,310**	**-**	**888**	**-**

Long-term debt – Main covenants

The Group's main long-term financial liabilities are governed by covenants that are commonly adopted in international business practice. They include in particular bond issues carried out within the framework of the Global/Euro Medium Term Notes program, issues of subordinated unconvertible hybrid bonds (so-called "hybrid bonds") and loans granted by banks and other financial institutions (including the European Investment Bank and Cassa Depositi e Prestiti SpA).

The main covenants regarding bond issues carried out within the framework of the Global/Euro Medium Term Notes program of Enel and Enel Finance International NV (including the green bonds of Enel Finance International NV guaranteed by Enel SpA, which are used to finance the Group's so-called eligible green projects) and those regarding bonds issued by Enel Finance International NV on the US market guaranteed by Enel SpA can be summarized as follows:

- negative pledge clauses under which the issuer and the guarantor may not establish or maintain mortgages, liens or other encumbrances on all or part of their assets or revenue to secure certain financial liabilities, unless the same encumbrances are extended equally or pro rata to the bonds in question;
- *pari passu* clauses, under which the bonds and the associated security constitute a direct, unconditional and unsecured obligation of the issuer and the guarantor, are issued without preferential rights among them and have at least the same seniority as other present and future unsubordinated and unsecured bonds of the issuer and the guarantor;
- cross-default clauses, under which the occurrence of a default event in respect of a specified financial liability (above a threshold level) of the issuer, the guarantor or, in some cases, "significant" subsidiaries constitutes a default in respect of the liabilities in question, which become immediately repayable.

Since 2019, Enel Finance International NV has issued a number of "sustainable" bonds on the European market (as part of the Euro Medium Term Notes - EMTN bond issue program) and on the American market, both guaranteed by Enel SpA, linked to the achievement of a number of the Sustainable Development Goals (SDGs) of the United Nations that contain the same covenants as other bonds of the same type.
In 2022, Enel Finance America LLC issued a "sustainable" bond of the same type, guaranteed by Enel SpA, on the US market.

The main covenants covering Enel's hybrid bonds, including the perpetual hybrid bond issues, which will only be repaid in the event of the dissolution or liquidation of the Company, can be summarized as follows:

- subordination clauses, under which each hybrid bond is subordinate to all other bonds issued by the company and has the same seniority with all other hybrid financial instruments issued, being senior only to equity instruments;
- prohibition on mergers with other companies, the sale or leasing of all or a substantial part of the company's assets to another company, unless the latter succeeds in all obligations of the issuer.

The main covenants envisaged in the loan contracts of Enel and Enel Finance International NV and the other Group companies, including the sustainability-linked loan facility agreements obtained by Enel SpA, can be summarized as follows:

- negative pledge clauses, under which the borrower and, in some cases, the guarantor are subject to limitations on the establishment of mortgages, liens or other encumbrances on all or part of their respective assets, with the exception of expressly permitted encumbrances;
- disposals clauses, under which the borrower and, in some cases, the guarantor may not dispose of their assets or operations, with the exception of expressly permitted disposals;
- *pari passu* clauses, under which the payment undertakings of the borrower have the same seniority as its other unsecured and unsubordinated payment obligations;
- change of control clauses, under which the borrower and, in some cases, the guarantor could be required to renegotiate the terms and conditions of the financing or make compulsory early repayment of the loans granted;
- rating clauses, which provide for the borrower or the guarantor to maintain their rating above a certain specified level;
- cross-default clauses, under which the occurrence of a default event in respect of a specified financial liability (above a threshold level) of the issuer or, in some cases, the guarantor constitutes a default in respect of the liabilities in question, which become immediately repayable.

Some loan contracts entered into by Enel SpA, including as guarantor, provide for some additional covenants, such as:

- the commitment to use the loan exclusively to hedge collateral for trading activities on the energy markets;
- a "reputational damage" clause, under which the lending bank can request the cancellation of its financial commitment undertaken by it and the early payment of the sums disbursed if it has suffered ascertained harm to its own reputation or that of other persons as a result of substantial breach of certain regulations;
- the commitment, also of the guarantor, to ensure compliance with certain environmental and social regulations and standards.

In some cases, the covenants are also binding for the significant companies or subsidiaries of the obligated parties. All the borrowings considered specify "events of default" typical of international business practice, such as, for example, insolvency, bankruptcy proceedings or the entity ceases trading.

In addition, the guarantees issued by Enel in the interest of e-distribuzione SpA for certain loans to e-distribuzione SpA from Cassa Depositi e Prestiti SpA require that at the end of each six-month measurement period Enel's net consolidated financial debt shall not exceed 4.5 times annual consolidated EBITDA.

Finally, the debt of Endesa SA, Enel Américas SA, Enel Chile SA and the other Spanish and Latin American subsidiaries (notably Enel Generación Chile SA) contains covenants and events of default typical of international business practice.

48.3.2 Short-term borrowings – *€18,392 million*

At December 31, 2022 short-term borrowings totaled €18,392 million, an increase of €5,086 million compared with December 31, 2021, and break down as follows:

Millions of euro			
	at Dec. 31, 2022	at Dec. 31, 2021	Change
Short-term bank borrowings	1,320	1,329	(9)
Commercial paper	13,838	10,708	3,130
Cash collateral and other financing on derivatives	1,513	918	595
Other short-term borrowings[(1)]	1,721	351	1,370
Short-term borrowings	**18,392**	**13,306**	**5,086**

(1) Does not include other current borrowings included in "Other current financial liabilities".

Commercial paper liabilities totaling €13,838 million concerned issues by Enel Finance International, Endesa and Enel Finance America.

The main commercial paper programs include:

- €8,000 million of Enel Finance International, an increase from €6,000 million in 2021;
- €5,000 million of Endesa, an increase from €4,000 million in 2021;
- $5,000 million (equivalent to €4,414 million at December 31, 2022), of Enel Finance America.

At December 31, 2022, the whole amount of commercial paper issues, equal to €13,838 million, was linked to sustainability objectives.

48.4 Derivative financial liabilities

For more information on derivative financial liabilities, please see note 51 "Derivatives and hedge accounting".

48.5 Net gain/(loss)

The following table shows net gains and losses by category of financial instruments, excluding derivatives.

Millions of euro	2022		2021[1]	
	Net gain/(loss)	*Of which impairment (loss)/gain*	Net gain/(loss)	*Of which impairment (loss)/gain*
Financial assets at amortized cost	**(1,242)**	***(1,305)***	**(883)**	***(1,151)***
Financial assets at FVOCI				
Equity investments at FVOCI	-	-	-	-
Other financial assets at FVOCI	(4)	-	15	-
Total financial assets at FVOCI	**(4)**	**-**	**15**	**-**
Financial assets at FVTPL				
Financial assets at FVTPL	9	-	3	-
Financial assets designated upon initial recognition (fair value option)	-	-	-	-
Total financial assets at FVTPL	**9**	**-**	**3**	**-**
Financial liabilities measured at amortized cost	**(2,357)**	**-**	**(4,310)**	**-**
Financial liabilities at FVTPL				
Financial liabilities held for trading	-	-	-	-
Financial liabilities designated upon initial recognition (fair value option)	-	-	-	-
Total financial liabilities at FVTPL	**-**	**-**	**-**	**-**

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of revenue connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

For more details on net gains and losses on derivatives, please see note 14 "Net financial income/(expense) from derivatives".

49. Risk management

Financial risk management governance and objectives

As part of its operations, the Enel Group is exposed to a variety of financial risks, notably interest rate risk, commodity risk, currency risk, credit and counterparty risk and liquidity risk.

Enel's primary objective is to mitigate financial risks appropriately so that they do not give rise to unexpected changes in results.

The following sections detail the above financial risks.

There were no changes in the sources of exposure to such risks compared with the previous year.

Interest rate risk

Interest rate risk derives primarily from the use of financial instruments and manifests itself as unexpected changes in charges on financial liabilities, if indexed to floating rates and/or exposed to the uncertainty of financial terms and conditions in negotiating new debt instruments, or as an unexpected change in the value of financial instruments measured at fair value (such as fixed-rate debt).

The main financial liabilities held by the Group include bonds, bank borrowings, borrowings from other lenders, commercial paper, derivatives, cash deposits received to secure commercial or derivative contracts (guarantees, cash collateral).

The Enel Group mainly manages interest rate risk through the definition of an optimal financial structure, with the dual goal of stabilizing borrowing costs and containing the cost of funds.

This goal is pursued through the diversification of the portfolio of financial liabilities by contract type, maturity and interest rate, and modifying the risk profile of specific exposures using OTC derivatives, mainly interest rate swaps and interest rate options. The term of such derivatives does not exceed the maturity of the underlying financial liability, so that any change in the fair value and/or expected cash flows of such contracts is offset by a corresponding change in the fair value and/or cash flows of the hedged position.

Proxy hedging techniques can be used in a number of residual circumstances, when the hedging instruments for

the risk factors are not available on the market or are not sufficiently liquid.
Using interest rate swaps, the Enel Group agrees with the counterparty to periodically exchange floating-rate interest flows with fixed-rate flows, both calculated on the same notional principal amount.

The following table reports the notional amount of interest rate derivatives at December 31, 2022 and December 31, 2021 broken down by type of contract.

Millions of euro	Notional amount	
	at Dec. 31, 2022	at Dec. 31, 2021
Floating-to-fixed interest rate swaps	5,836	7,700
Fixed-to-floating interest rate swaps	1,401	722
Fixed-to-fixed interest rate swaps	-	-
Floating-to-floating interest rate swaps	618	391
Interest rate options	-	50
Total	**7,855**	**8,863**

For more details on interest rate derivatives, please see note 51 "Derivatives and hedge accounting".

Interest rate risk sensitivity analysis

Enel analyzes the sensitivity of its exposure by estimating the effects of a change in interest rates on the portfolio of financial instruments.
More specifically, sensitivity analysis measures the potential impact on profit or loss and on equity of market scenarios that would cause a change in the fair value of derivatives or in the financial expense associated with unhedged gross debt.
These market scenarios are obtained by simulating parallel increases and decreases in the yield curve as at the reporting date.
There were no changes introduced in the methods and assumptions used in the sensitivity analysis compared with the previous year.
With all other variables held constant, the Group's pre-tax profit would be affected by a change in the level of interest rates as follows:

Millions of euro	2022				
		Pre-tax impact on profit or loss		Pre-tax impact on equity	
	Basis points	Increase	Decrease	Increase	Decrease
Change in financial expense on gross long-term floating-rate debt after hedging	25	32	(32)	-	-
Change in the fair value of derivatives classified as non-hedging instruments	25	25	(25)	-	-
Change in the fair value of derivatives designated as hedging instruments					
Cash flow hedges	25	-	-	29	(29)
Fair value hedges	25	-	-	(9)	9

At December 31, 2022, 22.3% (24.5% at December 31, 2021) of the nominal value of gross long-term financial debt was floating rate. Taking account of effective cash flow hedges of interest rate risk (in accordance with the provisions of the IFRS-EU), 82.0% of the nominal value of gross long-term financial debt was hedged at December 31, 2022 (84.5% at December 31, 2021).

Currency risk

Currency risk mainly manifests itself as unexpected changes in the financial statement items associated with transactions denominated in a currency other than the presentation currency. The Group's consolidated financial statements are also exposed to translation risk as a result of the conversion of the financial statements of foreign subsidiaries, which are denominated in local currencies, into euros as the Group's presentation currency.
The Group's exposure to currency risk is connected with the purchase or sale of fuels and power, investments (cash flows for capitalized costs), dividends and the purchase or sale of equity investments, commercial transactions and financial assets and liabilities.
The Group policies for managing currency risk provide for the mitigation of the effects on profit or loss of changes in the level of exchange rates, with the exception of the translation effects connected with consolidation.

In order to minimize the exposure to currency risk, Enel implements diversified revenue and cost sources geographically, and uses indexing mechanisms in commercial contracts. Enel also uses various types of derivative, typically on the OTC market.
The derivatives in the Group's portfolio of financial instruments include cross currency interest rate swaps, currency forwards and currency swaps. The term of such contracts does not exceed the maturity of the underlying instrument, so that any change in the fair value and/or expected cash flows of such instruments offsets the corresponding change in the fair value and/or cash flows of the hedged position.
Cross currency interest rate swaps are used to transform a long-term financial liability denominated in currency other than the presentation currency into an equivalent liability in the presentation currency.
Currency forwards are contracts in which the counterparties agree to exchange principal amounts denominated in different currencies at a specified future date and exchange rate (the strike). Such contracts may call for the actual exchange of the two principal amounts (deliverable forwards) or payment of the difference generated by differences between the strike exchange rate and the prevailing exchange rate at maturity (non-deliverable forwards). In the latter case, the strike rate and/or the spot rate can be determined as averages of the rates observed in a given period.
Currency swaps are contracts in which the counterparties enter into two transactions of the opposite sign at different future dates (normally one spot, the other forward) that provide for the exchange of principal denominated in different currencies.

The following table reports the notional amount of transactions outstanding at December 31, 2022 and December 31, 2021, broken down by type of hedged item.

Millions of euro	Notional amount	
	at Dec. 31, 2022	at Dec. 31, 2021
Cross currency interest rate swaps (CCIRSs) hedging debt denominated in currencies other than the euro	28,444	21,123
Currency forwards hedging currency risk on commodities	8,392	6,183
Currency forwards/CCIRSs hedging future cash flows in currencies other than the euro	5,333	5,034
Other currency forwards	1,497	926
Total	**43,666**	**33,266**

More specifically, these include:
- CCIRSs with a notional amount of €28,444 million to hedge the currency risk on debt denominated in currencies other than the euro (€21,123 million at December 31, 2021);
- currency forwards and cross currency swaps with a total notional amount of €13,725 million used to hedge the currency risk associated with purchases of natural gas and fuel and expected cash flows in currencies other than the euro (€11,217 million at December 31, 2021); changes in the notional amount during the year were affected by a greater exposure to exchange rate risk, in particular towards the US dollar, following the increase in natural gas prices and the increase in the use of coal for electricity generation;
- other currency forwards, which include OTC derivatives transactions carried out to mitigate currency risk on expected cash flows in currencies other than the presentation currency connected with the purchase of investment goods in the renewables and infrastructure and networks sectors (new generation digital meters), on operating costs for the supply of cloud services and on revenue from the sale of renewable energy. During 2022, hedged items included exposures to fluctuations in the euro/Chinese renminbi exchange rate deriving from investments in BESS (Battery Energy Storage System) projects.

At December 31, 2022, 51% (45% at December 31, 2021) of Group long-term debt was denominated in currencies other than the euro.
Taking account of hedges of currency risk, the percentage of debt not hedged against that risk amounted to 18% at December 31, 2022 (17% at December 31, 2021).

Currency risk sensitivity analysis

The Group analyzes the sensitivity of its exposure by estimating the effects of a change in exchange rates on the portfolio of financial instruments.
More specifically, sensitivity analysis measures the potential impact on profit or loss and equity of market scenarios that would cause a change in the fair value of derivatives or in the financial expense associated with unhedged gross medium/long-term debt.
These scenarios are obtained by simulating the appreciation/depreciation of the euro against all of the currencies compared with the value observed as at the reporting date.

There were no changes in the methods or assumptions used in the sensitivity analysis compared with the previous year.

With all other variables held constant, the pre-tax profit would be affected by changes in exchange rates as follows.

Millions of euro		2022			
		Pre-tax impact on profit or loss		Pre-tax impact on equity	
	Exchange rate	EUR appr.	EUR depr.	EUR appr.	EUR depr.
Change after hedging in financial expense on gross long-term debt denominated in currencies other than the euro	10%	-	-	-	-
Change in the fair value of derivatives classified as non-hedging instruments	10%	880	(1,073)	-	-
Change in the fair value of derivatives designated as hedging instruments					
Cash flow hedges	10%	-	-	(3,434)	4,193
Fair value hedges	10%	(40)	49	-	-

Commodity price risk

The risk of fluctuations in the price of energy commodities such as electricity, gas, oil, CO_2, and raw materials such as minerals and metals is generated by the volatility of prices and structural correlations between them, which create uncertainty in the margin on purchases and sales of electricity and fuels and materials at variable prices (e.g., indexed bilateral contracts, transactions on the spot market, etc.).

The exposures on indexed contracts are quantified by breaking down the contracts that generate exposure into the underlying risk factors.

To contain the effects of fluctuations and stabilize margins, in accordance with the policies and operating limits determined by the Group's governance and leaving an appropriate margin of flexibility to seize any short-term opportunities that may present themselves, Enel develops and plans strategies that impact the various phases of the industrial process linked to the production and sale of electricity and gas (such as forward procurement and long-term commercial agreements), as well as risk mitigation plans and techniques using derivative contracts (hedging).

As regards electricity sold by the Group, Enel mainly uses fixed-price contracts in the form of bilateral physical contracts (PPAs) and financial contracts (e.g., contracts for differences, VPP contracts, etc.) in which differences are paid to the counterparty if the market electricity price exceeds the strike price and to Enel in the opposite case. The residual exposure in respect of the sale of energy on the spot market not hedged with such contracts is aggregated by uniform risk factors that can be managed with hedging transactions on the market. Proxy hedging techniques can be used for the industrial portfolios when the hedging instruments for the specific risk factors generating the exposure are not available on the market or are not sufficiently liquid. In addition, Enel uses portfolio hedging techniques to assess opportunities for netting intercompany exposures.

The Group mainly uses plain vanilla derivatives for hedging (more specifically, forwards, swaps, options on commodities, futures, contracts for differences).

Some of these products can be indexed to a variety of underlyings (coal, gas, oil, CO_2, different geographical areas, etc.) and the approaches can be assessed and adapted to specific needs.

Enel also engages in proprietary trading in order to maintain a presence in the Group's reference energy commodity markets. These operations consist in taking on exposures in energy commodities (oil products, gas, coal, CO_2 certificates and electricity) using financial derivatives and physical contracts traded on regulated and over-the-counter markets, optimizing profits through transactions carried out on the basis of expected market developments.

The following table reports the notional amount of outstanding transactions at December 31, 2022 and December 31, 2021, broken down by type of instrument.

Millions of euro	Notional amount	
	at Dec. 31, 2022	at Dec. 31, 2021
Forward and futures contracts	114,128	90,273
Swaps	11,271	12,122
Options	504	1,076
Embedded	-	-
Total	**125,903**	**103,471**

For more details, please see note 51 "Derivatives and hedge accounting".

Commodity price risk sensitivity analysis

The following table presents the results of the analysis of sensitivity to a reasonably possible change in the commodity prices underlying the valuation model used in the scenario at the same date, with all other variables held constant.

The impact on pre-tax profit of shifts of +15% and -15% in the price curve for the main commodities that make up the fuel scenario and the basket of formulas used in the contracts is mainly attributable to the change in the price of electricity, gas and petroleum products and, to a lesser extent, of CO_2. The impact on equity of the same shifts in the price curve is primarily due to changes in the price of electricity, petroleum products and, to a lesser extent, CO_2. The Group's exposure to changes in the prices of other commodities is not material.

Millions of euro		2022			
		Pre-tax impact on profit or loss		Pre-tax impact on equity	
	Commodity price	Increase	Decrease	Increase	Decrease
Change in the fair value of trading derivatives on commodities	20%	(165)	169	-	-
Change in the fair value of derivatives on commodities designated as hedging instruments	20%	(17)	22	(273)	243

Credit and counterparty risk

The Group's commercial, commodity and financial transactions expose it to credit risk, i.e., the possibility that a deterioration in the creditworthiness of a counterparty or the failure to discharge contractual payment obligations could lead to the interruption of incoming cash flows and an increase in collection costs (settlement risk), as well as lower revenue flows due to the replacement of the original transactions with similar transactions negotiated on unfavorable market conditions (replacement risk). Other risks include the reputational and financial risks associated with significant exposures to a single counterparty or groups of related customers, or to counterparties operating in the same sector or in the same geographical area.

Accordingly, the exposure to credit and counterparty risk is attributable to the following types of transactions:

- the sale and distribution of electricity and gas in free and regulated markets and the supply of goods and services (trade receivables in respect of non-Group debtors);
- trading activities that involve the physical exchange of assets or transactions in financial instruments (the commodity portfolio);
- trading in derivatives, bank deposits and, more generally, financial instruments (the financial portfolio).

In order to minimize credit and counterparty risk, credit exposures are managed at the region/country/global business line level by different units, thereby ensuring the necessary segregation of risk management and control activities. Monitoring the consolidated exposure is carried out by Enel SpA.

In addition, at the Group level the policy provides for the use of uniform criteria – in all the main regions/countries/global business lines and at the consolidated level – in measuring commercial credit exposures in order to promptly identify any deterioration in the quality of outstanding receivables and any mitigation actions to be taken.

The policy for managing credit and counterparty risk associated with commercial activities provides for a preliminary assessment of the creditworthiness of counterparties and the adoption of mitigation instruments, such as obtaining collateral or unsecured guarantees.

In addition, the Group undertakes transactions to factor receivables without recourse, which results in the complete derecognition of the corresponding assets involved in the factoring, as the risks and rewards associated with them have been transferred.

Finally, with regard to financial and commodity transactions, risk mitigation is pursued with a uniform system for assessing counterparties at the Group level, including im-

plementation at the level of regions/countries/global business lines, as well as with the adoption of specific standardized contractual frameworks that contain risk mitigation clauses (e.g., netting arrangements) and possibly the exchange of cash collateral.
Despite the deterioration in the collection status of some customer segments, which was taken into account in the assessment of the impairment of trade receivables, to date the Group portfolio has displayed resilience to the current macroeconomic context and price scenario. This reflects the strengthening of digital collection channels and a sound diversification of the customer base.

Loan assets

Millions of euro

	at Dec. 31, 2022				
Staging	**Basis for recognition of expected credit loss allowance**	**Average loss rate (PD*LGD)**	**Gross carrying amount**	**Expected credit loss allowance**	**Carrying amount**
Performing	12-month ECL	1.2%	16,918	205	16,713
Underperforming	Lifetime ECL	4.1%	266	11	255
Non-performing	Lifetime ECL	12.6%	254	32	222
Total			**17,438**	**248**	**17,190**

Contract assets, trade receivables and other financial assets: individual measurement

Millions of euro

	at Dec. 31, 2022			
	Average loss rate (PD*LGD)	Gross carrying amount	Expected credit loss allowance	Carrying amount
Contract assets	**-**	**79**	**-**	**79**
Trade receivables				
Trade receivables not past due	0.7%	5,560	41	5,519
Trade receivables past due:				
- 1-30 days	1.0%	477	5	472
- 31-60 days	1.3%	75	1	74
- 61-90 days	2.8%	36	1	35
- 91-120 days	7.1%	28	2	26
- 121-150 days	12.5%	24	3	21
- 151-180 days	5.9%	51	3	48
- more than 180 days (credit impaired)	80.8%	1,629	1,317	312
Total trade receivables		**7,880**	**1,373**	**6,507**
Other financial assets				
Other financial assets not past due	2.2%	1,401	31	1,370
Other financial assets past due:				
- 1-30 days	-	35	-	35
- 31-60 days	-	219	-	219
- 61-90 days	-	-	-	-
- 91-120 days	-	-	-	-
- 121-150 days	-	-	-	-
- 151-180 days	-	2	-	2
- more than 180 days (credit impaired)	16.3%	147	24	123
Total other financial assets		**1,804**	**55**	**1,749**
TOTAL		**9,763**	**1,428**	**8,335**

Millions of euro

	at Dec. 31, 2021			
	Average loss rate (PD*LGD)	Gross carrying amount	Expected credit loss allowance	Carrying amount
Contract assets	**-**	**110**	**-**	**110**
Trade receivables				
Trade receivables not past due	0.7%	5,339	39	5,300
Trade receivables past due:				
- 1-30 days	1.2%	489	6	483
- 31-60 days	3.4%	89	3	86
- 61-90 days	10.2%	59	6	53
- 91-120 days	50.0%	34	17	17
- 121-150 days	31.6%	19	6	13
- 151-180 days	26.9%	26	7	19
- more than 180 days (credit impaired)	77.1%	1,813	1,397	416
Total trade receivables		**7,868**	**1,481**	**6,387**
Other financial assets				
Other financial assets not past due	1.9%	1,712	32	1,680
Other financial assets past due:				
- 1-30 days	-	352	-	352
- 31-60 days	-	244	-	244
- 61-90 days	-	-	-	-
- 91-120 days	-	2	-	2
- 121-150 days	-	-	-	-
- 151-180 days	-	-	-	-
- more than 180 days (credit impaired)	13.9%	332	46	286
Total other financial assets		**2,642**	**78**	**2,564**
TOTAL		**10,620**	**1,559**	**9,061**

Contract assets, trade receivables and other financial assets: collective measurement

Millions of euro

	at Dec. 31, 2022			
	Average loss rate (PD*LGD)	Gross carrying amount	Expected credit loss allowance	Carrying amount
Contract assets	**4.3%**	**46**	**2**	**44**
Trade receivables				
Trade receivables not past due	2.4%	7,698	187	7,511
Trade receivables past due:				
- 1-30 days	2.6%	535	14	521
- 31-60 days	42.3%	123	52	71
- 61-90 days	24.0%	275	66	209
- 91-120 days	29.0%	186	54	132
- 121-150 days	35.6%	146	52	94
- 151-180 days	45.0%	129	58	71
- more than 180 days (credit impaired)	56.4%	3,416	1,927	1,489
Total trade receivables		**12,508**	**2,410**	**10,098**
Other financial assets				
Other financial assets not past due	-	251	-	251
Other financial assets past due:				
- 1-30 days	50.0%	2	1	1
- 31-60 days	-	-	-	-
- 61-90 days	-	-	-	-
- 91-120 days	-	-	-	-
- 121-150 days	-	-	-	-
- 151-180 days	-	-	-	-
- more than 180 days (credit impaired)	-	-	-	-
Total other financial assets		**253**	**1**	**252**
TOTAL		**12,807**	**2,413**	**10,394**

Millions of euro

	at Dec. 31, 2021			
	Average loss rate (PD*LGD)	Gross carrying amount	Expected credit loss allowance	Carrying amount
Contract assets	**11.5%**	**26**	**2**	**24**
Trade receivables				
Trade receivables not past due	1.7%	4,603	77	4,526
Trade receivables past due:				
- 1-30 days	2.8%	3,321	94	3,227
- 31-60 days	9.9%	272	27	245
- 61-90 days	15.3%	183	28	155
- 91-120 days	26.1%	111	29	82
- 121-150 days	32.4%	111	36	75
- 151-180 days	33.3%	90	30	60
- more than 180 days (credit impaired)	58.5%	3,180	1,861	1,319
Total trade receivables		**11,871**	**2,182**	**9,689**
Other financial assets				
Other financial assets not past due	-	804	76	728
Other financial assets past due:				
- 1-30 days	-	7	-	7
- 31-60 days	-	-	-	-
- 61-90 days	-	-	-	-
- 91-120 days	-	-	-	-
- 121-150 days	-	-	-	-
- 151-180 days	-	1	-	1
- more than 180 days (credit impaired)	-	1	-	1
Total other financial assets		**813**	**76**	**737**
TOTAL		**12,710**	**2,260**	**10,450**

Liquidity risk

Liquidity risk manifests itself as uncertainty about the Group's ability to discharge its obligations associated with financial liabilities that are settled by delivering cash or another financial asset.

Enel manages liquidity risk by implementing measures to ensure an appropriate level of liquid financial resources, minimizing the associated opportunity cost and maintaining a balanced debt structure in terms of its maturity profile and funding sources.

In the short term, liquidity risk is mitigated by maintaining an appropriate level of unconditionally available resources, including liquidity on hand and short-term deposits, available committed credit lines and a portfolio of highly liquid assets.

In the long term, liquidity risk is mitigated by maintaining a balanced maturity profile for our debt, access to a range of sources of funding on different markets, in different currencies and with diverse counterparties.

The mitigation of liquidity risk enables the Group to maintain a credit rating that ensures access to the capital market and limits the cost of funds, with a positive impact on its financial position and performance.

The Group holds the following undrawn lines of credit and commercial paper programs.

Millions of euro	at Dec. 31, 2022		at Dec. 31, 2021	
	Expiring within one year	Expiring beyond one year	Expiring within one year	Expiring beyond one year
Committed credit lines	355	19,122	438	14,822
Uncommitted credit lines	980	-	888	-
Commercial paper	3,847	-	3,709	-
Total	**5,182**	**19,122**	**5,035**	**14,822**

Maturity analysis

The table below summarizes the maturity profile of the Group's long-term debt.

Millions of euro

At Dec. 31, 2022	Maturing in						
	Less than 3 months	From 3 months to 1 year	2024	2025	2026	2027	Beyond
Bonds:							
- listed, fixed rate	54	924	4,674	3,421	3,848	3,738	13,233
- listed, floating rate	237	300	391	304	225	199	891
- unlisted, fixed rate	-	-	1,403	1,395	1,163	2,529	12,237
- unlisted, floating rate	-	97	97	97	97	97	40
Total bonds	**291**	**1,321**	**6,565**	**5,217**	**5,333**	**6,563**	**26,401**
Bank borrowings:							
- fixed rate	73	138	928	288	406	692	748
- floating rate	120	557	3,144	1,196	2,399	944	4,488
- use of revolving credit lines	-	2	-	26	2	-	-
Total bank borrowings	**193**	**697**	**4,072**	**1,510**	**2,807**	**1,636**	**5,236**
Leases:							
- fixed rate	67	184	219	200	172	144	1,644
- floating rate	1	9	10	11	6	1	4
Total leases	**68**	**193**	**229**	**211**	**178**	**145**	**1,648**
Other non-bank borrowings:							
- fixed rate	18	52	61	56	60	56	201
- floating rate	-	2	-	6	-	-	-
Total other non-bank borrowings	**18**	**54**	**61**	**62**	**60**	**56**	**201**
TOTAL	**570**	**2,265**	**10,927**	**7,000**	**8,378**	**8,400**	**33,486**

Commitments to purchase commodities

In conducting its business, the Enel Group has entered into contracts to purchase specified quantities of commodities at a certain future date for its own use, which qualify for the own use exemption provided for under IFRS 9.

The following table reports the undiscounted cash flows associated with outstanding commitments at December 31, 2022.

Millions of euro	at Dec. 31, 2022	2022-2025	2026-2030	2031-2035	Beyond
Commitments to purchase commodities:					
- electricity	64,878	18,777	17,752	10,913	17,436
- fuels	96,996	11,842	59,697	13,466	11,991
Total	**161,874**	**30,619**	**77,449**	**24,379**	**29,427**

50. Offsetting financial assets and financial liabilities

At December 31, 2022, the Group did not hold offset positions in assets and liabilities, as it is not the Enel Group's policy to settle financial assets and liabilities on a net basis.

51. Derivatives and hedge accounting

The following tables show the notional amount and the fair value of derivative financial assets and derivative financial liabilities eligible for hedge accounting or measured at FVTPL, classified on the basis of the type of hedge relationship and the hedged risk, broken down into current and non-current instruments.

The notional amount of a derivative contract is the amount on the basis of which cash flows are exchanged. This amount can be expressed as a value or a quantity (for example tons, converted into euros by multiplying the notional amount by the agreed price). Amounts denominated in currencies other than the euro are translated at the official closing exchange rates provided by the World Markets Refinitiv (WMR) Company.

Millions of euro	Non-current				Current			
	Notional		Fair value		Notional		Fair value	
	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021
DERIVATIVE ASSETS								
Fair value hedge derivatives:								
- on interest rates	154	139	22	19	-	-	-	-
- on exchange rates	99	672	15	42	-	-	-	-
- of which associated with borrowings	*70*	*672*	*14*	*42*	-	-	-	-
Total	**253**	**811**	**37**	**61**	**-**	**-**	**-**	**-**
Cash flow hedge derivatives:								
- on interest rates	4,949	404	336	19	9	-	-	-
- on exchange rates	16,955	14,980	1,854	1,356	4,053	2,690	389	104
- of which associated with borrowings	*15,402*	*13,130*	*1,786*	*1,303*	*1,244*	*77*	*236*	*14*
- on commodities	4,321	2,693	1,270	1,059	7,416	3,469	2,366	3,023
Total	**26,225**	**18,077**	**3,460**	**2,434**	**11,478**	**6,159**	**2,755**	**3,127**
Trading derivatives:								
- on interest rates	-	-	-	-	-	50	-	1
- on exchange rates	19	26	1	-	3,640	2,154	74	23
- on commodities	1,774	1,147	472	277	49,253	48,304	12,001	19,640
Total	**1,793**	**1,173**	**473**	**277**	**52,893**	**50,508**	**12,075**	**19,664**
TOTAL DERIVATIVE ASSETS	**28,271**	**20,061**	**3,970**	**2,772**	**64,371**	**56,667**	**14,830**	**22,791**

Millions of euro	Non-current				Current			
	Notional		Fair value		Notional		Fair value	
	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021
DERIVATIVE LIABILITIES								
Fair value hedge derivatives:								
- on interest rates	1,603	660	92	5	-	-	-	-
- on exchange rates	813	-	99	-	185	-	-	-
- of which associated with borrowings	*750*	-	*91*	-	-	-	-	-
Total	**2,416**	**660**	**191**	**5**	**185**	**-**	**-**	**-**
Cash flow hedge derivatives:								
- on interest rates	890	6,807	59	620	150	653	1	9
- on exchange rates	11,956	7,224	1,640	1,244	3,798	1,892	176	49
- of which associated with borrowings	*8,388*	*5,034*	*1,348*	*1,099*	*67*	*21*	*2*	*1*
- on commodities	6,403	3,312	3,417	1,301	9,556	2,067	4,322	4,853
Total	**19,249**	**17,343**	**5,116**	**3,165**	**13,504**	**4,612**	**4,499**	**4,911**
Trading derivatives:								
- on interest rates	-	-	-	-	100	150	23	73
- on exchange rates	52	73	1	2	2,096	3,555	34	60
- on commodities	1,281	884	587	167	45,899	41,595	11,585	19,563
Total	**1,333**	**957**	**588**	**169**	**48,095**	**45,300**	**11,642**	**19,696**
TOTAL DERIVATIVE LIABILITIES	**22,998**	**18,960**	**5,895**	**3,339**	**61,784**	**49,912**	**16,141**	**24,607**

Exchange rate derivatives associated with borrowings refer to the fair value and notional amount of cross currency swaps entered into to hedge foreign currency loans to third parties; the net fair value of these derivatives is included in the representation of the Group's net financial debt.

51.1 Derivatives designated as hedging instruments

Derivatives are initially recognized at fair value, on the trade date of the contract, and are subsequently re-measured at their fair value. The method of recognizing the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged.

Hedge accounting is applied to derivatives entered into in order to reduce risks such as interest rate risk, currency risk, commodity price risk (including Virtual PPAs) and net investments in foreign operations when all the criteria provided by IFRS 9 are met.

At the inception of the transaction, the Group documents the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether hedging instruments are highly effective in offsetting changes in fair values or cash flows of hedged items.

For cash flow hedges of forecast transactions designated as hedged items, the Group assesses and documents that they are highly probable and present an exposure to changes in cash flows that affect profit or loss.

Depending on the nature of the risk exposure, the Group designates derivatives as either:

- fair value hedges;
- cash flow hedges.

For more details about the nature and the extent of risks arising from financial instruments to which the Group is exposed, please see note 49 "Risk management".

To be effective a hedge relationship shall meet all of the following criteria:

- existence of an economic relationship between hedging instrument and hedged item;
- the effect of credit risk does not dominate the value changes resulting from the economic relationship;
- the hedge ratio defined at initial designation shall be equal to the one used for risk management purposes (i.e., same quantity of the hedged item that the entity actually hedges and the quantity of the hedging instrument that the entity actually uses to hedge the quantity of the hedged item).

Based on the IFRS 9 requirements, the existence of an economic relationship is evaluated by the Group through a qualitative assessment or a quantitative computation, depending on the following circumstances:

- if the underlying risk of the hedging instrument and the hedged item is the same, the existence of an economic relationship will be provided through a qualitative analysis;
- on the other hand, if the underling risk of the hedging instrument and the hedged item is not the same, the existence of the economic relationship will be demonstrated through a quantitative method in addition to a qualitative analysis of the nature of the economic relationship (i.e., linear regression).

In order to demonstrate that the behavior of the hedging instrument is in line with those of the hedged item, different scenarios will be analyzed.
For hedging of commodity price risk, the existence of an economic relationship is deduced from a ranking matrix that defines, for each possible risk component, a set of all standard derivatives available in the market whose ranking is based on their effectiveness in hedging the considered risk.
In order to evaluate the credit risk effects, the Group considers the existence of risk mitigating measures (collateral, mutual break-up clauses, netting agreements, etc.).

The Group has established a hedge ratio of 1:1 for all the hedge relationships (including commodity price risk hedging) as the underlying risk of the hedging derivative is identical to the hedged risk, in order to minimize hedging ineffectiveness.
The hedge ineffectiveness will be evaluated through a qualitative assessment or a quantitative computation, depending on the following circumstances:

- if the critical terms of the hedged item and hedging instrument match and there are no other sources of ineffectiveness including the credit risk adjustment on the hedging derivative, the hedge relationship will be considered fully effective on the basis of a qualitative assessment;
- if the critical terms of the hedged item and hedging instrument do not match or there is at least one source of ineffectiveness, the hedge ineffectiveness will be quantified applying the dollar offset cumulative method with hypothetical derivative. This method compares changes in fair value of the hedging instrument and the hypothetical derivative between the reporting date and the inception date.

The main causes of hedge ineffectiveness can be the following:

- basis differences (i.e., the fair value or cash flows of the hedged item depend on a variable that is different from the variable that causes the fair value or cash flows of the hedging instrument to change);
- timing differences (i.e., the hedged item and hedging instrument occur or are settled at different dates);
- quantity or notional amount differences (i.e., the hedged item and hedging instrument are based on different quantities or notional amounts);
- other risks (i.e., changes in the fair value or cash flows of a derivative hedging instrument or hedged item relate to risks other than the specific risk being hedged);
- credit risk (i.e., the counterparty credit risk differently impact the changes in the fair value of the hedging instruments and hedged items).

The macroeconomic context became particularly unstable in 2022, due to the conflict between Russia and Ukraine, impacting raw material supply chains and causing high price volatility, especially in the energy sector. In this context, the commodity risk was managed effectively and did not have a significant impact on the soundness of hedging relationships, also thanks to the solidity of the integrated portfolio models used in the main European areas in which the Group operates and the geographical diversification of our sources of supply. Even credit risk was essentially unaffected, as the Group's main trading counterparties have a high credit rating or are adequately secured by bank or insurance guarantees.
The conflict and the difficult macroeconomic conditions had only a limited impact on the management of interest rate and exchange rate risk, being insufficient to directly and significantly influence the valuation of derivative instruments and the outcome of effectiveness checks of hedges. The volatility that buffeted financial markets was offset by risk mitigation actions using derivative financial instruments.

Fair value hedges

Fair value hedges are used to protect the Group against exposures to changes in the fair value of assets, liabilities or firm commitment attributable to a particular risk that could affect profit or loss.
Changes in the fair value of derivatives that qualify and are designated as hedging instruments are recognized in the income statement, together with changes in the fair value of the hedged item that are attributable to the hedged risk.
If the hedge no longer meets the criteria for hedge accounting, the adjustment to the carrying amount of a hedged item for which the effective interest rate method is used is amortized to profit or loss over the period to maturity.

Cash flow hedges

Cash flow hedges are applied in order to hedge the Group exposure to changes in future cash flows that are attributable to a particular risk associated with a recognized asset or liability or a highly probable transaction that could affect profit or loss.

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income. The gain or loss relating to the ineffective portion is recognized immediately in the income statement.

Amounts accumulated in equity are reclassified to profit or loss in the periods when the hedged item affects profit or loss (for example, when the hedged forecast sale takes place).

If the hedged item results in the recognition of a non-financial asset (i.e., property, plant and equipment or inventories, etc.) or a non-financial liability, or a hedged forecast transaction for a non-financial asset or a non-financial liability becomes a firm commitment for which fair value hedge accounting is applied, the amount accumulated in equity (i.e., hedging reserve) shall be removed and included in the initial amount (cost or other carrying amount) of the asset or the liability hedged (i.e., "basis adjustment").

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity and is recognized when the forecast transaction is ultimately recognized in the income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately transferred to the income statement.

For hedge relationships using forwards as a hedging instrument, where only the change in the value of the spot element is designated as the hedging instrument, accounting for the forward element (profit or loss vs OCI) is defined case by case. This approach is actually applied by the Group for hedging of currency risk on renewables assets.

Conversely, for hedge relationships using cross currency interest rate swaps as hedging instruments, the Group separates foreign currency basis spread, in designating the hedging derivative, and present them in other comprehensive income (OCI) as hedging costs.

With specific regard to cash flow hedges of commodity risk, in order to improve their consistency with the risk management strategy, the Enel Group applies a dynamic hedge accounting approach based on specific liquidity requirements (the so-called liquidity-based approach).

This approach requires the designation of hedges through the use of the most liquid derivatives available on the market and replacing them with others that are more effective in covering the risk in question.

Consistent with the risk management strategy, the liquidity-based approach allows the roll-over of a derivative by replacing it with a new derivative, not only in the event of expiry but also during the hedge relationship, if and only if the new derivative meets both of the following requirements:

- it represents a best proxy of the old derivative in terms of ranking;
- it meets specific liquidity requirements.

Satisfaction of these requirements is verified quarterly.

At the roll-over date, the hedge relationship is not discontinued. Accordingly, starting from that date, changes in the effective fair value of the new derivative will be recognized in equity (the hedging reserve), while changes in the fair value of the old derivative are recognized through profit or loss.

Reform of benchmarks for the determination of interest rates – IBOR reform

Overview

Interbank Offered Rates ("IBORs") are benchmark rates at which banks can borrow funds on the interbank market on an unsecured basis for a given period ranging from overnight to 12 months, in a specific currency.

In recent years there have been a number of cases of manipulation of these rates by the banks contributing to their calculation. For this reason, regulators around the world have begun a sweeping reform of interest rate benchmarks that includes the replacement of some benchmarks with alternative risk-free rates (the IBOR reform).

The Group's main exposure is based on Euribor and USD LIBOR.

Euribor is still considered compliant with the European Benchmarks Regulation (BMR) and this permits market participants to continue to use it for both existing and new contracts.

In line with the most recent guidance issued by the major regulatory bodies:

- the 1-month, 3-month and 6-month USD LIBOR benchmarks will become unrepresentative after June 30, 2023 and the alternative reference rate will be the Secured Overnight Financing Rate (SOFR);
- the 1-month, 3-month and 6-month GBP LIBOR benchmarks will become unrepresentative after December 31, 2021 and the alternative reference rate will be the Sterling Overnight Index Average (SONIA).

As a result of the IBOR reform, a number of temporary exceptions to the rules on hedge relationships have been allowed in implementation of the amendments to IFRS 9 issued in September 2019 (Phase 1) and August 2020 (Phase 2) to address, respectively:

- pre-replacement issues that impact financial reporting in the period preceding the replacement of an existing interest rate benchmark with an alternative risk-free rate (Phase 1); and
- post-replacement issues that could impact financial reporting when an existing interest rate benchmark is reformed or replaced and there is no longer any initial uncertainty, but hedge contracts and relationships still need to be updated to reflect the new benchmark rates (Phase 2).

Impact of the IBOR reform on the Group

In a context of uncertainty regarding the IBOR transition in the various countries, the Group has determined the overall number and nominal value of the contracts impacted by the reform. In addition, a number of contractual amendments have already been implemented in contracts previously indexed to GBP LIBOR in 2021 and others will be amended in 2023 on the basis of the evolution of the IBOR reform and market practice.

Debt and derivatives

The Group's floating rate debt is mainly benchmarked against Euribor and USD LIBOR and is almost entirely hedged using financial derivatives.

At the reporting date, the Group is planning to take no action with regard to Euribor since, as stated above, this benchmark has been comprehensively reformed to comply with the European Benchmarks Regulation. Despite the continuity with Euribor, replacement clauses may be required and could therefore be implemented by the Group in the new contracts in accordance with the evolution of accepted market practice.

During 2022, the Group obtained new US dollar loans indexed to SOFR. The main focus over the coming months will be how to change existing USD LIBOR to USD SOFR exposures and how to use the new, alternative risk-free rates for new financial transactions.

The Group's derivative instruments are managed through contracts that are mainly based on framework agreements defined by the International Swaps and Derivatives Association (ISDA).

The ISDA has revised its standardized contracts in light of the IBOR reform and amended the choices for floating rates within the 2006 ISDA definitions to include replacement clauses that would apply upon the permanent discontinuation of specific key benchmarks. These changes took effect on January 25, 2021. Transactions represented in the 2006 ISDA definitions carried out on January 25, 2021 or later include adjusted floating-rate options (e.g., the choice of floating rate with replacement clause), while transactions completed before that date (previous derivative contracts) continue to be based on the 2006 ISDA definitions.

For this reason, the ISDA published an IBOR Fallback Protocol to facilitate multilateral amendments to include the amended definitions.

The Group is assessing whether to: (i) adopt that protocol in the light of its exposure and developments in the IBOR reform or (ii) adjust in advance any contracts impacted bilaterally by the reform.

Hedge relationships

At the reporting date, hedged items and hedging instruments are primarily indexed to Euribor, USD LIBOR and SONIA.

The Group has assessed the impact of uncertainty engendered by the IBOR reform on hedge relationships at December 31, 2022 with reference to both hedging instruments and hedged items. Both the hedged items and the hedging instruments will change their parameterization from interbank market-based benchmarks (IBORs) to alternative risk-free rates (RFRs) as a result of the contractual amendments that will take effect in the coming years.

In particular, uncertainty remains as to how the replacement will take place with regard to both hedging instruments and hedged items indexed to USD LIBOR. The Group manages the uncertainty associated with these hedge relationships by continuing to apply the temporary exceptions provided for in the amendments to IFRS 9 issued in September 2019 (Phase 1). It was therefore felt that the benchmark indices for determining the interest rates on which the cash flows of the hedged items or the hedging instruments are based would not change as a consequence of the IBOR reform. The exception was applied for the following hedge relationship requirements:

- determine if a forecast transaction is highly probable;
- establish whether the future hedged cash flows will arise in a discontinued cash flow hedge relationship;
- assess the economic relationship between the hedged item and the hedging instrument.

The hedge relationships impacted may become ineffective attributable to different replacements of existing benchmarks with alternative risk-free benchmarks. In any case, the Group will seek to implement the replacements at the same time.

In addition, the Group changed the reference to GBP LIBOR in its interest rate hedging instruments used in cash flow hedge relationships with the new, economically equivalent, SONIA benchmark at the end of 2021. Consequently, the Group no longer applies the amendments to IFRS 9 issued in September 2019 (Phase 1) to these hedge relationships and, consequently, is applying the amendments to IFRS 9 issued in August 2020 (Phase 2), modifying the formal designation of the hedge relationship as required by the IBOR reform and without considering this event as a termination of the hedge relationship.

Furthermore, for cash flow hedge relationships, in modifying the description of the hedged item in the hedge relationship, the amounts accumulated in the cash flow hedge reserve were considered on the basis of the alternative benchmark index in relation to which the future hedged cash flows are determined.

The following table provides details of the notional amounts of the hedging instruments for which the amendments to IFRS 9 (both Phase 1 and Phase 2) were applied as at December 31, 2022, broken down by the alternative benchmark index used for determining the interest rate.

Millions of euro	Notional amount at Dec. 31, 2022	
Hedging instruments	**Phase 1**	**Phase 2**
USD LIBOR/SOFR	977	-
GBP LIBOR/SONIA	-	1,240
Total	**977**	**1,240**

Unamended contracts including those with specific replacement clauses

The Group is monitoring the evolution of the transition from the old interest rate benchmarks to the new rates, reviewing the overall value of contracts that have not yet been indexed to the new benchmark rates and, among these, the value of contracts which already include specific replacement clauses. The Group considers a contract to have not yet incorporated an alternative benchmark rate when the interest rate of the contract is indexed to an interest rate benchmark still involved in the IBOR reform and, therefore, when uncertainties still exist as to how and when replacement with the new benchmark will take place.

51.1.1 Hedge relationships by type of risk hedged

Interest rate risk

The following table shows the notional amount and the average interest rate of instruments hedging the interest rate risk on transactions outstanding at December 31, 2022 and December 31, 2021, broken down by maturity.

Millions of euro	Maturity						
	2023	**2024**	**2025**	**2026**	**2027**	**Beyond**	**Total**
At Dec. 31, 2022							
Interest rate swaps							
Total notional amount	159	722	573	902	2,017	3,382	7,755
Notional amount related to IRS in euro	159	623	573	682	1,558	2,724	6,319
Average IRS rate in euro	4.41	2.24	1.91	2.20	1.84	1.61	
Notional amount related to IRS in US dollars	-	47	-	-	459	237	743
Average IRS rate in US dollars		0.70			3.23	3.84	

The following table shows the notional amount and the fair value of the hedging instruments on the interest rate risk of transactions outstanding as at December 31, 2022 and December 31, 2021, broken down by type of hedged item.

Millions of euro		Fair value		Notional amount	Fair value		Notional amount
		Assets	Liabilities		Assets	Liabilities	
Hedging instrument	**Hedged item**	**at Dec. 31, 2022**			**at Dec. 31, 2021**		
Fair value hedges							
Interest rate swaps	Floating-rate borrowings/bonds	20	(2)	518	13	(1)	241
Interest rate swaps	Fixed-rate borrowings/bonds	2	(90)	1,239	6	(4)	558
Cash flow hedges							
Interest rate swaps	Floating-rate bonds	29	(44)	1,190	-	(167)	1,190
Interest rate swaps	Floating-rate loan assets	-	(9)	162	13	(1)	164
Interest rate swaps	Floating-rate borrowings	307	(7)	4,646	6	(461)	6,510
Total		**358**	**(152)**	**7,755**	**38**	**(634)**	**8,663**

The following table shows the notional amount and the fair value of hedging derivatives on interest rate risk as at December 31, 2022 and December 31, 2021 broken down by type of hedge.

Millions of euro	Notional amount		Fair value assets		Notional amount		Fair value liabilities	
Derivatives	**at Dec. 31, 2022**	**at Dec. 31, 2021**	**at Dec. 31, 2022**	**at Dec. 31, 2021**	**at Dec. 31, 2022**	**at Dec. 31, 2021**	**at Dec. 31, 2022**	**at Dec. 31, 2021**
Fair value hedges								
Interest rate swaps	154	139	22	19	1,603	660	(92)	(5)
Total	**154**	**139**	**22**	**19**	**1,603**	**660**	**(92)**	**(5)**
Cash flow hedges								
Interest rate swaps	4,958	404	336	19	1,040	7,460	(60)	(629)
Total	**4,958**	**404**	**336**	**19**	**1,040**	**7,460**	**(60)**	**(629)**
TOTAL INTEREST RATE DERIVATIVES	**5,112**	**543**	**358**	**38**	**2,643**	**8,120**	**(152)**	**(634)**

The notional amount of derivatives classified as hedging instruments at December 31, 2022 came to €7,755 million, with a corresponding positive fair value of €206 million.

Compared with December 31, 2021, the notional amount decreased by €908 million, mainly reflecting:

- the expiry of interest rate swaps amounting to €481 million;
- the classification as assets held for sale of Australian companies holding interest rate financial derivatives in the amount of €340 million;
- new interest rate swaps amounting to €1,174 million;
- the reduction in the notional amount of amortizing interest rate swaps in the amount of €211 million.

We also note the early closure of interest rate swaps for an amount of €1,050 million. The improvement in the fair value of €802 million mainly reflects developments in the yield curve.

Fair value hedge derivatives

The following table reports net gains and losses recognized through profit or loss in respect of fair value hedge derivatives and the hedged item that are attributable to interest rate risk both in 2022 and the previous year.

Millions of euro	2022	2021
	Net gain/(loss)	**Net gain/(loss)**
Interest rate hedging instruments	(84)	(10)
Hedged item	75	3
Ineffective portion	**(9)**	**(7)**

The following table shows the impact of fair value hedges of interest rate risk in the statement of financial position at December 31, 2022 and December 31, 2021.

Millions of euro	at Dec. 31, 2022			at Dec. 31, 2021		
	Notional amount	Carrying amount	Fair value used to measure ineffectiveness in the year	Notional amount	Carrying amount	Fair value used to measure ineffectiveness in the year
Interest rate swaps	1,757	(70)	(70)	799	14	14

The following table shows the impact of the hedged item of fair value hedges in the statement of financial position at December 31, 2022 and December 31, 2021.

Millions of euro	at Dec. 31, 2022			at Dec. 31, 2021		
	Carrying amount	Cumulative adjustment of fair value of hedged item	Fair value used to measure ineffectiveness in the year	Carrying amount	Cumulative adjustment of fair value of hedged item	Fair value used to measure ineffectiveness in the year
Fixed-rate borrowings/bonds	1,152	(87)	(81)	562	4	(8)
Floating-rate borrowings/bonds	576	(16)	(18)	262	(9)	12
Total	**1,728**	**(103)**	**(99)**	**824**	**(5)**	**4**

Cash flow hedge derivatives

The following table shows the cash flows expected in coming years from cash flow hedge derivatives on interest rate risk.

Millions of euro	Fair value	Distribution of expected cash flows					
	at Dec. 31, 2022	2023	2024	2025	2026	2027	Beyond
Cash flow hedge derivatives on interest rates							
Positive fair value	336	80	98	60	48	64	-
Negative fair value	(60)	(15)	(10)	(10)	(8)	(24)	-

The following table shows the impact of cash flow hedges of interest rate risk in the statement of financial position at December 31, 2022 and December 31, 2021.

Millions of euro	at Dec. 31, 2022			at Dec. 31, 2021		
	Notional amount	Carrying amount	Fair value used to measure ineffectiveness in the year	Notional amount	Carrying amount	Fair value used to measure ineffectiveness in the year
Interest rate swaps	5,998	276	276	7,864	(610)	(610)

The following table shows the impact of the hedged item of cash flow hedges in the statement of financial position at December 31, 2022 and December 31, 2021.

Millions of euro	at Dec. 31, 2022					at Dec. 31, 2021				
	Fair value of the hedged item used to measure ineffectiveness in the year	Fair value through P&L of CFH derivatives designated after initial recognition	Hedging reserve	Hedging costs reserve	Ineffective portion of carrying amount of CFH derivatives	Fair value of the hedged item used to measure ineffectiveness in the year	Fair value through P&L of CFH derivatives designated after initial recognition	Hedging reserve	Hedging costs reserve	Ineffective portion of carrying amount of CFH derivatives
Floating-rate bonds	15	-	(15)	-	-	167	-	(167)	-	-
Floating-rate loan assets	9	-	(9)	-	-	(12)	-	12	-	-
Floating-rate borrowings	(327)	(28)	326	-	2	417	(32)	(417)	-	(6)
Total	**(303)**	**(28)**	**302**	**-**	**2**	**572**	**(32)**	**(572)**	**-**	**(6)**

Currency risk

The following table reports the maturity profile of the notional amount and associated average contractual exchange rate for the instruments hedging currency risk on transactions outstanding at December 31, 2022 and December 31, 2021.

Millions of euro	Maturity						
	2023	2024	2025	2026	2027	Beyond	Total
At Dec. 31, 2022							
Cross currency interest rate swaps (CCIRS)							
Total notional amount of CCIRS	1,908	4,831	2,648	1,265	2,380	15,701	28,733
Notional amount for CCIRS EUR/USD	1,171	2,290	2,107	1,171	1,615	11,529	19,883
Average exchange rate EUR/USD	1.33	1.13	1.07	1.18	1.10	1.15	
Notional amount for CCIRS EUR/GBP	-	958	-	-	564	3,721	5,243
Average exchange rate EUR/GBP		0.88			0.90	0.81	
Notional amount for CCIRS EUR/CHF	-	228	-	-	132	-	360
Average exchange rate EUR/CHF		1.06			1.21		
Notional amount for CCIRS USD/BRL	140	288	239	94	-	-	761
Average exchange rate USD/BRL	5.22	5.50	5.22	5.29			
Notional amount for CCIRS EUR/BRL	597	438	181	-	70	-	1,286
Average exchange rate EUR/BRL	6.09	6.25	6.16		3.92		
Currency forwards							
Total notional amount of forwards	6,127	2,374	625	-	-	-	9,126
Notional amount - currency forwards EUR/USD	4,713	2,345	625	-	-	-	7,683
Average currency forward rate - EUR/USD	1.09	1.10	1.11				
Notional amount - currency forwards USD/BRL	333	-	-	-	-	-	333
Average currency forward rate - USD/BRL	5.61						
Notional amount - currency forwards EUR/CNH	311	-	-	-	-	-	311
Average currency forward rate - EUR/CNH	7.41						
Notional amount - currency forwards USD/CLP	199	20	-	-	-	-	219
Average currency forward rate - USD/CLP	906.90	921.05					
Notional amount - currency forwards USD/COP	156	2	-	-	-	-	158
Average currency forward rate - USD/COP	4,720.74	4,444.96					

Millions of euro	Maturity						
	2022	**2023**	**2024**	**2025**	**2026**	**Beyond**	**Total**
At Dec. 31, 2021							
Cross currency interest rate swap (CCIRS)							
Total notional amount of CCIRS	258	1,574	4,638	1,002	1,153	12,814	21,439
Notional amount for CCIRS EUR/USD	-	1,104	2,158	661	1,104	8,632	13,659
Average exchange rate EUR/USD		1.33	1.13	1.17	1.18	1.21	
Notional amount for CCIRS EUR/GBP	-	-	1,012	-	-	3,678	4,690
Average exchange rate EUR/GBP			0.88			0.82	
Notional amount for CCIRS EUR/CHF	-	-	218	-	-	126	344
Average exchange rate EUR/CHF			1.06			1.21	
Notional amount for CCIRS USD/BRL	98	132	295	155	49	244	973
Average exchange rate USD/BRL	4.81	5.22	5.55	5.29	5.39	3.57	
Notional amount for CCIRS EUR/BRL	160	339	402	79	-	77	1,057
Average exchange rate EUR/BRL	6.41	6.44	6.25	6.71		3.92	
Currency forward							
Total notional amount of forwards	4,324	1,320	371	4	-	-	6,019
Notional amount - currency forwards EUR/USD	3,064	1,268	371	4	-	-	4,707
Average currency forward rate - EUR/USD	1.16	1.19	1.18	1.18			
Notional amount - currency forwards USD/BRL	311	-	-	-	-	-	311
Average currency forward rate - USD/BRL	5.65						
Notional amount - currency forwards USD/COP	284	-	-	-	-	-	284
Average currency forward rate - USD/COP	3,963.3						
Notional amount - currency forwards USD/CLP	145	-	-	-	-	-	145
Average currency forward rate - USD/CLP	818.94						
Notional amount - currency forwards USD/CAD	107	-	-	-	-	-	107
Average currency forward rate - USD/CAD	1.24						

The following table shows the notional amount and the fair value of the hedging instruments on the currency risk of transactions outstanding as at December 31, 2022 and December 31, 2021, broken down by type of hedged item.

Millions of euro		Fair value		Notional amount	Fair value		Notional amount
Hedging instrument	**Hedged item**	**Assets**	**Liabilities**		**Assets**	**Liabilities**	
		at Dec. 31, 2022			**at Dec. 31, 2021**		
Fair value hedges							
Cross currency interest rate swaps (CCIRS)	Fixed-rate borrowings/bonds in foreign currencies	15	(99)	1,097	12	-	595
Cross currency interest rate swaps (CCIRS)	Floating-rate borrowings in foreign currencies	-	-	-	30	-	77
Cash flow hedges							
Cross currency interest rate swaps (CCIRS)	Floating-rate borrowings/financial assets in foreign currencies	95	(76)	1,061	88	(19)	953
Cross currency interest rate swaps (CCIRS)	Fixed-rate borrowings/financial assets in foreign currencies	4	(233)	2,445	43	(58)	2,553
Cross currency interest rate swaps (CCIRS)	Floating-rate bonds in foreign currencies	60	-	414	37	-	344
Cross currency interest rate swaps (CCIRS)	Fixed-rate bonds in foreign currencies	1,864	(1,293)	23,381	1,159	(1,095)	16,601
Cross currency interest rate swaps (CCIRS)	Future cash flows denominated in foreign currencies	-	(50)	335	-	(75)	316
Currency forwards	Future cash flows denominated in foreign currencies	9	(6)	326	7	(3)	378
Currency forwards	Future commodity purchases denominated in foreign currencies	192	(135)	7,508	106	(36)	4,802
Currency forwards	Purchases of investment goods and other in foreign currencies	19	(23)	1,292	20	(7)	839
Total		**2,258**	**(1,915)**	**37,859**	**1,502**	**(1,293)**	**27,458**

Cash flow hedges and fair value hedges include:

- CCIRSs with a notional amount of €26,923 million used to hedge the currency risk on fixed-rate debt denominated in currencies other than the euro, with a positive fair value of €258 million;
- CCIRSs with a notional amount of €1,810 million used to hedge the currency risk on floating-rate debt denominated in currencies other than the euro, with a positive fair value of €29 million;
- currency forwards with a notional amount of €7,834 million used to hedge the currency risk associated with purchases of natural gas, purchases of fuel and expected cash flows in currencies other than the euro, with a total positive fair value of €60 million;
- currency forwards with a notional amount of €1,292 million and a negative fair value of €4 million, in respect of OTC transactions to mitigate the currency risk on expected cash flows in currencies other than the presentation currency connected with the purchase of investment goods in the renewables and infrastructure and networks sectors (new generation digital meters), on operating costs for the supply of cloud services and on revenue from the sale of renewable energy.

The following table reports the notional amount and fair value of foreign exchange derivatives at December 31, 2022 and December 31, 2021, broken down by type of hedge.

Millions of euro	Notional amount		Fair value assets		Notional amount		Fair value liabilities	
Derivatives	**at Dec. 31, 2022**	**at Dec. 31, 2021**	**at Dec. 31, 2022**	**at Dec. 31, 2021**	**at Dec. 31, 2022**	**at Dec. 31, 2021**	**at Dec. 31, 2022**	**at Dec. 31, 2021**
Fair value hedges								
CCIRS	99	672	15	42	998	-	(99)	-
Total	**99**	**672**	**15**	**42**	**998**	**-**	**(99)**	**-**
Cash flow hedges								
Currency forwards	4,313	4,117	220	133	4,813	1,902	(164)	(46)
CCIRS	16,695	13,553	2,023	1,327	10,941	7,214	(1,652)	(1,247)
Total	**21,008**	**17,670**	**2,243**	**1,460**	**15,754**	**9,116**	**(1,816)**	**(1,293)**
TOTAL EXCHANGE RATE DERIVATIVES	**21,107**	**18,342**	**2,258**	**1,502**	**16,752**	**9,116**	**(1,915)**	**(1,293)**

The notional amount of CCIRS at December 31, 2022 amounted to €28,733 million (€21,439 million at December 31, 2021), an increase of €7,294 million. Cross currency interest rate swaps with a total amount of €258 million expired, while new derivatives amounted to €7,500 million, of which €6,936 million in respect of bond issues denominated in British pounds and US dollars in 2022. In addition, following the novation of a bond in US dollars from Enel Finance International to Enel Finance America, cross currency interest rate swaps of €662 million were terminated early. The amount also reflects developments in the exchange rate of the euro against the main other currencies and the effect of amortization, which caused their notional amount to increase by €714 million.
The notional amount of currency forwards at December 31, 2022 amounted to €9,126 million (€6,019 million at December 31, 2021), an increase of €3,107 million. The exposure to currency risk, especially that associated with the US dollar, is mainly due to purchases of natural gas, purchases of fuel and cash flows in respect of investments. Changes in the notional amount are connected with a greater exposure to exchange rate risk, in particular towards the US dollar, resulting from the increase in natural gas prices and the recovery in the generation of electricity from coal.

Fair value hedge derivatives

The following table reports net gains and losses recognized through profit or loss, reflecting changes in the fair value of fair value hedge derivatives and the hedged item that are attributable to currency risk for 2022 and the previous year.

Millions of euro	2022	2021
	Net gain/(loss)	Net gain/(loss)
Interest rate hedging instruments	(119)	9
Hedged item	129	(8)
Ineffective portion	**10**	**1**

The following table shows the impact of fair value hedges of currency risk in the statement of financial position at December 31, 2022 and December 31, 2021.

Millions of euro	at Dec. 31, 2022			at Dec. 31, 2021		
	Notional amount	Carrying amount	Fair value used to measure ineffectiveness in the year	Notional amount	Carrying amount	Fair value used to measure ineffectiveness in the year
Cross currency interest rate swaps (CCIRS)	1,097	(84)	(87)	672	42	37

The following table shows the impact of the hedged item of fair value hedges in the statement of financial position at December 31, 2022 and December 31, 2021.

Millions of euro	at Dec. 31, 2022			at Dec. 31, 2021		
	Carrying amount	Cumulative adjustment of fair value of hedged item	Fair value used to measure ineffectiveness in the year	Carrying amount	Cumulative adjustment of fair value of hedged item	Fair value used to measure ineffectiveness in the year
Fixed-rate borrowings/bonds in foreign currencies	525	(109)	70	639	35	(40)
Floating-rate borrowings/bonds in foreign currencies	449	(10)	13	-	-	-
Total	**974**	**(119)**	**83**	**639**	**35**	**(40)**

Cash flow hedge derivatives

The following table shows the cash flows expected in coming years from cash flow hedge derivatives on currency risk.

Millions of euro	Fair value	Distribution of expected cash flows					
	at Dec. 31, 2022	2023	2024	2025	2026	2027	Beyond
Cash flow hedge derivatives on exchange rates							
Positive fair value	2,243	1,256	889	320	299	2,197	-
Negative fair value	(1,816)	(58)	(53)	(97)	7	(361)	-

The following table shows the impact of cash flow hedges of currency risk in the statement of financial position at December 31, 2022 and at December 31, 2021.

Millions of euro	at Dec. 31, 2022			at Dec. 31, 2021		
	Notional amount	Carrying amount	Fair value used to measure ineffectiveness in the year	Notional amount	Carrying amount	Fair value used to measure ineffectiveness in the year
Cross currency interest rate swaps (CCIRS)	27,636	371	433	20,767	80	82
Currency forwards	9,126	56	56	6,019	87	89
Total	**36,762**	**427**	**489**	**26,786**	**167**	**171**

The following table shows the impact of the hedged item of cash flow hedges in the statement of financial position at December 31, 2022 and December 31, 2021.

Millions of euro	at Dec. 31, 2022					at Dec. 31, 2021			
	Fair value of the hedged item used to measure ineffectiveness in the year	Hedging reserve	Hedging costs reserve	Ineffective portion of carrying amount of CFH derivatives	Other effects through profit or loss[(1)]	Fair value of the hedged item used to measure ineffectiveness in the year	Hedging reserve	Hedging costs reserve	Ineffective portion of carrying amount of CFH derivatives
Floating-rate borrowings in foreign currencies	(30)	30	-	(11)	-	(69)	69	-	-
Fixed-rate borrowings in foreign currencies	225	(225)	(4)	-	-	15	(15)	-	-
Floating-rate bonds in foreign currencies	(60)	60	-	-	-	(37)	37	-	-
Fixed-rate bonds in foreign currencies	(628)	509	(56)	-	118	(66)	66	(2)	-
Future cash flows denominated in foreign currencies (hedged with CCIRSs)	50	(50)	-	-	-	75	(75)	-	-
Future cash flows denominated in foreign currencies (hedged with forwards)	(3)	3	-	-	-	(2)	2	1	-
Future commodity purchases denominated in foreign currencies	(60)	59	(1)	(1)	-	(72)	72	-	-
Purchases of investment goods and other in foreign currencies	7	(7)	1	2	-	(15)	15	(3)	-
Total	**(499)**	**379**	**(60)**	**(10)**	**118**	**(171)**	**171**	**(4)**	**-**

(1) The impact is connected with changes in spot rates between the date of inception of the CCRIS entered into to hedge bonds denominated in foreign currencies and the actual disbursement of the loan.

Commodity price risk

Millions of euro	Maturity						
	2023	2024	2025	2026	2027	Beyond	Total
At Dec. 31, 2022							
Commodity swaps							
Notional amount on electricity	653	164	143	139	132	333	1,564
Average commodity swap price on power (€/MWh)	162.5	77.9	48.9	47.2	45.8	29.0	
Notional amount on coal/shipping	1,037	-	-	-	-	-	1,037
Average commodity swap price on coal/shipping ($/t)	293.7	-	-	-	-	-	
Notional amount on gas	1,183	1,184	1,205	23	20	65	3,680
Average commodity swap price on gas (€/MWh)	60.1	47.9	52.0	21.0	8.3	7.2	
Notional amount on oil	1,076	227	48	-	-	-	1,351
Average commodity swap price on oil ($/bbl)	105.0	93.0	82.0	-	-	-	
Commodity forwards/futures							
Notional amount on power	2,906	509	388	294	249	720	5,066
Average commodity forward/future price on power (€/MWh)	148.1	35.2	17.4	17.8	15.8	15.6	
Notional amount on coal/shipping	-	-	-	-	-	-	-
Average commodity forward/future price on coal/shipping ($/ton)	-	-	-	-	-	-	
Notional amount on gas	7,171	4,099	229	-	-	-	11,499
Average commodity forward/future price on gas (€/MWh)	72.9	92.1	56.6	-	-	-	
Notional amount on CO_2	1,635	226	50	-	-	-	1,911
Average commodity forward/future price on CO_2 (€/ton)	81.3	94.9	94.0	-	-	-	
Notional amount on oil	1,263	58	-	-	-	-	1,321
Average commodity forward/future price on oil ($/bbl)	81.7	73.9	-	-	-	-	
Commodity options							
Notional amount on power	16	16	16	16	16	117	197
Average commodity option price on power (€/MWh)	35.0	35.0	35.0	35.0	35.0	33.0	
Notional amount on gas	-	-	-	-	-	-	-
Average commodity option price on gas (€/MWh)	-	-	-	-	-	-	
Notional amount on oil	70	-	-	-	-	-	70
Average commodity option price on oil ($/bbl)	133	-	-	-	-	-	

Millions of euro	Maturity						
	2022	2023	2024	2025	2026	Beyond	Total
At Dec. 31, 2021							
Commodity swap							
Notional amount on power	124	164	168	149	146	472	1,223
Average commodity swap price on power (€/MWh)	51.8	53.7	47.5	46.6	46.0	33.2	
Notional amount on gas	131	372	129	11	17	93	753
Average commodity swap price on gas (€/MWh)	63.8	13.7	12.1	9.4	12.0	9.6	
Notional amount on oil	669	244	99	-	-	-	1,012
Average commodity swap price on oil ($/bbl)	86.4	92.9	79.4	-	-	-	
Commodity forwards/futures							
Notional amount on power	319	637	302	288	248	856	2,650
Average commodity forward/future price on power (€/MWh)	29.7	43.3	20.0	19.7	18.7	16.6	
Notional amount on coal/shipping	14	-	-	-	-	-	14
Average commodity forward/future price on coal/shipping ($/ton)	90.8	-	-	-	-	-	
Notional amount on gas	3,315	1,048	5	-	-	-	4,368
Average commodity forward/future price on gas (€/MWh)	15.1	18.9	18.0	-	-	-	
Notional amount on CO_2	476	61	-	-	-	-	537
Average commodity forward/future price on CO_2 (€/t)	46.1	38.4	-	-	-	-	
Notional amount on oil	600	57	-	-	-	-	657
Average commodity forward/future price on oil ($/bbl)	37.7	51.6	-	-	-	-	
Commodity options							
Notional amount on power	10	21	21	21	21	134	228
Average commodity option price on power (€/MWh)	26.3	29.3	29.9	29.8	29.8	32.6	
Notional amount on gas	99	-	-	-	-	-	99
Average commodity option price gas (€/MWh)	50.5	-	-	-	-	-	

The following table reports the notional amount and fair value of instruments hedging commodity price risk on transactions outstanding at December 31, 2022 and December 31, 2021, broken down by type of commodity.

Millions of euro	Notional amount		Fair value assets		Notional amount		Fair value liabilities	
	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021
Derivatives								
Cash flow hedges								
Derivatives on power:								
- swaps	1,213	820	982	640	352	401	(498)	(263)
- forwards/futures	1,535	769	89	1,073	3,510	1,881	(898)	(598)
- options	218	229	36	49	-	-	(12)	(18)
Total derivatives on power	**2,966**	**1,818**	**1,107**	**1,762**	**3,862**	**2,282**	**(1,408)**	**(879)**
Derivatives on coal/shipping:								
- swaps	9	-	2	-	1,028	-	(373)	-
- forwards/futures	-	14	-	3	-	-	-	-
- options	-	-	-	-	-	-	-	-
Total derivatives on coal/shipping	**9**	**14**	**2**	**3**	**1,028**	**-**	**(373)**	**-**
Derivatives on gas and oil:								
- swaps	2,302	669	666	69	2,729	1,095	(765)	(99)
- forwards/futures	4,734	3,094	1,714	2,557	8,085	1,932	(5,182)	(5,150)
- options	22	30	4	3	48	70	(4)	(26)
Total derivatives on gas and oil	**7,058**	**3,793**	**2,384**	**2,629**	**10,862**	**3,097**	**(5,951)**	**(5,275)**
Derivatives on CO_2:								
- swaps	-	-	-	-	-	-	-	-
- forwards/futures	1,704	537	143	410	207	-	(7)	-
- options	-	-	-	-	-	-	-	-
Total derivatives on CO_2	**1,704**	**537**	**143**	**410**	**207**	**-**	**(7)**	**-**
TOTAL COMMODITY DERIVATIVES	**11,737**	**6,162**	**3,636**	**4,804**	**15,959**	**5,379**	**(7,739)**	**(6,154)**

The table reports the notional amount and fair value of derivatives hedging commodity price risk at December 31, 2022 and at December 31, 2021, broken down by type of hedge.

The positive fair value of cash flow hedge derivatives on commodities regards derivatives on gas and oil commodities in the amount of €2,384 million, derivatives on CO_2 (€143 million), derivatives on power (€1,107 million) and, to a lesser extent, hedges of coal purchases requested by the generation companies in the amount of €2 million.

The first category primarily regards hedges of fluctuations in the price of natural gas, for both purchases and sales, carried out for oil commodities and gas products.

The CO_2 category mainly includes hedging transactions undertaken for Enel Group compliance purposes.

The power category mainly includes medium/long-term hedging transactions, especially in Spain and North America.

Cash flow hedge derivatives on commodities included in liabilities regard derivatives on gas and oil commodities in the amount of €5,951 million (mainly for derivatives hedging sales), derivatives on power in the amount of €1,408 million and, to a lesser extent, derivatives on coal and CO_2 in the amount of respectively €373 million and €7 million.

Cash flow hedge derivatives

The following table shows the cash flows expected in coming years from cash flow hedge derivatives on commodity price risk.

Millions of euro	Fair value	Distribution of expected cash flows					
	at Dec. 31, 2022	2023	2024	2025	2026	2027	Beyond
Cash flow hedge derivatives on commodities							
Positive fair value	3,838	2,438	829	160	101	93	217
Negative fair value	(7,941)	(4,598)	(2,116)	(619)	(180)	(153)	(275)

The following table shows the impact of cash flow hedges of commodity price risk in the statement of financial position at December 31, 2022 and December 31, 2021.

Millions of euro	at Dec. 31, 2022			at Dec. 31, 2021		
	Notional amount	Carrying amount	Fair value used to measure ineffectiveness in the year	Notional amount	Carrying amount	Fair value used to measure ineffectiveness in the year
Power swaps	1,564	485	469	1,221	377	377
Coal/shipping swaps	1,037	(371)	(371)	-	-	-
Gas and oil swaps	5,031	(99)	(98)	1,764	(30)	(30)
Power forwards/futures	5,045	(809)	(938)	2,675	(223)	(223)
Coal/shipping forwards/futures	-	-	-	14	3	3
Gas and oil forwards/futures	12,820	(3,469)	(3,673)	5,027	(2,592)	(2,592)
CO_2 forwards/futures	1,911	136	138	537	410	410
Power options	218	24	24	204	7	7
Gas and oil options	70	-	-	99	(24)	(24)
Total	**27,696**	**(4,103)**	**(4,449)**	**11,541**	**(2,072)**	**(2,072)**

The following table shows the impact of the hedged item of cash flow hedges in the statement of financial position at December 31, 2022 and December 31, 2021.

Millions of euro	at Dec. 31, 2022				at Dec. 31, 2021			
	Fair value of the hedged item used to measure ineffectiveness in the year	Hedging reserve	Hedging costs reserve	Ineffective portion of carrying amount of CFH derivatives	Fair value of the hedged item used to measure ineffectiveness in the year	Hedging reserve	Hedging costs reserve	Ineffective portion of carrying amount of CFH derivatives
Future transactions in power	602	(602)	15	(32)	(297)	297	-	(29)
Future transactions in coal/shipping	371	(371)	-	-	(3)	3	-	-
Future transactions in gas and oil	3,360	(3,360)	-	(232)	2,751	(2,751)	-	(2)
Future transactions in CO_2	(133)	133	-	-	(410)	410	-	-
Total	**4,200**	**(4,200)**	**15**	**(264)**	**2,041**	**(2,041)**	**-**	**(31)**

With regard to cash flow hedge derivatives on commodity prices, the entire commodities market continued to experience major price swings in 2022. The greatest impact in terms of changes in the cash flow hedge reserve is attributable to future transactions in gas, which of all commodities was the one most affected by the high volatility.
Finally, the ineffectiveness recognized in 2022 on future transactions in gas is mainly related to proxy hedging operations in Spain.

51.2 Derivatives at fair value through profit or loss

The following table shows the notional amount and the fair value of derivatives at FVTPL as at December 31, 2022 and December 31, 2021.

Millions of euro	Notional amount		Fair value assets		Notional amount		Fair value liabilities	
	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021	at Dec. 31, 2022	at Dec. 31, 2021
Derivatives at FVTPL								
on interest rates:								
- interest rate swaps	-	50	-	1	100	100	(23)	(71)
- interest rate options	-	-	-	-	-	50	-	(2)
on exchange rates:								
- currency forwards	3,659	2,180	75	23	2,102	3,628	(34)	(62)
- CCIRS	-	-	-	-	46	-	(1)	-
- on commodities								
Derivatives on power:								
- swaps	595	777	106	(78)	245	1,088	(180)	(198)
- forwards/futures	6,903	23,207	872	3,368	5,620	17,970	(908)	(2,927)
- options	7	3	15	78	140	113	(172)	(16)
Total derivatives on power	**7,505**	**23,987**	**993**	**3,368**	**6,005**	**19,171**	**(1,260)**	**(3,141)**
Derivatives on coal:								
- swaps	-	35	-	4	-	133	-	23
- forwards/futures	115	213	21	63	1,291	455	(9)	(148)
- options	-	-	-	-	-	-	-	-
Total derivatives on coal	**115**	**248**	**21**	**67**	**1,291**	**588**	**(9)**	**(125)**
Derivatives on gas and oil:								
- swaps	1,964	2,904	806	(1,049)	834	4,199	(550)	1,843
- forwards/futures	40,669	19,001	10,456	16,706	38,651	16,755	(10,280)	(17,374)
- options	34	232	8	268	33	399	(22)	(402)
Total derivatives on gas and oil	**42,667**	**22,137**	**11,270**	**15,925**	**39,518**	**21,353**	**(10,852)**	**(15,933)**
Derivatives on CO_2:								
- swaps	-	-	-	-	-	-	-	-
- forwards/futures	725	3,079	115	557	361	1,366	(35)	(530)
- options	2	-	2	-	-	-	-	-
Total derivatives on CO_2	**727**	**3,079**	**117**	**557**	**361**	**1,366**	**(35)**	**(530)**
Derivatives on other:								
- swaps	-	-	-	-	-	1	-	(1)
- forwards/futures	13	-	72	-	5	-	(16)	-
- options	-	-	-	-	-	-	-	-
Total derivatives on other	**13**	**-**	**72**	**-**	**5**	**1**	**(16)**	**(1)**
Embedded derivatives	-	-	-	-	-	-	-	-
TOTAL	**54,686**	**51,681**	**12,548**	**19,941**	**49,428**	**46,257**	**(12,230)**	**(19,865)**

At December 31, 2022 the notional amount of trading derivatives on interest rates came to €100 million. The negative fair value of €23 million improved by €48 million on the previous year, mainly due to developments in the yield curve.

At December 31, 2022, the notional amount of derivatives on exchange rates was €5,761 million. The overall decrease in their notional value of €47 million and the increase in the associated net fair value of €80 million mainly reflected normal operations and developments in exchange rates.

At December 31, 2022, the notional amount of derivatives on commodities came to €98,207 million. The fair value of trading derivatives on commodities classified as assets mainly reflects the market valuation of hedges of gas and oil amounting to €11,270 million, derivatives on power amounting to €993 million, derivatives on CO_2 amounting to €117 million and, to a lesser extent, derivatives on coal and other commodities totaling €21 million and €72 million, respectively.
The fair value of trading derivatives on commodities classified as liabilities mainly regards hedges of gas and oil amounting to €10,852 million, derivatives on power amounting to €1,260 million and derivatives on CO_2, coal and other commodities in the amount of €35 million, €9 million and €16 million, respectively.
These amounts include transactions managed within the trading portfolios and transactions that, although established for hedging purposes, did not meet the requirements for hedge accounting.
The "other" category includes hedges using carried out on guarantees of origin and green certificates, i.e., incentive mechanisms for the production of electricity from renewable sources. In addition to commodity price risk, the Group companies have to manage the risk of fluctuations in the price of these certificates which were recently affected by greater market volatility compared with the past, due to the increasing market attention to environmental sustainability issues.

Fair value measurement

52. Assets and liabilities measured at fair value

The Group determines fair value in accordance with IFRS 13 whenever such measurement is required by the IFRS as a recognition or measurement criterion.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability, in an orderly transaction, between market participants, at the measurement date (i.e., an exit price).
The best proxy of fair value is market price, i.e., the current publicly available price actually used on a liquid and active market.

The fair value of assets and liabilities is classified in accordance with the three-level hierarchy described below, depending on the inputs and valuation techniques used in determining their fair value:
- Level 1, where the fair value is determined on the basis of quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2, where the fair value is determined on the basis of inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (such as prices) or indirectly (derived from prices);
- Level 3, where the fair value is determined on the basis of unobservable inputs.

This note also provides detailed disclosures concerning the valuation techniques and inputs used to perform these measurements.

To that end:
- recurring fair value measurements of assets or liabilities are those required or permitted by the IFRS in the statement of financial position at the close of each period;
- non-recurring fair value measurements are those required or permitted by the IFRS in the statement of financial position in particular circumstances.

For general information or specific disclosures on the accounting treatment of these circumstances, please see note 2 "Accounting policies".

52.1 Assets measured at fair value in the statement of financial position

The following table shows, for each class of assets measured at fair value on a recurring or non-recurring basis in the statement of financial position, the fair value measurement at the end of the reporting period and the level in the fair value hierarchy into which the fair value measurements of those assets are classified.

Millions of euro		Non-current assets				Current assets			
	Notes	Fair value at Dec. 31, 2022	Level 1	Level 2	Level 3	Fair value at Dec. 31, 2022	Level 1	Level 2	Level 3
Equity investments in other companies at FVOCI	29	360	14	43	303	-	-	-	-
Securities at FVOCI	29.1, 30.1	447	447	-	-	78	78	-	-
Loan assets and other financial assets at FVOCI		94	-	94	-	201	-	201	-
Equity investments in other companies at FVTPL	29	7	-	-	7	-	-	-	-
Financial assets from service concession arrangements at FVTPL	29	3,436	-	3,436	-	-	-	-	-
Loan assets and other financial assets at FVTPL		8	-	-	8	176	176	-	-
Other cash investments at FVTPL		-	-	-	-	872	42	-	830
Non-monetary grants in respect of environmental certificates		16	-	-	16	-	-	-	-
Fair value hedge derivatives:									
- on interest rates	51	22	-	22	-	-	-	-	-
- on exchange rates	51	15	-	15	-	-	-	-	-
Cash flow hedge derivatives:									
- on interest rates	51	336	-	336	-	-	-	-	-
- on exchange rates	51	1,854	-	1,854	-	389	-	389	-
- on commodities	51	1,270	314	300	656	2,366	496	1,597	273
Trading derivatives:									
- on interest rates	51	-	-	-	-	-	-	-	-
- on exchange rates	51	1	-	1	-	74	-	74	-
- on commodities	51	472	109	362	1	12,001	10,640	1,360	1
Inventories measured at fair value	51	15	15	-	-	18	-	18	-
Contingent consideration		5	-	-	5	2	-	2	-

The fair value of "Equity investments in other companies at FVOCI" is determined for listed companies on the basis of the quoted price at the close of the year, while that for unlisted companies is based on a reliable valuation of the relevant assets and liabilities.

"Financial assets from service concession arrangements at FVTPL" concern electricity distribution operations in Brazil, mainly by Enel Distribuição Rio de Janeiro, Enel Distribuição Ceará, and Enel Distribuição São Paulo, as well as the generation plant of PH Chucas in Costa Rica, and are accounted for in accordance with IFRIC 12.

Fair value was estimated as the net replacement cost based on the most recent rate information available and on the general price index for the Brazilian market.
The current portion of "Loan assets and other financial assets at FVTPL" essentially regard investments of liquidity. Their fair value is determined using Level 1 as based on market inputs.

Level 3 of the non-current portion of "Loan assets and other financial assets at FVTPL" reports the receivable in respect of the sale of Slovak Power Holding, which amounted to €8 million at December 31, 2022. Its fair value was determined using the contractual price formula. The current portion of "Loan assets and other financial assets at FVTPL" includes under Level 1 investments in securities and funds held mainly by Latin American companies.
The current portion of "Other cash investments at FVTPL" at Level 3 mainly refers to the optimization of Enel SpA's excess cash holdings.

The fair value of derivative contracts is determined using the official prices for instruments traded on regulated markets. The fair value of instruments not listed on a regulated market is determined using valuation methods appropriate for each type of financial instrument and market data as of the end of the reporting period (such as interest rates, exchange rates, volatility), discounting expected future cash flows on the basis of the market yield curve and

translating amounts in currencies other than the euro using exchange rates provided by the World Markets Refinitiv (WMR) Company.
Derivatives on interest rates and exchange rates are all measured using Level 2 inputs.
The fair value of derivatives on commodities is almost always measured using Level 1 or Level 2 inputs, as the determination is based on market inputs as these contracts are entered into with exchange counterparties, leading sector operators or financial institutions.
Marginal exceptions include certain derivatives relating to certain long-term financial contracts (virtual power purchase agreements, or VPPAs), for which internal measurement models were also used in part in order to measure these instruments over longer time horizons, given the illiquidity of the underlying variables.
In accordance with the IFRS, the Group assess credit risk, both of the counterparty (Credit Valuation Adjustment or CVA) and its own (Debit Valuation Adjustment or DVA), in order to adjust the fair value of financial instruments for the corresponding amount of counterparty risk where necessary. More specifically, the Group measures CVA/DVA using a Potential Future Exposure valuation technique for the net exposure of the position and subsequently allocating the adjustment to the individual financial instruments that make up the overall portfolio. All of the inputs used in this technique are observable on the market.

52.2 Assets not measured at fair value in the statement of financial position

For each class of assets not measured at fair value on a recurring basis but whose fair value must be reported, the following table reports the fair value at the end of the year and the level in the fair value hierarchy into which the fair value measurements of those assets are classified.

Millions of euro		Non-current assets				Current assets			
	Notes	Fair value at Dec. 31, 2022	Level 1	Level 2	Level 3	Fair value at Dec. 31, 2022	Level 1	Level 2	Level 3
Investment property	22	154	16	-	138	-	-	-	-
Inventories	33	-	-	-	-	47	-	-	47

The table reports the fair value of investment property and inventories of real estate not used in the business in the amount of €154 million and €47 million respectively. The amounts were calculated with the assistance of appraisals conducted by independent experts, who used different methods depending on the specific assets involved.

52.3 Liabilities measured at fair value in the statement of financial position

The following table reports for each class of liabilities measured at fair value on a recurring or non-recurring basis in the statement of financial position the fair value measurement at the end of the reporting period and the level in the fair value hierarchy into which the fair value measurements are classified.

Millions of euro		Non-current liabilities				Current liabilities			
	Notes	Fair value at Dec. 31, 2022	Level 1	Level 2	Level 3	Fair value at Dec. 31, 2022	Level 1	Level 2	Level 3
Fair value hedge derivatives:									
- on interest rates	51	92	-	92	-	-	-	-	-
- on exchange rates	51	99	-	99	-	-	-	-	-
- on commodities	51	-	-	-	-	-	-	-	-
Cash flow hedge derivatives:									
- on interest rates	51	59	-	59	-	1	-	1	-
- on exchange rates	51	1,640	-	1,640	-	176	-	176	-
- on commodities	51	3,417	1,722	1,551	144	4,322	3,049	1,250	23
Trading derivatives:									
- on interest rates	51	-	-	-	-	23	-	23	-
- on exchange rates	51	1	-	1	-	34	-	34	-
- on commodities	51	587	192	395	-	11,585	10,595	990	-
Contingent consideration		46	-	-	46	46	-	44	2

Contingent consideration mainly regards a number of equity investments held by the Group in North America, whose fair value was determined on the basis of the contractual terms and conditions.

52.4 Liabilities not measured at fair value in the statement of financial position

For each class of liabilities not measured at fair value in the statement of financial position but whose fair value must be reported, the following table reports the fair value at the end of the period and the level in the fair value hierarchy into which the fair value measurements of those liabilities are classified.

Millions of euro					
	Notes	**Fair value**	**Level 1**	**Level 2**	**Level 3**
		at Dec. 31, 2022			
Bonds:					
- fixed rate	48.3.1	44,717	41,964	2,753	-
- floating rate	48.3.1	3,073	62	3,011	-
Bank borrowings:					
- fixed rate	48.3.1	3,021	-	3,021	-
- floating rate	48.3.1	12,596	-	12,596	-
Non-bank borrowings:					
- fixed rate	48.3.1	3,134	-	3,134	-
- floating rate	48.3.1	54	-	54	-
Total		**66,595**	**42,026**	**24,569**	**-**

For listed debt instruments, the fair value is given by official prices. For unlisted instruments the fair value is determined using appropriate valuation techniques for each category of financial instrument and market data at the close of the year, including the credit spreads of Enel.

Other information

53. Share-based payments

Starting in 2019, the Shareholders' Meeting of Enel SpA ("Enel" or the "Company") has each year approved the adoption of long-term share-based incentive plans for the management of Enel and/or its subsidiaries pursuant to Article 2359 of the Italian Civil Code. Each of the incentive plans approved (the 2019 Long-Term Incentive Plan, the 2020 Long-Term Incentive Plan, the 2021 Long-Term Incentive Plan, the 2022 Long-Term Incentive Plan; referred to hereinafter, respectively, the "2019 LTI Plan", "2020 LTI Plan", the 2021 LTI Plan", the "2022 LTI Plan" and, jointly, the "Plans") provides for the grant of ordinary Company shares ("Shares") to the respective beneficiaries subject to the achievement of specific performance targets.

Plan beneficiaries are the Chief Executive Officer/General Manager of Enel and Enel Group managers in the positions most directly responsible for company performance or considered to be of strategic interest. The Plans provide for the award to the beneficiaries of an incentive consisting of a monetary component and an equity component. This incentive – determined, at the time of the award, as a base value calculated in relation to the fixed remuneration of the individual beneficiary – may vary depending on the degree of achievement of each of the three-year performance targets by the Plans, ranging from zero up to a maximum of 280% or 180% of the base value in the case, respectively, of the Chief Executive Officer/General Manager or the other beneficiaries.

The Plans establish that, of the total incentive effectively vested, the bonus will be fully paid in Shares in the amount of (i) up to 100% of the base value for the Chief Executive Officer/General Manager (up to 130% for the 2022 LTI Plan), and (ii) up to 50% of the base value for the other beneficiaries (up to 65% for the 2022 LTI Plan).

The actual award of the bonus under the Plans is subject to the achievement of specific performance targets during the three year performance period. If these targets are achieved, 30% of both the stock and cash components of the incentive will be paid in the first year following the end of the performance period and the remaining 70% will be paid in the second year following the end of the per-

formance period. The payment of a substantial portion of long-term variable remuneration (70% of the total) is therefore deferred to the second year following the end of the performance period of the individual Plans.
The following table provides information on the 2019 LTI Plan, the 2020 LTI Plan, the 2021 LTI Plan, and the 2022 LTI Plan.

For more information on the characteristics of the Plans, please see the information documents prepared pursuant to Article 84-*bis* of the CONSOB Regulation issued with Resolution no. 11971 of May 14, 1999 (the Issuers Regulation), which are available to the public in the section of Enel's website (www.enel.com) dedicated to the Shareholders' Meetings held respectively on May 16, 2019, May 14, 2020, May 20, 2021 and May 19, 2022.

	Grant date	Performance period	Verification of achievement of targets	Payout
2019 LTI Plan	12.11.2019[47]	2019-2021	2022[48]	2022-2023[49]
2020 LTI Plan	17.09.2020[50]	2020-2022	2023[51]	2023-2024
2021 LTI Plan	16.09.2021[52]	2021-2023	2024[53]	2024-2025
2022 LTI Plan	21.09.2022[54]	2022-2024	2025[55]	2025-2026

In implementation of the authorizations granted by the Shareholders' Meetings held on May 16, 2019, May 14, 2020, May 20, 2021 and May 19, 2022, in compliance with the associated terms and conditions, the Board of Directors approved – at is meetings of September 19, 2019, July 29, 2020, June 17, 2021 and June 16, 2022 – the launch of share buyback programs to serve the 2019 LTI Plan, the 2020 LTI Plan, the 2021 LTI Plan and the 2022 LTI Plan, respectively. The number of Shares whose purchase was authorized by the Board of Directors for each Plan, the actual number of Shares purchased, the associated weighted average price and total value are shown below.

(47) The date on which the Board of Directors approved the procedures and timing for granting the 2019 LTI Plan to the beneficiaries (taking account of the proposal issued by the Nomination and Compensation Committee at its meeting of November 11, 2019).
(48) On the occasion of the approval of the consolidated financial statements of the Enel Group at December 31, 2021, the Board of Directors verified the level of achievement of the performance targets of the 2019 LTI Plan.
(49) On September 5, 2022 the Company awarded part of the equity component of the bonus vested by the beneficiaries of the 2019 LTI Plan, in accordance with the Plan rules.
(50) The date on which the Board of Directors approved the procedures and timing for granting the 2020 LTI Plan to the beneficiaries (taking account of the proposal issued by the Nomination and Compensation Committee at its meeting of September 16, 2020).
(51) On the occasion of the approval of the consolidated financial statements of the Enel Group at December 31, 2022, the Board of Directors will verify the level of achievement of the performance targets of the 2020 LTI Plan.
(52) The date on which the Board of Directors approved the procedures and timing for granting the 2021 LTI Plan to the beneficiaries (taking account of the proposal issued by the Nomination and Compensation Committee at its meeting of June 9, 2021).
(53) On the occasion of the approval of the consolidated financial statements of the Enel Group at December 31, 2023, the Board of Directors will verify the level of achievement of the performance targets of the 2021 LTI Plan.
(54) The date on which the Board of Directors approved the procedures and timing for granting the 2022 LTI Plan to the beneficiaries (taking account of the proposal issued by the Nomination and Compensation Committee at its meeting of June 8, 2022).
(55) On the occasion of the approval of the consolidated financial statements of the Enel Group at December 31, 2024, the Board of Directors will verify the level of achievement of the performance targets of the 2022 LTI Plan.

	Purchases authorized by the Board of Directors	Actual purchases		
	Number of shares	Number of shares	Weighted average price (euros per share)	Total value (euros)
2019 LTI Plan	No more than 2,500,000 for a maximum amount of €10,500,000 million	1,549,152[56]	6.7779	10,499,999
2020 LTI Plan	1,720,000	1,720,000[57]	7.4366	12,790,870
2021 LTI Plan	1,620,000	1,620,000[58]	7.8737	12,755,459
2022 LTI Plan	2,700,000	2,700,000[59]	5.1951	14,026,715

As a result of the purchases made to support the 2019 LTI Plan, the 2020 LTI Plan, the 2021 LTI Plan and the 2022 LTI Plan, and taking into account the award on September 5, 2022 of 435,357 shares to the beneficiaries of the 2019 LTI Plan, at December 31, 2022 Enel holds a total of 7,153,795 treasury shares, equal to 0.07% of share capital.

The following information concerns the equity instruments granted in 2019, 2020, 2021 and 2022.

	2022				2021	
	Number of shares granted at the grant date	Fair value per share at the grant date	Number of shares potentially available for award	Number of shares awarded	Number of shares potentially available for award	Number of shares awarded
2019 LTI Plan	1,538,547	6.983	1,021,328	435,357[60]	1,529,182	-
2020 LTI Plan	1,638,775	7.380	1,631,951	-	1,638,775	-
2021 LTI Plan	1,577,773	7.0010	1,577,773	-	1,577,773	-
2022 LTI Plan	2,398,143	4.8495	2,395,323	-	-	-

The fair value of those equity instruments is measured on the basis of the market price of Enel Shares at the grant date.[61]

The cost of the equity component is determined on the basis of the fair value of the equity instruments granted and is recognized over the duration of the vesting period through an equity reserve.

The total costs recognized by the Group through profit or loss amounted to €11 million in 2022 (€9 million in 2021).

There have been no terminations or amendments involving the 2019 LTI Plan, the 2020 LTI Plan, the 2021 LTI Plan, or the 2022 LTI Plan.

(56) Shares purchased in the period between September 23 and December 2, 2019, equal to about 0.015% of share capital.
(57) Shares purchased in the period between September 3 and October 28, 2020, equal to about 0.017% of share capital.
(58) Shares purchased in the period between June 18 and July 21, 2021, equal to about 0.016% of share capital.
(59) Shares purchased in the period between June 17 and July 20, 2022, equal to about 0.026% of share capital.
(60) The table shows the number of shares awarded on September 5, 2022, to the beneficiaries of the 2019 LTI Plan, which make up the equity component of the bonus vested by the beneficiaries following the achievement of the performance objectives of the Plan. The disbursement of the remaining portion of the equity component of the bonus is deferred to 2023, in accordance with the terms and procedures of the rules of the 2019 LTI Plan.
(61) For the 2019 LTI Plan, the grant date is November 12, 2019, i.e., the date of the meeting of the Board of Directors that approved the procedures and timing of the grant under the 2019 LTI Plan to the beneficiaries.
For the 2020 LTI Plan, the grant date is September 17, 2020, i.e., the date of the meeting of the Board of Directors that approved the procedures and timing of the grant under the 2020 LTI Plan to the beneficiaries.
For the 2021 LTI Plan, the grant date is September 16, 2021, i.e., the date of the meeting of the Board of Directors that approved the procedures and timing of the grant under the 2021 LTI Plan to the beneficiaries.
For the 2022 LTI Plan, the grant date is September 21, 2022, i.e., the date of the meeting of the Board of Directors that approved the procedures and timing of the grant under the 2022 LTI Plan to the beneficiaries.

54. Related parties

As an operator in the field of generation, distribution, transport and sale of electricity and the sale of natural gas, Enel carries out transactions with a number of companies directly or indirectly controlled by the Italian State, the Group's controlling shareholder.
The table below summarizes the main types of transactions carried out with such counterparties.

Related party	Relationship	Nature of main transactions
Single Buyer	Fully controlled (indirectly) by the Ministry for the Economy and Finance	Purchase of electricity for the enhanced protection market
Cassa Depositi e Prestiti Group	Directly controlled by the Ministry for the Economy and Finance	Sale of electricity on the Ancillary Services Market (Terna) Sale of electricity transport services (Eni Group) Purchase of transport, dispatching and metering services (Terna) Purchase of postal services (Poste Italiane) Purchase of fuels for generation plants and natural gas storage and distribution services (Eni Group)
ESO - Energy Services Operator	Fully controlled (directly) by the Ministry for the Economy and Finance	Sale of subsidized electricity Payment of A3 component for renewable resource incentives
EMO - Energy Markets Operator	Fully controlled (indirectly) by the Ministry for the Economy and Finance	Sale of electricity on the Power Exchange (EMO) Purchase of electricity on the Power Exchange for pumping and plant planning (EMO)
Leonardo Group	Directly controlled by the Ministry for the Economy and Finance	Purchase of IT services and supply of goods

In addition, the Group conducts essentially commercial transactions with associated companies or companies in which it holds non-controlling interests.
Finally, Enel also maintains relationships with the pension funds FOPEN and FONDENEL, as well as Fondazione Enel and Enel Cuore, an Enel non-profit company devoted to providing social and healthcare assistance.

All transactions with related parties were carried out on normal market terms and conditions, which in some cases are determined by the Regulatory Authority for Energy, Networks and the Environment.

Credit facility guaranteed by SACE – Disclosure obligations established by Article 13, paragraph 3, letter c) (ii), of CONSOB Regulation on transactions with related parties

In compliance with the disclosure obligations established under Article 13, paragraph 3, letter c) (ii), of CONSOB Regulation no. 17221 of March 12, 2010, as amended (the "CONSOB Regulation"), and Article 13.4, letter c) (ii), of the Enel Procedure for Transactions with Related Parties (the "Enel Procedure"), we hereby disclose that a transaction with related parties was carried out in 2022 which qualifies as a transaction of "greater importance" having an ordinary nature and completed at market-equivalent or standard terms. More specifically, on December 23, 2022, Enel SpA signed with a pool of financial institutions – composed of Banco BPM SpA, BPER Banca SpA, Cassa Depositi e Prestiti SpA, Intesa Sanpaolo SpA and UniCredit SpA – a loan agreement in the form of a revolving credit facility in the amount of €12 billion, of which up to 70% of the nominal amount is guaranteed by SACE SpA.

This credit facility, and the related guarantee, is aimed at funding the collateral requirements of the Enel Group companies operating in Italy (specifically Enel Global Trading SpA) for trading on energy markets and is part of the temporary measures to support the liquidity of companies, provided in the form of a guarantee, envisaged by Article 15 of Decree Law 50 of May 17, 2022, ratified with Law 91 of July 15, 2022 (the so-called "Aid Decree Law"), as amended.

The overall transaction qualifies as a transaction with related parties due to the fact that Enel SpA, Cassa Depositi e Prestiti SpA and SACE SpA are companies under the common control of Italy's Ministry for the Economy and Finance. Taking into account the amounts indicated above (and, in particular, in consideration of the value of the guarantee), it qualifies as a related-party transaction of "greater importance". The transaction in question was completed applying the exemption pursuant to Article 13, paragraph 3, letter c), of the CONSOB Regulation and Article 13.4, letter c), of the Enel Procedure, as an ordinary transaction completed at market-equivalent or standard terms.

In particular, the transaction is connected with the ordinary exercise of "finance activity connected to the operations" of the Group headed by Enel SpA, taking into account, *inter alia*, the object, recurrence and size of the same, as well as the nature of the counterparties. Furthermore, the main terms and conditions applicable to it are governed by Article 15 of the Aid Decree Law. For the portion of the loan for which it is responsible, Cassa Depositi e Prestiti SpA applied to Enel SpA the same terms and conditions that are applied by the other banks.

The following tables summarize transactions with related parties, associated companies and joint ventures outstanding at December 31, 2022 and December 31, 2021 and carried out during the period.

Millions of euro

	Single Buyer	EMO	ESO	Cassa Depositi e Prestiti Group	Other
Income statement					
Revenue from sales and services	-	7,949	87	4,497	196
Other income	-	-	-	389	-
Other financial income	-	-	-	-	-
Electricity, gas and fuel purchases	6,379	16,817	2	4,266	3
Costs for services and other materials	-	220	2	3,258	73
Other operating costs	10	147	-	420	3
Net results from commodity contracts	-	-	-	50	-
Other financial expense	1	-	2	10	-

Millions of euro

	Single Buyer	EMO	ESO	Cassa Depositi e Prestiti Group	Other
Statement of financial position					
Other non-current financial assets	-	-	-	-	-
Trade receivables	-	220	6	1,040	38
Current financial derivative assets	-	-	-	-	-
Other current financial assets	-	-	-	5	-
Other current assets	-	-	30	58	2
Long-term borrowings	-	-	-	447	-
Non-current contract liabilities	-	-	-	9	8
Non-current financial derivative liabilities	-	-	-	-	-
Short-term borrowings	-	-	-	-	-
Current portion of long-term borrowings	-	-	-	89	-
Trade payables	1,211	305	6	1,097	(1)
Other current financial liabilities	-	-	-	-	-
Current contract liabilities	-	-	-	23	20
Other current liabilities	-	-	-	3	23
Other information					
Guarantees issued	-	20	-	11	58
Guarantees received	-	-	-	134	36
Commitments	-	-	-	149	-

Total 2022	Associates and joint ventures	Overall total 2022	Total in financial statements	% of total
12,729	210	**12,939**	**135,653**	**9.5%**
389	-	**389**	**4,864**	**8.0%**
-	154	**154**	**3,430**	**4.5%**
27,467	413	**27,880**	**96,896**	**28.8%**
3,553	247	**3,800**	**20,228**	**18.8%**
580	1	**581**	**4,685**	**12.4%**
50	-	**50**	**2,365**	**2.1%**
13	21	**34**	**5,880**	**0.6%**

Total at Dec. 31, 2022	Associates and joint ventures	Overall total at Dec. 31, 2022	Total in financial statements	% of total
-	1,885	**1,885**	**8,359**	**22.6%**
1,304	259	**1,563**	**16,605**	**9.4%**
-	5	**5**	**14,830**	**-**
5	99	**104**	**13,753**	**0.8%**
90	63	**153**	**4,314**	**3.5%**
447	327	**774**	**68,191**	**1.1%**
17	-	**17**	**5,747**	**0.3%**
-	9	**9**	**5,895**	**0.2%**
-	14	**14**	**18,392**	**0.1%**
89	21	**110**	**2,835**	**3.9%**
2,618	192	**2,810**	**17,641**	**15.9%**
-	1	**1**	**853**	**0.1%**
43	-	**43**	**1,775**	**2.4%**
26	21	**47**	**11,713**	**0.4%**

89	-	**89**		
170	-	**170**		
149	-	**149**		

Millions of euro

	Single Buyer	EMO	ESO	Cassa Depositi e Prestiti Group	Other
Income statement					
Revenue from sales and services	-	3,018	275	3,165	210
Other income	-	-	-	5	-
Financial income	-	-	-	15	-
Electricity, gas and fuel purchases	4,613	6,363	-	2,572	-
Costs for services and other materials	-	75	3	2,874	57
Other operating costs	6	198	-	13	1
Results from commodity contracts	-	-	-	13	-
Other financial expense	-	-	-	10	-

(1) The figure for 2021 has been adjusted, for comparative purposes only, to take account of the classification under the item "Profit/(Loss) from discontinued operations" of profit/(loss) connected with the assets held in Russia (which were sold in the 4th Quarter of 2022), Romania and Greece as the requirements of IFRS 5 for their classification as discontinued operations have been met.

Millions of euro

	Single Buyer	EMO	ESO	Cassa Depositi e Prestiti Group	Other
Statement of financial position					
Other non-current financial assets	-	-	-	-	-
Non-current financial derivative assets	-	-	-	-	-
Other non-current assets	-	-	-	119	-
Trade receivables	-	469	9	659	36
Current financial derivative assets	-	-	-	-	-
Other current financial assets	-	-	-	-	1
Other current assets	-	-	76	21	2
Long-term borrowings	-	-	-	536	-
Non-current contract liabilities	-	-	-	187	7
Non-current financial derivative liabilities	-	-	-	-	-
Short-term borrowings	-	-	-	-	-
Current portion of long-term borrowings	-	-	-	89	-
Trade payables	1,903	641	1	1,466	12
Current contract liabilities	-	-	-	12	-
Other current liabilities	-	-	-	38	38
Other information					
Guarantees issued	-	40	-	11	59
Guarantees received	-	-	-	138	36
Commitments	-	-	-	401	-

Total 2021	Associates and joint ventures	Overall total 2021	Total in financial statements[(1)]	% of total
6,668	342	**7,010**	**81,900**	**8.6%**
5	1	**6**	**3,819**	**0.2%**
15	123	**138**	**1,862**	**7.4%**
13,548	278	**13,826**	**47,702**	**29.0%**
3,009	143	**3,152**	**19,240**	**16.4%**
218	-	**218**	**1,968**	**11.1%**
13	11	**24**	**2,523**	**1.0%**
10	22	**32**	**6,087**	**0.5%**

Total at Dec. 31, 2021	Associates and joint ventures	Overall total at Dec. 31, 2021	Total in financial statements	% of total
-	1,120	**1,120**	**5,704**	**19.6%**
-	14	**14**	**2,772**	**0.5%**
119	-	**119**	**3,268**	**3.6%**
1,173	148	**1,321**	**16,076**	**8.2%**
-	32	**32**	**22,791**	**0.1%**
1	156	**157**	**8,645**	**1.8%**
99	24	**123**	**5,002**	**2.5%**
536	344	**880**	**54,500**	**1.6%**
194	-	**194**	**6,214**	**3.1%**
-	1	**1**	**3,339**	**-**
-	6	**6**	**13,306**	**-**
89	20	**109**	**4,031**	**2.7%**
4,023	59	**4,082**	**16,959**	**24.1%**
12	-	**12**	**1,433**	**0.8%**
76	4	**80**	**12,959**	**0.6%**

110	-	**110**		
174	-	**174**		
401	-	**401**		

With regard to disclosures on the remuneration of directors, members of the Board of Statutory Auditors and key management personnel, provided for under IAS 24, please see the following tables.

Millions of euro

	2022	2021	Change	
Remuneration of members of the Board of Directors and Board of Statutory Auditors and the General Manager				
Short-term employee benefits	5	5	-	-
Other long-term benefits	1	1	-	-
Total	**6**	**6**	**-**	**-**

Millions of euro

	2022	2021	Change	
Remuneration of key management personnel				
Short-term employee benefits	13	13	-	-
Other long-term benefits	2	4	(2)	-50%
Total	**15**	**17**	**(2)**	**-11.8%**

In November 2010, the Board of Directors of Enel SpA approved a procedure governing the approval and execution of transactions with related parties carried out by Enel SpA directly or through subsidiaries (the "Enel Procedure"). The procedure (available at https://www.enel.com/investors/bylaws-rules-and-policies/transactions-with-related-parties/) sets out rules designed to ensure the transparency and procedural and substantive propriety of transactions with related parties. It was adopted in implementation of the provisions of Article 2391-*bis* of the Italian Civil Code and the implementing regulations issued by CONSOB with Resolution no. 17221 of March 12, 2010, as amended (the "CONSOB Regulation").

55. Government grants - Disclosure pursuant to Article 1, paragraphs 125-129, of Law 124/2017

Pursuant to Article 1, paragraphs 125-129, of Law 124/2017 as amended, the following provides information on grants received from Italian public agencies and bodies, as well as donations by Enel SpA and the fully consolidated subsidiaries to companies, individuals and public and private entities. The disclosure comprises: (i) grants received from Italian public entities/State entities; and (ii) donations made by Enel SpA and Group subsidiaries to public or private parties resident or established in Italy.

The following disclosure includes payments in excess of €10,000 made by the same grantor/donor during 2022, even if made in multiple financial transactions. They are recognized on a cash basis.

Pursuant to the provisions of Article 3-*quater* of Decree Law 135 of December 14, 2018, ratified with Law 12 of February 11, 2019, for grants received, please refer to the information contained in the National Register of State Aid referred to in Article 52 of Law 234 of December 24, 2012.

Grants received in millions of euro

Financial institution/Grantor	Beneficiary	Amount	Notes
Anpal	Enel Green Power Italia Srl	(0.04)	Instalment of grant returned in second instance FNC-C-06952, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Green Power Italia Srl	(0.05)	Instalment of grant returned in third instance FNC-C-10223, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Invitalia MISE	Enel Green Power Italia Srl	(8.44)	Return of instalment of grant under first progress statement of Development Contract 3SUN HJT, following abandonment of original project to expand the Catania facility
Anpal	Enel Green Power SpA	(0.07)	Instalment of grant returned in second instance FNC-C-06952, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Green Power SpA	(0.05)	Instalment of grant returned in third instance FNC-C-10223, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Global Thermal Generation Srl	(0.06)	Instalment of grant returned in second instance FNC-C-06952, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Global Thermal Generation Srl	(0.02)	Instalment of grant returned in third instance FNC-C-10223, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Grids	(0.04)	Instalment of grant returned in second instance FNC-C-06952, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Grids	(0.04)	Instalment of grant returned in third instance FNC-C-10223, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Global Trading SpA	(0.005)	Instalment of grant returned in second instance FNC-C-06952, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Global Trading SpA	(0.006)	Instalment of grant returned in third instance FNC-C-10223, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Produzione SpA	(0.04)	Instalment of grant returned in second instance FNC-C-06952, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Produzione SpA	(0.03)	Instalment of grant returned in third instance FNC-C-10223, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	e-distribuzione SpA	(0.17)	Instalment of grant returned in second instance FNC-C-06952, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020

Grants received in millions of euro

Financial institution/Grantor	Beneficiary	Amount	Notes
Anpal	e-distribuzione SpA	(0.10)	Instalment of grant returned in third instance FNC-C-10223, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Regione Lazio	Enel X Srl	0.07	Instalment of grant as balance for the Homix-Care project, funded under the ROP ERDF Lazio 2014-2020
Anpal	Enel X Srl	(0.02)	Instalment of grant returned in second instance FNC-C-06952, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel X Srl	(0.01)	Instalment of grant returned in third instance FNC-C-10223, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Sole Srl	-	Instalment of grant returned in second instance FNC-C-06952, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Sole Srl	(0.01)	Instalment of grant returned in third instance FNC-C-10223, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Regione Sicilia	Enel X Mobility Srl	2.03	Instalment of grant for Sicilia Smart Charging project, financed by the Region of Sicily through National Plan for Electric Vehicle Charging Infrastructure
Anpal	Servizio Elettrico Nazionale SpA	(0.02)	Instalment of grant returned in second instance FNC-C-06952, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Servizio Elettrico Nazionale SpA	(0.01)	Instalment of grant returned in third instance FNC-C-10223, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Energia SpA	(0.14)	Instalment of grant returned in second instance FNC-C-06952, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Energia SpA	(0.02)	Instalment of grant returned in third instance FNC-C-10223, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Global Services Srl	(0.06)	Instalment of grant returned in second instance FNC-C-06952, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Global Services Srl	(0.01)	Instalment of grant returned in third instance FNC-C-10223, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Italia SpA	(0.04)	Instalment of grant returned in second instance FNC-C-06952, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
Anpal	Enel Italia SpA	(0.01)	Instalment of grant returned in third instance FNC-C-10223, financed through the New Skills Fund referred to in Art. 88 of Decree Law of May 19, 2020 and the ministerial decree of October 9, 2020
		(7.413)	**Total**

Grants made in millions of euro

Grantor	Beneficiary	Amount	Notes
Enel SpA	FGS Onlus	0.05	Donation to promote equal opportunities
Enel SpA	European University Institute	0.10	Donation for scientific research on European energy issues
Enel SpA	Fondazione Centro Studi Enel	0.10	Enel Foundation grant
Enel SpA	Earthrise Trust	0.01	Donation for rural development projects
Enel SpA	International Energy Agency	0.08	Donation for the study of the energy market
Enel SpA	Comunità Sant'Egidio	0.04	Gadgets donation
Enel SpA	Associazione UISP Unione Italiana Sport per Tutti	0.03	Gadgets donation
Enel SpA	Onlus CESIE	0.06	Gadgets donation
Enel SpA	Onlus Sport Senza Frontiere	0.02	Gadgets donation
Enel Produzione SpA	Associazione Juppiter APS giovanile	0.06	30% 1st tranche - project presentation
Enel Produzione SpA	Associazione Juppiter APS giovanile	0.06	30% 2nd tranche - digital content creation
Enel Produzione SpA	Associazione Juppiter APS giovanile	0.08	40% last tranche - conclusion
Enel Produzione SpA	Fondazione Centro Studi Enel	0.09	Enel Foundation – balance of 2021 grant
Enel Produzione SpA	Fondazione Centro Studi Enel	0.48	Enel Foundation – 1st instalment of 2022 grant
Enel Produzione SpA	Enel Cuore Onlus	0.13	2nd instalment of Enel Cuore 2021 grant
Enel Produzione SpA	Enel Cuore Onlus	0.18	1st instalment of Enel Cuore 2022 grant
Enel Produzione SpA	Fondazione WWF Italia	0.01	Agreement Enel Produzione
Enel Produzione SpA	Associazione Le Colonne	0.03	Donation "Accogliere ad Arte"
Enel Italia SpA	Enel Cuore Onlus	0.15	2021 grant
Enel Italia SpA	Società Coop, Greenwill	0.01	Modal donation "Alleva la speranza Greenwill"
Enel Italia SpA	Foglietti Enrico	0.01	Modal donation "Alleva la speranza Foglietti Enrico"
Enel Italia SpA	Feat Impresa Locale	0.02	1st instalment 2022 donation WE Feat arl
Enel Italia SpA	Help Code Italia	0.04	Enel Helpcode project "È viva la scuola labs"
Enel Italia SpA	Fondazione Accademia Nazionale "Santa Cecilia"	0.60	Modal donation 2022
Enel Italia SpA	Fondazione Teatro alla Scala	0.60	Donation 2022
Enel Italia SpA	Fondazione Teatro Maxxi	0.60	Modal donation 2022
Enel Italia SpA	Enel Cuore Onlus	0.02	Extraordinary contribution 2022
Enel Italia SpA	Fondazione Centro Studi Enel	0.05	Grants 2022
Enel Italia SpA	Help Code Italia	0.02	Payment for the start of energy courses
Enel Italia SpA	Moige - Movimento italiano genitori Onlus	0.05	Donation to support the Young Ambassadors Campaign for digital citizenship to counter cyber risk, bulling and cyberbullying in all its forms - 2nd instalment and balance
Enel Italia SpA	Fondazione Centro Studi Enel	0.11	Balance of 2021 grant
e-distribuzione SpA	Enel Cuore Onlus	2.09	80% balance of 2021 grant
e-distribuzione SpA	Enel Cuore Onlus	0.47	20% instalment of 2022 grant
e-distribuzione SpA	Fondazione Centro Studi Enel	1.41	50% balance of 2021 grant
e-distribuzione SpA	Fondazione Centro Studi	1.28	50% instalment of 2022 grant
Enel X Srl	Enel Cuore Onlus	0.04	2022 grant
Enel Green Power Italia	Unione dei Comuni Montani Amiata Grossetana (Sarchioto - Borrello - Simoni Giorgio)	0.04	Donation to the Union of Amiata Grossetana mountain municipalities as part of sustainability activities linked to the BG3 power station smart repowering project, for the "Non Solo Neve" and "Fondo per la Montagna" projects developed by the beneficiary. The projects envisage the construction and redevelopment of a bike-pedestrian path with urban furniture and signage for the benefit of the area, also affecting municipalities with a geothermal vocation in an area where Enel Green Power has been operating for a long time
Enel Energia SpA	Confimprese	0.01	Association dues 2022 - 029/22
Enel Energia SpA	Anigas	0.10	Association dues 2022
Enel Energia SpA	Fondazione Centro Studi Enel	1.01	Balance 2021 grant
Enel Energia SpA	Enel Cuore Onlus	1.49	Balance 2021 grant
Enel Energia SpA	Enel Cuore Onlus	0.20	"Nel Cuore dello Spazio Enel" project
Enel Energia SpA	Enel Cuore Onlus	0.33	20% instalment of 2022 grant
Enel Energia SpA	Fondazione Centro Studi Enel	0.90	50% instalment of 2022 grant
Enel Energia SpA	Associazione Milano & Partners	0.05	Association dues 2022
Enel Energia SpA	Assonime	0.02	Association dues 2022
Enel Energia SpA	Proxigas	0.10	Balance Proxigas
Enel Energia SpA	Enel Cuore Onlus	0.04	Association dues
Enel Global Trading SpA	Enel Cuore Onlus	0.14	Contribution aimed at supporting and developing projects of Enel Cuore Onlus
Enel Global Trading SpA	Fondazione Centro Studi Enel	0.10	Contribution aimed at supporting and developing Research and Higher Education projects
		13.71	**Total**

56. Contractual commitments and guarantees

The commitments entered into by the Enel Group and the guarantees given to third parties are shown below.

Millions of euro	at Dec. 31, 2022	at Dec. 31, 2021	Change
Guarantees given:			
- sureties and other guarantees granted to third parties	4,296	4,937	(641)
Commitments to suppliers for:			
- electricity purchases	64,878	71,244	(6,366)
- fuel purchases	96,996	58,042	38,954
- various supplies	2,449	1,631	818
- tenders	6,165	4,668	1,497
- other	6,889	6,187	702
Total	**177,377**	**141,772**	**35,605**
TOTAL	**181,673**	**146,709**	**34,964**

Compared with December 31, 2021, the decrease of €6,366 million in commitments for "electricity purchases" is essentially attributable to companies in Latin America, in particular in Brazil, and mainly reflects the sale of Celg Distribuição SA - Celg-D (Enel Goiás), partially offset by the increase in Chile, mainly attributable to new contracts and developments in commodity prices.

The increase of €38,954 million in commitments for "fuel purchases" mainly regards gas supplies, especially in Italy and Spain, and reflected the increase in demand for natural gas and in gas prices.

For more details on the expiry of commitments and guarantees, please see the section "Commitments to purchase commodities" in note 49.

57. Contingent assets and liabilities

The following reports the main contingent assets and liabilities at December 31, 2022, which are not recognized in the consolidated financial statements as they do not meet the requirements provided for in IAS 37.

Brindisi Sud thermal generation plant – Ash dispute – Italy

With regard to the criminal investigation initiated by the Public Prosecutor's Office of the Court of Lecce in 2017 concerning the use of fly ash in the cement industry, the Brindisi Sud power plant was involved in a criminal investigation involving accused individuals and Enel Produzione (EP) pursuant to Legislative Decree 231 of June 8, 2001, that resulted in the issue of a preventive seizure order that allowed operation of the plant as well as the seizure of EP assets and receivables up to an amount of about €500 million. The seizures were subsequently revoked following the positive outcome of testing by the independent experts appointed by the investigating magistrate, which confirmed the non-hazardous nature of the ash, finding it suitable for use in the cement-making process, as well as the appropriateness of the operation of the plant. Subsequently, a pre-trial hearing was conducted in 2021, following which the pre-trial hearing judge granted petitions to participate in the trial as civil plaintiff filed by the City of Brindisi, which quantified damages at about €27 million, requesting a provisional award of €8 million, and by the Region of Puglia, which has not yet quantified the damages requested. The pre-trial hearing judge remanded all of the defendants before the Court of Brindisi. At the hearing of May 26, 2022, the court, in upholding the objection raised by EP that the preliminary hearing of October 22, 2021, held without the necessary presence of the parties, should be declared void, declared the hearing and the instrument ordering committal for trial void and submitted the trial documentation to the Court of Lecce for a new preliminary hearing. At the following hearing of October 7, 2022, which was held as summary judgement at the request of the defendant, the court issued its ruling acquitting all of the defendants of the charges because "the alleged offense did not occur". The ruling also acquitted EP as the administrative offense alleged under the provisions of Legislative Decree 231/2001 had not occurred as there were no predicate offenses, in conformity with the position of the Public Prosecutor and the defense.

Enel, Enel Energia and Servizio Elettrico Nazionale antitrust proceeding – Italy

On May 11, 2017, the Competition Authority announced the beginning of proceedings for alleged abuse of a dominant position against Enel SpA (Enel), Enel Energia SpA (EE) and Servizio Elettrico Nazionale SpA (SEN). The proceeding was initiated on the basis of complaints filed by the Italian Association of Energy Wholesalers and Traders (AIGET) and the company Green Network SpA (GN), as well as a number of complaints from individual consumers.

On December 20, 2018 the Competition Authority issued its final ruling, with which it levied a fine of about €93 million on all three Group companies, for violation of Article 102 of the Treaty on the Functioning of the European Union (TFEU).

The main disputed conduct consisted in abuse of a dominant position by the three companies (to the benefit in particular of EE) who allegedly used the privacy consent given by SEN consumers, to the detriment of competing traders. With regard to other allegations made with the measure to initiate the proceeding, concerning the organization and performance of sales activities at physical locations (Enel Points and Enel Point Partner Shops) and winback policies reported by GN, the Competition Authority reached the conclusion that the preliminary findings did not provide sufficient evidence of any abusive conduct on the part of Enel Group companies.

The companies involved challenged the measures of the Competition Authority before the Lazio Regional Administrative Court, which with a decision filed on October 17, 2019 partially upheld the appeals filed by SEN and EE, shortening the period of abuse and requiring the Competition Authority to recalculate the penalty in accordance with the criteria specified in the ruling. With a measure dated November 27, 2019, the Competition Authority set the recalculated penalty at €27,529,786.46.

The rulings of the Regional Administrative Court were challenged on appeal before the Council of State. With an order of July 20, 2020, the Council of State suspended the ruling and ordered that the issue be submitted for a preliminary ruling before the Court of Justice of the European Union (CJEU) pursuant to Article 267 of the TFEU, formulating a number of questions aimed at clarifying the interpretation of the concept of "abuse of a dominant position" to be applied to the present case.

With a ruling of May 12, 2022, the CJEU provided the requested interpretation and, subsequently, on December 1, 2022, the Council of State, in application of the guidelines set out by the CJEU, fully voided the fine levied by the Competition Authority and, upholding the arguments presented by the companies, denied that any abuse of position had occurred.

Hydroelectric concessions – Italy

Italian regulations governing large-scale hydroelectric concessions were most recently modified by the "Simplifications Decree" (Decree Law 135 of 2018 ratified with Law 12 of February 11, 2019), which introduced a series of innovations regarding the granting of such concessions upon their expiry and the valorization of the assets and works

connected to them to be transferred to the new concession holder. This legislation also introduced a number of changes in the matter of concession fees, establishing a fixed and variable component of fees, as well as an obligation to provide free power to public bodies (220 kWh of power for each kW of average nominal capacity of the facilities covered by the concession). In implementation of this national law and under specific enabling authority, various regions (Lombardy, Piedmont, Emilia-Romagna, Friuli-Venezia Giulia, the Province of Trento, Calabria and Basilicata) enacted regional laws.

In particular, the regions of Lombardy, Piedmont and Emilia-Romagna, in application of these new regulations, requested payment from Enel Green Power Italia and Enel Produzione of the dual-component fee and the monetization of the free power.

Enel Green Power Italia and Enel Produzione challenged the first implementing acts issued under the individual regional laws and the subsequent payment notices of fees and the monetization of free electricity supplies before the Regional Administrative Court and Regional Water Resources Court (of Lombardy, Piedmont and Emilia-Romagna), asking that they be declared void and raising the question of constitutional illegitimacy of both the national law and the regional laws. The Regional Administrative Court and then the Council of State, at the appeal stage, deferred their jurisdiction in favor of the Superior Public Water Resources Court, before which Enel Green Power Italia and Enel Produzione resumed the disputes, which are now at the preliminary stage.

The companies initiated the proceedings by complaining that the regional implementing acts – as well as the regional legislation which they implement – were constitutionally illegitimate, first for violation of national legislation and various primary principles protected both by the Italian Constitution and European law concerning legitimate expectations, property rights, reasonableness, private initiative, and concessions, where:

- they provide for retroactive application to valid large diversion concessions of the dual-component fee and the obligation to supply free power or its financial equivalent;
- they order the monetization of the obligation to supply free energy, which is not envisaged in the national law.

Furthermore, the introduction by the regions of these new obligations to pay the new dual-component fee (divided into a fixed component and a variable component) and to supply a certain annual quantity of electricity free of charge in the form of payment of the associated monetary value, which is also to be paid by the holders of valid concessions that have not yet expired, creates an unexpected and unreasonable financial imbalance in the concession relationships. This circumstance is in evident contrast with the principles of reasonableness, proportionality and legitimate expectation of concession fees, compliance with which is required by constitutional case law if, in the context of long-term relationships, pejorative modifications are introduced.

Both the national law and the regional implementing legislation violate Community principles and constitutional principles such as property rights, the principle of legal certainty, and the freedom of enterprise. In particular, the rules do not expressly provide for the transfer of the business unit from the outgoing to the successor concession holder, and also establish inadequate criteria for the valorization of the works to be transferred, which threatens to create what is essentially a mechanism for expropriation, in violation of constitutional principles.

Finally, the Council of Ministers had challenged a number of the regional implementing laws before the Constitutional Court, claiming the violation of various constitutional principles. Enel Green Power Italia participated in the aforementioned proceedings (together with a number of trade associations and other sector operators) concerning constitutional legitimacy undertaken by the government against the Province of Trento and the Regions of Lombardy, Piedmont and Basilicata. The Council of Ministers subsequently withdrew the appeals as the complaints of illegitimacy they brought were resolved by subsequent regional laws. The Constitutional Court therefore extinguished the proceedings, with the consequent cancellation of the related interventions by Enel Green Power Italia, despite the fact that the latter concerned different constitutionality issues than those raised by the Council of Ministers.

Antitrust proceeding 12461 EE – Contract renewals

On December 13, 2022, the Competition Authority notified Enel Energia SpA ("Company" or "EE") and six other companies (Hera, A2A, Acea, Eni Plenitude, Engie, Edison) that it had initiated a proceeding for unfair commercial practices, contesting the violation of certain provisions of the Consumer Code and Article 3 of Decree Law 115 of August 9, 2022 (the so-called "second Aid Decree") of August 10, 2022, ratified with Law 142 of September 21, 2022. Similar proceedings had previously been initiated against four other operators (Iren, Iberdrola, E.ON and Dolomiti).

In particular, the Competition Authority, acting on the basis of reports received and without any preliminary investigation, argued that EE had sent its customers, in the period from May to October 2022, notices of price changes that were allegedly generic and omissive to the extent that they did not specify the expiry date of the financial conditions subject to renewal and represented a unwarranted exercise of *ius variandi* in modification of the financial conditions of the supply relationship, in violation of the aforementioned Article 3 of the second Aid Decree.

With the measure initiating the procedure, the Competition Authority simultaneously prohibited on a precaution-

ary basis the sending of new price change notices and ordered the correction of those already sent.
All the operators subject to the order, including EE, challenged the provision, which was based on the assumption that any price change had been prohibited to suppliers in the period indicated by the second Aid Decree (August 10 - April 30).
With an order of December 22, 2022, issued as part of the appeal filed by Iren, the Council of State distinguished contractual renewals (of expiring offers) from those covered by *ius variandi* and excluded the applicability of Article 3 of the decree law. This principle was also recognized by the Government, which, with the Milleproroghe Decree of December 29, 2022, established that Article 3 of the second Aid Decree shall not apply to the contractual clauses that allow an electricity and natural gas supply company to update the contractual financial conditions upon expiry of the same, in compliance with the contractual terms of notice and without prejudice to the right of withdrawal of the counterparty. The Milleproroghe Decree also extended the duration of the prohibition to June 30, 2023.
Following the pronouncement of the Council of State and the aforementioned clarifying legislative intervention, the Competition Authority, with a new precautionary measure of December 30, 2022, ordered the partial upholding of the original precautionary measure and confirmed the prohibition on changes or renewals of the financial conditions of expiring contracts for which the expiry date was not specifically identified or in any case predeterminable in the associated notice sent to the customer.
EE filed an appeal for additional reasons, whose hearing, together with all the various appeals lodged by other operators, took place on February 22, 2023 and the publication of the ruling is pending.

BEG litigation – Italy, France, Luxembourg

Following an arbitration proceeding initiated by BEG SpA (BEG) in Italy, Enelpower SpA (Enelpower) obtained a ruling in its favor in 2002, which was upheld by the Court of Cassation in 2010, which entirely rejected the petition for damages with regard to alleged breach by Enelpower of an agreement concerning the assessment of the possible construction of a hydroelectric power station in Albania. Subsequently, BEG, acting through its subsidiary Albania BEG Ambient Shpk (ABA), filed suit against Enelpower and Enel SpA (Enel) in Albania concerning the matter, obtaining a ruling from the District Court of Tirana on March 24, 2009, upheld by the Albanian Court of Cassation, ordering Enelpower and Enel to pay tortious damages of about €25 million for 2004 as well as an unspecified amount of tortious damages for subsequent years. Following the ruling, Albania BEG Ambient demanded payment of more than €430 million.
On November 5, 2016, Enel and Enelpower filed a petition with the Albanian Court of Cassation, asking for the ruling issued by the District Court of Tirana on March 24, 2009 to be voided. The proceeding is still pending.
With a ruling of the Court of Appeal of Rome of March 7, 2022, the further proceedings undertaken by Enel and Enelpower before the Court of Rome were concluded, having sought recognition of BEG's liability for having circumvented the arbitration award rendered in Italy in favor of Enelpower through the aforementioned initiatives undertaken by the subsidiary ABA. With the ruling, the Court of Appeal of Rome upheld the ruling of first instance rendered by the Court of Rome on June 16, 2015, which had denied the petition in the proceeding.
On May 20, 2021, the European Court of Human Rights (ECHR) issued a ruling with which it decided the appeal brought by BEG against the Italian State for violation of Article 6.1 of the European Convention on Human Rights. With this decision, the Court denied BEG's request to reopen the above arbitration proceedings, and also rejected BEG's claim for pecuniary damages amounting to about €1.2 billion due to the absence of a causal link with the disputed conduct, granting it only €15,000.00 in non-pecuniary damages.
Nonetheless, on December 29, 2021, BEG, with an action that the company and its legal counsel deemed unfounded and specious, also decided to sue the Italian State before the Court of Milan, to demand, as a consequence of the ECHR ruling, damages for tortious liability in an amount of about €1.8 billion. In this case, BEG also involved Enel and Enelpower by way of a claim of joint and several liability. With an order of June 14, 2022, the Court of Milan, in accepting the objection of territorial incompetence raised by the State Attorney, declared its incompetence to hear the dispute in favor of the Court of Rome, the court exclusively competent to hear the causes in which the Italian State is involved, ordering BEG to pay the costs of the proceedings in favor of the defendants. BEG did not resume the judgment before the Court of Rome within the legal term of 14 October 2022 and therefore the proceeding was extinguished.
A short time later, on November 3, 2022, BEG resubmitted the same claims for damages of the terminated proceeding, serving a new writ of summons before the Court of Milan against the same defendants, with the exception of the Italian State, which BEG declared not to wishing to agree to this judgement. The first appearance hearing is set for May 9, 2023. The company is preparing its defenses to proceed with the appearance in court in order to contest the claim, which is considered entirely specious and unfounded, like the previous similar initiative.

Proceedings undertaken by Albania BEG Ambient Shpk (ABA) to obtain enforcement of the ruling of the District Court of Tirana of March 24, 2009

France

In February 2012, ABA filed suit against Enel and Enelpower with the *Tribunal de Grande Instance* in Paris in order to render the ruling of the Albanian court enforceable in France. Enel SpA and Enelpower SpA challenged the suit.

Following the beginning of the case before the *Tribunal de Grande Instance*, between 2012 and 2013 Enel France was served with a number of "*Saisie Conservatoire de Créances*" (orders for the precautionary attachment of receivables) in favor of ABA to conserve any receivables of Enel in respect of Enel France.

On January 29, 2018, the *Tribunal de Grande Instance* issued a ruling in favor of Enel and Enelpower, denying ABA the recognition and enforcement of the Tirana court's ruling in France for lack of the requirements under French law for the purposes of granting exequatur. Among other issues, the *Tribunal de Grande Instance* ruled that: (i) the Albanian ruling conflicted with an existing decision (the arbitration ruling of 2002) and that (ii) the fact that BEG sought to obtain in Albania what it was not able to obtain in the Italian arbitration proceeding, resubmitting the same claim through ABA, represented fraud.

Subsequently, with a ruling of May 4, 2021, the Paris Court of Appeal denied the appeal by ABA in full, fully upholding the non-compatibility of the Albanian ruling with the arbitration award of 2002 determined by the TGI, ordering it to reimburse Enel and Enelpower €200,000.00 each for legal costs.

On June 21, 2021, ABA filed an appeal with the *Cour de Cassation* against the ruling of the Paris Court of Appeal. Enel and Enelpower have appeared in court and the hearing for the final discussion of the case is set for March 28, 2023.

Enel initiated a separate proceeding to obtain release of the precautionary attachments granted to ABA and which are no longer valid as a result of the appeal ruling. With an order of June 16, 2022, the Court of Paris ordered the release of the precautionary attachments while also ordering ABA to pay Enel a total of about €146,000 in damages and legal costs. ABA challenged the aforementioned release order, requesting its suspension as a precautionary measure. The request for precautionary suspension was rejected on November 23, 2022 and the appeal continues in the trial court. At the same time, Enel is taking the necessary actions for credit recovery.

The Netherlands

At the end of July 2014, ABA filed suit with the Court of Amsterdam to render the ruling of the Albanian court enforceable in the Netherlands.

Following an initial ruling of June 29, 2016, in favor of ABA, in a ruling of July 17, 2018, the Amsterdam Court of Appeal upheld the appeal advanced by Enel and Enelpower, ruling that the Albanian judgment cannot be recognized and enforced in the Netherlands, as it was arbitrary and manifestly unreasonable and therefore contrary to Dutch public order. Subsequently, the proceeding before the Court of Appeal continued with regard to the subordinate question raised by ABA with which it asked the Dutch court to rule on the merits of the dispute in Albania and in particular the alleged tortious liability of Enel and Enelpower in the failure to build the power plant in Albania. On December 3, 2019, the Amsterdam Court of Appeal issued a definitive ruling in which it fully quashed the trial court judgment of June 29, 2016, rejecting any claim made by ABA, thereby confirming the denial of recognition and enforcement of the Albanian ruling in the Netherlands. The Court came to this conclusion after affirming its jurisdiction over ABA's subordinate claim and re-analyzing the merits of the case under Albanian law, finding no tortious liability on the part of Enel and Enelpower. As a result of the decision of the Court of Appeal, Enel and Enelpower are therefore not liable to pay any amount to ABA, which was in fact ordered by the Court of Appeal to reimburse the companies for the losses incurred in illegitimate conservative seizures, to be quantified as part of a specific procedure, and the costs of the trial and appeal proceedings.

On July 16, 2021 the Supreme Court completely rejected ABA's appeal of the rulings of the Court of Appeal, ordering it to reimburse court costs. The decision of the Court of Appeal has thus become final.

Luxembourg

In Luxembourg, again at the initiative of ABA, J.P. Morgan Bank Luxembourg SA was also served with an order for a number of precautionary seizures of any receivables of both Enel Group companies in respect of the bank.

In parallel ABA filed a claim to obtain enforcement of the ruling of the Court of Tirana in Luxembourg. Owing to a number of procedural delays, the proceeding is still in the initial stages and no ruling has been issued.

United States and Ireland

In 2014, ABA had initiated two proceedings requesting execution of the Albanian sentence before the courts of the State of New York and Ireland, which both ruled in favor of Enel and Enelpower, respectively, on February 23 and February 26, 2018. Accordingly, there are no lawsuits pending in Ireland or New York State.

Environmental incentives – Spain

With the Decision of November 27, 2017 on the issue of environmental incentives for thermal power plants (the "Decision"), the European Commission reached the preliminary conclusion that the environmental incentive for coal

power plants provided for in Spain's Order ITC/3860/2007 represents State aid pursuant to Article 107, paragraph 1, of the Treaty on the Functioning of the European Union (TFEU), expressing doubts about the compatibility of the incentive with the internal market while recognizing that the incentives are in line with the European Union's environmental policy. On March 2, 2018, the Commission's Directorate-General for Competition has initiated a formal enquiry pursuant to Article 108, paragraph 2, of the TFEU, in order to establish whether the incentive in question constituted state aid compatible with the internal market. The formal enquiry pursuant to Article 108 of the TFUE is still open. On April 13, 2018, Endesa Generación SA, acting as an interested third party, submitted comments contesting this interpretation. Subsequently, on September 8, 2021, the appeal of the decision lodged by Gas Natural (now Naturgy) with the General Court of the European Union was denied. The ruling was appealed by Naturgy and EDP España before the Court of Justice of the European Union (CJEU). Endesa Generación has filed a request to participate in the proceeding and, with an order of June 1, 2022, the CJUE allowed that participation. Endesa Generación then filed its briefs in the proceedings initiated by Naturgy and EDP España on July 8 and 13, 2022, respectively.

Social Bonus – Spain

In relation to the various financing schemes for the Social Bonus adopted by the Spanish Government – in relation to which on December 21, 2021, the *Tribunal Supremo* had declared inapplicable the scheme envisaged in Article 45, paragraph 4 of Spain's Electricity Industry Law no. 24 of December 26, 2013 (LSE) for incompatibility with Article 3.2 of Directive 2009/72/EC of the European Parliament, in line with the decision issued in this regard by the Court of Justice of the European Union (CJEU) on October 14, 2021 – with ruling no. 212/2022 of February 21, 2022 the *Tribunal Supremo* also ruled on the appeals filed by Endesa SA, Endesa Energía SAU and Energía XXI Comercializadora de Referencia SLU (Endesa) and other companies in the energy sector against the third scheme for financing the Social Bonus, and for co-financing with government authorities of the supply to vulnerable consumers, envisaged under Article 45, paragraph 4 of LSE, Royal Decree Law 7/2016 of December 23 and Royal Decree 897/2017 of October 6.

With the ruling, the *Tribunal Supremo*, partially allowing the appeals, found that (i) the aforesaid regime was inapplicable; (ii) Articles 12 to 17 of Royal Decree 897/2017 of 6 October are inapplicable and void, and (iii) the appellants were entitled to be compensated for the amounts paid to finance the Social Bonus and provide co-financing with government authorities, and to reimbursement of all costs incurred to fulfill the obligations set out in this mechanism, deducting any amounts transferred to customers, where applicable.

In the absence of voluntary compliance by the authorities, on November 10, 2022 the companies filed a petition for enforcement of the ruling, requesting payment of the related amounts; the proceeding is currently pending.

"Endesa I and II" industrial relations dispute – Spain

With effect from January 1, 2019, Endesa notified the workers and their union representatives that the 4th Collective Bargaining Agreement must be considered terminated under the terms of the "framework guarantee contract" and the "agreement on the voluntary suspension or resolution of employment contracts in the period 2013-2018", applying from that date the provisions of general labor law, as well as the applicable legal criteria established in the matter. Yet, the interpretative differences between Endesa and the trade union representatives regarding the effects of the resolution of the 4th Collective Bargaining Agreement with regard, in particular, to the social benefits granted to retired personnel, led to the initiation of a suit by the unions represented in the company. On March 26, 2019, the court of first instance issued a ruling in favor of Endesa, but the unions appealed against this decision before the *Tribunal Supremo*.

On July 7, 2021, the *Tribunal Supremo* issued a definitive ruling denying the appeals lodged by the aforementioned unions against the ruling of the court of first instance, affirming that social benefits (including those relating to electricity prices) originate exclusively in the collective bargaining agreements, both for employees currently in service and those who have retired, as well as for their family members, with the consequence that the termination of such agreements (as happened in the case of the 4th Collective Bargaining Agreement) produces the general contractual regulation of the conditions established therein for employees currently in service and. for those who have retired and their family members, the definitive extinction of all their rights, until new regulations (which came with the 5th Endesa Collective Bargaining Agreement).

In parallel, numerous individual suits have been filed by staff and former employees who had agreed to participate in termination incentive agreements in order to obtain judicial confirmation that the termination of the 4th Endesa Collective Bargaining Agreement did not affect them. The majority of these proceedings, initially suspended pending the definition of the collective action pending before the *Tribunal Supremo*, were rolled together to incorporate the outcome of the ruling of the latter, that, regarding a "collective dispute", would have the value of *res judicata* in respect of individual proceedings concerning the same issue.

Meanwhile, on January 21, 2020, the arbitration award was issued on the arbitration submitted before the *Servicio Interconfederal de Mediación y Arbitraje* (SIMA) with a view to resolving the main issues concerning the 5th Endesa Collective Bargaining Agreement with the company. The award amended certain parts of the 5th Endesa Collective Bargaining Agreement, which was subsequently signed

by the social partners and entered force on January 23, 2020. On the same date, Endesa also signed two further collective bargaining agreements (a "framework guarantee contract" and an "agreement on voluntary measures to suspend or terminate employment contracts") with all the unions present in the company. On June 17, 2020, the 5th Endesa Collective Bargaining Agreement was published in the Spanish Official Journal (*Boletín Oficial del Estado*), taking full effect.

On December 30, 2020, the *Audiencia Nacional* notified Endesa a new petition for a "collective dispute" initiated by three trade unions with minority representation filed on December 1, 2020, concerning the cancellation of some "derogatory provisions" of the 5th Endesa Collective Bargaining Agreement. The plaintiffs claim that the contested "derogatory provisions" would imply the illegitimate abolition of social benefits and economic rights of workers. Endesa considers these provisions to be fully legitimate, in line with the arguments made during proceeding concerning the reduction of social benefits for retired personnel. With a ruling of November 15, 2021, the petitions of the plaintiff unions were rejected, with verification of the legitimacy of the 5th Endesa Collective Bargaining Agreement. The ruling was appealed by the trade unions before the *Tribunal Supremo* and the proceeding is currently under way.

GNL Endesa Generación SA arbitration proceeding – Spain

In the course of an arbitration proceeding to review the price of a long-term supply contract for liquefied natural gas (LNG) initiated by Endesa Generación SA, the defendant, an LNG production company, filed a counterclaim demanding payment of some $1 billion. The amount of the claim could be revised by the plaintiff depending on market developments in months up to the completion of arbitration proceeding, which is scheduled for the 2nd Quarter of 2023. The company believes that this counterclaim is unfounded and late and external legal counsel believes it is highly unlikely to be upheld.

Furnas-Tractebel litigation – Brazil

In 1998 the Brazilian company CIEN (now Enel CIEN) signed an agreement with Tractebel for the delivery of electricity from Argentina through its Argentina-Brazil interconnection line. As a result of Argentine regulatory changes introduced as a consequence of the economic crisis in 2002, Enel CIEN was unable to make the electricity available to Tractebel.

In October 2009, Tractebel sued Enel CIEN, which submitted its defense. Enel CIEN cited force majeure as a result of the Argentine crisis as the main argument in its defense. Out of court, Tractebel has indicated that it plans to acquire 30% of the interconnection line involved in the dispute. With a ruling of February 16, 2023, the court of first instance denied the grounds of the claim submitted by Tractebel against Enel CIEN. The time limit for appealing that ruling is currently pending. The amount involved in the dispute is estimated at about R$658 million (about €117 million), plus damages to be quantified.

For analogous reasons, in May 2010 Furnas had also filed suit against Enel CIEN for failure to deliver electricity, requesting payment of about R$571.6 million (about €91 million), in addition to unspecified damages, seeking to acquire ownership (in this case 70%) of the interconnection line. The proceeding was decided in Enel CIEN's favor with a ruling of the *Tribunal de Justiça* with a definitive ruling of October 18, 2019, which denied all of the claims of Furnas.

Cibran litigation – Brazil

Companhia Brasileira de Antibióticos (Cibran) has filed six suits against the Enel Group company Ampla Energia e Serviços SA (today Enel Distribuição Rio de Janeiro) to obtain damages for alleged losses incurred as a result of the interruption of electricity service by the Brazilian distribution company between 1987 and 2002, in addition to non-pecuniary damages. The Court ordered a unified technical appraisal for those cases, the findings of which were partly unfavorable to Enel Distribuição Rio de Janeiro. The latter challenged the findings, asking for a new study, which led to the denial of part of Cibran's petitions. Cibran subsequently challenged the findings of the new study, but without success.

The first suit, filed in 1999 and regarding the years from 1995 to 1999, was adjudicated with a ruling of the court of first instance against Enel Distribuição Rio de Janeiro. Enel Distribuição Rio de Janeiro appealed the ruling and the appeal was upheld by the *Tribunal de Justiça*, which denied all of Cibran's claims. The ruling became definitive on August 24, 2020.

With regard to the second case, filed in 2006 and regarding the years from 1987 to 1994, on June 1, 2015, the courts issued a ruling ordering Enel Distribuição Rio de Janeiro to pay R$96,465,103 (about €23 million) plus interest in pecuniary damages and R$80,000 (about €19,000) in non-pecuniary damages. On July 8, 2015, Enel Distribuição Rio de Janeiro appealed the decision with the *Tribunal de Justiça* of Rio de Janeiro, which on November 6, 2019 issued a ruling on merits granting Ampla's petition and denying all of Cibran's claims. On November 25, 2019, Cibran filed an appeal against the ruling of the *Tribunal de Justiça* of Rio de Janeiro, which was preliminarily denied for formal reasons on September 10, 2020. On January 29, 2021, Cibran appealed (*agravo de instrumento*) the decisions before the *Superior Tribunal de Justiça* (STJ), which was denied on June 8, 2021. On June 22, 2021, Cibran filed an appeal (*agravo interno*) with the STJ, which was denied on March 24, 2022. On April 19, 2022, Cibran filed another appeal (*recurso extraordinario*), which was denied with ruling of May 13, 2022, against which Cibran has appealed and the proceeding is pending.

A ruling from the court of first instance is still pending for the remaining four suits for the years 2001 and 2002. The value of all the disputes is estimated at about R$681 million (about €121 million).

Coperva litigation – Brazil

As part of the project to expand the grid in rural areas of Brazil, in 1982 Companhia Energética do Ceará SA (Coelce, today Enel Distribuição Ceará), then owned by the Brazilian government and now an Enel Group company, had entered into contracts for the use of the grids of a number of cooperatives established specifically to pursue the expansion project. The contracts provided for the payment of a monthly fee by Enel Distribuição Ceará, which was also required to maintain the networks.

Those contracts, between cooperatives established in special circumstances and the then public-sector company, do not specifically identify the grids governed by the agreements, which prompted a number of the cooperatives to sue Enel Distribuição Ceará asking for, among other things, a revision of the fees agreed in the contracts.

These proceedings include the suit filed by Cooperativa de Eletrificação Rural do Vale do Acarau Ltda (Coperva) with a value of about R$427 million (about €75 million). Enel Distribuição Ceará was granted rulings in its favor from the trial court and the court of appeal, but Coperva filed a further appeal (*embargo de declaração*) based on procedural issues, which was also denied by the appeal court in a ruling of January 11, 2016. On February 3, 2016, Coperva lodged an extraordinary appeal before the *Tribunal Superior de Justiça* (TSJ) against the appeal court ruling on the merits, which was granted on November 5, 2018 for the ruling issued in the previous appeal (*embargo de declaração*). On December 3, 2018, Enel Distribuição Ceará filed an appeal (*agravo interno*) against this ruling of the TSJ. The proceedings are currently pending.

ANEEL litigation – Brazil

In 2014, Eletropaulo (today Enel Distribuição São Paulo) initiated an action before the Brazilian federal courts seeking to void the administrative measure of the *Agência Nacional de Energia Elétrica* (ANEEL, the national electricity agency), which in 2012 retroactively introduced a negative coefficient to be applied in determining rates for the following regulatory period (2011-2015). With this provision, ANEEL ordered the restitution of the value of some components of the network previously included in rates because they were considered non-existent and denied Enel Distribuição São Paulo's request to include additional components in rates. The administrative measure of ANEEL was challenged and on September 9, 2014 it was suspended on a precautionary basis. The first-instance proceeding is still in its preliminary stages and the value of the suit is about R$1.3 billion (about €241 million).

Endicon – Brazil

On October 17, 2021 Endicon (former Enel service provider in Brazil) filed a lawsuit against Enel Distribuição Rio de Janeiro and Enel Distribuição Ceará in which it seeks total damages of approximately R$435 million (about €77 million) for pecuniary and non-pecuniary damages incurred in connection with certain events allegedly attributable to Group companies, which occurred during the execution of the contracts between the parties, and from the abusive exercise of contractual rights by the latter, which is alleged to have produced a loss on the management of the contracts. On May 10, 2022, in upholding the appeals filed by the two Group companies, the precautionary measure that had been previously notified to the companies and immediately suspended was definitively revoked. It had required them to (i) publicly announce the material facts of the dispute and (ii) record a contingency in the financial statements of the companies in relation to the dispute. In the meantime, on December 2, 2021, Enel Distribuição Rio de Janeiro and Enel Distribuição Ceará presented their defenses in the proceedings on the merits, which continue in the first instance.

Socrel – Brazil

Enel Distribuição São Paulo has been sued by Serviços de Eletricidade and Telecomunicações Ltda (Socrel) for damages for losses caused by an alleged unlawful termination of contract by the Group company that involved a series of contracts between the parties, which would have caused Socrel's liquidity crisis. Following an expert report issued during the proceedings, Socrel's request was quantified at R$295 million (about €52 million). The proceeding is currently pending before the court of first instance.

Extraordinary 2022 rate revision (Ceará) – Brazil

On April 19, 2022, the *Agência Nacional de Energia Elétrica* (ANEEL) issued resolution no. 3.026/2022 with which it authorized an average 24.85% rate increase for 2022 for the electricity distribution services performed by Enel Distribuição Ceará. Both private individuals and public institutions have challenged this resolution before the Federal Regional Court of the district of Ceará, for a total of six proceedings requesting, on precautionary basis, the cancellation of the effects of the resolution and, on a permanent basis, the voidance of the resolution itself, arguing that the rate increase is illegitimate. In all proceedings, Enel Distribuição Ceará has contested the petitioners' claims, arguing the legitimacy of the rate adjustment. On June 21, 2022, the Federal Regional Court rejected the precautionary request and joindered the six proceedings in a single proceeding in consideration of fact that the relief sought and the cause of action are the same. On September 23, 2022, Enel Distribuição Ceará also submitted that, as a result of certain legislative measures,

the rate had been reduced following an extraordinary rate review and a reduction in taxes. The trial proceeding continues. The estimated value of the proceeding has not been determined.

GasAtacama Chile – Chile

In January 2020, the appeal proceeding was completed for the administrative fine levied in August 2016 by the *Superintendencia de Electricidad y Combustibles* (SEC) against GasAtacama Chile (now Enel Generación Chile) concerning the information provided to the CDEC- SING (*Centro de Despacho Económico de Carga*) in relation to the variables of the Technical Minimum and the Minimum Operation Time at the Atacama power station. Upon completion of the proceeding, the amount of the fine was reduced from approximately $6 million to about $432,000 and the amount was paid by the company.

In relation to the issue mentioned above, a number of operators of the *Sistema Interconectado del Norte Grande* (SING), including Aes Gener SA, Eléctrica Angamos SA and Engie Energía Chile SA, sued GasAtacama Chile seeking damages of about €58 million (the former two) and about €150 million (the other operators). The aforementioned disputes have been partially combined into a single proceeding and are currently pending (after the resumption of the proceeding following the lifting of the national emergency in response to the COVID-19 pandemic, the court served the provision that determines the substantial facts and issues of the trial, the preliminary investigation phase is completed and the proceeding continues its course).

El Quimbo – Colombia

A number of legal actions ("*acciones de grupo*" and "*acciones populares*") brought by residents and fishermen in the affected area are pending with regard to the El Quimbo project for the construction by Emgesa (now Enel Colombia) of a 400 MW hydroelectric plant in the region of Huila (Colombia). More specifically, the first collective action, currently in the preliminary stage, was brought by around 1,140 residents of the municipality of Garzón, who claim that the construction of the plant would reduce their business revenue by 30%. A second action was brought, between August 2011 and December 2012, by residents and businesses/associations of five municipalities of Huila claiming damages related to the closing of a bridge (Paso El Colegio). With regard to *acciones populares*, or class action lawsuits, in 2008 a suit was filed by a number of residents of the area demanding, among other things, that the environmental permit be suspended. As part of this action, on September 11, 2020, the Huila Court issued a partially unfavorable ruling against Emgesa, sentencing it to fulfill the obligations already provided for in the environmental license. Both the *Autoridad Nacional de Licencias Ambientales* (ANLA) and Emgesa challenged this decision before the Council of State. On September 20, 2022, ANLA's appeal was denied because it had been filed late. The proceeding continues in relation to Emgesa's appeal.

Another *acción popular* was brought by a number of fish farming companies over the alleged impact that filling the Quimbo basin would have on fishing in the Betania basin downstream from Quimbo. After a number of precautionary rulings, on February 22, 2016, the Huila Court issued a ruling allowing generation to continue for six months. The court ordered Emgesa to prepare a technical design that would ensure compliance with oxygen level requirements and to provide collateral of about 20,000,000,000 Colombian pesos (about €5.5 million).

The Huila Court subsequently extended the six-month time limit, and therefore, in the absence of contrary court rulings the Quimbo plant is continuing to generate electricity as the oxygenation system installed by Emgesa has so far demonstrated that it can maintain the oxygen levels required by the court. On March 22, 2018, ANLA and CAM jointly presented the final report on the monitoring of water quality downstream of the dam of the El Quimbo hydroelectric plant. Both authorities confirmed the compliance of Emgesa with the oxygen level requirements. After the parties had filed briefs, on January 12, 2021, it was learned that the ruling of first instance of the Court of Huila had been issued (it was subsequently notified to the company on February 1, 2021). The ruling, while acknowledging that the oxygenation system implemented by Emgesa had mitigated the risks associated with the protection of fauna in the Bethany basin, imposed a series of obligations on the environmental authorities involved, as well as on Emgesa itself. In particular, the latter is required to implement a decontamination project to ensure that the water in the basin does not generate risks for the flora and fauna of the river, which will be subject to verification by ANLA, and to make permanent the operation of the oxygenation system, adapting it to comply with the parameters established by ANLA. On March 4, 2021, Emgesa challenged the appeal ruling before the Council of State.

On December 31, 2021, the Council of State ruled that Emgesa's appeal was admissible. The proceeding is continuing at the appeal level.

Nivel de Tensión Uno proceedings – Colombia

This dispute involves an "*acción de grupo*" brought by Centro Médico de la Sabana hospital and other parties against Codensa (now Enel Colombia) seeking restitution of allegedly excess rates. The action is based upon the alleged failure of Codensa to apply a subsidized rate that they claim the users should have paid as *Tensión Uno* category users (voltage of less than 1 kV) and owners of infrastructure, as established in Resolution no. 82/2002, as amended by Resolution no. 97/2008. The preliminary stage has been completed and a ruling is pending. The

estimated value of the proceeding is about 337 billion Colombian pesos (about €96 million).

Chucas arbitration – Costa Rica

PH Chucas SA (Chucas) is a special purpose entity established by Enel Green Power Costa Rica SA after it won a tender organized in 2007 by the Instituto Costarricense de Electricidad (ICE) for the construction of a 50 MW hydroelectric plant and the sale of the power generated by the plant to ICE under a build, operate and transfer contract (BOT).

On May 27, 2015, Chucas initiated an arbitration proceeding before the *Cámara Costarricense-Norteamericana de Comercio* (AMCHAM CICA) seeking reimbursement of the additional costs incurred to build the plant and as a result of the delays in completing the project as well as voidance of the fine levied by ICE for alleged delays in finalizing the works. In a decision issued in November 2017, the arbitration board ruled in Chucas' favor, granting recognition of the additional costs incurred in the amount of about $113 million (about €91 million) and legal costs and found that Chucas was not liable to pay the finds to ICE. ICE appealed the arbitration ruling before the Supreme Court and on September 5, 2019 Chucas was notified of the ruling partially upholding ICE's appeal to void the arbitration ruling for a number of formal procedural reasons. On September 11, 2019, Chucas filed a "*recurso de aclaración y adición*" with the same court and it was partially upheld on June 8, 2020. The Court's decision expanded on the ruling of September 5, 2019 with information concerning the admission of evidence deposited by Chucas without, however, modifying the decision concerning the voidance of the arbitration award.

On July 14, 2020, Chucas filed a new request for arbitration with the AMCHAM CICA for a preliminary estimated amount of about $240 million. On August 14, 2020, ICE filed its response, requesting the dismissal of the proceeding for lack of jurisdiction on the part of the arbitration tribunal. The request for dismissal was denied by AMCHAM CICA. In parallel, ICE filed precautionary appeals to the *Tribunal Contencioso Administrativo* against Chucas and the AMCHAM CICA seeking to suspend the arbitration proceedings. While these appeals were preliminarily upheld, they were subsequently denied. In May 2021, Chucas filed its arbitration request complete with preliminary demands, quantifying the value of its claim at about $362 million (about €305 million). In June 2021, ICE filed its defense, continuing to assert a lack of jurisdiction. ICE has not made a counterclaim. On August 4, 2021, the arbitration tribunal rejected ICE's claim of lack of jurisdiction. The matter has subsequently been submitted for consideration to the first section of the Supreme Court and the arbitration proceedings was suspended.

On May 12, 2022, with a measure that was notified to the company on July 28, 2022, the first section of the Supreme Court ruled that the arbitration tribunal was incompetent to hear the dispute. On August 8, 2022, Chucas filed an extraordinary appeal against this ruling, the overall resolution of which is expected for mid-2023. The arbitration proceeding is suspended.

Kino arbitration – Mexico

On September 16, 2020, Kino Contractor SA de Cv (Kino Contractor), Kino Facilities Manager SA de Cv (Kino Facilities) and Enel SpA (Enel) were notified of a request for arbitration filed by Parque Solar Don José SA de Cv, Villanueva Solar SA de Cv and Parque Solar Villanueva Tres SA de Cv (together, "Project Companies") in which the Project Companies alleged the violation (i) by Kino Contractor of certain provisions of the EPC Contract and (ii) by Kino Facilities of certain provisions of the Asset Management Agreement, both contracts concerning solar projects owned by the three companies filing for arbitration.

Enel, which is the guarantor of the obligations assumed by Kino Contractor and Kino Facilities under the above contracts, has also been called into the arbitration proceeding, but no specific claims have been filed against it.

The Project Companies, in which Enel Green Power SpA is a non-controlling shareholder, are controlled by CDPQ Infraestructura Participación SA de Cv (which is controlled by Caisse de Dépôt et Placement du Québec) and CKD Infraestructura México SA de Cv. After the request for arbitration and the related response from the defendants, the parties exchanged further introductory briefs, in which the financial claim of the counterparties was updated to about $135 million, while Kino Facilities has not continued its counter-claim. The hearing was held in October 2022 and the final phase is currently pending. The issuance of the arbitration award is expected by mid-2023.

Allianz – North America

On May 18, 2022, High Lonesome Wind Project LLC was sued in New York Superior Court by Allianz Risk Transfer Ltd for about $203 million concerning an alleged liability accrued by the company, as of February 2020, in connection with a Proxy Revenue Swap. The claim is being contested in its entirety. The proceedings are currently pending before the Southern District Court in New York.

Gastalsa – Peru

In 2011, Empresa de Gas de Talara SA (Gastalsa) filed a claim before the Civil Court of Talara requesting to revoke the measure that canceled the concession of natural gas granted to it in the Parinas district, the Province of Talara and the Department of Piura, and the consequent transfer of the gas pipeline owned by Enel Generación Piura SA (EGPIURA) to Gastalsa itself.

On January 6, 2022, the court partially upheld the Gastalsa claim. In February 2022, EGPIURA learned of a precautionary measure issued by the Civil Court of Talara of the

Superior Court of Justice of Sullana (*Juzgado Civil de Talara de la Corte Superior de Justicia de Sullana*) in favor of Gastalsa which orders the *Dirección General de Hidrocarburos del Ministerio de Energía y Minas*, the *Organismo Superior de la Inversión en Energía y Minería* (Osinergmin) and the Ministry of Energy to (i) restore the natural gas concession of the Parinas district, the Province of Talara and the Department of Piura in favor of Gastalsa; and (ii) proceed with the upgrade and transfer of the pipeline to Gastalsa. The above means that the economic value of the gas pipeline, currently owned by EGPIURA (which supplies natural gas to the Malacas thermal power station) is to be estimated for transfer to Gastalsa.

On August 2, 2022, the *Sala Civil de la Corte Superior de Justicia de Sullana* ruled against Gastalsa in the second-level appeal, referring the case to the court of first instance for a new decision. As a result of that decision, on September 9, 2022, the precautionary measure issued earlier was revoked.

In the meantime, in July 2022, the Constitutional Court had granted the petition of the system operator, an interested third party, acknowledging that the original petition of Gastalsa had been filed after the time limit. On January 24, 2023 the Constitutional Court also denied the appeal of that measure.

Gabčíkovo litigation – Slovakia

Slovenské elektrárne (SE) is involved in a number of cases before the national courts concerning the 720 MW Gabčíkovo hydroelectric plant, which is administered by Vodohospodárska Výsatavba Štátny Podnik (VV) and whose operation and maintenance, as part of the privatization of SE in 2006, had been entrusted to SE for a period of 30 years under an operating agreement (the VEG Operating Agreement).

Immediately after the closing of the privatization, the Public Procurement Office (PPO) filed suit with the Court of Bratislava seeking to void the VEG Operating Agreement on the basis of alleged violations of the regulations governing public tenders, qualifying the contract as a service contract and as such governed by those regulations. In November 2011 the trial court ruled in favor of SE, whereupon the PPO appealed the decision.

In parallel with the PPO action, VV also filed a number of suits, asking in particular for the voidance of the VEG Operating Agreement. On December 12, 2014, VV withdrew unilaterally from the VEG Operating Agreement, notifying its termination on March 9, 2015, for breach of contract. On March 9, 2015, the decision of the appeals court overturned the ruling of the trial court and voided the contract as part of the action pursued by the PPO. SE lodged an extraordinary appeal against that decision before the Supreme Court. At a hearing of June 29, 2016, the Supreme Court denied the appeal and SE then appealed the ruling to the Constitutional Court, which denied the appeal on January 18, 2017.

In addition, SE lodged a request for arbitration with the Vienna International Arbitral Centre (VIAC) under the VEG Indemnity Agreement. Under that accord, which had been signed as part of the privatization between the National Property Fund (now MH Manazment - MHM) of the Slovak Republic and SE, the latter was entitled to an indemnity in the event of the early termination of the VEG Operating Agreement for reasons not attributable to SE. On June 30, 2017, the arbitration court issued its ruling denying the request of SE.

In parallel with this arbitration proceeding launched by SE, both VV and MHM filed two suits in the Slovakian courts to void the VEG Indemnity Agreement owing to the alleged connection of the latter with the VEG Operating Agreement. These proceedings were joindered and, on September 27, 2017, the Court of Bratislava denied the request of the plaintiffs for procedural reasons. Both VV and MHM appealed that decision, and both the appeals were denied upholding the trial court decision in favor of SE. VV filed an extraordinary appeal (*dovolanie*) against that decision on March 9, 2020, with the Supreme Court, to which SE replied with a brief submitted on June 8, 2020. SE also filed an appeal before the Slovak Constitutional Court, which was denied on July 29, 2021. On March 24, 2021, the Supreme Court overturned the decision of the Bratislava Court of Appeal, referring the judgment to the latter court, and the proceeding is currently pending.

At the local level, VV has also filed other suits against SE for alleged unjustified enrichment (estimated at about €360 million plus interest) for the period from 2006 to 2015. SE filed counter-claims for all of the proceedings under way. Developments in those proceedings can be summarized as follows:

- for 2006-2008, at the hearing of June 26, 2019, the Court of Bratislava rejected VV's main claim and, consequently, SE's counterclaim. The ruling in first instance was appealed by both parties before the Court of Appeal of Bratislava. As for the appeal proceedings (a) the proceedings relating to 2006 were completed with the decision of December 6, 2022, notified to SE on February 18, 2023, which upheld the ruling in first instance. SE is assessing which course of action to pursue; (b) the proceedings relating to the years 2007 and 2008 are still pending;
- the proceedings relating to the years 2011, 2014 and 2015 are all pending before the court of first instance and briefs have been exchanged between the parties. For proceedings relating to the years 2011 and 2014 hearings before the court of first instance were postponed to specified dates before being postponed to dates to be determined owing the pandemic. For the proceeding relating to 2015 the hearing before the court of first instance is scheduled for March 7, 2023;
- the proceedings relating to the years 2009, 2010 and

2013 were completed in the court of first instance with ruling issued by the Court of Bratislava on, respectively, November 24, 15 and 22, 2022, rejecting both VV's claim and SE's counterclaim. Between December 2022 and January 2023 both SE and VV filed appeals against the rulings relating to the years 2010 and 2013, and on January 19, 2023 SE also filed an appeal against the ruling relating to the year 2009;

- as regards the proceeding relating to the year 2012, on February 2, 2023 SE was notified of the appeal ruling upholding the ruling of first instance denying of both VV's claim and SE's counterclaim. SE is considering which course of action to pursue.

Finally, in another proceeding VV asked for SE to return the fee for the transfer from SE to VV of the technology assets of the Gabčíkovo plant as part of the privatization, with a value of about €43 million plus interest. After issuing a preliminary decision on the case in which it noted the lack of standing of VV, on December 18, 2020, the Court of Bratislava issued a decision in favor of SE, rejecting VV's claims. On January 4, 2021, VV filed an appeal against that decision, and the proceeding is pending.

Tax litigation in Brazil

Withholding Tax – Ampla

In 1998, Ampla Energia e Serviços SA (Ampla) financed the acquisition of Coelce with the issue of bonds in the amount of $350 million ("Fixed Rate Notes" - FRN) subscribed by its Panamanian subsidiary, which had been established to raise funds abroad. Under the special rules then in force, subject to maintaining the bond until 2008, the interest paid by Ampla to its subsidiary was not subject to withholding tax in Brazil.

However, the financial crisis of 1998 forced the Panamanian company to refinance itself with its Brazilian parent, which for that purpose obtained loans from local banks. The tax authorities considered this financing to be the equivalent of the early extinguishment of the bond, with the consequent loss of entitlement to the exemption from withholding tax.

In December 2005, Ampla Energia e Serviços carried out a spin-off that involved the transfer of the residual FRN debt and the associated rights and obligations to Ampla Investimentos e Serviços SA.

On November 6, 2012, the *Câmara Superior de Recursos Fiscais* (the highest level of administrative courts) issued a ruling against Ampla, for which the company promptly asked that body for clarifications. On October 15, 2013, Ampla was notified of the denial of the request for clarification (*embargo de declaração*), thereby upholding the previous adverse decision. The company provided security for the debt and on June 27, 2014 continued litigation before the ordinary courts (*Tribunal de Justiça*).

In December 2017, the court appointed an expert to examine the issue in greater detail in support of the future ruling. In September 2018, the expert submitted a report, requesting additional documentation.

In December 2018, the company provided the additional documentation and is awaiting the court's assessment of the arguments and documents presented.

The amount involved in the dispute at December 31, 2022 was about €246 million.

PIS/COFINS/ICMS - Enel Distribuição São Paulo

In March 2017, the *Supremo Tribunal Federal* of Brazil (STF) ruled on the calculation of the PIS and COFINS taxes, confirming the argument that the ICMS - *Imposto sobre Circulação de Mercadorias e Serviços* (tax on the circular of goods and services) was not included in the calculation basis of the PIS and COFINS.

In May 2021, the STF established that the ruling would have effect from the judgment of March 2017, except for taxpayers who had filed an appeal before that date.

The Group's Brazilian companies affected by the STF ruling had already initiated legal action in their respective federal regional courts. Subsequently, the latter notified them of the final decision, recognizing the right to deduct the ICMS applied to their operations from the calculation basis of the PIS and COFINS. Since the excess payment of the PIS and COFINS taxes had been transferred to final customers, at the same time as the recognition of these recoverable taxes, a liability in respect of those customers was recognized in the same amount, net of any costs incurred or to be incurred in the legal proceedings. These liabilities represent an obligation to reimburse the recovered taxes to final customers.

In this regard, Enel Distribuição São Paulo initiated two proceedings that led to rulings in its favor. These regarded the periods from December 2003 to December 2014 and from January 2015 onwards. With regard to the second proceeding, the Federal Union filed an action of rescission against the company, disputing the fact that part of the period in question (prior to March 2017) would be adversely impacted by the STF ruling of May 2021.

In May 2022, the company challenged this action and will defend its actions through the various levels of the court system.

The estimated amount involved in the proceeding at December 31, 2022 was about €206 million.

IRPJ/CSLL – Eletropaulo

On October 5, 2021, Eletropaulo received an assessment notice from the Brazilian tax authorities contesting the deductibility for income tax purposes (*Imposto sobre a Renda das Pessoas Jurídicas* - IRPJ and *Contribuiçao Social sobre o Lucro Líquido* - CSLL) of the amortization of the increased values generated by extraordinary corporate transactions carried out before the acquisition of the company by the Enel Group. The contested period runs from 2017 to 2019.

Considering its position sound, the company presented its defense at the first level of administrative adjudication.
The amount involved in the dispute at December 31, 2022 was about €137 million.

PIS – Eletropaulo
In July 2000, Eletropaulo filed suit seeking a tax credit for PIS (*Programa Integração Social*) paid in application of regulations (Decree Laws 2.445/1988 and 2.449/1988) that were subsequently declared unconstitutional by the *Supremo Tribunal Federal* (STF). In May 2012, the *Superior Tribunal de Justiça* (STJ) issued a final ruling in favor of the company that recognized the right to the credit.
In 2002, before the issue of that favorable final ruling, the company had offset its credit against other federal taxes. This behavior was contested by the federal tax authorities but the company, claiming it had acted correctly, challenged in court the assessments issued by the federal tax authorities. Following defeat at the initial level of adjudication, the company appealed.
The amount involved in the dispute at December 31, 2022 was about €123 million.

ICMS - Ampla, Coelce and Eletropaulo
The States of Rio de Janeiro, Ceará and São Paulo issued a number of tax assessments against Ampla Energia e Serviços SA (for the years 1996-1999 and 2007-2017), Companhia Energética do Ceará (2003, 2004, 2006-2012, 2015 and 2016) and Eletropaulo (2008-2021), challenging the deduction of ICMS - *Imposto sobre Circulação de Mercadorias e Serviços* (tax on the circular of goods and services) in relation to the purchase of certain non-current assets. The companies challenged the assessments, arguing that they correctly deducted the tax and asserting that the assets, the purchase of which generated the ICMS, are intended for use in their electricity distribution activities.
The companies are continuing to defend their actions at the various levels of adjudication.
The amount involved in the disputes totaled approximately €95 million at December 31, 2022.

Withholding Tax - Endesa Brasil
On November 4, 2014, the Brazilian tax authorities issued an assessment against Endesa Brasil SA (now Enel Brasil SA) alleging the failure to apply withholding tax to payments of allegedly higher dividends to non-resident recipients.
More specifically, in 2009, Endesa Brasil, as a result of the first-time application of the IFRS, had derecognized goodwill, recognizing the effects in equity, on the basis of the correct application of the accounting standards it had adopted. The Brazilian tax authorities, however, asserted – during an audit – that the accounting treatment was incorrect and that the effects of the derecognition should have been recognized through profit or loss. As a result, the corresponding amount (about €202 million) was reclassified as a payment of income to non-residents and, therefore, subject to withholding tax of 15%.
It should be noted that the accounting treatment adopted by the company was agreed with the external auditor and also confirmed by a specific legal opinion issued by a local firm.
Following unfavorable rulings from the administrative courts, the company is continuing to defend its actions in court and the appropriateness of the accounting treatment.
The overall amount involved in the dispute at December 31, 2022 was about €69 million.

ICMS – Coelce
The State of Ceará has filed various tax assessments against Companhia Energética do Ceará SA (Coelce) over the years (for tax periods from 2005 to 2014), contesting the determination of the deductible portion of the ICMS - *Imposto sobre Circulação de Mercadorias e Serviços* (tax on the circular of goods and services) and in particular the method of calculation of the pro-rata deduction with reference to the revenue deriving from the application of a special rate envisaged by the Brazilian government for the sale of electricity to low-income households (*Baixa Renda*).
The company has appealed the individual assessments, arguing that the tax deduction was calculated correctly. The company is defending its actions in the various levels of jurisdiction.
The overall amount involved in the dispute at December 31, 2022 was about €55 million.

PIS – Eletropaulo
In December 1995, the Brazilian government increased the rate of the federal PIS (*Programa Integração Social*) tax from 0.50% to 0.65% with the issue of a provisional measure (Executive Provisional Order).
Subsequently, the provisional measure was re-issued five times before its definitive ratification into law in 1998. Under Brazilian legislation, an increase in the tax rate (or the establishment of a new tax) can only be ordered by law and take effect 90 days after its publication.
Eletropaulo therefore filed suit arguing that an increase in the tax rate would only have been effective 90 days after the last Provisional Order, claiming that the effects of the first four provisional measures should be considered void (since they were never ratified into law). This dispute ended in April 2008 with recognition of the validity of the increase in the PIS rate starting from the first provisional measure.
In May 2008, the Brazilian tax authorities filed a suit against Eletropaulo to request payment of taxes corresponding to the rate increase from March 1996 to December 1998. Eletropaulo has fought the request at the various levels of adjudication, arguing that the time limit for the issue of the notice of assessment had lapsed. In particular, since more than five years have passed since the taxable event (December 1995, the date of the first provisional measure) without issuing any formal instrument, the right of the tax

authorities to request the payment of additional taxes and the authority to undertake legal action to obtain payment have been challenged.
In 2017, following the unfavorable decisions issued in previous rulings, Eletropaulo filed an appeal in defense of its rights and its actions with the *Superior Tribunal de Justiça* (STJ) and the *Supremo Tribunal Federal* (STF). The proceedings are still pending while the amounts subject to dispute have been covered by a bank guarantee.
With regard to the request of the Office of the Attorney General of the Brazilian National Treasury Department to replace the bank guarantee with a deposit in court, the court of second instance granted the petition. The company therefore replaced the bank guarantee with a cash deposit and filed a clarification motion against the related decision, which is currently awaiting a decision.
The overall amount involved in the dispute at December 31, 2022 was about €45 million.

FINSOCIAL – Eletropaulo
Following a final ruling issued by the Federal Regional Court on September 11, 2011, Eletropaulo was recognized the right to compensation for certain FINSOCIAL credits (social contributions) relating to sums paid from September 1989 to March 1992.
Despite the expiration of the relative statute of limitations, the Federal Tax Authority contested the determination of some credits and rejected the corresponding offsetting, issuing tax assessments that the company promptly challenged in the administrative courts, defending the legitimacy of its calculations and actions.
After an unfavorable ruling at first instance, the company filed an appeal before the administrative court of second instance.
The overall amount involved in the dispute at December 31, 2022 was about €43 million.

Tax litigation in Spain

Income tax – Enel Iberia, Endesa and subsidiaries
In 2018, the Spanish tax authorities completed a general audit involving the companies of the Group participating in the Spanish tax consolidation mechanism. This audit, which began in 2016, involved corporate income tax, value added tax and withholding taxes (mainly for the years 2011 to 2014).
With reference to the main claims, the companies involved have challenged the related assessments at the first administrative level (*Tribunal Económico-Administrativo Central* - TEAC), defending the correctness of their actions.
On April 4, 2022, the TEAC rejected the appeal and the companies are continuing to defend their actions in court (*Audiencia Nacional*).
With regard to the disputes concerning corporate income tax, the issues for which an unfavorable outcome is considered possible amounted to about €133 million at December 31, 2022:

- Enel Iberia is defending the appropriateness of the criterion adopted for determining the deductibility of capital losses deriving from stock sales (around €88 million) and certain financial expense (around €15 million);
- Endesa and its subsidiaries are mainly defending the appropriateness of the criteria adopted for the deductibility of certain financial expense (about €24 million) and costs for decommissioning nuclear power plants (about €6 million).

In 2021, the Spanish tax authorities concluded a new general audit for the years from 2015 to 2018. The companies involved challenged the related assessments at the first level of administrative adjudication (TEAC), arguing that they had acted correctly.
In relation to the main dispute regarding corporate income tax, which concerned the deductibility of certain financial charges, the dispute for which an adverse outcome is considered possible has a value of about €222 million at December 31, 2022 (Enel Iberia €210 million and Endesa SA €12 million).

Income tax – Enel Green Power España SL
On June 7, 2017, the Spanish tax authorities issued a notice of assessment to Enel Green Power España SL, contesting the treatment of the merger of Enel Unión Fenosa Renovables SA ("EUFER") into Enel Green Power España SL in 2011 as a tax neutral transaction, asserting that the transaction had no valid economic reason.
On July 6, 2017, the company appealed the assessment at the first administrative level (*Tribunal Económico-Administrativo Central* - TEAC), defending the appropriateness of the tax treatment applied to the merger. The company has provided the supporting documentation demonstrating the synergies achieved as a result of the merger in order to prove the existence of a valid economic reason for the transaction. On December 10, 2019, the TEAC denied the appeal and the company is continuing to defend its actions in court (*Audiencia Nacional*).
The overall amount involved in the dispute at December 31, 2022 was about €100 million.

Tax litigation in Italy

Withholding Tax – Enel Servizio Elettrico Nazionale
As a result of a tax audit initiated in March 2018 and following a subsequent investigation conducted with questionnaires submitted to the banks involved as assignees in certain transfers of receivables from Servizio Elettrico Nazionale SpA (SEN) in respect of mass market customers under a framework agreement, on December 19, 2018, the Revenue Agency Regional Directorate of Lazio Large Taxpayers Office, notified the company of an assessment in respect of the alleged violation of withholding tax obli-

gations relating to the amounts paid to the banks as part of the aforementioned transfers in 2013.
In particular, the dispute arises from an assessment by the Office that: (i) reclassified, for tax purposes only, the assignment of receivables as a financing transaction; (ii) asserted an alleged withholding obligation for the company commensurate with the cost of the transaction (as the difference between the nominal value of the assigned receivables and the transfer price), reconstructing the subsequent transactions involving the assigned receivables (further sales and/or securitizations with non-residents carried out by the banks), in which the company had no role.
In the first stages of the proceeding, which arose following SEN's appeal of the assessment, the company's objections concerning the illegitimacy of the Office's reclassification of the transaction for tax purposes and, consequently, of the payment flows were not upheld, despite significant procedural violations in the assessment activity.
In 2022, the conditions for a settlement arose, which the company decided to accept for the sole purpose of avoiding the continuation of the pending dispute concerning a matter characterized by interpretative uncertainty. This solution provides for an overall revision of the tax claim and the withdrawal of claims for subsequent years.
The settlement involved the payment during the year by the company of about €45 million and the action was deprived of purpose.

58. Future accounting standards

The following provides a list of accounting standards, amendments and interpretations that will take effect for the Group after December 31, 2022.

- *"Amendments to IAS 1 - Classification of Liabilities as Current or Non-current"*, issued in January 2020. The amendments regard the provisions of IAS 1 concerning the presentation of liabilities. More specifically, the changes clarify:
  - the criteria to adopt in classifying a liability as current or non-current, specifying the meaning of right of an entity to defer settlement and that that right must exist at the end of the reporting period;
  - that the classification is unaffected by the intentions or expectations of management about when the entity will exercise its right to defer settlement of a liability;
  - that the right to defer exists if and only if the entity satisfies the terms of the loan at the end of the reporting period, even if the creditor does not verify compliance until later; and
  - that settlement regards the transfer to the counterparty of cash, equity instruments, other assets or services.

  The amendments will take effect, subject to endorsement, for annual periods beginning on or after January 1, 2024.[62]
- *"Amendments to IAS 1 - Non-current Liabilities with Covenants"*, issued in October 2022. IAS 1 requires classification of liabilities as non-current only where an entity has a right to defer settlement in the 12 months following the reporting date. The amendments of the standard improve disclosure when the right to defer settlement of a liability for at least 12 months is subject to compliance with covenants and specify that the classification of the liability as current or non-current at the reporting date is not affected by covenants that must be complied with subsequent to the reporting date.

  The amendments will take effect, subject to endorsement, for annual periods beginning on or after January 1, 2024.
- *"Amendments to IAS 1 and IFRS Practice Statement 2 - Disclosure of Accounting Policies"*, issued in February 2021. The amendments are intended to support entities in deciding which accounting policies to disclose in the financial statements. The amendments to IAS 1 require companies to disclose their material accounting policy information rather than their significant accounting policies. A guide on how to apply the concept of materiality to disclosures on accounting policies is provided in the amendments to IFRS Practice Statement 2. The amendments will take effect for annual periods beginning on or after January 1, 2023.
- *"Amendments to IAS 8 - Definition of Accounting Estimates"*, issued in February 2021. The amendments clarify how companies should distinguish changes in accounting policies from changes in accounting estimates. The definition of changes in accounting estimates has been replaced with a definition of accounting estimates as "monetary amounts in financial statements that are subject to measurement uncertainty". The amendments will take effect for annual periods beginning on or after January 1, 2023.
- *"Amendments to IAS 12 - Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction"*, issued in May 2021. The amendments require entities to recognize deferred tax on transactions that at initial recognition give rise to equal taxable and deductible temporary differences. The amendments will take effect for annual periods beginning on or after January 1, 2023.
- *"Amendments to IFRS 10 and IAS 28 – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"*, issued in September 2014. The amendments clarify the accounting treatment for sales or contribution of assets between an investor and its associates or joint ventures. They confirm that the accounting treat-

(62) In July 2020, an amendment was issued to postpone the date of entry into force from January 1, 2023 to January 1, 2024.

ment depends on whether the assets sold or contributed to an associate or joint venture constitute a "business" (as defined in IFRS 3). The IASB has deferred the effective date of these amendments indefinitely.

- *"IFRS 17 – Insurance Contracts"*, issued in May 2017. The standard introduces different models for calculating the costs of insurance and reinsurance. The standard will take effect for annual periods beginning on or after January 1, 2023. The Group has recalculated the impact of the first-time application of IFRS 17 at January 1, 2022 and the total impact at December 31, 2022 is estimated as a positive change of up to €30 million, mainly due to the discounting of reserves.
- "*Amendments to IFRS 16 - Lease Liability in a Sale and Leaseback*", issued in September 2022. The amendments require the seller-lessee to measure the right-of-use asset arising from a sale and leaseback transaction in proportion to the previous carrying amount of the asset involved in the arrangement and in line with the retained right-of-use. Consequently, the seller-lessee will be allowed to recognize only the amount of any capital gain or loss relating to the rights transferred to the buyer-lessor.
  The amendments do not prescribe specific measurement requirements for liabilities deriving from a leaseback. However, they include examples that illustrate the initial and subsequent measurement of the liability by including variable payments that do not depend on an index or a rate. This representation is a departure from the general accounting model required by IFRS 16, in which variable payments that do not depend on an index or a rate are recognized through profit or loss in the period in which the event or condition that determines these payments occurs. In this regard, the seller-lessee will have to develop and apply an accounting policy to determine the lease payments such that any amount of retained right-of-use gain or loss is not recognized.
  The amendments will take effect, subject to endorsement, for annual periods beginning January 1, 2024. In conformity with "IAS 8 - Accounting Policies, Changes in Accounting Estimates and Errors", retrospective application is permitted for sale and leaseback transactions entered into after the date of initial application of IFRS 16.

The Group is assessing the potential impact of the future application of the new provisions.

59. Events after the reporting period

Enel places new perpetual hybrid bonds for €1.75 billion to refinance some of its outstanding hybrid bonds

On January 9, 2023, Enel SpA launched the issuance of non-convertible, subordinated, perpetual, hybrid bonds for institutional investors on the European market, denominated in euros for an aggregate principal amount of €1.75 billion (the "New Securities"). At the same time, Enel also announced, through a separate notice, the launch of voluntary tender offers to repurchase for cash and subsequently cancel, for a total aggregate principal amount equal to the principal amount raised from the New Securities, any-and-all of the €750 million equity-accounted perpetual hybrid bond with first call date in August 2023, as well as part of the outstanding $1,250 million hybrid bond due September 2073 with call date in September 2023, subject to satisfaction of a number of conditions.

Enel announces the results of the tender offer on the perpetual hybrid bond denominated in euros

With the conclusion of the voluntary tender offer launched on January 9, 2023 and expired on January 16, 2023, on January 18, 2023 Enel announced that it will repurchase for cash its outstanding perpetual hybrid bond denominated in euros for an aggregate nominal amount of €699,970,000.00. Taking into account the principal amount raised through the issue of new securities and the principal amount of securities purchased in connection with the tender offer for the euro-denominated bond, the capped maximum acceptance amount ("Capped Maximum Amount") for the concurrent tender offer for its $1,250 million hybrid bond due September 2073 with call date in September 2023 has been removed.

Enel announces the results of the tender offer on the perpetual hybrid bond denominated in euros

As a consequence of the removal of the capped maximum acceptance amount ("Capped Maximum Amount") on the dollar-denominated bond – as announced on January 18, 2023 – Enel has accepted for purchase all of the offers validly tendered on the dollar-denominated bond by the Early Tender Deadline for a total nominal amount of $411,060,000.

Enel launches a €1.5 billion sustainability-linked bond

On February 14, 2023, Enel Finance International NV launched a dual-tranche sustainability-linked bond for institutional investors for a total of €1.5 billion. The new issue envisages for the first time the use by Enel of multiple Key Performance Indicators (KPIs) per tranche. One tranche of

the bond combines a KPI linked to the EU taxonomy with a KPI linked to the United Nations Sustainable Development Goals (SDGs). The other tranche of the bond is linked to two KPIs related to the Group's full decarbonization path, across direct and indirect greenhouse gas emission reduction.

Enel starts disposal process for assets in Argentina by selling thermal generation activities

On February 17, 2023, the Enel Group, through its subsidiary Enel Argentina, signed and closed the deal for the sale to energy company Central Puerto SA of the Group's 75.7% stake in the thermal generation company Enel Generación Costanera.

At the same time, Enel has signed the agreement on the sale to Central Puerto of the Group's 41.2% stake in the thermal generation company Central Dock Sud. The total consideration for the sale of Enel's equity in the two companies amounts to $102 million.

Enel signs agreement to sell its Romanian operations to PPC

On March 9, 2023, Enel SpA signed an agreement with Greek company Public Power Corporation SA (PPC) for the sale of all the equity stakes held by the Enel Group in Romania. The agreement provides that PPC will pay a total of approximately €1,260 million, equivalent to an enterprise value of about €1,900 million (on a 100% basis). The overall transaction is expected to generate a total positive effect on the Group's consolidated net debt of approximately €1.7 billion, of which about €0.1 billion in 2022 and the remaining amount in 2023, alongside a cumulative negative impact for 2022-2023 on reported Group profit amounting to approximately €1.4 billion, of which around €0.6 billion related to the release of the foreign exchange reserve to be booked in 2023.

60. Fees of the Audit Firm pursuant to Article 149-*duodecies* of the CONSOB Issuers Regulation

Fees pertaining to 2022 paid by Enel SpA and its subsidiaries at December 31, 2022 to the Audit Firm and entities belonging to its network for services are summarized in the following table, pursuant to the provisions of Article 149-*duodecies* of the CONSOB Issuers Regulation.

Millions of euro

Type of service	Entity providing the service	Fees
Enel SpA		
Auditing	of which:	
	- KPMG SpA	0.5
	- entities of the KPMG network	-
Certification services	of which:	
	- KPMG SpA	2.1
	- entities of the KPMG network	-
Other services	of which:	
	- KPMG SpA	-
	- entities of the KPMG network	-
Total		**2.6**
Enel SpA subsidiaries		
Auditing	of which:	
	- KPMG SpA	4.3
	- entities of the KPMG network	7.9
Certification services	of which:	
	- KPMG SpA	1.3
	- entities of the KPMG network	1.1
Other services	of which:	
	- KPMG SpA	0.1
	- entities of the KPMG network	-
Total		**14.7**
TOTAL		**17.3**

Declaration of the Chief Executive Officer and the officer in charge of financial reporting of the Enel Group at December 31, 2022, pursuant to the provisions of Article 154-*bis*, paragraph 5, of Legislative Decree 58 of February 24, 1998 and Article 81-*ter* of CONSOB Regulation no. 11971 of May 14, 1999

1. The undersigned Francesco Starace and Alberto De Paoli, in their respective capacities as Chief Executive Officer and officer in charge of financial reporting of Enel SpA, hereby certify, taking account of the provisions of Article 154-*bis*, paragraphs 3 and 4, of Legislative Decree 58 of February 24, 1998:
   a. the appropriateness with respect to the characteristics of the Enel Group and
   b. the effective adoption of

   the administrative and accounting procedures for the preparation of the consolidated financial statements of the Enel Group in the period between January 1, 2022 and December 31, 2022.

2. In this regard, we report that:
   a. the appropriateness of the administrative and accounting procedures used in the preparation of the consolidated financial statements of the Enel Group has been verified in an assessment of the internal control system for financial reporting. The assessment was carried out on the basis of the guidelines set out in the "Internal Controls - Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO);
   b. the assessment of the internal control system for financial reporting did not identify any material issues.

3. In addition, we certify that the consolidated financial statements of the Enel Group at December 31, 2022:
   a. have been prepared in compliance with the International Financial Reporting Standards endorsed by the European Union pursuant to Regulation (EC) no. 1606/2002 of the European Parliament and of the Council of July 19, 2002;
   b. correspond to the information in the books and other accounting records;
   c. provide a true and fair representation of the financial position, financial performance and cash flows of the issuer and the companies included in the consolidation scope.

4. Finally, we certify that the Report on Operations, accompanied by the consolidated financial statements of the Enel Group at December 31, 2022, contains a reliable analysis of operations and performance, as well as the situation of the issuer and the companies included in the consolidation scope, together with a description of the main risks and uncertainties to which they are exposed.

Rome, March 16, 2023

Francesco Starace

Chief Executive Officer
of Enel SpA

Alberto De Paoli

Officer in charge of financial reporting
of Enel SpA

Reports

Report of the Board of Statutory Auditors

REPORT OF THE BOARD OF STATUTORY AUDITORS TO THE SHAREHOLDERS' MEETING OF ENEL SpA CALLED TO APPROVE THE FINANCIAL STATEMENTS FOR 2022
(pursuant to Article 153 of Legislative Decree 58/1998)

Shareholders,

The current Board of Statutory Auditors of Enel SpA (hereinafter also "Enel" or the "Company") was appointed by the Shareholders' Meeting of May 19, 2022.

During the year ended December 31, 2022 we performed the oversight activities envisaged by law at Enel SpA (hereinafter also "Enel" or the "Company"). In particular, pursuant to the provisions of Article 149, paragraph 1, of Legislative Decree 58 of February 24, 1998 (hereinafter the "Consolidated Law on Financial Intermediation") and Article 19, paragraph 1 of Legislative Decree 39 of January 27, 2010 (hereinafter "Decree 39/2010"), we monitored:

- compliance with the law and the corporate bylaws as well as compliance with the principles of sound administration in the performance of the Company's business;
- the Company's financial reporting process and the adequacy of the administrative and accounting system, as well as the reliability of the latter in representing operational events;
- the statutory audit of the annual statutory and consolidated accounts and the independence of the Audit Firm;
- the adequacy and effectiveness of the internal control and risk management system;
- the adequacy of the organizational structure of the Company, within the scope of our responsibilities;
- the implementation of the corporate governance rules as provided for by the 2020 edition of the Italian Corporate Governance Code (hereinafter, the "Corporate Governance Code");
- the appropriateness of the instructions given by the Company to its subsidiaries to enable Enel to meet statutory public disclosure requirements.

In performing our checks and assessments of the above issues, we did not find any issues that would merit reporting here.

In compliance with the instructions issued by CONSOB with Communication no. DEM/1025564 of April 6, 2001, as amended, we report the following:

- we monitored compliance with the law and the bylaws and we have no issues to report;
- on a quarterly basis, we received adequate information from the Chief Executive Officer, as well as through our participation in the meetings of the Board of Directors of Enel, on activities performed, general developments in operations and the outlook,

and on transactions with the most significant impact on performance or the financial position carried out by the Company and its subsidiaries. The actions approved and implemented appeared to be in compliance with the law and the bylaws and were not manifestly imprudent, risky, in potential conflict of interest or in contrast with the resolutions of the Shareholders' Meeting or otherwise prejudicial to the integrity of the Company's assets. For a discussion of the features of the most significant transactions, please see the Report on Operations accompanying the separate financial statements of the Company and the consolidated financial statements of the Enel Group for 2022 (in the section "Significant events in 2022");

- we did not find any atypical or unusual transactions conducted with third parties, Group companies or other related parties;
- in the section "Related parties" of the notes to the separate financial statements for 2022 of the Company, the directors describe the main transactions with related parties – the latter being identified on the basis of international accounting standards and the instructions of CONSOB – carried out by the Company, to which readers may refer for details on the transactions and their financial impact. They also detail the procedures adopted to ensure that related-party transactions are carried out in accordance with the principles of transparency and procedural and substantive fairness. On the basis of our oversight activities, we found that the transactions were carried out in compliance with the approval and execution processes set out in the related procedure – adopted in compliance with the provisions of Article 2391-*bis* of the Italian Civil Code and the implementing regulations issued by CONSOB – described in the Report on Corporate Governance and Ownership Structure for 2022. All transactions with related parties reported in the notes to the separate financial statements for 2022 of the Company were executed as part of ordinary operations in the interest of the Company and settled on market terms and conditions. In view of its importance, please see the section in the notes to the separate financial statements concerning the "*Credit facility guaranteed by SACE - Disclosure obligations established by art. 13, paragraph 3, letter c) (ii), of CONSOB Regulation on transactions with related parties*";
- the Company declares that it has prepared its separate financial statements for 2022 on the basis of international accounting standards (IAS/IFRS) – and the interpretations issued by the IFRIC and the SIC – endorsed by the European Union pursuant to Regulation (EC) no. 1606/2002 and in force at the close of 2022 (hereinafter also "IFRS-EU"), as well as the provisions of Legislative Decree 38 of February 28, 2005 and its related implementing measures, as it did the previous year. The Company's separate financial statements for 2022 have been prepared on a going-concern basis using the cost method, with the exception of items that are measured at fair value under the IFRS-EU, as indicated in the accounting policies for the individual items of the financial statements. The notes to the separate financial statements give detailed information

on the accounting standards and measurement criteria adopted, accompanied by an indication of the standards applied for the first time in 2022, which as indicated in the notes did not have a significant impact in the year under review;

- the separate financial statements for 2022 of the Company underwent the statutory audit by the Audit Firm, KPMG SpA, which issued an unqualified opinion, including with regard to the consistency of the Report on Operations and certain information in the Report on Corporate Governance and Ownership Structure of the Company with the financial statements, as well as compliance with the provisions of law, pursuant to Article 14 of Decree 39/2010 and Article 10 of Regulation (EU) no. 537/2014. The report of KPMG SpA also includes the declaration provided pursuant to Article 14, paragraph 2(e) of Decree 39/2010 stating that the Audit Firm did not identify any significant errors in the contents of the report on operations;
- the Company declares that it has also prepared the consolidated financial statements of the Enel Group for 2022 on the basis of international accounting standards (IAS/IFRS) – and the interpretations issued by the IFRIC and the SIC – endorsed by the European Union pursuant to Regulation (EC) no. 1606/2002 and in force at the close of 2022, as well as the provisions of Legislative Decree 38 of February 28, 2005 and its related implementing measures, as it did the previous year. The 2022 consolidated financial statements of the Enel Group are also prepared on a going-concern basis using the cost method, with the exception of items that are measured at fair value under the IFRS-EU (as indicated in the discussion of measurement criteria for the individual items) and non-current assets (or disposal groups) classified as held for sale, which are measured at the lower of carrying amount and fair value less costs to sell. The notes to the consolidated financial statements provide a detailed discussion of the accounting standards and measurement criteria adopted, accompanied by an indication of standards applied for the first time in 2022, which did not have a significant impact in the year under review. Note also that, starting from 2021, in compliance with the provisions of Delegated Regulation (EU) 2019/815 of December 17, 2018 as amended (the "ESEF Regulation"), the Company has (i) drawn up its entire Annual Financial Report (including the separate financial statements and the consolidated financial statements, the respective reports on operations and the associated certifications pursuant to Article 154-*bis*, paragraph 5, of the Consolidated Law on Financial Intermediation) in the single electronic reporting format XHTML (Extensible Hypertext Markup Language), and (ii) marked up (with specific tags) the schedules of the consolidated financial statements and the related explanatory notes using the iXBRL markup language (Inline eXtensible Business Reporting Language), in accordance with the ESEF taxonomy issued annually by ESMA, in order to facilitate the accessibility, analysis and comparability of the annual financial reports;

- the consolidated financial statements for 2022 of the Enel Group underwent statutory audit by the Audit Firm KPMG SpA, which issued an unqualified opinion, including with regard to the consistency of the Report on Operations and certain information in the Report on Corporate Governance and Ownership Structure with the consolidated financial statements, as well as compliance with the provisions of law, pursuant to Article 14 of Decree 39/2010 and Article 10 of Regulation (EU) no. 537/2014. The report of KPMG SpA also includes:
  - a discussion of key aspects of the audit report on the consolidated financial statements; and
  - the declaration provided pursuant to Article 14, paragraph 2(e) of Decree 39/2010 and Article 4 of CONSOB Regulation no. 20267 (implementing Legislative Decree 254 of December 30, 2016) concerning, respectively, a statement that the Audit Firm did not identify any significant errors in the contents of the Report on Operations and that it verified that the Board of Directors had approved the consolidated non-financial statement.

  Under the terms of its engagement, KPMG SpA also issued unqualified opinions on the financial statements for 2022 of the most significant Italian companies of the Enel Group. Moreover, during periodic meetings with the representatives of the Audit Firm, KPMG SpA, the latter did not raise any issues concerning the reporting packages of the main foreign companies of the Enel Group, selected by the auditors on the basis of the work plan established for the auditing of the consolidated financial statements of the Enel Group, that would have a sufficiently material impact to be reported in the opinion on those financial statements;
- taking due account of the recommendations of the European Securities and Markets Authority issued on January 21, 2013, and most recently confirmed with the Public Statement of October 28, 2022, to ensure appropriate transparency concerning the methods used by listed companies in testing goodwill for impairment, in line with the recommendations contained in the joint Bank of Italy - CONSOB - ISVAP document no. 4 of March 3, 2010, and in the light of indications of CONSOB in its Communication no. 7780 of January 28, 2016, the compliance of the impairment testing procedure with the provisions of IAS 36 was expressly approved by the Board of Directors of the Company, having obtained a favorable opinion in this regard from the Control and Risk Committee in February 2023, i.e., prior to the date of approval of the financial statements for 2022;
- we examined the Board of Directors' proposal for the allocation of net profit for 2022 and the distribution of available reserves and have no comments in this regard;
- we note that the Board of Directors of the Company certified, following appropriate checks by the Control and Risk Committee and the Board of Statutory Auditors in March 2023, that as at the date on which the 2022 financial statements were approved the

Enel Group continued to meet the conditions established by CONSOB (set out in Article 15 of the Markets Regulation, approved with Resolution no. 20249 of December 28, 2017) concerning the accounting transparency and adequacy of the organizational structures and internal control systems that subsidiaries established and regulated under the law of non-EU countries must comply with so that Enel shares can continue to be listed on regulated markets in Italy;

- we monitored, pursuant to the aforementioned Article 15 of the Markets Regulation, the facts and circumstances concerning the suitability of the administrative-accounting systems of the subsidiaries referred to in the previous point;
- we monitored, within the scope of our responsibilities, the adequacy of the organizational structure of the Company (and the Enel Group as a whole), obtaining information from department heads and in meetings with the boards of auditors or equivalent bodies of a number of the main Enel Group companies in Italy and abroad, for the purpose of the reciprocal exchange of material information. As from the second half of 2014, the organizational structure of the Enel Group is based on a matrix of global business lines and geographical areas. Taking account of the changes implemented most recently in 2022 and the early months of 2023, it is organized into: (i) global business lines, which are responsible for managing and developing assets, optimizing their performance and the return on capital employed in the various geographical areas in which the Group operates. The global business lines are: Enel Green Power and Thermal Generation, Global Energy and Commodity Management, Enel Grids, Enel X Global Retail and Global E-Mobility; (ii) regions and countries, which are responsible for managing relationships with local institutional bodies, regulatory authorities, the media and other local stakeholders, as well as optimizing the customer portfolio and generation assets, pursuing the best integrated margin, while also providing staff and other service support to the global business lines and adopting appropriate security, safety and environmental standards. Regions and countries comprise: Italy, Iberia, Europe, Latin America, North America, and Africa, Asia and Oceania; (iii) global service functions, which are responsible for managing information and communication technology activities (Global Digital Solutions), procurement at the Group level (Global Procurement) and customer supply activation, invoicing, credit and customer care processes (Global Customer Operations); and (iv) holding company functions, which among other things are responsible for managing governance processes at the Group level. They include: Administration, Finance and Control, People and Organization, Communications, Legal and Corporate Affairs, Audit, and Innovation and Sustainability. We found no issues concerning the adequacy of the organizational system described above in supporting the strategic development of the Company and the Enel Group or the consistency of that system with control requirements;

- we met with the boards of auditors or equivalent bodies of a number of the Group's main companies in Italy and abroad. These companies, particularly those in Europe, were affected, as was the Parent Company, by the significant effects of the dynamics of gas prices and the geopolitical context. While taking account of these phenomena, no material issues emerged from the exchange of information that would require mention here beyond the disclosures already provided in the Annual Report;
- we monitored the independence of the Audit Firm, having received today from KPMG specific written confirmation that they met that requirement (pursuant to the provisions of Article 6, paragraph 2(a), of Regulation (EU) 537/2014) and paragraph 17 of international standard on auditing (ISA Italia) 260 and having discussed the substance of that declaration with the audit partner. In this regard, we also monitored – as provided for under Article 19, paragraph 1(e), of Decree 39/2010 – the nature and the scale of non-audit services provided to the Company and other Enel Group companies by KPMG SpA and the entities belonging to its network. The fees due to KPMG SpA and the entities belonging to its network are reported in the notes to the separate financial statements of the Company. Following our examinations, the Board of Statutory Auditors found no critical issues concerning the independence of KPMG SpA.

  We held periodic meetings with the representatives of the Audit Firm, pursuant to Article 150, paragraph 3, of the Consolidated Law on Financial Intermediation, and no material issues emerged that would require mention in this report.

  With specific regard to the provisions of Article 11 of Regulation (EU) 537/2014, KPMG SpA today provided the Board of Statutory Auditors with the "additional report" for 2022 on the results of the statutory audit carried out, which indicates no significant difficulties encountered during the audit or any significant shortcomings in the internal control system for financial reporting or the Enel accounting system that would raise issues requiring mention in the opinion on the separate and consolidated financial statements. The Board of Statutory Auditors will transmit that report to the Board of Directors promptly, accompanied by any comments it may have, in accordance with Article 19, paragraph 1(a), of Decree 39/2010.

  As at the date of this report, the Audit Firm also reported that it did not prepare any management letter for 2022;
- we monitored the financial reporting process, the appropriateness of the administrative and accounting system and its reliability in representing operational events, as well as compliance with the principles of sound administration in the performance of the Company's business and we have no comments in that regard. We conducted our checks by obtaining information from the head of the Administration, Finance and Control department (taking due account of the head's role as the officer responsible for the preparation of the Company's financial reports), examining Company documentation and analyzing the findings of the examinations performed by KPMG SpA.

The Chief Executive Officer and the officer in charge of financial reporting of Enel issued a statement (regarding the Company's 2022 separate financial statements) certifying (i) the appropriateness with respect to the characteristics of the Company and the effective adoption of the administrative and accounting procedures used in the preparation of the financial statements; (ii) the compliance of the content of the financial reports with international accounting standards endorsed by the European Union pursuant to Regulation (EC) no. 1606/2002; (iii) the correspondence of the financial statements with the information in the books and other accounting records and their ability to provide a true and fair representation of the performance and financial position of the Company; and (iv) that the Report on Operations accompanying the financial statements contains a reliable analysis of operations and performance, as well as the situation of the issuer, together with a description of the main risks and uncertainties to which it is exposed. The statement also affirmed that the appropriateness of the administrative and accounting procedures used in the preparation of the separate financial statements of the Company had been verified in an assessment of the internal control system for financial reporting (supported by the findings of the independent testing performed by a qualified external advisor) and that the assessment of the internal control system did not identify any material issues. An analogous statement was prepared for the consolidated financial statements for 2022 of the Enel Group;

- we monitored the adequacy and effectiveness of the internal control system, primarily through constant participation of the head of the Audit department of the Company in the meetings of the Board of Statutory Auditors and holding about half of the meetings jointly with the Control and Risk Committee, as well as through periodic meetings with the body charged with overseeing the operation of and compliance with the organizational and management model adopted by the Company pursuant to Legislative Decree 231/2001. In the light of our examination and in the absence of significant issues, there are no reasons to doubt the adequacy and effectiveness of the internal control and risk management system. In February 2023, the Board of Directors of the Company expressed an analogous assessment of the situation and also noted, in November 2022, that the main risks associated with the strategic targets set out in the 2023-2025 Business Plan were compatible with the management of the Company in a manner consistent with those targets;
- in 2022 no petitions were received by the Board of Auditors nor did we receive any complaints concerning circumstances deemed censurable pursuant to Article 2408 of the Italian Civil Code;
- we monitored the effective implementation of the Corporate Governance Code, verifying the compliance of Enel's corporate governance arrangements with the recommendations of the Code. Detailed information on the Company's corporate

governance system can be found in the Report on Corporate Governance and Ownership Structure for 2022.

In June 2022, the Board of Statutory Auditors verified that the Board of Directors, in evaluating the independence of non-executive directors, correctly applied the assessment criteria specified in the Corporate Governance Code and the principle of the priority of substance over form that must inform the application of the Code's recommendations in general, adopting a transparent procedure, the details of which are discussed in the Report on Corporate Governance and Ownership Structure for 2022.

With regard to the so-called "self-assessment" of the independence of its members, the Board of Statutory Auditors, in February 2022 (by the previous members of the Board of Statutory Auditors) and in May 2022 and March 2023 (by the current members of the Board of Statutory Auditors) ascertained that all standing statutory auditors met the relevant requirements set out in the Consolidated Law on Financial Intermediation and in the Corporate Governance Code;

- in the final part of 2022 and during the first two months of 2023, the Board of Statutory Auditors, with the support of an independent advisory firm, conducted a board review assessing the size, composition and functioning of the Board of Statutory Auditors, as has been done since 2018, similar to the review conducted for the Board of Directors since 2004. This is a best practice that the Board of Statutory Auditors intended to adopt even in the absence of a specific recommendation of the Corporate Governance Code, a "peer-to-peer review" approach, i.e., the assessment not only of the functioning of the body as a whole, but also of the style and content of the contribution provided by each of the auditors. The approach adopted in performing the board review for 2022 and the findings of that review are described in detail in the report on corporate governance and ownership structure for 2022.

  During 2022, the Board of Statutory Auditors also participated in an induction program, characterized by specific studies to update directors and statutory auditors on cyber security and risk governance issues. The Board of Statutory Auditors suggests that with each turnover of the corporate bodies, an induction program be conducted in order to provide an in-depth overview of the structural characteristics and operation of the Group;
- we monitored the application of the provisions of Legislative Decree 254 of December 30, 2016 (hereinafter "Decree 254") concerning the disclosure of non-financial and diversity information by certain large undertakings and groups. In performing that activity, we monitored the adequacy of the organizational, administrative, reporting and control system established by the Company in order to enable the accurate representation in the consolidated non-financial statements for 2022 of the activity of the Enel Group, its results and its impacts in the non-financial areas referred to in

Article 3, paragraph 1, of Decree 254, and have no comments in this regard. The Audit Firm, KPMG SpA, has issued, pursuant to Article 3, paragraph 10, of Decree 254 and Article 5 of CONSOB Regulation no. 20267 of January 18, 2018, its certification of the conformity of the information provided in the consolidated non-financial statement with the requirements of applicable law;

- since the listing of its shares, the Company has adopted specific rules (most recently amended in September 2018) for the internal management and processing of confidential information, which also set out the procedures for the disclosure of documentation and information concerning the Company and the Group, with specific regard to inside information. Those rules (which can be consulted on the corporate website) contain appropriate provisions directed at subsidiaries to enable Enel to comply with statutory public disclosure requirements, pursuant to Article 114, paragraph 2, of the Consolidated Law on Financial Intermediation ;
- in 2002 the Company also adopted (and has subsequently updated, most recently in February 2021) a Code of Ethics (also available on the corporate website) that expresses the commitments and ethical responsibilities involved in the conduct of business, regulating and harmonizing corporate conduct in accordance with standards of maximum transparency and fairness with respect to all stakeholders;
- with regard to the provisions of Legislative Decree 231 of June 8, 2001 – which introduced into Italian law a system of administrative (in fact criminal) liability for companies for certain types of offences committed by its directors, managers or employees on behalf of or to the benefit of the company – since July 2002 Enel has adopted a compliance program consisting of a "general part" and various "special parts" concerning the difference offences specified by Legislative Decree 231/2001 that the program is intended to prevent. For a description of the manner in which the model has been adapted to the characteristics of the various Italian companies of the Group, as well as a description of the purposes of the "Enel Global Compliance Program" for the Group's foreign companies, please see the Report on Corporate Governance and Ownership Structure for 2022. The structure that monitors the operation and compliance with the program and is responsible for updating it is a collegial body. This body, appointed in July 2020, is still composed of three external members who jointly have specific professional expertise on corporate organization matters and corporate criminal law. The Board of Statutory Auditors received adequate information on the main activities carried out in 2022 by that body, including in meetings with its members. Our examination of those activities found no facts or situations that would require mention in this report;
- in 2022, the Board of Statutory Auditors issued a favorable opinion (at the meeting of February 2, 2022) on the 2022 Audit Plan, in accordance with the provisions of Recommendation 33, letter c) of the Corporate Governance Code;

- a report on the fixed and variable compensation accrued by those who served as Chairman of the Board of Directors, Chief Executive Officer/General Manager and other directors in 2022 for their respective positions and any compensation instruments awarded to them is contained in the second section of the Report on Remuneration Policy for 2023 and Remuneration Paid in 2022 referred to in Article 123-*ter* of the Consolidated Law on Financial Intermediation (for the sake of brevity, "Remuneration Report" hereinafter), approved by the Board of Directors, acting on a proposal of the Nomination and Compensation Committee on April 6, 2023, which will be published in compliance with the time limits established by law. The design of these remuneration instruments is in line with best practices as it complies with the principle of establishing a link with appropriate financial and non-financial performance targets and pursuing the creation of shareholder value over the medium and long term. The proposals to the Board of Directors concerning such forms of compensation and the determination of the associated parameters were prepared by the Nomination and Compensation Committee, which is made up entirely of independent directors, drawing on the findings of benchmark analyses, including at the international level, conducted by an independent consulting firm. In addition, the second section of the Remuneration Report contains, in compliance with the applicable CONSOB regulations, specific disclosures on the remuneration received in 2022 by the members of the oversight body and by key management personnel (in aggregate form for the latter).

  The Board of Statutory Auditors also supervised the process of preparing the remuneration policy for 2023, described in full in the first section of the Remuneration Report, without finding any critical issues. In particular, oversight activity examined the consistency of the various measures envisaged by that policy with (i) the provisions of Directive (EU) 2017/828 as transposed into Italian law, (ii) the recommendations of the Italian Corporate Governance Code, as well as (iii) the results of the benchmark analysis carried out, including at the international level, by an independent consulting firm that the Nomination and Compensation Committee elected to engage.

  As indicated in the first section of the Remuneration Report, during the preparation of the remuneration policy for 2023, the Board of Statutory Auditors – taking account of the recommendations in this regard by the Corporate Governance Code – asked the independent consulting firm to conduct an additional benchmark analysis to ascertain the adequacy of the remuneration paid to the members of the oversight body. This analysis was performed on the basis of the data reported in the documentation published on the occasion of 2022 shareholders' meetings by issuers belonging to a peer group composed – unlike that used for the analogous analysis concerning the

Board of Directors – exclusively of Italian companies belonging the FTSE-MIB index ([1]). The functions that the Italian legal system assigns to the Board of Statutory Auditors differentiate the latter from the bodies with oversight functions provided for in the one-tier and two-tier governance systems commonly adopted in other countries. For the purpose of identifying the peer group, the consultant, in agreement with the Board of Statutory Auditors, decided to exclude certain industrial companies belonging to the FTSE-MIB index that have concentrated ownership structures, while evaluating some companies in the FTSE-MIB index operating in the financial services industry.

The analysis showed that, on the basis of the data as at December 31, 2021, Enel exceeds the peer group in terms of capitalization, is above the ninth decile in terms of revenue and slightly below the ninth decile in terms of number of employees.

The same analysis also found that – against Enel's very high positioning compared with the companies included in the panel in terms of capitalization, revenue and number of employees – the remuneration of the Chairman of the Board of Statutory Auditors and of the other Statutory Auditors is below the peer group median for the Chairman and in line with the median for the other standing Statutory Auditors. The analysis also found that in 2021, on average, the boards of statutory auditors of the companies belonging to the panel were composed of four standing auditors compared with the three standing members of Enel's Board of Statutory Auditors, and held 26 meetings compared with the 28 meetings held by Enel's Board of Statutory Auditors.

On the basis of the analysis, it therefore emerged that the competitiveness of the remuneration envisaged for the Chairman and the other standing members of Enel's Board of Statutory Auditors is similar to the positioning of the non-executive directors of Enel with regard to the remuneration paid to them in their capacity as directors (net of attendance fees, which at Enel are not envisaged for participation in board meetings but are paid by some of the peer group companies used for the purpose of preparing the 2023 policy for directors' remuneration).

The analysis found that the positioning of the amount of remuneration paid to the Chairman and the standing members of the Board of Statutory Auditors is substantially in line with that currently paid by the larger of the peer group companies in which the Ministry for the Economy and Finance holds a significant direct and/or indirect investment.

However, the consultant noted that to correctly assess the appropriateness of the remuneration envisaged for the members of the Board of Statutory Auditors, an overall assessment of the effort required by the position would be advisable.

([1]) The peer group consists of the following 18 companies: A2A, Assicurazioni Generali, Banco BPM, BPER Banca, Eni, Hera, Leonardo, Mediobanca, Nexi, Pirelli, Poste Italiane, Prysmian, Saipem, Snam, Terna, TIM, UniCredit and Unipol.

In this regard, a significant element identified by the Board of Statutory Auditors is the comparison between the average level of remuneration of the members of the Board of Statutory Auditors and that of the members of the Board of Directors of the Company (excluding the Chairman and the Chief Executive Officer), taking into account all meetings (Board of Directors, Committees and Board of Statutory Auditors) in which they respectively participate. This analysis shows that the average remuneration per meeting of the directors is more than three times greater than that of the members of the Board of Statutory Auditors.

The Board of Statutory Auditors' oversight activity in 2022 was carried out in 24 meetings and with participation in the 16 meetings of the Board of Directors and participation in the annual Shareholders' Meeting, and, through the Chairman or one or more of its members, in the 14 meetings of the Control and Risk Committee (held jointly with the Board of Statutory Auditors), in the 11 meetings of the Nomination and Compensation Committee, in the 1 meeting of the Related Parties Committee and in the 6 meetings of the Corporate Governance and Sustainability Committee, for a total of 86 meetings. The delegated magistrate of the State Audit Court participated in the meetings of the Board of Statutory Auditors and those of the Board of Directors.
During the course of this activity and on the basis of information obtained from KPMG SpA, no omissions, censurable facts, irregularities or other significant developments were found that would require reporting to the regulatory authorities or mention in this report.

Finally, the Board of Statutory Auditors notes that:

- in 2021 and until March 31, 2022, the health emergency associated with the COVID-19 pandemic was still under way in Italy. Through that date, Italian authorities maintained a number of limitations on freedom of movement within the country to contain the contagion, among other things imposing bans on gatherings. In this context, the Board of Statutory Auditors, in the light of the measures to contain the COVID-19 pandemic, held some of its meetings – as long as the state of emergency was in place – exclusively with the use of audio/video conference systems by all participants, which nevertheless ensured their identification and the exchange of documentation – in accordance with the provisions of Article 25.4 of the bylaws – and, more generally, the full performance of the oversight body's functions;
- the ongoing Russia-Ukraine conflict, as well as the instability of commodity prices, in particular those of gas, strongly influenced operations in 2022. Among other things, we note the sale of the equity investment in Enel Russia PJSC and the challenges of managing hedging operations for price fluctuations in the energy markets and the related cash collateral (margin requirements). In this regard, the SACE-secured credit facility referred to earlier strengthened the Enel Group liquidity position. For these and

for all other events connected with the aforementioned geopolitical and economic environment, please see also the discussion in the Company's Annual Report.

Based on the oversight activity performed and the information exchanged with the independent Audit Firm KPMG SpA, we recommend that you approve the Company's financial statements for the year ended December 31, 2022 in conformity with the proposals of the Board of Directors.

Rome, April 6, 2023

The Board of Auditors

[signed]

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Barbara Tadolini - Chairman

[signed]

_____

Luigi Borré - Auditor

[signed]

_____

Maura Campra - Auditor



Report of the Audit Firm

KPMG S.p.A.
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(This independent auditors' report has been translated into English solely for the convenience of international readers. Accordingly, only the original Italian version is authoritative.)

Independent auditors' report pursuant to article 14 of Legislative decree no. 39 of 27 January 2010 and article 10 of Regulation (EU) no. 537 of 16 April 2014

To the shareholders of
Enel S.p.A.

Report on the audit of the consolidated financial statements

Opinion

We have audited the consolidated financial statements of the Enel Group (the "group"), which comprise the statement of financial position as at 31 December 2022, the income statement and the statements of comprehensive income, changes in equity and cash flows for the year then ended and notes thereto, which include a summary of the significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the financial position of the Enel Group as at 31 December 2022 and of its financial performance and cash flows for the year then ended in accordance with the International Financial Reporting Standards endorsed by the European Union and the Italian regulations implementing article 9 of Legislative decree no. 38/05.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISA Italia). Our responsibilities under those standards are further described in the "*Auditors' responsibilities for the audit of the consolidated financial statements*" section of our report. We are independent of Enel S.p.A. (the "parent") in accordance with the ethics and independence rules and standards applicable in Italy to audits of financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in the audit of the consolidated financial statements of the current year. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

KPMG S.p.A. è una società per azioni di diritto italiano e fa parte del network KPMG di entità indipendenti affiliate a KPMG International Limited, società di diritto inglese.

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Recognition of revenue from the supply of electricity and gas not yet invoiced

Notes to the consolidated financial statements: notes 2.1 "Use of estimates and management judgement – Revenue from contracts with customers", 2.2 "Significant accounting policies – Revenue from contracts with customers", 11.a "Revenue from sales and services" and 34 "Trade receivables"

Key audit matter	Audit procedures addressing the key audit matter
Revenue from the supply of electricity and gas to end users is recognised at the time the electricity or gas is delivered and includes, in addition to amounts invoiced on the basis of periodic meter readings or on the volumes notified by distributors and transporters, an estimate of the electricity and gas delivered during the year but not yet invoiced that is calculated also taking account of any network losses. Revenue accrued between the date of the last meter reading and the year-end is based on estimates of the daily consumption of individual customers, primarily determined on their historical information, adjusted to reflect the climate factors or other matters that may affect the estimated consumption. These estimates are very complex given the nature of underlying assumptions. Therefore, we believe that the recognition of revenue from the supply of electricity and gas not yet invoiced is a key audit matter.	Our audit procedures included: • understanding the process for the recognition of revenue from the supply of electricity and gas not yet invoiced; • assessing the design, implementation and operating effectiveness of controls, including IT controls, deemed material for the purposes of our audit, including by involving our IT specialists; • performing substantive procedures on the electricity and gas volumes considered in the estimation; • checking the accuracy of the selling prices used in the estimation; • comparing the estimates recognised in the consolidated financial statements with the subsequent actual figures; • assessing the appropriateness of the disclosures provided in the notes about the revenue from the supply of electricity and gas not yet invoiced.

Responsibilities of the parent's directors and board of statutory auditors ("Collegio Sindacale") for the consolidated financial statements

The directors are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with the International Financial Reporting Standards endorsed by the European Union and the Italian regulations implementing article 9 of Legislative decree no. 38/05 and, within the terms established by the Italian law, for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

The directors are responsible for assessing the group's ability to continue as a going concern and for the appropriate use of the going concern basis in the preparation of the consolidated financial statements and for the adequacy of the related disclosures. The use of this basis of accounting is appropriate unless the directors believe that the conditions for liquidating the parent or ceasing operations exist, or have no realistic alternative but to do so.

The *Collegio Sindacale* is responsible for overseeing, within the terms established by the Italian law, the group's financial reporting process.

Auditors' responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a

guarantee that an audit conducted in accordance with ISA Italia will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISA Italia, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the group's internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors;
- conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the group to cease to continue as a going concern;
- evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation;
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance, identified at the appropriate level required by ISA Italia, regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the ethics and independence rules and standards applicable in Italy and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the measures taken to eliminate those threats or the safeguards applied.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current year and are, therefore, the key audit matters. We describe these matters in our auditors' report.

Other information required by article 10 of Regulation (EU) no. 537/14

On 16 May 2019, the parent's shareholders appointed us to perform the statutory audit of its separate and consolidated financial statements as at and for the years ending from 31 December 2020 to 31 December 2028.

We declare that we did not provide the prohibited non-audit services referred to in article 5.1 of Regulation (EU) no. 537/14 and that we remained independent of the parent in conducting the statutory audit.

We confirm that the opinion on the consolidated financial statements expressed herein is consistent with the additional report to the *Collegio Sindacale*, in its capacity as audit committee, prepared in accordance with article 11 of the Regulation mentioned above.

Report on other legal and regulatory requirements

Opinion on the compliance with the provisions of Commission Delegated Regulation (EU) 2019/815

The parent's directors are responsible for the application of the provisions of Commission Delegated Regulation (EU) 2019/815 with regard to regulatory technical standards on the specification of a single electronic reporting format (ESEF) to the consolidated financial statements at 31 December 2022 to be included in the annual financial report.

We have performed the procedures required by Standard on Auditing (SA Italia) 700B in order to express an opinion on the compliance of the consolidated financial statements with Commission Delegated Regulation (EU) 2019/815.

In our opinion, the consolidated financial statements at 31 December 2022 have been prepared in XHTML format and have been marked up, in all material respects, in compliance with the provisions of Commission Delegated Regulation (EU) 2019/815.

Due to certain technical limitations, some information included in the notes to the consolidated financial statements when extracted from the XHTML format to an XBRL instance may not be reproduced in an identical manner with respect to the corresponding information presented in the consolidated financial statements in XHTML format.

Opinion pursuant to article 14.2.e) of Legislative decree no. 39/10 and article 123-bis.4 of Legislative decree no. 58/98

The parent's directors are responsible for the preparation of the group's reports on operation and on corporate governance and ownership structure at 31 December 2022 and for the consistency of such reports with the related consolidated financial statements and their compliance with the applicable law.

We have performed the procedures required by Standard on Auditing (SA Italia) 720B in order to express an opinion on the consistency of the report on operations and the specific information presented in the report on corporate governance and ownership structure indicated by article 123-bis.4 of Legislative decree no. 58/98 with the group's consolidated financial statements at 31 December 2022 and their compliance with the applicable law and to state whether we have identified material misstatements.

In our opinion, the report on operations and the specific information presented in the report on corporate governance and ownership structure referred to above are consistent with the group's consolidated financial statements at 31 December 2022 and have been prepared in compliance with the applicable law.

With reference to the above statement required by article 14.2.e) of Legislative decree no. 39/10, based on our knowledge and understanding of the entity and its environment obtained through our audit, we have nothing to report.

Statement pursuant to article 4 of the Consob regulation implementing Legislative decree no. 254/16

The directors of Enel S.p.A. are responsible for the preparation of a consolidated non-financial statement pursuant to Legislative decree no. 254/16. We have checked that the directors had approved such consolidated non-financial statement. In accordance with article 3.10 of Legislative decree no. 254/16, we attested the compliance of the non-financial statement separately.

Rome, 6 April 2023

KPMG S.p.A.

(signed on the original)

Renato Naschi
Director



Attachments

Subsidiaries, associates and other significant equity investments of the Enel Group at December 31, 2022

In compliance with Articles 38 and 39 of Legislative Decree 127/1991 and CONSOB Notice no. DEM/6064293 of July 28, 2006, a list of subsidiaries and associates of Enel SpA at December 31, 2022, pursuant to Article 2359 of the Italian Civil Code, and of other significant equity investments is provided below. Enel has full title to all investments.
The following information is included for each company: name, registered office, share capital, currency in which share capital is denominated, business segment, method of consolidation, Group companies that have a stake in the company and their respective ownership share, and the Group's ownership share.

The following provides a key to the icons representing the business segments.

Business segment	Description of business segments
	Group holding company
	Country holding company
	Enel Green Power
	Thermal Generation
	Trading
	Enel Grids
	Enel X
	End-user Markets
	Services
	Finance
	Enel X Way

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Parent									
Enel SpA	Rome	IT	10,166,679,946.00	EUR		Holding			100.00%
Subsidiaries									
25 Mile Creek Windfarm LLC	Andover	US	1.00	USD		Line-by-line	25RoseFarms Holdings LLC	100.00%	100.00%
25 Mile PPA LLC	Andover	US	1.00	USD		Line-by-line	EGP North America PPA LLC	100.00%	100.00%
25RoseFarms Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Green Power 25RoseFarms Holdings LLC	100.00%	100.00%
3SUN Srl	Catania	IT	1,000,000.00	EUR		AFS	Enel Green Power Italia Srl	96.74%	100.00%
							Enel Green Power SpA	3.26%	
3Sun USA LLC	Andover	US	1.00	USD		Line-by-line	Enel North America Inc.	100.00%	100.00%
400 Manley Solar LLC	Boston	US	-	USD		Line-by-line	Enel X Project MP Holdings LLC	100.00%	100.00%
4814 Investments LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
ABC Solar 11 SpA	Santiago de Chile	CL	1,000,000.00	CLP		Line-by-line	Enel Green Power Chile SA	100.00%	64.93%
ABC Solar 3 SpA	Santiago de Chile	CL	1,000,000.00	CLP		Line-by-line	Enel Green Power Chile SA	100.00%	64.93%
Ables Springs Solar LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Ables Springs Storage LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Abu Renewables India Private Limited	Gurugram	IN	100,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
Ace High Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Aced Renewables Hidden Valley (RF) (Pty) Ltd	Johannesburg	ZA	1,000.00	ZAR		Equity	Enel Green Power RSA 2 (RF) (Pty) Ltd	55.00%	27.50%
Acefat AIE	Barcelona	ES	793,340.00	EUR		-	Edistribución Redes Digitales SLU	14.29%	10.02%
Adams Solar PV Project Two (RF) (Pty) Ltd	Johannesburg	ZA	10,000,000.00	ZAR		Line-by-line	Enel Green Power South Africa (Pty) Ltd	60.00%	60.00%
Adria Link Srl	Gorizia	IT	300,297.00	EUR		Equity	Enel Produzione SpA	50.00%	50.00%
Aferkat Wind Farm	Benslimane	MA	389,600.00	MAD		Line-by-line	Enel Green Power Morocco SARLAU	100.00%	100.00%
Agassiz Beach LLC	Minneapolis	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	51.00%	51.00%
Agatos Green Power Trino Srl	Rome	IT	10,000.00	EUR		Line-by-line	Enel Green Power Solar Energy Srl	100.00%	100.00%
Aguilón 20 SA	Zaragoza	ES	2,682,000.00	EUR		Line-by-line	Enel Green Power España SLU	51.00%	35.76%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Alba Energia Ltda	Rio de Janeiro	BR	16,045,169.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Albany Solar LLC	Wilmington	US	-	USD		Line-by-line	Aurora Distributed Solar LLC	100.00%	74.13%
Alliance SA	Managua	NI	6,180,150.00	NIO		-	Ufinet Latam SLU	99.90%	19.48%
Alpe Adria Energia Srl	Udine	IT	900,000.00	EUR		Equity	Enel Produzione SpA	50.00%	50.00%
Alta Farms Azure Ranchland Holdings LLC	Dover	US	100.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Alta Farms Wind Project II LLC	Andover	US	1.00	USD		Line-by-line	Enel Green Power 25RoseFarms Holdings LLC	100.00%	100.00%
Alvorada Energia SA	Niterói	BR	22,317,415.92	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Ampla Energia e Serviços SA	Rio de Janeiro	BR	4,138,230,386.65	BRL		Line-by-line	Enel Brasil SA	99.82%	82.12%
Annandale Solar LLC	Wilmington	US	-	USD		Line-by-line	Aurora Distributed Solar LLC	100.00%	74.13%
Apiacás Energia SA	Rio de Janeiro	BR	14,216,846.33	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Aquilla Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Aragonesa de Actividades Energéticas SAU	Teruel	ES	60,100.00	EUR		Line-by-line	Endesa Red SAU	100.00%	70.12%
Aranort Desarrollos SLU	Madrid	ES	3,010.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Aravalli Surya (Project 1) Private Limited	Gurugram	IN	31,630,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
Arcadia Power Inc.	Washington DC	US	-	USD		-	Enel X North America Inc.	0.14%	0.14%
Arena Green Power 1 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Shark Power SLU	100.00%	70.12%
Arena Green Power 2 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Shark Power SLU	100.00%	70.12%
Arena Green Power 3 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Shark Power SLU	100.00%	70.12%
Arena Green Power 4 SLU	Seville	ES	3,000.00	EUR		Line-by-line	Shark Power SLU	100.00%	70.12%
Arena Green Power 5 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Shark Power SLU	100.00%	70.12%
Arena Power Solar 11 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Arena Power Solar 12 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Arena Power Solar 13 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Arena Power Solar 20 SLU	Seville	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Arena Power Solar 33 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Arena Power Solar 34 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Arena Power Solar 35 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Arrow Hills Solar Project	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Asociación Nuclear Ascó-Vandellós II AIE	Tarragona	ES	19,232,400.00	EUR		Proportional	Endesa Generación SAU	85.41%	59.89%
Ateca Renovables SL	Madrid	ES	3,000.00	EUR		Equity	Baylio Solar SLU	19.72%	35.06%
							Dehesa de los Guadalupes Solar SLU	14.93%	
							Seguidores Solares Planta 2 SLU	15.35%	
Athonet France SASU	Paris	FR	50,000.00	EUR		-	Athonet Srl	100.00%	16.00%
Athonet Srl	Trieste	IT	68,927.57	EUR		-	Enel X Srl	16.00%	16.00%
Athonet UK Ltd	Battle, East Sussex	GB	250,001.00	GBP		-	Athonet Srl	100.00%	16.00%
Athonet USA Inc.	Wilmington	US	1.00	USD		-	Athonet Srl	100.00%	16.00%
Atlántico Photovoltaic SAS ESP	Barranquilla	CO	50,587,000.00	COP		Line-by-line	Enel Colombia SA ESP	100.00%	47.18%
Atwater Solar LLC	Wilmington	US	-	USD		Line-by-line	Aurora Distributed Solar LLC	100.00%	74.13%
Aurora Distributed Solar LLC	Wilmington	US	-	USD		Line-by-line	Aurora Solar Holdings LLC	74.13%	74.13%
Aurora Land Holdings LLC	Wilmington	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Aurora Solar Holdings LLC	Wilmington	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Aurora Wind Holdings LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Aurora Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Aurora Wind Holdings LLC	100.00%	100.00%
Autumn Hills LLC	Wilmington	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	51.00%	51.00%
Autumn Waltz Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Avikiran Energy India Private Limited	Gurugram	IN	100,000,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
Avikiran Solar India Private Limited	New Delhi	IN	253,659,580.00	INR		AFS	Enel Green Power India Private Limited	100.00%	100.00%
Avikiran Surya India Private Limited	Gurugram	IN	200,000.00	INR		Equity	Enel Green Power India Private Limited	51.00%	51.00%
Avikiran Vayu India Private Limited	Gurugram	IN	100,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Azure Blue Jay Holdings LLC	Dover	US	100.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Azure Blue Jay Solar Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Green Power Azure Blue Jay Solar Holdings LLC	100.00%	100.00%
Azure Sky Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Azure Blue Jay Solar Holdings LLC	100.00%	100.00%
Azure Sky Wind Holdings LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Azure Sky Wind Project LLC	Andover	US	1.00	USD		Line-by-line	AzureRanchII Wind Holdings LLC	100.00%	100.00%
Azure Sky Wind Storage LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
AzureRanchII Wind Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Green Power AzureRanchII Wind Holdings LLC	100.00%	100.00%
Baikal Enterprise SLU	Palma de Mallorca	ES	3,006.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Baleares Energy SLU	Palma de Mallorca	ES	4,509.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Barnwell County Solar Project LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Baylio Solar SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Beaver Falls Water Power Company	Wilmington	US	-	USD		Line-by-line	Beaver Valley Holdings LLC	67.50%	67.50%
Beaver Valley Holdings LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Beijing Tecnatom Nuclear Power Safety Technology Services Company Limited	Beijing	CN	280,000.00	EUR		Equity	Tecnatom SA	100.00%	31.56%
Bejaad Solar Plant	Casablanca	MA	10,000.00	MAD		Line-by-line	Enel Green Power Morocco SARLAU Mrs Riveros Perez Paula Cristina	99.00% 1.00%	99.00%
Belltail Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Belomechetskaya WPS	Moscow	RU	3,010,000.00	RUB		Line-by-line	Enel Green Power Rus Limited Liability Company	100.00%	100.00%
Bijou Hills Wind LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Bioenergy Casei Gerola Srl	Rome	IT	100,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Bison Meadows Storage Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Bison Meadows Wind Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Blair Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Blue Jay Solar I LLC	Andover	US	1.00	USD		Line-by-line	Azure Blue Jay Solar Holdings LLC	100.00%	100.00%
Blue Jay Solar II LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Blue Star Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
BluRe MA	San José	LU	7,092,970.00	EUR		-	Slovenské elektrárne AS	5.00%	1.65%
Bogotá ZE SAS	Bogotá	CO	186,361,690.00	COP		AFS	Colombia ZE SAS	100.00%	47.18%
Bold Elk Wind Limited Partnership	Calgary	CA	100.00	CAD		Line-by-line	Enel Alberta Wind Inc.	0.10%	100.00%
							Enel Green Power Canada Inc.	99.90%	
Bondia Energia Ltda	Niterói	BR	2,950,888.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Boone Stephens Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Bosa del Ebro SL	Zaragoza	ES	3,010.00	EUR		Line-by-line	Enel Green Power España SLU	51.00%	35.76%
Bottom Grass Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Boujdour Wind Farm	Casablanca	MA	300,000.00	MAD		Equity	Nareva Enel Green Power Morocco SA	90.00%	45.00%
Bouldercombe Solar Farm Trust	Sydney	AU	10.00	AUD		Line-by-line	Enel Green Power Bouldercombe Trust	100.00%	100.00%
Bouldercombe Solar (Pty) Ltd	Sydney	AU	100.00	AUD		Line-by-line	Enel Green Power Bouldercombe Holding (Pty) Ltd	100.00%	100.00%
Box Canyon Energy Storage Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
BP Hydro Finance Partnership	Salt Lake City	US	-	USD		Line-by-line	Enel Green Power North America Inc.	24.08%	100.00%
							Enel Kansas LLC	75.92%	
Brandonville Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Bravo Dome Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Brazatortas 220 Renovables SL	Madrid	ES	3,000.00	EUR		Equity	Baylio Solar SLU	16.98%	23.81%
							Furatena Solar 1 SLU	16.98%	
Brazoria West Solar Project LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Brazos Flat Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Brick Road Solar Holdings LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Bronco Hills Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Brush County Solar Project LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Buck Canyon Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Buckshutem Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Buckshutem Solar II LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Buffalo Dunes Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Buffalo Dunes Wind Project LLC	Topeka	US	-	USD		Line-by-line	EGPNA Development Holdings LLC	75.00%	75.00%
Buffalo Jump LP	Alberta	CA	10.00	CAD		Line-by-line	Enel Alberta Wind Inc.	0.10%	100.00%
							Enel Green Power Canada Inc.	99.90%	
Buffalo Spirit Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Bungala One Finco (Pty) Ltd	Sydney	AU	1,000.00	AUD		AFS	Bungala One Property Trust	100.00%	51.00%
Bungala One Operation Holding Trust	Sydney	AU	100.00	AUD		AFS	Enel Green Power Bungala (Pty) Ltd	50.00%	50.00%
Bungala One Operations Holding (Pty) Ltd	Sydney	AU	100.00	AUD		AFS	Enel Green Power Bungala (Pty) Ltd	51.00%	51.00%
Bungala One Operations (Pty) Ltd	Sydney	AU	1,000.00	AUD		AFS	Bungala One Operations Holding (Pty) Ltd	100.00%	51.00%
Bungala One Operations Trust	Sydney	AU	-	AUD		AFS	Bungala One Operations Holding (Pty) Ltd	100.00%	51.00%
Bungala One Property Holding (Pty) Ltd	Sydney	AU	100.00	AUD		AFS	Enel Green Power Bungala (Pty) Ltd	51.00%	51.00%
Bungala One Property Holding Trust	Sydney	AU	100.00	AUD		AFS	Enel Green Power Bungala (Pty) Ltd	50.00%	50.00%
Bungala One Property (Pty) Ltd	Sydney	AU	1,000.00	AUD		AFS	Bungala One Property Holding (Pty) Ltd	100.00%	51.00%
Bungala One Property Trust	Sydney	AU	-	AUD		AFS	Bungala One Property Holding (Pty) Ltd	100.00%	51.00%
Bungala Two Finco (Pty) Ltd	Sydney	AU	-	AUD		AFS	Bungala Two Property Trust	100.00%	51.00%
Bungala Two Operations Holding (Pty) Ltd	Sydney	AU	-	AUD		AFS	Enel Green Power Bungala (Pty) Ltd	51.00%	51.00%
Bungala Two Operations Holding Trust	Sydney	AU	-	AUD		AFS	Enel Green Power Bungala (Pty) Ltd	50.00%	50.00%
Bungala Two Operations (Pty) Ltd	Sydney	AU	-	AUD		AFS	Bungala Two Operations Holding (Pty) Ltd	100.00%	51.00%
Bungala Two Operations Trust	Sydney	AU	-	AUD		AFS	Bungala Two Operations Holding (Pty) Ltd	100.00%	51.00%
Bungala Two Property Holding (Pty) Ltd	Sydney	AU	-	AUD		AFS	Enel Green Power Bungala (Pty) Ltd	51.00%	51.00%
Bungala Two Property Holding Trust	Sydney	AU	-	AUD		AFS	Enel Green Power Bungala (Pty) Ltd	50.00%	50.00%
Bungala Two Property (Pty) Ltd	Sydney	AU	-	AUD		AFS	Bungala Two Property Holding (Pty) Ltd	100.00%	51.00%
Bungala Two Property Trust	Sydney	AU	1.00	AUD		AFS	Bungala Two Property Holding (Pty) Ltd	100.00%	51.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Burgundy Spruce Solar LP	Calgary	CA	100.00	CAD		Line-by-line	Enel Alberta Solar Inc. Enel Green Power Canada Inc.	0.10% 99.90%	100.00%
Business Venture Investments 1468 (Pty) Ltd	Johannesburg	ZA	100.00	ZAR		Line-by-line	Enel Green Power South Africa (Pty) Ltd	100.00%	100.00%
Butterfly Meadows Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
C&C Castelvetere Srl	Rome	IT	100,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
C&C Uno Energy Srl	Rome	IT	118,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Cactus Mesa Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Campos Promotores Renovables SL	Elche	ES	3,000.00	EUR		Equity	Enel Green Power España SLU	25.30%	17.74%
Canastota Wind Power LLC	Andover	US	-	USD		Line-by-line	Fenner Wind Holdings LLC	100.00%	100.00%
Caney River Wind Project LLC	Overland Park	US	-	USD		Equity	Rocky Caney Wind LLC	100.00%	10.00%
Canyon Top Energy Storage Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Castle Rock Ridge Limited Partnership	Alberta	CA	-	CAD		Line-by-line	Enel Alberta Wind Inc. Enel Green Power Canada Inc.	0.10% 99.90%	100.00%
Catalana d'Iniciatives SCR SA	Barcelona	ES	30,862,800.00	EUR		-	Endesa Red SAU	0.94%	0.66%
Cattle Drive Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
CCP.RO Bucharest SA	Bucharest	RO	79,800,000.00	RON		-	Enel Romania SA	9.52%	9.52%
Cdec - Sic Ltda	Santiago de Chile	CL	709,783,206.00	CLP		-	Enel Green Power Chile SA	6.00%	3.90%
Cedar Run Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Central Dock Sud SA	Buenos Aires	AR	1,231,270,567.54	ARS		AFS	Enel Argentina SA Inversora Dock Sud SA	0.24% 71.78%	33.94%
Central Geradora Fotovoltaica Bom Nome Ltda	Salvador	BR	4,979,739.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Central Geradora Fotovoltaica São Francisco Ltda	Niterói	BR	268,128,917.00	BRL		Line-by-line	Enel Brasil SA Enel X Brasil SA	0.00% 100.00%	82.27%
Central Hidráulica Güejar-Sierra SL	Seville	ES	364,213.34	EUR		Equity	Enel Green Power España SLU	33.30%	23.35%
Central Térmica de Anllares AIE	Madrid	ES	595,000.00	EUR		Equity	Endesa Generación SAU	33.33%	23.37%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Central Vuelta de Obligado SA	Buenos Aires	AR	500,000.00	ARS		Equity	Central Dock Sud SA	6.40%	20.93%
							Enel Generación Costanera SA	1.30%	
							Enel Generación El Chocón SA	33.20%	
Centrales Nucleares Almaraz-Trillo AIE	Madrid	ES	-	EUR		Equity	Endesa Generación SAU	24.18%	16.95%
Centrum Pre Vedu A Vyskum SRO	Kalná Nad Hronom	SK	6,639.00	EUR		Equity	Slovenské elektrárne AS	100.00%	33.00%
CES 1 Private Company	Athens	GR	500.00	EUR		Discontinued operations	Enel Green Power Hellas SA	0.20%	0.20%
CES 2 Private Company	Athens	GR	501.00	EUR		Discontinued operations	Enel Green Power Hellas SA	0.20%	0.20%
CES 3 Private Company	Athens	GR	501.00	EUR		Discontinued operations	Enel Green Power Hellas SA	0.20%	0.20%
CES 4 Private Company	Athens	GR	501.00	EUR		Discontinued operations	Enel Green Power Hellas SA	0.20%	0.20%
CES 5 Private Company	Athens	GR	501.00	EUR		Discontinued operations	Enel Green Power Hellas SA	0.20%	0.20%
CES 6 Private Company	Athens	GR	501.00	EUR		Discontinued operations	Enel Green Power Hellas SA	0.20%	0.20%
CES 7 Private Company	Athens	GR	501.00	EUR		Discontinued operations	Enel Green Power Hellas SA	0.20%	0.20%
CES 8 Private Company	Athens	GR	501.00	EUR		Discontinued operations	Enel Green Power Hellas SA	0.20%	0.20%
CESI - Centro Elettrotecnico Sperimentale Italiano Giacinto Motta SpA	Milan	IT	8,550,000.00	EUR		Equity	Enel SpA	42.70%	42.70%
Champagne Storage LLC	Wilmington	US	1.00	USD		Line-by-line	Enel Energy Storage Holdings LLC (formerly EGP Energy Storage Holdings LLC)	100.00%	100.00%
Checkerboard Plains Solar Project Limited Partnership	Calgary	CA	-	CAD		Line-by-line	Enel Alberta Solar Inc.	0.10%	100.00%
							Enel Green Power Canada Inc.	99.90%	
Cheyenne Ridge II Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Cheyenne Ridge Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Chi Black River LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Chi Minnesota Wind LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Chi Operations Inc.	Andover	US	100.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Chi Power Inc.	Naples	US	100.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Chi Power Marketing Inc.	Wilmington	US	100.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Chi West LLC	San Francisco	US	100.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Chinango SAC	San Miguel	PE	295,249,298.00	PEN		Line-by-line	Enel Generación Perú SAA	80.00%	55.02%
Chisago Solar LLC	Wilmington	US	-	USD		Line-by-line	Aurora Distributed Solar LLC	100.00%	74.13%
Chisholm View II Holding LLC	Wilmington	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Chisholm View Wind Project II LLC	Wilmington	US	-	USD		Line-by-line	Chisholm View II Holding LLC	62.79%	62.79%
Chisholm View Wind Project LLC	New York	US	-	USD		Equity	EGPNA REP Wind Holdings LLC	100.00%	10.00%
Cimarron Bend Assets LLC	Wilmington	US	-	USD		Line-by-line	Cimarron Bend Wind Project I LLC	49.00%	100.00%
							Cimarron Bend Wind Project II LLC	49.00%	
							Cimarron Bend Wind Project III LLC	1.00%	
							Enel Kansas LLC	1.00%	
Cimarron Bend III HoldCo LLC	Andover	US	1.00	USD		Line-by-line	Enel Green Power Cimarron Bend Wind Holdings III LLC	100.00%	100.00%
Cimarron Bend Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Cimarron Bend Wind Holdings I LLC	Wilmington	US	-	USD		Line-by-line	Cimarron Bend Wind Holdings II LLC	100.00%	100.00%
Cimarron Bend Wind Holdings II LLC	Dover	US	100.00	USD		Line-by-line	Cimarron Bend Wind Holdings LLC	100.00%	100.00%
Cimarron Bend Wind Holdings III LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Cimarron Bend Wind Holdings LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Cimarron Bend Wind Project I LLC	Wilmington	US	-	USD		Line-by-line	Cimarron Bend Wind Holdings I LLC	100.00%	100.00%
Cimarron Bend Wind Project II LLC	Wilmington	US	-	USD		Line-by-line	Cimarron Bend Wind Holdings I LLC	100.00%	100.00%
Cimarron Bend Wind Project III LLC	Wilmington	US	-	USD		Line-by-line	Cimarron Bend Wind Holdings III LLC	100.00%	100.00%
Cinch Top Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Cipher Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
CityPoste Payment Digital Srl	Teramo	IT	10,000.00	EUR		Equity	CityPoste Payment SpA	100.00%	50.00%
CityPoste Payment SpA	Teramo	IT	-	EUR		Equity	Mooney Group SpA	100.00%	50.00%
Clear Sky Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Clinton Farms Battery Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Clinton Farms Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Cloudwalker Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Cogein Sannio Srl	Rome	IT	10,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Cogeneración El Salto SL in liquidation	Zaragoza	ES	36,060.73	EUR		Equity	Enel Green Power España SLU	20.00%	14.02%
Cogenio Iberia SL	Madrid	ES	2,874,621.80	EUR		Equity	Endesa X Servicios SLU	20.00%	14.02%
Cogenio Srl	Rome	IT	2,310,000.00	EUR		Equity	Enel X Italia Srl	20.00%	20.00%
Cohuna Solar Farm (Pty) Ltd	Sydney	AU	100.00	AUD		AFS	Enel Green Power Cohuna Holdings (Pty) Ltd	100.00%	100.00%
Cohuna Solar Farm Trust	Sydney	AU	1.00	AUD		AFS	Enel Green Power Cohuna Trust	100.00%	100.00%
Colombia ZE SAS	Bogotá	CO	5,503,986,000.00	COP		AFS	Enel Colombia SA ESP	100.00%	47.18%
Comanche Crest Ranch LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Comercializadora Eléctrica de Cádiz SA	Cadiz	ES	600,000.00	EUR		Equity	Endesa Red SAU	33.50%	23.49%
Compagnia Porto di Civitavecchia SpA in liquidation	Rome	IT	14,730,800.00	EUR		Equity	Enel Produzione SpA	25.00%	25.00%
Companhia Energética do Ceará - Coelce	Fortaleza	BR	1,085,346,885.76	BRL		Line-by-line	Enel Brasil SA	74.05%	60.92%
Compañía de Trasmisión del Mercosur SA - CTM	Buenos Aires	AR	2,025,191,313.00	ARS		Line-by-line	Enel Brasil SA Enel CIEN SA Enel SpA	74.15% 25.85% 0.00%	82.27%
Compañía Energética Veracruz SAC	San Miguel	PE	2,886,000.00	PEN		Line-by-line	Enel Perú SAC	100.00%	82.27%
Compañía Eólica Tierras Altas SA	Soria	ES	13,222,000.00	EUR		Equity	Compañía Eólica Tierras Altas SA Enel Green Power España SLU	5.00% 35.63%	26.29%
Compass Rose Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Concert Srl	Rome	IT	10,000.00	EUR		Line-by-line	Enel Green Power SpA	100.00%	100.00%
Concho Solar I LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Concord Vine Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Consolidated Hydro Southeast LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Consolidated Pumped Storage Inc.	Wilmington	US	550,000.00	USD		Line-by-line	Enel Green Power North America Inc.	81.83%	81.83%
Conza Green Energy Srl	Rome	IT	73,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Copper Landing Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Corporación Empresarial de Extremadura SA	Badajoz	ES	44,538,000.00	EUR		-	Endesa SA	1.01%	0.71%
Corporación Eólica de Zaragoza SL	La Puebla de Alfinden	ES	271,652.00	EUR		Equity	Enel Green Power España SLU	25.00%	17.53%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Country Roads Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Cow Creek Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Crédito Fácil Codensa SA Compañía de Financiamiento	Bogotá	CO	32,000,000,000.00	COP		Equity	Colombia ZE SAS	0.00%	23.12%
							Enel Colombia SA ESP	48.99%	
							Enel X Colombia SAS ESP	0.00%	
Crockett Solar I LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Cross Trails Energy Storage Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Cross Trails GESS LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Dairy Meadows Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Daisy Patch Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Danax Energy (Pty) Ltd	Sandton	ZA	100.00	ZAR		Line-by-line	Enel Green Power South Africa (Pty) Ltd	100.00%	100.00%
Dappled Colt Storage Project Limited Partnership	Calgary	CA	-	CAD		Line-by-line	Enel Alberta Storage Inc.	0.10%	100.00%
							Enel Green Power Canada Inc.	99.90%	
Dara Solar Investment Srl	Bucharest	RO	14,392,400.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%
Dauphin Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
De Rock Int'l Srl	Bucharest	RO	5,629,000.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%
							Enel Green Power SpA	0.00%	
Decimalfigure - Unipessoal Ltda	Pego	PT	2,000.00	EUR		Equity	Tejo Energia - Produção e Distribuição de Energia Eléctrica SA	100.00%	30.68%
Dehesa de los Guadalupes Solar SLU	Seville	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Dehesa PV Farm 03 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Dehesa PV Farm 04 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Derivex SA	Bogotá	CO	715,292,000.00	COP		-	Enel Colombia SA ESP	5.00%	2.36%
Desarrollo de Fuerzas Renovables S de RL de Cv	Mexico City	MX	33,101,350.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	99.99%	100.00%
							Kino Facilities Manager SA de Cv	0.01%	
Desert Willow Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
DI.T.N.E. - Distretto Tecnologico Nazionale sull'Energia – Società Consortile a Responsabilità Limitata	Rome	IT	444,206.61	EUR		-	Enel Produzione SpA	1.73%	1.73%
Diamond Vista Holdings LLC	Wilmington	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Diamond Vista Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Dispatch Renewable Energy Societe Anonyme	Heraklion, Crete	GR	440,000.00	EUR		Discontinued operations	Enel Green Power Hellas SA	0.00%	0.00%
Distribuidora de Energía Eléctrica del Bages SA	Barcelona	ES	108,240.00	EUR		Line-by-line	Endesa Red SAU	55.00%	70.12%
							Hidroeléctrica de Catalunya SLU	45.00%	
Distribuidora Eléctrica del Puerto de la Cruz SAU	Santa Cruz de Tenerife	ES	12,621,210.00	EUR		Line-by-line	Endesa Red SAU	100.00%	70.12%
Distrilec Inversora SA	Buenos Aires	AR	497,612,021.00	ARS		Line-by-line	Enel Américas SA	51.50%	42.37%
Dodge Center Distributed Solar LLC	Wilmington	US	-	USD		Line-by-line	Aurora Distributed Solar LLC	100.00%	74.13%
Dolores Wind SA de Cv	Mexico City	MX	200.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	0.50%	100.00%
							Enel Rinnovable SA de Cv	99.50%	
Dominica Energía Limpia SA de Cv	Mexico City	MX	2,070,600,646.00	MXN		Equity	Tenedora de Energía Renovable Sol y Viento SAPI de Cv	60.80%	20.00%
Dorset Ridge Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Dover Solar I LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Dragonfly Fields Solar Project LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Drift Sand Wind Holdings LLC	Wilmington	US	-	USD		Equity	Enel Kansas LLC	50.00%	50.00%
Drift Sand Wind Project LLC	Wilmington	US	-	USD		Equity	Drift Sand Wind Holdings LLC	100.00%	50.00%
Dwarka Vayu 1 Private Limited	Gurgaon	IN	100,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
E.S.CO. Comuni Srl	Bergamo	IT	1,000,000.00	EUR		Line-by-line	Enel X Italia Srl	60.00%	60.00%
Earthly Reflections Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Eastwood Solar LLC	Wilmington	US	-	USD		Line-by-line	Aurora Distributed Solar LLC	100.00%	74.13%
Ebenezer Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Ecosolar2 Private Company	Grevena	GR	1,000.00	EUR		Discontinued operations	Enel Green Power Hellas SA	0.10%	0.10%
Edgartown Depot Solar 1 LLC	Boston	US	-	USD		Line-by-line	Enel X MA Holdings LLC	100.00%	100.00%
Edistribución Redes Digitales SLU	Madrid	ES	1,204,540,060.00	EUR		Line-by-line	Endesa Red SAU	100.00%	70.12%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
E-Distribuţie Banat SA	Timisoara	RO	382,158,580.00	RON		Discontinued operations	Enel SpA	51.00%	51.00%
E-Distribuţie Dobrogea SA	Constanţa	RO	280,285,560.00	RON		Discontinued operations	Enel SpA	51.00%	51.00%
E-Distribuţie Muntenia SA	Bucharest	RO	271,635,250.00	RON		Discontinued operations	Enel SpA	78.00%	78.00%
e-distribuzione SpA	Rome	IT	2,600,000,000.00	EUR		Line-by-line	Enel Italia SpA	100.00%	100.00%
EF Divesture LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Efficientya Srl	Bergamo	IT	100,000.00	EUR		Equity	Enel X Italia Srl	50.00%	50.00%
EGP Australia (Pty) Ltd	Sydney	AU	10,000.00	AUD		AFS	Enel Green Power Australia (Pty) Ltd	100.00%	100.00%
EGP Bioenergy Srl	Rome	IT	1,000,000.00	EUR		Line-by-line	Enel Green Power Puglia Srl	100.00%	100.00%
EGP fotovoltaica La Loma SAS in liquidation	Bogotá	CO	8,000,000.00	COP		Line-by-line	Enel Colombia SA ESP	100.00%	47.18%
EGP Geronimo Holding Company Inc.	Wilmington	US	1,000.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
EGP HoldCo 1 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP HoldCo 10 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP HoldCo 11 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP HoldCo 12 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP HoldCo 13 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP HoldCo 14 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP HoldCo 15 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP HoldCo 16 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP HoldCo 17 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP HoldCo 18 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP HoldCo 2 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP HoldCo 3 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP HoldCo 4 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP HoldCo 5 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP HoldCo 6 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
EGP HoldCo 7 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP HoldCo 8 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP HoldCo 9 LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGP Magdalena Solar SA de Cv	Mexico City	MX	691,771,740.00	MXN		Line-by-line	Enel Rinnovabile SA de Cv	99.00%	100.00%
							Hidroelectricidad del Pacífico S de RL de Cv	1.00%	
EGP Matimba NewCo 1 Srl	Rome	IT	10,000.00	EUR		Equity	Enel Green Power SpA	50.00%	50.00%
EGP Matimba NewCo 2 Srl	Rome	IT	10,000.00	EUR		Line-by-line	Enel Green Power SpA	100.00%	100.00%
EGP Nevada Power LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
EGP North America PPA LLC	Andover	US	1.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
EGP Salt Wells Solar LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
EGP San Leandro Microgrid I LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
EGP Solar Services LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
EGP Stillwater Solar LLC	Wilmington	US	-	USD		Line-by-line	Enel Stillwater LLC	100.00%	100.00%
EGP Stillwater Solar PV II LLC	Wilmington	US	1.00	USD		Line-by-line	Stillwater Woods Hill Holdings LLC	100.00%	100.00%
EGP Timber Hills Project LLC	Los Angeles	US	-	USD		Line-by-line	Padoma Wind Power LLC	100.00%	100.00%
EGPNA 2020 HoldCo 1 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 10 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 11 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 12 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 13 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 14 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 15 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 16 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 17 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 18 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
EGPNA 2020 HoldCo 19 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 2 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 20 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 21 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 22 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 23 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 24 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 25 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 26 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 27 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 28 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 29 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 3 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 30 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 4 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 5 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 6 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 7 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 8 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2020 HoldCo 9 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 1 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 10 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 11 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 12 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 13 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
EGPNA 2023 HoldCo 14 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 15 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 16 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 17 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 18 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 19 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 2 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 20 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 3 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 4 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 5 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 6 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 7 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 8 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA 2023 HoldCo 9 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA Development Holdings LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Development LLC	100.00%	100.00%
EGPNA Hydro Holdings LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
EGPNA Preferred Wind Holdings II LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
EGPNA Preferred Wind Holdings LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
EGPNA Project HoldCo 1 LLC	Dover	US	100.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
EGPNA Project HoldCo 2 LLC	Dover	US	100.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
EGPNA Project HoldCo 5 LLC	Dover	US	100.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
EGPNA Project HoldCo 6 LLC	Dover	US	100.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
EGPNA Project HoldCo 7 LLC	Dover	US	100.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
EGPNA Renewable Energy Partners LLC	Wilmington	US	-	USD		Equity	EGPNA REP Holdings LLC	10.00%	10.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
EGPNA REP Holdings LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
EGPNA REP Solar Holdings LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
EGPNA REP Wind Holdings LLC	Wilmington	US	-	USD		Equity	EGPNA Renewable Energy Partners LLC	100.00%	10.00%
EGPNA Wind Holdings 1 LLC	Wilmington	US	-	USD		Equity	EGPNA REP Wind Holdings LLC	100.00%	10.00%
EGPNA-SP Seven Cowboy Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Elcogas SA in liquidation	Puertollano (Ciudad Real)	ES	809,690.40	EUR		Equity	Endesa Generación SAU	40.99%	33.06%
							Enel SpA	4.32%	
Elcomex Solar Energy Srl	Bucharest	RO	4,590,000.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%
							Enel Green Power SpA	0.00%	
Elecgas SA	Pego	PT	50,000.00	EUR		Equity	Endesa Generación Portugal SA	50.00%	35.06%
Electra Capital (RF) (Pty) Ltd	Johannesburg	ZA	10,000,000.00	ZAR		Line-by-line	Enel Green Power South Africa (Pty) Ltd	60.00%	60.00%
Eléctrica de Jafre SA	Barcelona	ES	165,876.00	EUR		Line-by-line	Endesa Red SAU	52.54%	70.12%
							Hidroeléctrica de Catalunya SLU	47.46%	
Eléctrica de Lijar SL	Cadiz	ES	1,081,821.79	EUR		Equity	Endesa Red SAU	50.00%	35.06%
Eléctrica del Ebro SAU	Barcelona	ES	500,000.00	EUR		Line-by-line	Endesa Red SAU	100.00%	70.12%
Electricidad de Puerto Real SA	Cadiz	ES	4,960,246.40	EUR		Equity	Endesa Red SAU	50.00%	35.06%
Electrometalúrgica del Ebro SL	Barcelona	ES	2,906,862.00	EUR		-	Enel Green Power España SLU	0.18%	0.12%
Electrotest Instalaciones, Montajes y Mantenimientos SL	Puerto Real	ES	10,000.00	EUR		-	Epresa Energía SA	50.00%	17.53%
Eletropaulo Metropolitana Eletricidade de São Paulo SA	São Paulo	BR	3,079,524,934.33	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Elini	Antwerp	BE	76,273,810.00	EUR		-	Slovenské elektrárne AS	4.00%	1.32%
Emerald Crescent Solar Limited Partnership	Calgary	CA	100.00	CAD		Line-by-line	Enel Alberta Solar Inc.	0.10%	100.00%
							Enel Green Power Canada Inc.	99.90%	
Emerging Networks El Salvador SA de Cv	San Salvador	SV	2,000.00	USD		-	Emerging Networks Guatemala SA	1.00%	19.50%
							Livister Latam SLU	99.00%	
Emerging Networks Guatemala SA	Guatemala City	GT	742,000.00	GTQ		-	Livister Latam SLU	99.99%	19.50%
							Ufinet Guatemala SA	0.01%	
Emerging Networks Latam Inc.	Wilmington	US	100.00	USD		-	IFX Networks Ltd	100.00%	19.50%
Emerging Networks Panama SA	Panama City	PA	300.00	USD		-	IFX/Eni - SPC Panama Inc.	100.00%	19.50%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Emintegral Cycle SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Empresa Carbonífera del Sur - ENCASUR SAU	Madrid	ES	18,030,000.00	EUR		Line-by-line	Endesa Generación SAU	100.00%	70.12%
Empresa de Alumbrado Eléctrico de Ceuta Distribución SAU	Ceuta	ES	9,335,000.00	EUR		Line-by-line	Empresa de Alumbrado Eléctrico de Ceuta SA	100.00%	67.61%
Empresa de Alumbrado Eléctrico de Ceuta Energía SLU	Ceuta	ES	10,000.00	EUR		Line-by-line	Endesa Energía SAU	100.00%	70.12%
Empresa de Alumbrado Eléctrico de Ceuta SA	Ceuta	ES	16,562,250.00	EUR		Line-by-line	Endesa Red SAU	96.42%	67.61%
Empresa de Generación Eléctrica Los Pinos SA	San Miguel	PE	7,928,044.00	PEN		Line-by-line	Enel Green Power Perú SAC	100.00%	82.27%
							Energética Monzón SAC	0.00%	
Empresa de Generación Eléctrica Marcona SAC	San Miguel	PE	3,368,424.00	PEN		Line-by-line	Enel Green Power Perú SAC	100.00%	82.27%
							Energética Monzón SAC	0.00%	
Empresa Distribuidora Sur SA - Edesur	Buenos Aires	AR	898,585,028.00	ARS		Line-by-line	Distrilec Inversora SA	56.36%	59.33%
							Enel Argentina SA	43.10%	
Empresa Eléctrica Pehuenche SA	Santiago de Chile	CL	175,774,920,733.00	CLP		Line-by-line	Enel Generación Chile SA	92.65%	56.27%
Empresa Propietaria de la Red SA	Panama City	PA	58,500,000.00	USD		-	Enel SpA	11.11%	11.11%
En. Solar 7 Single Member Private Company	Maroussi	GR	1,000.00	EUR		Discontinued operations	Enel Green Power Hellas SA	100.00%	100.00%
Endesa Capital SAU	Madrid	ES	60,200.00	EUR		Line-by-line	Endesa SA	100.00%	70.12%
Endesa Comercialização de Energia SA	Porto	PT	250,000.00	EUR		Line-by-line	Endesa Energía SAU	100.00%	70.12%
Endesa Energía Renovable SLU	Madrid	ES	100,000.00	EUR		Line-by-line	Endesa Energía SAU	100.00%	70.12%
Endesa Energía SAU	Madrid	ES	14,445,575.90	EUR		Line-by-line	Endesa SA	100.00%	70.12%
Endesa Financiación Filiales SAU	Madrid	ES	4,621,003,006.00	EUR		Line-by-line	Endesa SA	100.00%	70.12%
Endesa Generación II SAU	Seville	ES	63,107.00	EUR		Line-by-line	Endesa SA	100.00%	70.12%
Endesa Generación Nuclear SAU	Seville	ES	60,000.00	EUR		Line-by-line	Endesa Generación SAU	100.00%	70.12%
Endesa Generación Portugal SA	Lisbon	PT	50,000.00	EUR		Line-by-line	Endesa Energía SAU	0.20%	70.12%
							Endesa Generación SAU	99.20%	
							Enel Green Power España SLU	0.60%	
Endesa Generación SAU	Seville	ES	1,940,379,735.35	EUR		Line-by-line	Endesa SA	100.00%	70.12%
Endesa Ingeniería SLU	Seville	ES	965,305.00	EUR		Line-by-line	Endesa Red SAU	100.00%	70.12%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Endesa Medios y Sistemas SLU	Madrid	ES	89,999,790.00	EUR		Line-by-line	Endesa SA	100.00%	70.12%
Endesa Operaciones y Servicios Comerciales SLU	Madrid	ES	10,138,580.00	EUR		Line-by-line	Endesa Energía SAU	100.00%	70.12%
Endesa Red SAU	Madrid	ES	719,901,723.26	EUR		Line-by-line	Endesa SA	100.00%	70.12%
Endesa X Servicios SLU	Madrid	ES	60,000.00	EUR		Line-by-line	Endesa SA	100.00%	70.12%
Endesa X Way SL	Madrid	ES	600,000.00	EUR		Line-by-line	Endesa X Servicios SLU	49.00%	85.36%
							Enel X Way Srl	51.00%	
Endesa SA	Madrid	ES	1,270,502,540.40	EUR		Line-by-line	Endesa SA	0.02%	70.12%
							Enel Iberia SRLU	70.10%	
Enel Alberta Solar Inc.	Calgary	CA	1.00	CAD		Line-by-line	Enel Green Power Canada Inc.	100.00%	100.00%
Enel Alberta Storage Inc.	Calgary	CA	1.00	CAD		Line-by-line	Enel Green Power Canada Inc.	100.00%	100.00%
Enel Alberta Wind Inc.	Alberta	CA	16,251,021.00	CAD		Line-by-line	Enel Green Power Canada Inc.	100.00%	100.00%
Enel Américas SA	Santiago de Chile	CL	15,799,498,544.85	USD		Line-by-line	Enel Américas SA	0.00%	82.27%
							Enel SpA	82.27%	
Enel and Shikun & Binui Innovation Infralab Ltd	Airport City	IL	38,000.00	ILS		Equity	Enel Grids Srl	50.00%	50.00%
Enel Argentina SA	Buenos Aires	AR	2,297,711,908.00	ARS		Line-by-line	Enel Américas SA	99.92%	82.25%
							Enel Generación Chile SA	0.08%	
Enel Bella Energy Storage LLC	Wilmington	US	-	USD		Line-by-line	Enel Energy Storage Holdings LLC (formerly EGP Energy Storage Holdings LLC)	100.00%	100.00%
Enel Brasil Central SA	Rio de Janeiro	BR	49,440.00	BRL		Line-by-line	Enel Brasil SA	20.23%	82.27%
							Enel X Brasil SA	79.77%	
Enel Brasil SA	Niterói	BR	38,070,269,190.10	BRL		Line-by-line	Enel Américas SA	99.56%	82.27%
							Enel Brasil SA	0.44%	
							Energía y Servicios South America SpA	0.00%	
Enel Chile SA	Santiago de Chile	CL	3,882,103,470,184.00	CLP		Line-by-line	Enel SpA	64.93%	64.93%
Enel CIEN SA	Rio de Janeiro	BR	285,044,682.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Colina SA	Santiago de Chile	CL	82,222,000.00	CLP		Line-by-line	Enel Chile SA	0.00%	64.34%
							Enel Distribución Chile SA	100.00%	
Enel Colombia SA ESP	Bogotá	CO	655,222,312,800.00	COP		Line-by-line	Enel Américas SA	57.34%	47.18%
Enel Costa Rica CAM SA	San José	CR	27,500,000.00	USD		Line-by-line	Enel Colombia SA ESP	100.00%	47.18%
Enel Cove Fort II LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Enel Cove Fort LLC	Beaver	US	-	USD		Line-by-line	Enel Geothermal LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Distribución Chile SA	Santiago de Chile	CL	177,568,664,063.00	CLP		Line-by-line	Enel Chile SA	99.09%	64.34%
Enel Distribución Perú SAA	San Miguel	PE	638,563,900.00	PEN		Line-by-line	Enel Perú SAC	83.15%	68.41%
Enel Energia SpA	Rome	IT	10,000,000.00	EUR		Line-by-line	Enel Italia SpA	100.00%	100.00%
Enel Energía SA de Cv	Mexico City	MX	25,000,100.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	100.00%	100.00%
Enel Energie Muntenia SA	Bucharest	RO	37,004,350.00	RON		Discontinued operations	Enel SpA	78.00%	78.00%
Enel Energie SA	Bucharest	RO	140,000,000.00	RON		Discontinued operations	Enel SpA	51.00%	51.00%
Enel Energy Australia (Pty) Ltd	Sydney	AU	200,100.00	AUD		Line-by-line	Enel Green Power Australia (Pty) Ltd	100.00%	100.00%
Enel Energy North America Illinois LLC	Andover	US	1.00	USD		Line-by-line	Enel Energy North America LLC	100.00%	100.00%
Enel Energy North America Ohio LLC	Andover	US	1.00	USD		Line-by-line	Enel Energy North America LLC	100.00%	100.00%
Enel Energy North America Pennsylvania LLC	Andover	US	1.00	USD		Line-by-line	Enel Energy North America LLC	100.00%	100.00%
Enel Energy North America Texas LLC	Andover	US	1.00	USD		Line-by-line	Enel Energy North America LLC	100.00%	100.00%
Enel Energy North America LLC	Andover	US	1.00	USD		Line-by-line	Enel X North America Inc.	100.00%	100.00%
Enel Energy South Africa	Wilmington	ZA	100.00	ZAR		Line-by-line	Enel X International Srl	100.00%	100.00%
Enel Energy Storage Holdings LLC (formerly EGP Energy Storage Holdings LLC)	Andover	US	100.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Enel Finance America LLC	Wilmington	US	200,000,000.00	USD		Line-by-line	Enel North America Inc.	100.00%	100.00%
Enel Finance International NV	Amsterdam	NL	1,478,810,371.00	EUR		Line-by-line	Enel Holding Finance Srl	75.00%	100.00%
							Enel SpA	25.00%	
Enel Fortuna SA	Panama City	PA	100,000,000.00	USD		Line-by-line	Enel Panamá CAM Srl	50.06%	23.62%
Enel Future Project 2020 #1 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #10 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #11 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #12 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #13 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #14 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Future Project 2020 #15 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #16 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #17 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #18 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #19 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #2 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #20 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #3 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #4 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #5 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #6 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #7 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #8 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Future Project 2020 #9 LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Enel Generación Chile SA	Santiago de Chile	CL	552,777,320,871.00	CLP		Line-by-line	Enel Chile SA	93.55%	60.74%
Enel Generación Costanera SA	Buenos Aires	AR	701,988,378.00	ARS		AFS	Enel Argentina SA	75.68%	62.25%
Enel Generación El Chocón SA	Buenos Aires	AR	18,321,776,559.00	ARS		Line-by-line	Enel Argentina SA Hidroinvest SA	8.67% 59.00%	54.07%
Enel Generación Perú SAA	San Miguel	PE	1,538,101,266.24	PEN		Line-by-line	Enel Perú SAC	83.60%	68.78%
Enel Generación Piura SA	San Miguel	PE	73,982,594.00	PEN		Line-by-line	Enel Perú SAC	96.50%	79.39%
Enel Generación SA de Cv	Mexico City	MX	7,100,100.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	100.00%	100.00%
Enel Geothermal LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Enel Global Services Srl	Rome	IT	10,000.00	EUR		Line-by-line	Enel SpA	100.00%	100.00%
Enel Global Trading SpA	Rome	IT	90,885,000.00	EUR		Line-by-line	Enel SpA	100.00%	100.00%
Enel Green Power 25RoseFarms Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Green Power Argentina SA	Buenos Aires	AR	463,577,761.00	ARS		Line-by-line	Enel Américas SA Enel Green Power SpA Energía y Servicios South America SpA	99.86% 0.00% 0.14%	82.27%
Enel Green Power Aroeira 01 SA	Rio de Janeiro	BR	134,518,400.90	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Enel Green Power Aroeira 02 SA	Rio de Janeiro	BR	134,501,000.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Enel Green Power Aroeira 03 SA	Rio de Janeiro	BR	134,501,000.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Enel Green Power Aroeira 04 SA	Rio de Janeiro	BR	134,638,500.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	99.90% 0.10%	82.27%
Enel Green Power Aroeira 05 SA	Rio de Janeiro	BR	134,501,000.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Enel Green Power Aroeira 06 SA	Rio de Janeiro	BR	134,511,000.90	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Enel Green Power Aroeira 07 SA	Rio de Janeiro	BR	134,501,000.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Enel Green Power Aroeira 08 SA	Rio de Janeiro	BR	134,501,000.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Enel Green Power Aroeira 09 SA (formerly Enel Green Power São Gonçalo Participações SA)	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	99.90% 0.10%	82.27%
Enel Green Power Australia (Pty) Ltd	Sydney	AU	100.00	AUD		Line-by-line	Enel Green Power SpA	100.00%	100.00%
Enel Green Power Australia Trust	Sydney	AU	100.00	AUD		AFS	Enel Green Power SpA	100.00%	100.00%
Enel Green Power Azure Blue Jay Solar Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Enel Green Power Azure Ranchland Holdings LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Enel Green Power AzureRanchII Wind Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Enel Green Power Boa Vista 01 Ltda	Salvador	BR	3,554,607.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Enel Green Power Boa Vista Eólica SA	Rio de Janeiro	BR	42,890,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Bouldercombe Holding (Pty) Ltd	Sydney	AU	100.00	AUD		Line-by-line	Enel Green Power Australia (Pty) Ltd	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Green Power Boulder combe Trust	Sydney	AU	10.00	AUD		Line-by-line	Enel Green Power Australia Trust	100.00%	100.00%
Enel Green Power Brejolândia Solar SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	99.90% 0.10%	82.27%
Enel Green Power Bungala (Pty) Ltd	Sydney	AU	100.00	AUD		AFS	Enel Green Power Australia (Pty) Ltd	100.00%	100.00%
Enel Green Power Bungala Trust	Sydney	AU	-	AUD		AFS	Enel Green Power Australia (Pty) Ltd	100.00%	100.00%
Enel Green Power Cabeça de Boi SA	Niterói	BR	270,114,539.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Cachoeira Dourada SA	Cachoeira Dourada	BR	64,339,835.85	BRL		Line-by-line	Enel Brasil SA Enel Green Power Cachoeira Dourada SA	99.61% 0.15%	82.07%
Enel Green Power Canada Inc.	Montreal	CA	85,681,857.00	CAD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Enel Green Power Cerrado Solar SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	99.90% 0.10%	82.27%
Enel Green Power Chile SA	Santiago de Chile	CL	842,121,530.67	USD		Line-by-line	Enel Chile SA Enel SpA	99.99% 0.01%	64.93%
Enel Green Power Cimarron Bend Wind Holdings III LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Enel Green Power Cohuna Holdings (Pty) Ltd	Sydney	AU	3,419,700.00	AUD		AFS	Enel Green Power Australia (Pty) Ltd	100.00%	100.00%
Enel Green Power Cohuna Trust	Sydney	AU	-	AUD		AFS	Enel Green Power Australia Trust	100.00%	100.00%
Enel Green Power Cove Fort Solar LLC	Wilmington	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Enel Green Power Cristal Eólica SA	Rio de Janeiro	BR	87,784,899.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Cristal Eólica SA Enel Green Power Desenvolvimento Ltda	98.63% 0.00% 1.37%	82.27%
Enel Green Power Cumaru 01 SA	Niterói	BR	204,653,590.90	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	99.90% 0.00%	82.27%
Enel Green Power Cumaru 02 SA	Niterói	BR	237,601,272.90	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Enel Green Power Cumaru 03 SA	Rio de Janeiro	BR	225,021,296.24	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Enel Green Power Cumaru 04 SA	Rio de Janeiro	BR	230,869,708.24	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Enel Green Power Cumaru 05 SA	Rio de Janeiro	BR	180,208,000.90	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	99.94% 0.00%	82.22%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Green Power Cumaru Participaçoes SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Cumaru Solar 01 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Cumaru Solar 02 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Damascena Eólica SA	Rio de Janeiro	BR	83,709,003.00	BRL		Line-by-line	Enel Brasil SA	99.16%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.84%	
Enel Green Power Delfina A Eólica SA	Rio de Janeiro	BR	284,062,483.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Delfina B Eólica SA	Rio de Janeiro	BR	93,068,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Delfina C Eólica SA	Rio de Janeiro	BR	31,105,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Delfina D Eólica SA	Rio de Janeiro	BR	105,864,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Delfina E Eólica SA	Niterói	BR	105,936,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Desenvolvimento Ltda	Rio de Janeiro	BR	61,617,590.35	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Energía y Servicios South America SpA	0.00%	
Enel Green Power Development Srl	Rome	IT	20,000.00	EUR		Line-by-line	Enel Green Power SpA	100.00%	100.00%
Enel Green Power Diamond Vista Wind Project LLC	Wilmington	US	1.00	USD		Line-by-line	Diamond Vista Holdings LLC	100.00%	100.00%
Enel Green Power Dois Riachos Eólica SA	Rio de Janeiro	BR	83,347,009.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Egypt SAE	Cairo	EG	250,000.00	EGP		Line-by-line	Enel Green Power SpA	100.00%	100.00%
Enel Green Power El Salvador SA de Cv	El Salvador	SV	22,860.00	USD		Line-by-line	Enel Green Power SpA	99.96%	99.99%
							Energía y Servicios South America SpA	0.04%	
Enel Green Power Elkwater Wind Limited Partnership	Alberta	CA	1,000.00	CAD		Line-by-line	Enel Alberta Wind Inc.	1.00%	100.00%
							Enel Green Power Canada Inc.	99.00%	
Enel Green Power Elmsthorpe Wind LP	Calgary	CA	1,000.00	CAD		Line-by-line	Enel Alberta Wind Inc.	0.10%	100.00%
							Enel Green Power Canada Inc.	99.90%	
Enel Green Power Emiliana Eólica SA	Rio de Janeiro	BR	97,191,530.00	BRL		Line-by-line	Enel Brasil SA	98.35%	82.27%
							Enel Green Power Desenvolvimento Ltda	1.65%	
							Enel Green Power Emiliana Eólica SA	0.00%	
Enel Green Power España SLU	Madrid	ES	11,152.74	EUR		Line-by-line	Endesa Generación SAU	100.00%	70.12%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Green Power Esperança Eólica SA	Rio de Janeiro	BR	99,418,174.00	BRL		Line-by-line	Enel Brasil SA	98.89%	82.27%
							Enel Green Power Desenvolvimento Ltda	1.11%	
Enel Green Power Esperança Solar SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Estonian Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Enel Green Power Fazenda SA	Niterói	BR	264,141,174.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Fence Post Solar Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Enel Green Power Flat Rocks One Holding (Pty) Ltd	Sydney	AU	100.00	AUD		AFS	EGP Australia (Pty) Ltd	100.00%	100.00%
Enel Green Power Flat Rocks One Holding Trust	Sydney	AU	100.00	AUD		AFS	Enel Green Power Australia Trust	100.00%	100.00%
Enel Green Power Fontes dos Ventos 2 SA	Rio de Janeiro	BR	183,315,219.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Fontes dos Ventos 3 SA	Rio de Janeiro	BR	221,001,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Fontes II Participações SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Fontes Solar SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Ganado Solar Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Enel Green Power Germany GmbH	Berlin	DE	25,000.00	EUR		Line-by-line	Enel Green Power SpA	100.00%	100.00%
Enel Green Power Girgarre Holdings (Pty) Ltd	Sydney	AU	100.00	AUD		AFS	Enel Green Power Australia (Pty) Ltd	100.00%	100.00%
Enel Green Power Girgarre Trust	Sydney	AU	10.00	AUD		AFS	Enel Green Power Australia Trust	100.00%	100.00%
Enel Green Power Global Investment BV	Amsterdam	NL	10,000.00	EUR		Line-by-line	Enel Green Power SpA	100.00%	100.00%
Enel Green Power Hadros Wind Limited Partnership	-	CA	1,000.00	CAD		Line-by-line	Enel Alberta Wind Inc.	1.00%	100.00%
							Enel Green Power Canada Inc.	99.00%	
Enel Green Power Hellas SA	Maroussi	GR	40,187,850.00	EUR		Discontinued operations	Enel Green Power SpA	100.00%	100.00%
Enel Green Power Hellas Supply Single Member SA	Maroussi	GR	600,000.00	EUR		Discontinued operations	Enel Green Power Hellas SA	100.00%	100.00%
Enel Green Power Hellas Wind Parks South Evia Single Member SA	Maroussi	GR	141,569,641.00	EUR		Discontinued operations	Enel Green Power Hellas SA	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Green Power Hilltopper Wind LLC (formerly Hilltopper Wind Power LLC)	Dover	US	1.00	USD		Line-by-line	Hilltopper Wind Holdings LLC	100.00%	100.00%
Enel Green Power Horizonte MP Solar SA	Rio de Janeiro	BR	431,566,053.00	BRL		Line-by-line	Alba Energia Ltda	0.01%	82.27%
							Enel Brasil SA	99.99%	
Enel Green Power India Private Limited	New Delhi	IN	200,000,000.00	INR		Line-by-line	Enel Green Power Development Srl	100.00%	100.00%
Enel Green Power Italia Srl	Rome	IT	272,000,000.00	EUR		Line-by-line	Enel Italia SpA	100.00%	100.00%
Enel Green Power Ituverava Norte Solar SA	Rio de Janeiro	BR	219,806,645.67	BRL		Line-by-line	Bondia Energia Ltda	0.08%	82.27%
							Enel Brasil SA	99.92%	
							Enel Green Power Brasil Participações Ltda	0.00%	
Enel Green Power Ituverava Solar SA	Rio de Janeiro	BR	227,810,333.00	BRL		Line-by-line	Bondia Energia Ltda	0.00%	82.27%
							Enel Brasil SA	100.00%	
Enel Green Power Ituverava Sul Solar SA	Rio de Janeiro	BR	408,949,643.00	BRL		Line-by-line	Bondia Energia Ltda	0.00%	82.27%
							Enel Brasil SA	100.00%	
Enel Green Power Joana Eólica SA	Rio de Janeiro	BR	90,259,530.00	BRL		Line-by-line	Enel Brasil SA	98.33%	82.27%
							Enel Green Power Desenvolvimento Ltda	1.67%	
Enel Green Power Kenya Limited	Nairobi	KE	100,000.00	KES		Line-by-line	Enel Green Power SpA	99.00%	100.00%
							Enel Green Power South Africa (Pty) Ltd	1.00%	
Enel Green Power Korea LLC	Seoul	KR	5,665,000,000.00	KRW		Line-by-line	Enel Green Power SpA	100.00%	100.00%
Enel Green Power Lagoa do Sol 01 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Lagoa do Sol 02 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Lagoa do Sol 03 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Lagoa do Sol 04 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Lagoa do Sol 05 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Lagoa do Sol 06 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Lagoa do Sol 07 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Green Power Lagoa do Sol 08 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Lagoa do Sol 09 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Lagoa II Participações SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Lagoa III Participações SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Lagoa Participações SA (formerly Enel Green Power Projetos 45 SA)	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Lily Solar Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Enel Green Power Maniçoba Eólica SA	Rio de Janeiro	BR	90,722,530.00	BRL		Line-by-line	Enel Brasil SA	99.20%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.80%	
Enel Green Power Matimba Srl	Rome	IT	10,000.00	EUR		Equity	Enel Green Power SpA	50.00%	50.00%
Enel Green Power Metehara Solar Privrate Limited Company	-	ET	5,600,000.00	ETB		Line-by-line	Enel Green Power Solar Metehara SpA	80.00%	80.00%
Enel Green Power México S de RL de Cv	Mexico City	MX	662,949,966.00	MXN		Line-by-line	Enel Green Power SpA	100.00%	100.00%
							Enel Rinnovabile SA de Cv	0.00%	
Enel Green Power Modelo I Eólica SA	Rio de Janeiro	BR	70,842,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Modelo II Eólica SA	Rio de Janeiro	BR	63,742,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Morocco SARLAU	Casablanca	MA	639,000,000.00	MAD		Line-by-line	Enel Green Power Development Srl	0.00%	100.00%
							Enel Green Power SpA	100.00%	
Enel Green Power Morro do Chapéu I Eólica SA	Rio de Janeiro	BR	248,138,287.11	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Morro do Chapéu II Eólica SA	Rio de Janeiro	BR	206,050,114.05	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Morro do Chapéu Solar 01 SA (formerly Enel Green Power São Gonçalo III Participações SA)	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Morro Norte 01 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Morro Norte 02 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Green Power Morro Norte 03 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Morro Norte 04 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Mourão SA	Rio de Janeiro	BR	25,600,100.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Namibia (Pty) Ltd	Windhoek	NA	10,000.00	NAD		Line-by-line	Enel Green Power SpA	100.00%	100.00%
Enel Green Power North America Development LLC	Wilmington	US	-	USD		Line-by-line	Enel North America Inc.	100.00%	100.00%
Enel Green Power North America Inc.	Andover	US	-	USD		Line-by-line	Enel North America Inc.	100.00%	100.00%
Enel Green Power Nova Olinda 01 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Nova Olinda 02 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Nova Olinda 03 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Nova Olinda 04 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Nova Olinda 05 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Nova Olinda 06 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Nova Olinda 07 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Nova Olinda 08 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Nova Olinda 09 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Novo Lapa 01 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Novo Lapa 02 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Green Power Novo Lapa 03 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Novo Lapa 04 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Novo Lapa 05 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Novo Lapa 06 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Novo Lapa 07 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Novo Lapa 08 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power O&M Solar LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Enel Green Power Paranapanema SA	Niterói	BR	162,567,500.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Partecipazioni Speciali Srl	Rome	IT	10,000.00	EUR		Line-by-line	Enel Green Power SpA	100.00%	100.00%
Enel Green Power Pau Ferro Eólica SA	Rio de Janeiro	BR	74,124,000.00	BRL		Line-by-line	Enel Brasil SA	97.92%	82.27%
							Enel Green Power Desenvolvimento Ltda	2.08%	
							Enel Green Power Pau Ferro Eólica SA	0.00%	
Enel Green Power Pedra do Gerônimo Eólica SA	Rio de Janeiro	BR	119,319,527.57	BRL		Line-by-line	Enel Brasil SA	98.25%	82.27%
							Enel Green Power Desenvolvimento Ltda	1.75%	
Enel Green Power Perú SAC	San Miguel	PE	1,291,373,507.00	PEN		Line-by-line	Enel Américas SA	100.00%	82.27%
							Energía y Servicios South America SpA	0.00%	
Enel Green Power Primavera Eólica SA	Rio de Janeiro	BR	95,674,900.00	BRL		Line-by-line	Enel Brasil SA	98.50%	82.27%
							Enel Green Power Desenvolvimento Ltda	1.50%	
Enel Green Power Puglia Srl	Rome	IT	1,000,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Enel Green Power RA SAE in liquidation	Cairo	EG	15,000,000.00	EGP		Line-by-line	Enel Green Power Egypt SAE	100.00%	100.00%
Enel Green Power Rattlesnake Creek Wind Project LLC (formerly Rattlesnake Creek Wind Project LLC)	Delaware	US	1.00	USD		Line-by-line	Rattlesnake Creek Holdings LLC	100.00%	100.00%
Enel Green Power Roadrunner Solar Project Holdings II LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Green Power Roadrunner Solar Project Holdings LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Enel Green Power Roadrunner Solar Project II LLC	Dover	US	100.00	USD		Line-by-line	Enel Roadrunner Solar Project Holdings II LLC	100.00%	100.00%
Enel Green Power Rockhaven Ranchland Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Enel Green Power Romania Srl	Bucharest	RO	2,430,631,000.00	RON		Discontinued operations	Enel Green Power SpA	100.00%	100.00%
Enel Green Power Roseland Solar LLC	Andover	US	1.00	USD		Line-by-line	25RoseFarms Holdings LLC	100.00%	100.00%
Enel Green Power RSA (Pty) Ltd	Johannesburg	ZA	1,000.00	ZAR		Equity	EGP Matimba NewCo 1 Srl	100.00%	50.00%
Enel Green Power RSA 2 (RF) (Pty) Ltd	Johannesburg	ZA	120.00	ZAR		Equity	Enel Green Power RSA (Pty) Ltd	100.00%	50.00%
Enel Green Power Rus Limited Liability Company	Moscow	RU	60,500,000.00	RUB		Line-by-line	Enel Green Power Partecipazioni Speciali Srl	1.00%	100.00%
							Enel Green Power SpA	99.00%	
Enel Green Power SpA	Rome	IT	272,000,000.00	EUR		Line-by-line	Enel SpA	100.00%	100.00%
Enel Green Power Salto Apiacás SA (formerly Enel Green Power Damascena Eólica SA)	Rio de Janeiro	BR	274,420,832.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Sannio Srl	Rome	IT	750,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Enel Green Power São Abraão Eólica SA	Rio de Janeiro	BR	91,300,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power São Cirilo 01 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power São Cirilo 02 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power São Cirilo 03 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power São Gonçalo 01 SA (formerly Enel Green Power Projetos 10)	Teresina	BR	74,960,396.92	BRL		Line-by-line	Alba Energia Ltda	0.00%	82.27%
							Enel Brasil SA	100.00%	
Enel Green Power São Gonçalo 02 SA (formerly Enel Green Power Projetos 11)	Teresina	BR	82,268,018.57	BRL		Line-by-line	Alba Energia Ltda	0.00%	82.27%
							Enel Brasil SA	100.00%	
Enel Green Power São Gonçalo 07 SA (formerly Enel Green Power Projetos 42 SA)	Teresina	BR	114,522,004.82	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power São Gonçalo 08 SA (formerly Enel Green Power Projetos 43 SA)	Teresina	BR	109,281,818.16	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Green Power São Gonçalo 10 SA (formerly Enel Green Power Projetos 15)	Teresina	BR	82,871,484.32	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power São Gonçalo 11 SA (formerly Enel Green Power Projetos 44 SA)	Teresina	BR	114,475,154.82	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power São Gonçalo 12 SA (formerly Enel Green Power Projetos 22 SA)	Teresina	BR	108,022,914.82	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Enel Green Power São Gonçalo 14	Teresina	BR	147,279,287.77	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Enel Green Power São Gonçalo 15	Teresina	BR	120,057,468.67	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power São Gonçalo 17 SA	Teresina	BR	122,007,042.67	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Enel Green Power São Gonçalo 18 SA (formerly Enel Green Power Ventos de Santa Ângela 13 SA)	Teresina	BR	120,981,744.40	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Enel Green Power São Gonçalo 19 SA	Teresina	BR	122,467,788.77	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%
Enel Green Power São Gonçalo 21 SA (formerly Enel Green Power Projetos 16)	Teresina	BR	89,994,200.26	BRL		Line-by-line	Alba Energia Ltda Enel Brasil SA	0.00% 100.00%	82.27%
Enel Green Power São Gonçalo 22 SA (formerly Enel Green Power Projetos 30)	Teresina	BR	89,787,960.25	BRL		Line-by-line	Alba Energia Ltda Enel Brasil SA	0.00% 100.00%	82.27%
Enel Green Power São Gonçalo 3 SA (formerly Enel Green Power Projetos 12)	Teresina	BR	75,324,686.12	BRL		Line-by-line	Alba Energia Ltda Enel Brasil SA	0.00% 100.00%	82.27%
Enel Green Power São Gonçalo 4 SA (formerly Enel Green Power Projetos 13)	Teresina	BR	82,925,257.61	BRL		Line-by-line	Alba Energia Ltda Enel Brasil SA	0.00% 100.00%	82.27%
Enel Green Power São Gonçalo 5 SA (formerly Enel Green Power Projetos 14)	Teresina	BR	82,230,525.15	BRL		Line-by-line	Alba Energia Ltda Enel Brasil SA	0.00% 100.00%	82.27%
Enel Green Power São Gonçalo 6 SA (formerly Enel Green Power Projetos 19 SA)	Teresina	BR	183,602,691.38	BRL		Line-by-line	Alba Energia Ltda Enel Brasil SA Enel Green Power Brasil Participações Ltda	0.00% 100.00% 0.00%	82.27%
Enel Green Power São Judas Eólica SA	Niterói	BR	82,674,900.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	98.26% 1.74%	82.27%
Enel Green Power São Micael 01 SA (formerly Enel Green Power São Gonçalo 9 SA)	Teresina	BR	1,000.00	BRL		Line-by-line	Alba Energia Ltda Enel Brasil SA	0.10% 99.90%	82.27%
Enel Green Power São Micael 02 SA (formerly Enel Green Power São Gonçalo 13)	Teresina	BR	1,000.00	BRL		Line-by-line	Alba Energia Ltda Enel Brasil SA	0.10% 99.90%	82.27%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Green Power São Micael 03 SA (formerly Enel Green Power São Gonçalo 16 SA)	Teresina	BR	1,000.00	BRL		Line-by-line	Alba Energia Ltda Enel Brasil SA	0.10% 99.90%	82.27%
Enel Green Power São Micael 04 SA (formerly Enel Green Power São Gonçalo 20 SA)	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	99.90% 0.10%	82.27%
Enel Green Power São Micael 05 SA	Teresina	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	99.90% 0.10%	82.27%
Enel Green Power Services LLC	Wilmington	US	100.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Enel Green Power SHU SAE in liquidation	Cairo	EG	15,000,000.00	EGP		Line-by-line	Enel Green Power Egypt SAE	100.00%	100.00%
Enel Green Power Singapore Pte Ltd	Singapore	SG	8,000,000.00	SGD		Line-by-line	Enel Green Power SpA	100.00%	100.00%
Enel Green Power Solar Energy Srl	Rome	IT	10,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Enel Green Power Solar Metehara SpA	Rome	IT	50,000.00	EUR		Line-by-line	Enel Green Power SpA	100.00%	100.00%
Enel Green Power Solar Ngonye SpA (formerly Enel Green Power Africa Srl)	Rome	IT	50,000.00	EUR		AFS	EGP Matimba NewCo 2 Srl	100.00%	100.00%
Enel Green Power South Africa (Pty) Ltd	Johannesburg	ZA	1,000.00	ZAR		Line-by-line	Enel Green Power SpA	100.00%	100.00%
Enel Green Power South Africa 3 (Pty) Ltd	Gauteng	ZA	1,000.00	ZAR		Line-by-line	Enel Green Power SpA	100.00%	100.00%
Enel Green Power Stampede Solar Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Enel Green Power Swift Wind LP	Calgary	CA	1,000.00	CAD		Line-by-line	Enel Alberta Wind Inc. Enel Green Power Canada Inc.	0.10% 99.90%	100.00%
Enel Green Power Tacaicó Eólica SA	Rio de Janeiro	BR	50,034,360.00	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	97.87% 2.13%	82.27%
Enel Green Power Tefnut SAE in liquidation	Cairo	EG	15,000,000.00	EGP		Line-by-line	Enel Green Power Egypt SAE	100.00%	100.00%
Enel Green Power Turkey Enerjí Yatirimlari Anoním Şírketí	Istanbul	TR	37,141,108.00	TRY		Line-by-line	Enel Green Power SpA	100.00%	100.00%
Enel Green Power UB33 GmbH & Co. KG	Berlin	DE	75,000.00	EUR		Line-by-line	Enel Green Power Germany GmbH	100.00%	100.00%
Enel Green Power Ventos de Santa Ângela 1 SA	Teresina	BR	182,273,006.17	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Ângela Energias Renováveis SA	100.00% 0.00%	82.27%
Enel Green Power Ventos de Santa Ângela 10 SA (formerly Enel Green Power Projetos 21)	Teresina	BR	122,100,849.07	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Ângela Energias Renováveis SA	100.00% 0.00%	82.27%
Enel Green Power Ventos de Santa Ângela 11 SA (formerly Enel Green Power Projetos 23)	Teresina	BR	132,786,606.48	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Ângela Energias Renováveis SA	100.00% 0.00%	82.27%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Green Power Ventos de Santa Ângela 14 SA (formerly Enel Green Power Projetos 24)	Teresina	BR	198,554,956.48	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Ângela Energias Renováveis SA	100.00% 0.00%	82.27%
Enel Green Power Ventos de Santa Ângela 15 SA (formerly Enel Green Power Projetos 25)	Teresina	BR	125,100,849.07	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Ângela Energias Renováveis SA	100.00% 0.00%	82.27%
Enel Green Power Ventos de Santa Ângela 17 SA (formerly Enel Green Power Projetos 26)	Teresina	BR	152,022,288.00	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Ângela Energias Renováveis SA	100.00% 0.00%	82.27%
Enel Green Power Ventos de Santa Ângela 19 SA (formerly Enel Green Power Projetos 27)	Teresina	BR	95,587,248.00	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Ângela Energias Renováveis SA	100.00% 0.00%	82.27%
Enel Green Power Ventos de Santa Ângela 2 SA	Teresina	BR	299,922,006.17	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Ângela Energias Renováveis SA	100.00% 0.00%	82.27%
Enel Green Power Ventos de Santa Ângela 20 SA (formerly Enel Green Power Projetos 28)	Teresina	BR	92,895,408.95	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Ângela Energias Renováveis SA	100.00% 0.00%	82.27%
Enel Green Power Ventos de Santa Ângela 21 SA (formerly Enel Green Power Projetos 29)	Teresina	BR	41,179,409.72	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Ângela Energias Renováveis SA	100.00% 0.00%	82.27%
Enel Green Power Ventos de Santa Ângela 3 SA (formerly Enel Green Power Projetos 4)	Teresina	BR	99,786,606.48	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Ângela Energias Renováveis SA	100.00% 0.00%	82.27%
Enel Green Power Ventos de Santa Ângela 4 SA (formerly Enel Green Power Projetos 6)	Teresina	BR	100,732,205.24	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Ângela Energias Renováveis SA	100.00% 0.00%	82.27%
Enel Green Power Ventos de Santa Ângela 5 SA (formerly Enel Green Power Projetos 7)	Teresina	BR	84,786,606.48	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Ângela Energias Renováveis SA	100.00% 0.00%	82.27%
Enel Green Power Ventos de Santa Ângela 6 SA (formerly Enel Green Power Projetos 8)	Teresina	BR	83,786,606.48	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Ângela Energias Renováveis SA	100.00% 0.00%	82.27%
Enel Green Power Ventos de Santa Ângela 7 SA (formerly Enel Green Power Projetos 9)	Teresina	BR	81,245,805.55	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Esperança Energias Renováveis SA	100.00% 0.00%	82.27%
Enel Green Power Ventos de Santa Ângela 8 SA (formerly Enel Green Power Projetos 18)	Teresina	BR	91,786,606.48	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Ângela Energias Renováveis SA	100.00% 0.00%	82.27%
Enel Green Power Ventos de Santa Ângela 9 SA (formerly Enel Green Power Projetos 20)	Teresina	BR	118,786,606.00	BRL		Line-by-line	Enel Brasil SA Ventos de Santa Ângela Energias Renováveis SA	100.00% 0.00%	82.27%
Enel Green Power Ventos de Santa Ângela ACL 12 (formerly Enel Green Power Projetos 36)	Teresina	BR	94,727,364.09	BRL		Line-by-line	Enel Brasil SA Enel Green Power Desenvolvimento Ltda	100.00% 0.00%	82.27%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Green Power Ventos de Santa Ângela ACL 13 SA (formerly Enel Green Power Projetos 17 SA)	Teresina	BR	77,496,725.02	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de Santa Ângela ACL 16 SA (formerly Enel Green Power Projetos 38 SA)	Teresina	BR	89,917,563.24	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de Santa Ângela ACL 18 SA (formerly Enel Green Power Projetos 47 SA)	Teresina	BR	86,496,703.24	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de Santa Esperança 08 SA (formerly Enel Green Power Projetos 34 SA)	Rio de Janeiro	BR	173,154,500.67	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de Santa Esperança 1 SA (formerly Enel Green Power Fonte dos Ventos 1 SA)	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Ventos de Santa Esperança 13 (formerly Enel Green Power Projetos 33 SA)	Rio de Janeiro	BR	221,832,010.12	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de Santa Esperança 15 SA	Rio de Janeiro	BR	292,888,027.82	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de Santa Esperança 16 SA (formerly Enel Green Power Projetos 35 SA)	Rio de Janeiro	BR	252,240,012.65	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de Santa Esperança 17 SA (formerly Enel Green Power Projetos 31 SA)	Rio de Janeiro	BR	252,240,012.65	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de Santa Esperança 21 SA (formerly Enel Green Power Projetos 37 SA)	Rio de Janeiro	BR	276,814,829.93	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de Santa Esperança 22 SA (formerly Enel Green Power Projetos 39 SA)	Rio de Janeiro	BR	274,625,153.91	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de Santa Esperança 25 SA (formerly Enel Green Power Projetos 40 SA)	Rio de Janeiro	BR	171,324,007.59	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de Santa Esperança 26 SA (formerly Enel Green Power Projetos 41 SA)	Rio de Janeiro	BR	344,251,125.91	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
							Enel Green Power Ventos de Santa Esperança 26 SA (formerly Enel Green Power Projetos 41 SA)	0.00%	

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Green Power Ventos de Santa Esperança 3 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Ventos de Santa Esperança 7 SA (formerly Enel Green Power Lagedo Alto SA)	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Ventos de Santa Esperança Participações SA (formerly Enel Green Power Cumaru 06 SA)	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Ventos de Santo Orestes 1 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Ventos de Santo Orestes 2 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Ventos de São Roque 01 SA	Teresina	BR	383,436,550.79	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de São Roque 02 SA	Teresina	BR	369,758,650.79	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de São Roque 03 SA	Teresina	BR	112,576,700.90	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de São Roque 04 SA	Teresina	BR	379,980,530.79	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de São Roque 05 SA	Teresina	BR	212,501,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de São Roque 06 SA	Teresina	BR	112,501,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Green Power Ventos de São Roque 07 SA	Teresina	BR	112,501,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de São Roque 08 SA	Teresina	BR	337,473,758.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de São Roque 11 SA	Teresina	BR	318,740,450.79	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de São Roque 13 SA	Teresina	BR	112,501,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Green Power Ventos de São Roque 16 SA	Teresina	BR	353,284,550.79	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de São Roque 17 SA	Teresina	BR	298,952,100.79	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de São Roque 18 SA	Teresina	BR	332,473,758.81	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de São Roque 19 SA	Teresina	BR	112,501,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de São Roque 22 SA	Teresina	BR	112,501,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de São Roque 26 SA	Teresina	BR	112,501,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Ventos de São Roque 29 SA	Teresina	BR	112,501,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Verwaltungs GmbH	Berlin	DE	25,000.00	EUR		Line-by-line	Enel Green Power Germany GmbH	100.00%	100.00%
Enel Green Power Vietnam LLC (Công ty TNHH Enel Green Power Việt Nam)	Ho Chi Minh City	VN	2,431,933.00	USD		Line-by-line	Enel Green Power SpA	100.00%	100.00%
Enel Green Power Villoresi Srl	Rome	IT	1,200,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	51.00%	51.00%
Enel Green Power Volta Grande SA (formerly Enel Green Power Projetos I SA)	Niterói	BR	565,756,528.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Zambia Limited	Lusaka	ZM	15,000.00	ZMW		Line-by-line	Enel Green Power Development Srl	1.00%	100.00%
							Enel Green Power South Africa (Pty) Ltd	99.00%	
Enel Green Power Zeus II - Delfina 8 SA	Rio de Janeiro	BR	77,939,980.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Green Power Zeus Sul 1 Ltda	Rio de Janeiro	BR	6,986,993.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Enel Green Power Zeus Sul 2 SA	Rio de Janeiro	BR	1,000.00	BRL		Line-by-line	Enel Brasil SA	99.90%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.10%	
Enel Grids Srl	Rome	IT	10,100,000.00	EUR		Line-by-line	Enel SpA	100.00%	100.00%
Enel Guatemala SA	Guatemala City	GT	67,208,000.00	GTQ		Line-by-line	Enel Américas SA	0.00%	47.18%
							Enel Colombia SA ESP	100.00%	

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Holding Finance Srl	Rome	IT	10,000.00	EUR		Line-by-line	Enel SpA	100.00%	100.00%
Enel Iberia SRLU	Madrid	ES	336,142,500.00	EUR		Line-by-line	Enel SpA	100.00%	100.00%
Enel Innovation Hubs Srl	Rome	IT	1,100,000.00	EUR		Line-by-line	Enel SpA	100.00%	100.00%
Enel Insurance NV	Amsterdam	NL	60,000.00	EUR		Line-by-line	Enel SpA	100.00%	100.00%
Enel Investment Holding BV	Amsterdam	NL	1,000,000.00	EUR		Line-by-line	Enel SpA	100.00%	100.00%
Enel Italia SpA	Rome	IT	100,000,000.00	EUR		Line-by-line	Enel SpA	100.00%	100.00%
Enel Kansas Development Holdings LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Enel Kansas LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Enel Land HoldCo LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Enel Logistics Srl	Rome	IT	1,000,000.00	EUR		Line-by-line	Enel Italia SpA	100.00%	100.00%
Enel Minnesota Holdings LLC	Minneapolis	US	-	USD		Line-by-line	EGP Geronimo Holding Company Inc.	100.00%	100.00%
Enel Nevkan Inc.	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Enel North America Inc.	Andover	US	50.00	USD		Line-by-line	Enel SpA	100.00%	100.00%
Enel Operations Canada Ltd	Alberta	CA	1,000.00	CAD		Line-by-line	Enel Green Power Canada Inc.	100.00%	100.00%
Enel Panamá CAM Srl	Panama City	PA	3,001.00	USD		Line-by-line	Enel Américas SA	0.03%	47.19%
							Enel Colombia SA ESP	99.97%	
Enel Perú SAC	San Miguel	PE	5,361,789,105.00	PEN		Line-by-line	Enel Américas SA	100.00%	82.27%
Enel Produzione SpA	Rome	IT	1,800,000,000.00	EUR		Line-by-line	Enel Italia SpA	100.00%	100.00%
Enel Renovable Srl	Panama City	PA	10,100.00	USD		Line-by-line	Enel Colombia SA ESP	0.99%	47.19%
							Enel Panamá CAM Srl	99.01%	
Enel Rinnovabile SA de Cv	Mexico City	MX	100.00	MXN		Line-by-line	Enel Green Power Global Investment BV	99.00%	100.00%
							Enel Green Power México S de RL de Cv	1.00%	
Enel Roadrunner Solar Project Holdings II LLC	Andover	US	-	USD		Line-by-line	Enel Green Power Roadrunner Solar Project Holdings II LLC	100.00%	100.00%
Enel Roadrunner Solar Project Holdings LLC	Dover	US	100.00	USD		Line-by-line	Enel Green Power Roadrunner Solar Project Holdings LLC	100.00%	100.00%
Enel Romania SA	Buftea	RO	200,000.00	RON		Discontinued operations	Enel SpA	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel Salt Wells LLC	Fallon	US	-	USD		Line-by-line	Enel Geothermal LLC	100.00%	100.00%
Enel Saudi Arabia Limited	Al Khobar	SA	1,000,000.00	SAR		Line-by-line	e-distribuzione SpA	60.00%	60.00%
Enel Servicii Comune SA	Bucharest	RO	33,000,000.00	RON		Discontinued operations	E-Distribuţie Banat SA	50.00%	51.00%
							E-Distribuţie Dobrogea SA	50.00%	
Enel Sole Srl	Rome	IT	4,600,000.00	EUR		Line-by-line	Enel Italia SpA	100.00%	100.00%
Enel Soluções Energéticas Ltda	Rio de Janeiro	BR	42,863,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
							Enel Soluções Energéticas Ltda	0.00%	
Enel Stillwater LLC	Wilmington	US	-	USD		Line-by-line	Enel Geothermal LLC	100.00%	100.00%
Enel Surprise Valley LLC	Wilmington	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Enel Texkan Inc.	Wilmington	US	100.00	USD		Line-by-line	Chi Power Inc.	100.00%	100.00%
Enel Trade Energy Srl	Bucharest	RO	2,437,050.00	RON		Discontinued operations	Enel Romania SA	100.00%	100.00%
Enel Trade Serbia doo Beograd in liquidation	Belgrade	RS	300,000.00	EUR		Line-by-line	Enel Global Trading SpA	100.00%	100.00%
Enel Trading Argentina Srl	Buenos Aires	AR	14,011,100.00	ARS		Line-by-line	Enel Américas SA	55.00%	82.26%
							Enel Argentina SA	45.00%	
Enel Trading Brasil SA	Rio de Janeiro	BR	5,280,312.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Trading North America LLC	Wilmington	US	10,000,000.00	USD		Line-by-line	Enel North America Inc.	100.00%	100.00%
Enel Uruguay SA	Montevideo	UY	20,000.00	UYU		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel Vayu (Project 2) Private Limited	Gurugram	IN	45,000,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
Enel Wind Project (Amberi) Private Limited	New Delhi	IN	5,000,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
Enel X Advisory Services North America Inc.	Boston	US	-	USD		Line-by-line	Enel X Advisory Services Srl	100.00%	100.00%
Enel X Advisory Services Srl	Rome	IT	-	EUR		Line-by-line	Enel X Srl	100.00%	100.00%
Enel X Advisory Services UK Limited	London	GB	502.00	GBP		Line-by-line	Enel X Advisory Services Srl	100.00%	100.00%
Enel X Advisory Services USA LLC	Boston	US	-	USD		Line-by-line	Enel X North America Inc.	100.00%	100.00%
Enel X Arecibo LLC	Boston	US	-	USD		Line-by-line	Enel X Pr Holdings LLC	100.00%	100.00%
Enel X Argentina SAU	Buenos Aires	AR	127,800,000.00	ARS		Line-by-line	Enel X International Srl	100.00%	100.00%
Enel X Asputeck Ave. Project LLC	Boston	US	-	USD		Line-by-line	Enel X Finance Partner LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel X Australia Holding (Pty) Ltd	Melbourne	AU	28,424,578.00	AUD		Line-by-line	Enel X International Srl	100.00%	100.00%
Enel X Australia (Pty) Ltd	Melbourne	AU	7,209,880.00	AUD		Line-by-line	Energy Response Holdings (Pty) Ltd	100.00%	100.00%
Enel X Battery Storage Limited Partnership	Oakville	CA	10,000.00	CAD		Line-by-line	Enel X Canada Holding Inc.	0.01%	100.00%
							Enel X Canada Ltd	99.99%	
Enel X Brasil Gerenciamento de Energia Ltda	Sorocaba	BR	5,538,403.00	BRL		Line-by-line	Enel X Ireland Limited	0.00%	100.00%
							EnerNOC UK II Limited	100.00%	
Enel X Brasil SA	Niterói	BR	471,725,892.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Enel X Canada Holding Inc.	Oakville	CA	1,000.00	CAD		Line-by-line	Enel X Canada Ltd	100.00%	100.00%
Enel X Canada Ltd	Mississauga	CA	1,000.00	CAD		Line-by-line	Enel North America Inc.	100.00%	100.00%
Enel X Chile SpA	Santiago de Chile	CL	3,341,831,929.00	CLP		Line-by-line	Enel Chile SA	100.00%	64.93%
Enel X College Ave. Project LLC	Boston	US	-	USD		Line-by-line	Enel X MA Holdings LLC	100.00%	100.00%
Enel X Colombia SAS ESP	Bogotá	CO	50,368,000.00	COP		Line-by-line	Enel Colombia SA ESP	100.00%	47.18%
Enel X Federal LLC	Boston	US	5,000.00	USD		Line-by-line	Enel X North America Inc.	100.00%	100.00%
Enel X Finance Partner LLC	Boston	US	100.00	USD		Line-by-line	Enel X North America Inc.	100.00%	100.00%
Enel X Financial Services Srl	Rome	IT	1,000,000.00	EUR		Equity	Mooney Group SpA	100.00%	50.00%
Enel X Germany GmbH	Berlin	DE	25,000.00	EUR		Line-by-line	Enel X International Srl	100.00%	100.00%
Enel X Hayden Rowe St. Project LLC	Boston	US	100.00	USD		Line-by-line	Enel X MA Holdings LLC	100.00%	100.00%
Enel X International Srl	Rome	IT	100,000.00	EUR		Line-by-line	Enel X Srl	100.00%	100.00%
Enel X Ireland Limited	Dublin	IE	10,841.00	EUR		Line-by-line	Enel X International Srl	100.00%	100.00%
Enel X Italia Srl	Rome	IT	200,000.00	EUR		Line-by-line	Enel Italia SpA	100.00%	100.00%
Enel X Japan KK	Tokyo	JP	1,030,000,000.00	JPY		Line-by-line	Enel X International Srl	100.00%	100.00%
Enel X KOMIPO Solar Limited	Seoul	KR	8,472,600,000.00	KRW		Line-by-line	Enel X Korea Limited	80.00%	80.00%
Enel X Korea Limited	Seoul	KR	11,800,000,000.00	KRW		Line-by-line	Enel X International Srl	100.00%	100.00%
Enel X Las Piedras LLC	Boston	US	-	USD		Line-by-line	Enel X Pr Holdings LLC	100.00%	100.00%
Enel X MA Holdings LLC	Boston	US	100.00	USD		Line-by-line	Enel X Finance Partner LLC	100.00%	100.00%
Enel X MA PV Portfolio 1 LLC	Boston	US	-	USD		Line-by-line	Enel X MA Holdings LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel X MA PV Portfolio 2 LLC	Boston	US	-	USD		Line-by-line	Enel X Project MP Holdings LLC	100.00%	100.00%
Enel X MA PV Portfolio 3 LLC	Boston	US	-	USD		Line-by-line	Enel X Finance Partner LLC	100.00%	100.00%
Enel X México S de RL de Cv	Mexico City	MX	39,921,546.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	0.00%	100.00%
							Enel X International Srl	100.00%	
Enel X Mobility Srl	Rome	IT	100,000.00	EUR		Line-by-line	Enel Italia SpA	100.00%	100.00%
Enel X Morrissey Blvd. Project LLC	Boston	US	100.00	USD		Line-by-line	Enel X MA Holdings LLC	100.00%	100.00%
Enel X New Zealand Limited	Wellington	NZ	313,606.00	AUD		Line-by-line	Energy Response Holdings (Pty) Ltd	100.00%	100.00%
Enel X North America Inc.	Boston	US	1,000.00	USD		Line-by-line	Enel North America Inc.	100.00%	100.00%
Enel X Norway AS	Porsgrunn	NO	11,000,000.00	NOK		Line-by-line	Enel X Way Srl	100.00%	100.00%
Enel X Perú SAC	San Miguel	PE	12,005,000.00	PEN		Line-by-line	Enel Perú SAC	100.00%	82.27%
Enel X Polska Sp. zo.o.	Warsaw	PL	12,275,150.00	PLN		Line-by-line	Enel X Ireland Limited	100.00%	100.00%
Enel X Pr Holdings LLC	Boston	US	-	USD		Line-by-line	Enel X Finance Partner LLC	100.00%	100.00%
Enel X Project MP Holdings LLC	Boston	US	-	USD		Line-by-line	Enel X Project MP Sponsor LLC	100.00%	100.00%
Enel X Project MP Sponsor LLC	Boston	US	-	USD		Line-by-line	Enel X North America Inc.	100.00%	100.00%
Enel X Romania Srl	Bucharest	RO	7,044,450.00	RON		Discontinued operations	Enel X International Srl	99.97%	100.00%
							Enel X Srl	0.03%	
Enel X Rus LLC	Moscow	RU	8,000,000.00	RUB		Line-by-line	Enel X International Srl	99.00%	99.00%
Enel X Srl	Rome	IT	1,050,000.00	EUR		Line-by-line	Enel SpA	100.00%	100.00%
Enel X Services India Private Limited	Mumbai City	IN	45,000.00	INR		Line-by-line	Enel X International Srl	100.00%	100.00%
							Enel X North America Inc.	0.00%	
Enel X Singapore Pte Ltd	Singapore	SG	1,212,000.00	SGD		Line-by-line	Enel X International Srl	100.00%	100.00%
Enel X Taiwan Co. Ltd	Taipei City	TW	76,100,000.00	TWD		Line-by-line	Enel X Ireland Limited	100.00%	100.00%
Enel X UK Limited	London	GB	32,628.00	GBP		Line-by-line	Enel X International Srl	100.00%	100.00%
Enel X Way (Shanghai) Co. Ltd	Shanghai	CN	3,500,000.00	USD		Line-by-line	Enel X Way Srl	100.00%	100.00%
Enel X Way Brasil SA	Rio de Janeiro	BR	3,045,337.00	BRL		Line-by-line	Enel Brasil SA	20.00%	96.45%
							Enel X Way Srl	80.00%	
Enel X Way Canada Holding Ltd	Vancouver	CA	-	CAD		Line-by-line	Enel X Way Srl	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Enel X Way Chile SpA	Santiago de Chile	CL	11,229,030,071.00	CLP		Line-by-line	Enel Chile SA Enel X Way Srl	49.00% 51.00%	82.81%
Enel X Way France SAS	Paris	FR	2,901,000.00	EUR		Line-by-line	Enel X Way Srl	100.00%	100.00%
Enel X Way Germany GmbH	Berlin	DE	25,000.00	EUR		Line-by-line	Enel X Way Srl	100.00%	100.00%
Enel X Way Italia Srl	Rome	IT	5,000,000.00	EUR		Line-by-line	Enel X Way Srl	100.00%	100.00%
Enel X Way North America Inc.	San Carlos	US	0.10	USD		Line-by-line	Enel X Way Srl	100.00%	100.00%
Enel X Way Perú SAC	Lima	PE	1,561,900.00	PEN		Line-by-line	Enel Perú SAC Enel X Way Srl	20.00% 80.00%	96.45%
Enel X Way Romania Srl	Bucharest	RO	12,778,740.00	RON		Discontinued operations	Enel X Way Srl	100.00%	100.00%
Enel X Way Srl	Rome	IT	6,026,000.00	EUR		Line-by-line	Enel SpA	100.00%	100.00%
Enel X Way Sweden AB	Stockholm	SE	50,000.00	SEK		Line-by-line	Enel X Way Srl	100.00%	100.00%
Enel X Way UK Limited	London	GB	1.00	GBP		Line-by-line	Enel X Way Srl	100.00%	100.00%
Enel X Way USA LLC	San Carlos	US	-	USD		Line-by-line	Enel X Way North America Inc.	100.00%	100.00%
Enel X Wood St. Project LLC	Boston	US	-	USD		Line-by-line	Enel X Finance Partner LLC	100.00%	100.00%
Enel X Woodland Solar Project LLC	Boston	US	-	USD		Line-by-line	Enel X Finance Partner LLC	100.00%	100.00%
Enelpower Contractor and Development Saudi Arabia Ltd	Riyadh	SA	5,000,000.00	SAR		Line-by-line	EnelPower Srl	51.00%	51.00%
Enelpower do Brasil Ltda	Rio de Janeiro	BR	5,689,000.00	BRL		Line-by-line	Enel Brasil SA Energía y Servicios South America SpA	100.00% 0.00%	82.27%
EnelPower Srl	Milan	IT	2,000,000.00	EUR		Line-by-line	Enel SpA	100.00%	100.00%
Energética Monzón SAC	San Miguel	PE	6,463,000.00	PEN		Line-by-line	Enel Green Power Perú SAC Energía y Servicios South America SpA	100.00% 0.00%	82.27%
Energía Base Natural SLU	Valencia	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Energía Ceuta XXI Comercializadora de Referencia SAU	Ceuta	ES	65,000.00	EUR		Line-by-line	Empresa de Alumbrado Eléctrico de Ceuta SA	100.00%	67.61%
Energía Eólica Ábrego SLU	Madrid	ES	3,576.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Energía Eólica Galerna SLU	Madrid	ES	3,413.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Energía Eólica Gregal SLU	Madrid	ES	3,250.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Energía Global de México (Enermex) SA de Cv	Mexico City	MX	50,000.00	MXN		Line-by-line	Enel Green Power SpA	99.00%	99.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Energía Global Operaciones Srl	San José	CR	10,000.00	CRC		Line-by-line	Enel Costa Rica CAM SA	100.00%	47.18%
Energía Limpia de Amistad SA de Cv	Mexico City	MX	33,452,769.00	MXN		Equity	Tenedora de Energía Renovable Sol y Viento SAPI de Cv	60.80%	20.00%
Energía Limpia de Palo Alto SA de Cv	Mexico City	MX	673,583,489.00	MXN		Equity	Tenedora de Energía Renovable Sol y Viento SAPI de Cv	60.80%	20.00%
Energía Limpia de Puerto Libertad S de RL de Cv	Mexico City	MX	2,953,980.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	0.01%	100.00%
							Enel Rinnovabile SA de Cv	99.99%	
Energía Marina SpA	Santiago de Chile	CL	2,404,240,000.00	CLP		Equity	Enel Green Power Chile SA	25.00%	16.23%
Energía Neta Sa Caseta Llucmajor SLU	Palma de Mallorca	ES	9,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Energía XXI Comercializadora de Referencia SLU	Madrid	ES	2,000,000.00	EUR		Line-by-line	Endesa Energía SAU	100.00%	70.12%
Energía y Naturaleza SLU	Valencia	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Energía y Servicios South America SpA	Santiago de Chile	CL	12,120,575.70	USD		Line-by-line	Enel Américas SA	100.00%	82.27%
Energías Alternativas del Sur SL	Las Palmas de Gran Canaria	ES	546,919.10	EUR		Line-by-line	Enel Green Power España SLU	54.95%	38.53%
Energías de Aragón I SLU	Zaragoza	ES	3,200,000.00	EUR		Line-by-line	Endesa Red SAU	100.00%	70.12%
Energías de Graus SL	Barcelona	ES	1,298,160.00	EUR		Line-by-line	Enel Green Power España SLU	66.67%	46.75%
Energías Especiales de Careón SA	Santiago de Compostela	ES	270,450.00	EUR		Line-by-line	Enel Green Power España SLU	97.00%	68.01%
Energías Especiales de Peña Armada SAU	Madrid	ES	963,300.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Energías Especiales del Alto Ulla SAU	Madrid	ES	9,210,840.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Energías Especiales del Bierzo SA	Torre del Bierzo	ES	1,635,000.00	EUR		Equity	Enel Green Power España SLU	50.00%	35.06%
Energías Limpias de Carmona SL	Seville	ES	7,000.00	EUR		Equity	Envatios Promoción I SLU	6.25%	13.15%
							Envatios Promoción II SLU	6.25%	
							Envatios Promoción III SLU	6.25%	
Energías Renovables La Mata SA de Cv	Mexico City	MX	656,615,400.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	99.00%	100.00%
							Enel Rinnovabile SA de Cv	1.00%	
Energie Electrique de Tahaddart SA	Tangier	MA	306,160,000.00	MAD		Equity	Endesa Generación SAU	32.00%	22.44%
Energo Sonne Srl	Bucharest	RO	31,520.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%
Energotel AS	Bratislava	SK	2,191,200.00	EUR		-	Slovenské elektrárne AS	20.00%	6.60%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
ENergy Hydro Piave Srl in liquidation	Belluno	IT	800,000.00	EUR		Line-by-line	Enel Produzione SpA	100.00%	100.00%
Energy Podium Private Company	Katerini Pieria	GR	4,001.00	EUR		Discontinued operations	Enel Green Power Hellas SA	0.02%	0.02%
Energy Response Holdings (Pty) Ltd	Melbourne	AU	35,128,517.00	AUD		Line-by-line	Enel X Australia Holding (Pty) Ltd	100.00%	100.00%
EnerNOC GmbH	Munich	DE	25,000.00	EUR		Line-by-line	Enel X North America Inc.	100.00%	100.00%
EnerNOC Ireland Limited	Dublin	IE	10,589.00	EUR		Line-by-line	Enel X Ireland Limited	100.00%	100.00%
EnerNOC UK II Limited	London	GB	21,000.00	GBP		Line-by-line	Enel X UK Limited	100.00%	100.00%
Enigma Green Power 1 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Shark Power SLU	100.00%	70.12%
Entech (China) Information Technology Co. Ltd	Shenzhen	CN	140,000.00	USD		Equity	EnerNOC UK II Limited	50.00%	50.00%
Entech Utility Service Bureau Inc.	Lutherville	US	1,500.00	USD		Line-by-line	Enel X North America Inc.	100.00%	100.00%
Envatios Promoción I SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Envatios Promoción II SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Envatios Promoción III SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Envatios Promoción XX SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Eólica Valle del Ebro SA	Zaragoza	ES	3,561,342.50	EUR		Line-by-line	Enel Green Power España SLU	50.50%	35.41%
Eólica Zopiloapan SA de Cv	Mexico City	MX	1,877,201.54	MXN		Line-by-line	Enel Green Power México S de RL de Cv Enel Green Power Partecipazioni Speciali Srl	56.98% 39.50%	96.48%
Eólicas de Agaete SL	Las Palmas de Gran Canaria	ES	240,400.00	EUR		Line-by-line	Enel Green Power España SLU	80.00%	56.09%
Eólicas de Fuencaliente SA	Las Palmas de Gran Canaria	ES	216,360.00	EUR		Line-by-line	Enel Green Power España SLU	55.00%	38.56%
Eólicas de Fuerteventura AIE	Puerto del Rosario	ES	-	EUR		Equity	Enel Green Power España SLU	40.00%	28.05%
Eólicas de la Patagonia SA	Buenos Aires	AR	480,930.00	ARS		Equity	Enel Green Power España SLU	50.00%	35.06%
Eólicas de Lanzarote SL	Las Palmas de Gran Canaria	ES	1,758,000.00	EUR		Equity	Enel Green Power España SLU	40.00%	28.05%
Eólicas de Tenerife AIE	Santa Cruz de Tenerife	ES	420,708.40	EUR		Equity	Enel Green Power España SLU	50.00%	35.06%
Eólicos de Tirajana SL	Las Palmas de Gran Canaria	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	60.00%	42.07%
Epresa Energía SA	Cadiz	ES	2,500,000.00	EUR		Equity	Endesa Red SAU	50.00%	35.06%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Ermis 2 Energeiaki Private Company	Grevena	GR	1,002.00	EUR		Discontinued operations	Enel Green Power Hellas SA	0.10%	0.10%
E-Solar 2 Srl	Rome	IT	2,500.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
E-Solar Srl	Rome	IT	2,500.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Essaouira Wind Farm	Casablanca	MA	300,000.00	MAD		Equity	Nareva Enel Green Power Morocco SA	70.00%	35.00%
European Energy Exchange AG	Leipzig	DE	40,050,000.00	EUR		-	Enel Global Trading SpA	2.38%	2.38%
Evacuación Carmona 400-220 kV Renovables SL	Seville	ES	10,003.00	EUR		Equity	Envatios Promoción I SLU	3.13%	6.58%
							Envatios Promoción II SLU	3.13%	
							Envatios Promoción III SLU	3.13%	
Evolution Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Ewiva Srl	Milan	IT	1,000,000.00	EUR		Equity	Enel X Way Srl	50.00%	50.00%
Expedition Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Explorer Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Explorer Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Explotaciones Eólicas de Escucha SA	Zaragoza	ES	3,505,000.00	EUR		Line-by-line	Enel Green Power España SLU	70.00%	49.08%
Explotaciones Eólicas El Puerto SA	Zaragoza	ES	3,230,000.00	EUR		Line-by-line	Enel Green Power España SLU	73.60%	51.61%
Explotaciones Eólicas Santo Domingo de Luna SA	Zaragoza	ES	100,000.00	EUR		Line-by-line	Enel Green Power España SLU	51.00%	35.76%
Explotaciones Eólicas Saso Plano SA	Zaragoza	ES	5,488,500.00	EUR		Line-by-line	Enel Green Power España SLU	65.00%	45.58%
Explotaciones Eólicas Sierra Costera SA	Zaragoza	ES	8,046,800.00	EUR		Line-by-line	Enel Green Power España SLU	90.00%	63.11%
Explotaciones Eólicas Sierra La Virgen SA	Zaragoza	ES	4,200,000.00	EUR		Line-by-line	Enel Green Power España SLU	90.00%	63.11%
Farrier Station Energy Storage Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Fayette Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Fazenda Aroeira Empreendimento de Energia Ltda	Rio de Janeiro	BR	2,362,045.90	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Fence Post Solar Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Green Power Fence Post Solar Holdings LLC	100.00%	100.00%
Fence Post Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas Development Holdings LLC	100.00%	100.00%
Fenner Wind Holdings LLC	Dover	US	100.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Field Day Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Finocchiara Solar Srl	Rome	IT	10,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Finsec Lab Ltd	Tel Aviv	IL	100.00	ILS		Equity	Enel X Srl	30.00%	30.00%
Flagpay Srl	Milan	IT	10,000.00	EUR		Equity	PayTipper SpA	100.00%	50.00%
Flat Rock Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Flat Rocks Girgarre Cohuna Finco (Pty) Ltd	Sydney	AU	120.00	AUD		AFS	Cohuna Solar Farm Trust	33.33%	100.00%
							Flat Rocks One Wind Farm Trust	33.33%	
							Girgarre Solar Farm Trust	33.33%	
Flat Rocks One Wind Farm (Pty) Ltd	Sydney	AU	100.00	AUD		AFS	Enel Green Power Flat Rocks One Holding (Pty) Ltd	100.00%	100.00%
Flat Rocks One Wind Farm Trust	Sydney	AU	100.00	AUD		AFS	Enel Green Power Flat Rocks One Holding Trust	100.00%	100.00%
Flat Top Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Flint Rock Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Florence Hills LLC	Minneapolis	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	51.00%	51.00%
Flowing Spring Farms LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Fontibón ZE SAS	Bogotá	CO	392,420,000.00	COP		AFS	Bogotá ZE SAS	100.00%	47.18%
Fótons de Santo Anchieta Energias Renováveis SA	Rio de Janeiro	BR	577,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Fotovoltaica Yunclillos SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Fourmile Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Fox Run Energy Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Franklintown Farm LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Freedom Energy Storage LLC	Andover	US	-	USD		Line-by-line	Enel Energy Storage Holdings LLC (formerly EGP Energy Storage Holdings LLC)	100.00%	100.00%
Front Marítim del Besòs SL	Barcelona	ES	9,000.00	EUR		Equity	Endesa Generación SAU	61.37%	43.03%
Frontiersman Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
FRV Corchitos I SLU	Madrid	ES	75,800.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
FRV Corchitos II Solar SLU	Madrid	ES	22,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
FRV Gibalbín - Jerez SLU	Madrid	ES	23,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
FRV Tarifa SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
FRV Villalobillos SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
FRV Zamora Solar 1 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
FRV Zamora Solar 3 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
FRWF Stage 1 (Pty) Ltd	Sydney	AU	100.00	AUD		Line-by-line	Enel Green Power Australia (Pty) Ltd	100.00%	100.00%
Fundamental Recognized Systems SLU	Andorra	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Furatena Solar 1 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Ganado Solar Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Green Power Ganado Solar Holdings LLC	100.00%	100.00%
Ganado Solar LLC	Andover	US	-	USD		Line-by-line	Ganado Solar Holdings LLC	100.00%	100.00%
Ganado Storage LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Garob Wind Farm (RF) (Pty) Ltd	Johannesburg	ZA	100.00	ZAR		Equity	Enel Green Power RSA 2 (RF) (Pty) Ltd	55.00%	27.50%
Gas y Electricidad Generación SAU	Palma de Mallorca	ES	213,775,700.00	EUR		Line-by-line	Endesa Generación SAU	100.00%	70.12%
Gauley Hydro LLC	Wilmington	US	-	USD		Equity	GRPP Holdings LC	100.00%	50.00%
Gauley River Management LLC	Willison	US	1.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Generadora de Occidente Ltda	Guatemala City	GT	16,262,000.00	GTQ		Line-by-line	Enel Colombia SA ESP	99.00%	47.18%
							Enel Guatemala SA	1.00%	
Generadora Eólica Alto Pacora Srl	Panama City	PA	10,100.00	USD		Line-by-line	Enel Colombia SA ESP	0.99%	47.19%
							Enel Panamá CAM Srl	99.01%	
Generadora Montecristo SA	Guatemala City	GT	3,820,000.00	GTQ		Line-by-line	Enel Colombia SA ESP	100.00%	47.18%
							Enel Guatemala SA	0.00%	
Generadora Solar Austral SA	Chiriquí	PA	10,000.00	USD		Line-by-line	Enel Panamá CAM Srl	100.00%	47.19%
Generadora Solar de Occidente SA	Panama City	PA	10,000.00	USD		Line-by-line	Enel Panamá CAM Srl	100.00%	47.19%
Generadora Solar El Puerto SA	Chiriquí	PA	10,000.00	USD		Line-by-line	Enel Panamá CAM Srl	100.00%	47.19%
Generadora Solar Tolé Srl	Panama City	PA	10,100.00	USD		Line-by-line	Enel Colombia SA ESP	0.99%	47.19%
							Enel Panamá CAM Srl	99.01%	

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Geotérmica del Norte SA	Santiago de Chile	CL	326,577,419,702.00	CLP		Line-by-line	Enel Green Power Chile SA	84.59%	54.92%
Gibson Bay Wind Farm (RF) (Pty) Ltd	Johannesburg	ZA	1,000.00	ZAR		Line-by-line	Enel Green Power South Africa (Pty) Ltd	60.00%	60.00%
Girgarre Solar Farm (Pty) Ltd	Sydney	AU	-	AUD		AFS	Enel Green Power Girgarre Holdings (Pty) Ltd	100.00%	100.00%
Girgarre Solar Farm Trust	Sydney	AU	10.00	AUD		AFS	Enel Green Power Girgarre Trust	100.00%	100.00%
Glass Top Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Global Commodities Holdings Limited	London	GB	4,042,375.00	GBP		-	Enel Global Trading SpA	4.68%	4.68%
Globyte SA	San José	CR	900,000.00	CRC		-	Enel Costa Rica CAM SA	10.00%	4.72%
Gloucester Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
GNL Chile SA	Santiago de Chile	CL	3,026,160.00	USD		Equity	Enel Generación Chile SA	33.33%	20.25%
Goodwell Wind Project LLC	Wilmington	US	-	USD		Equity	Origin Goodwell Holdings LLC	100.00%	10.00%
Gooseneck Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Gorona del Viento El Hierro SA	Santa Cruz de Tenerife	ES	30,936,736.00	EUR		Equity	Unión Eléctrica de Canarias Generación SAU	23.21%	16.28%
Grand Prairie Solar Project LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Gridspertise Iberia SL	Madrid	ES	3,000.00	EUR		Equity	Gridspertise Srl	100.00%	50.00%
Gridspertise India Private Limited	Gurugram	IN	100,000.00	INR		Equity	Gridspertise Srl	100.00%	50.00%
Gridspertise Latam SA	São Paulo	BR	2,010,000.00	BRL		Equity	Enel Brasil SA Gridspertise Srl	0.00% 100.00%	50.00%
Gridspertise Srl	Rome	IT	7,500,000.00	EUR		Equity	Enel Grids Srl	50.00%	50.00%
Gridspertise LLC	Dover	US	160,000.00	USD		Equity	Gridspertise Srl	100.00%	50.00%
GRPP Holdings LLC	Andover	US	2.00	USD		Equity	EGPNA REP Holdings LLC	50.00%	50.00%
Guadarranque Solar 4 SLU	Seville	ES	3,006.00	EUR		Line-by-line	Endesa Generación II SAU	100.00%	70.12%
Guayepo Solar SAS	Bogotá	CO	1,000,000.00	COP		Line-by-line	Enel Colombia SA ESP	100.00%	47.18%
Guir Wind Farm	Casablanca	MA	10,000.00	MAD		Line-by-line	Enel Green Power Morocco SARLAU Mrs Riveros Perez Paula Cristina	99.00% 1.00%	99.00%
GulfStar Power LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Gusty Hill Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
GV Energie Rigenerabili ITAL-RO Srl	Bucharest	RO	1,145,400.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%
							Enel Green Power SpA	0.00%	
Hadley Ridge LLC	Minneapolis	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	51.00%	51.00%
Hamilton County Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Hansborough Valley Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Harmony Plains Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Hastings Solar LLC	Wilmington	US	-	USD		Line-by-line	Aurora Distributed Solar LLC	100.00%	74.13%
Heartland Farms Wind Project LLC	Wilmington	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Hidroeléctrica de Catalunya SLU	Barcelona	ES	126,210.00	EUR		Line-by-line	Endesa Red SAU	100.00%	70.12%
Hidroeléctrica de Ourol SL	Lugo	ES	1,608,200.00	EUR		Equity	Enel Green Power España SLU	30.00%	21.04%
Hidroelectricidad del Pacífico S de RL de Cv	Colima	MX	30,890,736.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	99.99%	99.99%
Hidroflamicell SL	Barcelona	ES	78,120.00	EUR		Line-by-line	Hidroeléctrica de Catalunya SLU	75.00%	52.59%
Hidroinvest SA	Buenos Aires	AR	55,312,093.00	ARS		Line-by-line	Enel Américas SA	41.94%	79.55%
							Enel Argentina SA	54.76%	
HIF H2 SpA	Santiago de Chile	CL	6,303,000.00	USD		Equity	Enel Green Power Chile SA	50.00%	32.46%
High Chaparral Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
High Lonesome Storage LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
High Lonesome Wind Holdings LLC	Wilmington	US	100.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
High Lonesome Wind Power LLC	Boston	US	100.00	USD		Line-by-line	High Lonesome Wind Holdings LLC	100.00%	100.00%
High Noon Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
High Street Corporation (Pty) Ltd	Melbourne	AU	2.00	AUD		Line-by-line	Enel Green Power Australia (Pty) Ltd	100.00%	100.00%
Hilltopper Wind Holdings LLC	Wilmington	US	1,000.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Hispano Generación de Energía Solar SL	Jerez de los Caballeros	ES	3,500.00	EUR		Line-by-line	Enel Green Power España SLU	51.00%	35.76%
Honey Stone Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Honeybee Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Hope Creek LLC	Crestview	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	51.00%	51.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Hope Ridge Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Horse Run Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Horse Wrangler Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Hubject eRoaming Technology (Shanghai) Co. Ltd	Shangai	CN	12,668,015.70	CNY		-	Hubject GmbH	100.00%	12.50%
Hubject GmbH	Berlin	DE	65,943.00	EUR		-	Enel X Way Srl	12.50%	12.50%
Hubject Inc.	Santa Monica	US	100,000.00	USD		-	Hubject GmbH	100.00%	12.50%
ICE Tudela SL	Pozuelo de Alarcón	ES	3,000.00	EUR		-	Enel Green Power España SLU	5.12%	3.59%
Idalia Park Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Idrosicilia SpA	Milan	IT	22,520,000.00	EUR		Equity	Enel SpA	1.00%	1.00%
IFX Networks Argentina Srl	Buenos Aires	AR	2,260,551.00	ARS		-	IFX/Eni - SPC V Inc.	99.85%	19.50%
							Minority Stock Holding Corp.	0.15%	
IFX Networks Colombia SAS	Bogotá	CO	18,951,211,000.00	COP		-	IFX Networks Panama SA	48.43%	19.50%
							IFX/Eni - SPC III Inc.	34.60%	
							Livister Latam SLU	16.97%	
IFX Networks LLC	Wilmington	US	80,848,653.00	USD		-	Ufinet Latam SLU	100.00%	19.50%
IFX Networks Ltd	Tortola	VG	50,001.00	USD		-	IFX Networks LLC	100.00%	19.50%
IFX Networks Panama SA	Panama City	PA	26,460.00	USD		-	IFX/Eni - SPC Panama Inc.	79.37%	19.50%
							Livister Latam SLU	20.63%	
IFX/Eni - SPC III Inc.	Tortola	VG	100.00	USD		-	IFX Networks Ltd	100.00%	19.50%
IFX/Eni - SPC IV Inc.	Tortola	VG	100.00	USD		-	IFX Networks Ltd	100.00%	19.50%
IFX/Eni - SPC Panama Inc.	Tortola	VG	100.00	USD		-	IFX Networks Ltd	100.00%	19.50%
IFX/Eni - SPC V Inc.	Tortola	VG	100.00	USD		-	IFX Networks Ltd	100.00%	19.50%
IIK Energía de Dzemul SA de Cv	Mexico City	MX	6,479,172.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	0.00%	100.00%
							Enel Rinnovabile SA de Cv	100.00%	
IIK Energía de Telchac SA de Cv	Mexico City	MX	-	MXN		Line-by-line	Enel Green Power México S de RL de Cv	0.00%	100.00%
							Enel Rinnovabile SA de Cv	100.00%	
Infraestructura de Evacuación Peñaflor 220 kV SL	Madrid	ES	3,500.00	EUR		Equity	Enel Green Power España SLU	41.14%	28.85%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Infraestructuras Puerto Santa María 220 SL	Madrid	ES	3,000.00	EUR		Line-by-line	Puerto Santa María Energía I SLU	50.00%	70.12%
							Puerto Santa María Energía II SLU	50.00%	
Infraestructuras San Serván 220 SL	Madrid	ES	12,000.00	EUR		Equity	Enel Green Power España SLU	30.80%	21.60%
Infraestructuras San Serván Set 400 SL	Madrid	ES	90,000.00	EUR		Equity	Aranort Desarrollos SLU	6.41%	13.48%
							Baylio Solar SLU	6.41%	
							Furatena Solar 1 SLU	6.41%	
Inkolan Información y Coordinación de Obras AIE	Bilbao	ES	84,141.68	EUR		-	Edistribución Redes Digitales SLU	14.29%	10.02%
Inspectores y Consultores Ibercal SLU	Vizcaya	ES	3,100.00	EUR		Equity	Tecnatom SA	100.00%	31.56%
Instalaciones San Serván II 400 SL	Madrid	ES	11,026.00	EUR		Equity	Aranort Desarrollos SLU	7.94%	16.69%
							Baylio Solar SLU	7.94%	
							Furatena Solar 1 SLU	7.94%	
International Multimedia University Srl in bankruptcy	-	IT	24,000.00	EUR		-	Enel Italia SpA	13.04%	13.04%
Inversora Dock Sud SA	Buenos Aires	AR	828,941,660.00	ARS		AFS	Enel Américas SA	57.14%	47.01%
Ipsomata DPGU Private Company	Heraklion, Crete	GR	5,000.00	EUR		Discontinued operations	Enel Green Power Hellas SA	0.02%	0.02%
Iris Bloom Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Iron Belt Energy Storage Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Iron Bull Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Isamu Ikeda Energia SA	Niterói	BR	16,474,475.77	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Italgest Energy (Pty) Ltd	Johannesburg	ZA	1,000.00	ZAR		Line-by-line	Enel Green Power South Africa (Pty) Ltd	100.00%	100.00%
Jack River LLC	Minneapolis	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	51.00%	51.00%
Jade Energia Ltda	Rio de Janeiro	BR	4,107,097.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Jaguito Solar 10 MW SA	Panama City	PA	10,000.00	USD		Line-by-line	Enel Panamá CAM Srl	100.00%	47.19%
Jessica Mills LLC	Minneapolis	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	51.00%	51.00%
Julia Hills LLC	Minneapolis	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	51.00%	51.00%
Junia Insurance Srl	Mosciano Sant'Angelo (TE)	IT	100.00	EUR		Equity	Mooney Group SpA	100.00%	50.00%
Juniper Canyon Energy Storage Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Keeneys Creek Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Ken Renewables India Private Limited	Gurugram	IN	12,100,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
Khaba Renewable Energy Private Limited	Gurugram	IN	18,100,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
Khidrat Renewable Energy Private Limited	Gurugram	IN	78,100,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
King Branch Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Kingston Energy Storage LLC	Wilmington	US	-	USD		Line-by-line	Enel Energy Storage Holdings LLC (formerly EGP Energy Storage Holdings LLC)	100.00%	100.00%
Kino Contractor SA de Cv	Mexico City	MX	100.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	99.00%	100.00%
							Enel Rinnovabile SA de Cv	1.00%	
Kino Facilities Manager SA de Cv	Mexico City	MX	2,933,340.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	100.00%	100.00%
							Enel Rinnovabile SA de Cv	0.00%	
Kokkinari DPGU Private Company	Heraklion, Crete	GR	15,000.00	EUR		Discontinued operations	Enel Green Power Hellas SA	0.01%	0.01%
Kongul Enerjí Sanayí Ve Tícaret Anoním Şírketí	Istanbul	TR	14,537,500.00	TRY		Line-by-line	Enel Green Power Turkey Enerjí Yatirimlari Anoním Şírketí	100.00%	100.00%
Koporie WPS LLC	Leningrad Region	RU	21,000,000.00	RUB		Line-by-line	Enel Green Power Rus Limited Liability Company	100.00%	100.00%
Korea Line Corporation	Seoul	KR	122,132,520,000.00	KRW		-	Enel Global Trading SpA	0.25%	0.25%
Koukos Energy Private Company	Athens	GR	4,002.00	EUR		Discontinued operations	Enel Green Power Hellas SA	0.05%	0.05%
Kromschroeder SA	Barcelona	ES	627,126.00	EUR		Equity	Endesa Medios y Sistemas SLU	29.26%	20.52%
Lake Emily Solar LLC	Wilmington	US	-	USD		Line-by-line	Aurora Distributed Solar LLC	100.00%	74.13%
Lake Pulaski Solar LLC	Wilmington	US	-	USD		Line-by-line	Aurora Distributed Solar LLC	100.00%	74.13%
Land Run Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Land Run Wind Project LLC	Dover	US	100.00	USD		Line-by-line	Sundance Wind Project LLC	100.00%	100.00%
Lantern Trail Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Latamsolar Energías Renovables SAS	Bogotá	CO	8,000,000.00	COP		Line-by-line	Enel Colombia SA ESP	100.00%	47.18%
Latamsolar Fotovoltaica Fundación SAS	Bogotá	CO	8,000,000.00	COP		Line-by-line	Enel Colombia SA ESP	100.00%	47.18%
Lathrop Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Lava Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Lawrence Creek Solar LLC	Minneapolis	US	-	USD		Line-by-line	Aurora Distributed Solar LLC	100.00%	74.13%
Lebanon Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Legacy Blossom Storage Project Limited Partnership	Calgary	CA	-	CAD		Line-by-line	Enel Alberta Storage Inc. Enel Green Power Canada Inc.	0.10% 99.90%	100.00%
Lemonade Solar Project LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Liberty Energy Storage LLC	Andover	US	-	USD		Line-by-line	Enel Energy Storage Holdings LLC (formerly EGP Energy Storage Holdings LLC)	100.00%	100.00%
Libyan Italian Joint Company - Azienda Libico-Italiana (A.L.I.)	Tripoli	LY	1,350,000.00	EUR		-	EnelPower Srl	0.33%	0.33%
Light Cirrus Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Lily Solar Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Green Power Lily Solar Holdings LLC	100.00%	100.00%
Lily Solar LLC	Andover	US	-	USD		Line-by-line	Enel Kansas Development Holdings LLC	100.00%	100.00%
Lindahl Wind Holdings LLC	Wilmington	US	-	USD		Line-by-line	EGPNA Preferred Wind Holdings LLC	100.00%	100.00%
Lindahl Wind Project LLC	Wilmington	US	-	USD		Line-by-line	Lindahl Wind Holdings LLC	100.00%	100.00%
Little Elk Wind Holdings LLC	Wilmington	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Little Elk Wind Project LLC	Wilmington	US	-	USD		Line-by-line	Little Elk Wind Holdings LLC	100.00%	100.00%
Little Salt Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Litus Energy Storage LLC	Andover	US	-	USD		Line-by-line	Enel Energy Storage Holdings LLC (formerly EGP Energy Storage Holdings LLC)	100.00%	100.00%
Livister Chile SpA	Santiago de Chile	CL	11,843,107,407.00	CLP		-	Livister Latam SLU	100.00%	19.50%
Livister Latam SLU	Madrid	ES	2,442,066.00	EUR		-	Ufinet Latam SLU	100.00%	19.50%
Llano Sánchez Solar Power One Srl	Panama City	PA	10,020.00	USD		Line-by-line	Enel Colombia SA ESP Enel Panamá CAM Srl	0.20% 99.80%	47.19%
Lone Pine Wind Inc.	Alberta	CA	-	CAD		-	Enel Green Power Canada Inc.	10.00%	10.00%
Lone Pine Wind Project LP	Alberta	CA	-	CAD		Equity	Enel Green Power Canada Inc.	10.00%	10.00%
Lucas Sostenible SL	Madrid	ES	1,099,775.00	EUR		Equity	Enel Green Power España SLU	35.29%	24.74%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Luminary Highlands Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Luz de Angra Energia SA	Rio de Janeiro	BR	4,062,085.00	BRL		Line-by-line	Enel X Brasil SA	51.00%	41.96%
Luz de Caruaru Energia SA	Rio de Janeiro	BR	21,027,600.00	BRL		Line-by-line	Enel X Brasil SA	51.00%	41.96%
Luz de Jaboatão Energia SA	Rio de Janeiro	BR	21,114,200.00	BRL		Line-by-line	Enel X Brasil SA	51.00%	41.96%
Luz de Macapá Energia SA	Rio de Janeiro	BR	24,338,000.00	BRL		Line-by-line	Enel X Brasil SA	51.00%	41.96%
Maicor Wind Srl	Rome	IT	20,850,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Malaspina Energy Scarl in liquidation	Bergamo	IT	100,000.00	EUR		Line-by-line	Enel X Italia Srl	100.00%	100.00%
Mansar Renewable Energy Private Limited	Gurgaon	IN	100,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
Maple Canada Solutions Holdings Ltd	-	CA	-	CAD		Equity	Enel X Canada Ltd	20.00%	20.00%
Maple Energy Solutions LP	-	CA	-	CAD		Equity	Enel X Canada Holding Inc.	20.00%	20.00%
Maple Run Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Marte Srl	Rome	IT	6,100,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Marudhar Wind Energy Private Limited	Gurugram	IN	100,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
Más Energía S de RL de Cv	Mexico City	MX	61,872,926.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv Hidroelectricidad del Pacífico S de RL de Cv	99.99% 0.01%	100.00%
Mason Mountain Wind Project LLC	Wilmington	US	-	USD		Line-by-line	Padoma Wind Power LLC	100.00%	100.00%
Matrigenix (Pty) Ltd	Johannesburg	ZA	1,000.00	ZAR		Line-by-line	Enel Green Power South Africa (Pty) Ltd	100.00%	100.00%
Maty Energia Srl	Rome	IT	10,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
MC Solar I LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
McBride Wind Project LLC	Wilmington	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Medidas Ambientales SL	Burgos	ES	60,100.00	EUR		-	Tecnatom SA	50.00%	15.78%
Merit Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Metro Wind LLC	Minneapolis	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	51.00%	51.00%
Mexicana de Hidroelectricidad Mexhidro S de RL de Cv	Mexico City	MX	181,728,901.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	99.99%	99.99%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Mibgas SA	Madrid	ES	3,000,000.00	EUR		-	Endesa SA	1.35%	0.95%
Midelt Wind Farm SA	Casablanca	MA	145,000,000.00	MAD		Equity	Nareva Enel Green Power Morocco SA	70.00%	35.00%
Minglanilla Renovables 400 kV AIE	Valencia	ES	-	EUR		Proportional	Energía Base Natural SLU	4.79%	25.36%
							Energía Eólica Ábrego SLU	7.98%	
							Energía Eólica Galerna SLU	9.31%	
							Energía Eólica Gregal SLU	9.31%	
							Energía y Naturaleza SLU	4.79%	
Minicentrales Acequia Cinco Villas AIE	Ejea de los Caballeros	ES	3,346,993.04	EUR		-	Enel Green Power España SLU	5.39%	3.78%
Minicentrales del Canal de las Bárdenas AIE	Zaragoza	ES	1,202,000.00	EUR		-	Enel Green Power España SLU	15.00%	10.52%
Minicentrales del Canal Imperial-Gallur SL	Zaragoza	ES	1,820,000.00	EUR		Equity	Enel Green Power España SLU	36.50%	25.59%
Minority Stock Holding Corp.	Tortola	VG	100.00	USD		-	IFX Networks Ltd	100.00%	19.50%
Mira Energy (Pty) Ltd	Johannesburg	ZA	100.00	ZAR		Line-by-line	Enel Green Power South Africa (Pty) Ltd	100.00%	100.00%
Miranda Plataforma Logística SA	Burgos	ES	1,800,000.00	EUR		-	Nuclenor SA	0.22%	0.08%
MO Land Holdings 1358 LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Moebius Tecnologia em Informatica SA	Rio de Janeiro	BR	150,000.00	BRL		-	Ufinet Brasil Telecomunicação Ltda	100.00%	19.50%
Monte Reina Renovables SL	Madrid	ES	4,000.00	EUR		Equity	FRV Zamora Solar 1 SLU	20.58%	14.43%
Montrose Solar LLC	Wilmington	US	-	USD		Line-by-line	Aurora Distributed Solar LLC	100.00%	74.13%
Moonbeam Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Mooney Group SpA	Milan	IT	10,050,000.00	EUR		Equity	Enel X Srl	50.00%	50.00%
Mooney SpA	Milan	IT	87,833,331.00	EUR		Equity	Mooney Group SpA	100.00%	50.00%
Mooney Servizi SpA	Milan	IT	8,549,999.00	EUR		Equity	Mooney Group SpA	100.00%	50.00%
Morgan Branch Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Mount Pleasant Energy Storage 1 LLC	Boston	US	-	USD		Line-by-line	Enel X North America Inc.	100.00%	100.00%
Mountrail Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
MPG Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Mucho Viento Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Mule Bit Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Muskegon County Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Muskegon Green Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Mustang Run Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Nabb Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Napolean Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Nareva Enel Green Power Morocco SA	Casablanca	MA	98,750,000.00	MAD		Equity	Enel Green Power Morocco SARLAU	50.00%	50.00%
Negocios y Telefonía NEDETEL SA	Guayaquil	EC	4,773,525.00	USD		-	Ufinet Latam SLU	70.00%	13.65%
Net Botanic Internet Inteligente SA	Rio de Janeiro	BR	450,000.00	BRL		-	Ufinet Brasil Telecomunicação Ltda	100.00%	19.50%
Netra Renewable Energy Private Limited	Gurgaon	IN	100,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
Nevkan Renewables LLC	Wilmington	US	-	USD		Line-by-line	Enel Nevkan Inc.	100.00%	100.00%
New York Distributed Storage Projects LLC	Boston	US	-	USD		Line-by-line	Enel X North America Inc.	100.00%	100.00%
Ngonye Power Company Limited	Lusaka	ZM	10.00	ZMW		AFS	Enel Green Power Solar Ngonye SpA (formerly Enel Green Power Africa Srl)	80.00%	80.00%
Nojoli Wind Farm (RF) (Pty) Ltd	Johannesburg	ZA	10,000,000.00	ZAR		Line-by-line	Enel Green Power South Africa (Pty) Ltd	60.00%	60.00%
North English Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
North Rock Wind LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Northland Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Northstar Wind Project LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Northumberland Solar Project I LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Northwest Hydro LLC	Wilmington	US	-	USD		Line-by-line	Chi West LLC	100.00%	100.00%
Novolitio Recuperación de Baterías SL	Ponferrada	ES	180,000.00	EUR		Equity	Endesa Generación SAU	45.00%	31.55%
Nuclenor SA	Burgos	ES	102,000,000.00	EUR		Equity	Endesa Generación SAU	50.00%	35.06%
Nuove Energie Srl	Porto Empedocle	IT	5,204,028.73	EUR		Line-by-line	Enel Global Trading SpA	100.00%	100.00%
Nxuba Wind Farm (RF) (Pty) Ltd	Johannesburg	ZA	1,000.00	ZAR		Equity	Enel Green Power RSA 2 (RF) (Pty) Ltd	51.00%	25.50%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
NYC Storage (353 Chester) SPE LLC	Wilmington	US	1.00	USD		Line-by-line	Enel X North America Inc.	100.00%	100.00%
Ochrana A Bezpecnost Se SRO	Kalná Nad Hronom	SK	33,193.92	EUR		Equity	Slovenské elektrárne AS	100.00%	33.00%
Olathe Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Olivum PV Farm 01 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
OMIP - Operador do Mercado Ibérico (Portugal) SGPS SA	Lisbon	PT	2,610,000.00	EUR		-	Endesa Generación Portugal SA	5.00%	3.51%
Open Range Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Operador del Mercado Ibérico de Energía - Polo Español SA	Madrid	ES	1,999,998.00	EUR		-	Endesa SA	5.00%	3.51%
Oravita Power Park Srl	Bucharest	RO	2,000.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%
Orchid Acres Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Origin Goodwell Holdings LLC	Wilmington	US	-	USD		Equity	EGPNA Wind Holdings 1 LLC	100.00%	10.00%
Origin Wind Energy LLC	Wilmington	US	-	USD		Equity	Origin Goodwell Holdings LLC	100.00%	10.00%
Osage Wind Holdings LLC	Wilmington	US	100.00	USD		Line-by-line	Enel Kansas LLC	50.00%	50.00%
Osage Wind LLC	Wilmington	US	-	USD		Line-by-line	Osage Wind Holdings LLC	100.00%	50.00%
Ossining Energy Storage 1 LLC	Boston	US	-	USD		Line-by-line	Enel X North America Inc.	100.00%	100.00%
Ovacik Eolíko Enerjí Elektrík Üretím Ve Tícaret Anoním Şírketí	Istanbul	TR	2,925,900.00	TRY		Line-by-line	Enel Green Power Turkey Enerjí Yatirimlari Anoním Şírketí	100.00%	100.00%
Oxagesa AIE in liquidation	Alcañiz	ES	6,010.00	EUR		Equity	Enel Green Power España SLU	33.33%	23.37%
Oyster Bay Wind Farm (RF) (Pty) Ltd	Johannesburg	ZA	1,000.00	ZAR		Equity	Enel Green Power RSA 2 (RF) (Pty) Ltd	55.00%	27.50%
Padoma Wind Power LLC	Elida	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Painted Rose Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Palo Alto Farms Wind Project LLC	Dallas	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Pampinus PV Farm 01 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Paradise Creek Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Paravento SL	Lugo	ES	3,006.00	EUR		Line-by-line	Enel Green Power España SLU	90.00%	63.11%
Parc Eòlic La Tossa-La Mola d'en Pascual SL	Madrid	ES	1,183,100.00	EUR		Equity	Enel Green Power España SLU	30.00%	21.04%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Parc Eòlic Los Aligars SL	Madrid	ES	1,313,100.00	EUR		Equity	Enel Green Power España SLU	30.00%	21.04%
Parco Eolico Monti Sicani Srl	Rome	IT	10,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Parque Amistad II SA de Cv	Mexico City	MX	1,413,533,480.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	0.50%	100.00%
							Enel Rinnovabile SA de Cv	99.50%	
Parque Amistad III SA de Cv	Mexico City	MX	931,692,540.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	0.50%	100.00%
							Enel Rinnovabile SA de Cv	99.50%	
Parque Amistad IV SA de Cv	Mexico City	MX	1,489,508,400.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	0.50%	100.00%
							Enel Rinnovabile SA de Cv	99.50%	
Parque Eólico A Capelada SLU	A Coruña	ES	5,857,704.33	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Parque Eólico Belmonte SA	Madrid	ES	120,400.00	EUR		Line-by-line	Enel Green Power España SLU	50.17%	35.18%
Parque Eólico BR-1 SAPI de Cv	Mexico City	MX	-	MXN		Line-by-line	Enel Green Power México S de RL de Cv	0.50%	25.50%
							Enel Rinnovabile SA de Cv	25.00%	
Parque Eólico Carretera de Arinaga SA	Las Palmas de Gran Canaria	ES	1,603,000.00	EUR		Line-by-line	Enel Green Power España SLU	80.00%	56.09%
Parque Eólico de Barbanza SA	A Coruña	ES	3,606,072.60	EUR		Line-by-line	Enel Green Power España SLU	75.00%	52.59%
							Parque Eólico de Barbanza SA	0.00%	
Parque Eólico de San Andrés SA	A Coruña	ES	552,920.00	EUR		Line-by-line	Enel Green Power España SLU	82.00%	57.50%
Parque Eólico de Santa Lucía SA	Las Palmas de Gran Canaria	ES	901,500.00	EUR		Line-by-line	Enel Green Power España SLU	65.67%	46.51%
							Parque Eólico de Santa Lucía SA	1.00%	
Parque Eólico Finca de Mogán SA	Santa Cruz de Tenerife	ES	3,810,340.00	EUR		Line-by-line	Enel Green Power España SLU	90.00%	63.11%
Parque Eólico Montes de las Navas SA	Madrid	ES	6,540,000.00	EUR		Line-by-line	Enel Green Power España SLU	75.50%	52.94%
Parque Eólico Muniesa SLU	Madrid	ES	3,006.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Parque Eólico Palmas dos Ventos Ltda	Salvador	BR	4,096,626.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
							Enel Green Power Desenvolvimento Ltda	0.00%	
Parque Eólico Pampa SA	Buenos Aires	AR	477,139,364.00	ARS		Line-by-line	Enel Green Power SpA	100.00%	100.00%
Parque Eólico Punta de Teno SA	Santa Cruz de Tenerife	ES	528,880.00	EUR		Line-by-line	Enel Green Power España SLU	52.00%	36.46%
Parque Eólico Sierra del Madero SA	Madrid	ES	7,193,970.00	EUR		Line-by-line	Enel Green Power España SLU	58.00%	40.67%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Parque Salitrillos SA de Cv	Mexico City	MX	100.00	MXN		Equity	Tenedora de Energía Renovable Sol y Viento SAPI de Cv	60.80%	20.00%
Parque Solar Cauchari IV SA	San Salvador de Jujuy	AR	500,000.00	ARS		Line-by-line	Enel Green Power Argentina SA	95.00%	82.27%
							Energía y Servicios South America SpA	5.00%	
Parque Solar Don José SA de Cv	Mexico City	MX	100.00	MXN		Equity	Tenedora de Energía Renovable Sol y Viento SAPI de Cv	60.80%	20.00%
Parque Solar Villanueva Tres SA de Cv	Mexico City	MX	306,024,631.13	MXN		Equity	Tenedora de Energía Renovable Sol y Viento SAPI de Cv	60.80%	20.00%
Parque Talinay Oriente SA	Santiago de Chile	CL	66,092,165,170.93	CLP		Line-by-line	Enel Green Power Chile SA	60.91%	78.64%
							Enel Green Power SpA	39.09%	
Pastis - Centro Nazionale per la ricerca e lo sviluppo dei materiali SCPA in liquidation	Brindisi	IT	2,065,000.00	EUR		-	Enel Italia SpA	1.14%	1.14%
Paynesville Solar LLC	Wilmington	US	-	USD		Line-by-line	Aurora Distributed Solar LLC	100.00%	74.13%
PayTipper Network Srl	Cascina	IT	40,000.00	EUR		Equity	PayTipper SpA	100.00%	50.00%
PayTipper SpA	Milan	IT	3,000,000.00	EUR		Equity	Mooney Group SpA	100.00%	50.00%
PDP Technologies Ltd	Israel	IL	1,129,252.00	ILS		-	Enel Grids Srl	5.72%	5.72%
Pearl Star Wind Limited Partnership	Calgary	CA	100.00	CAD		Line-by-line	Enel Alberta Wind Inc.	0.10%	100.00%
							Enel Green Power Canada Inc.	99.90%	
Pebble Stream Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Pegop - Energia Eléctrica SA	Pego	PT	50,000.00	EUR		Equity	Endesa Generación Portugal SA	0.02%	35.06%
							Endesa Generación SAU	49.98%	
PH Chucas SA	San José	CR	100,000.00	CRC		Line-by-line	Enel Colombia SA ESP	24.69%	30.67%
							Enel Costa Rica CAM SA	40.31%	
PH Don Pedro SA	San José	CR	100,001.00	CRC		Line-by-line	Enel Costa Rica CAM SA	33.44%	18.92%
							Globyte SA	66.54%	
PH Río Volcán SA	San José	CR	100,001.00	CRC		Line-by-line	Enel Costa Rica CAM SA	34.32%	19.29%
							Globyte SA	65.66%	
Piebald Hill Energy Storage Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Pike Den Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Pilesgrove Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Pincher Creek LP	Alberta	CA	-	CAD		Line-by-line	Enel Alberta Wind Inc.	51.00%	51.00%
							Enel Green Power Canada Inc.	1.00%	
Pine Island Distributed Solar LLC	Wilmington	US	-	USD		Line-by-line	Aurora Distributed Solar LLC	100.00%	74.13%
Point Rider Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Pomerado Energy Storage LLC	Wilmington	US	1.00	USD		Line-by-line	Enel Energy Storage Holdings LLC (formerly EGP Energy Storage Holdings LLC)	100.00%	100.00%
Potoc Power Park Srl	Bucharest	RO	2,000.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%
PowerCrop Macchiareddu Srl	Bologna	IT	100,000.00	EUR		Equity	PowerCrop SpA (formerly PowerCrop Srl)	100.00%	50.00%
PowerCrop Russi Srl	Bologna	IT	100,000.00	EUR		Equity	PowerCrop SpA (formerly PowerCrop Srl)	100.00%	50.00%
PowerCrop SpA (formerly PowerCrop Srl)	Bologna	IT	4,000,000.00	EUR		Equity	Enel Green Power Italia Srl	50.00%	50.00%
Prairie Rose Transmission LLC	Minneapolis	US	-	USD		Equity	Prairie Rose Wind LLC	100.00%	10.00%
Prairie Rose Wind LLC	Albany	US	-	USD		Equity	EGPNA REP Wind Holdings LLC	100.00%	10.00%
Primavera Energia SA	Niterói	BR	36,965,444.64	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Productive Solar Systems SLU	Andorra	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Productora de Energías SA	Barcelona	ES	60,101.22	EUR		Equity	Enel Green Power España SLU	30.00%	21.04%
Productora Eléctrica Urgellenca SA	Lérida	ES	8,400,000.00	EUR		-	Endesa SA	8.43%	5.91%
Progreso Solar 20 MW SA	Panama City	PA	10,000.00	USD		Line-by-line	Enel Panamá CAM Srl	100.00%	47.19%
Promociones Energéticas del Bierzo SLU	Madrid	ES	12,020.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Promotores Mudéjar 400 kV SL	Zaragoza	ES	3,000.00	EUR		Equity	Enel Green Power España SLU	24.75%	26.08%
							Renovables La Pedrera SLU	6.75%	
							Renovables Mediavilla SLU	5.69%	
Proveedora de Electricidad de Occidente S de RL de Cv	Mexico City	MX	89,708,835.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	99.99%	99.99%
Prowind Windfarm Bogdanesti Srl	Bucharest	RO	118,460,800.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%
Prowind Windfarm Deleni Srl	Bucharest	RO	202,009,300.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%
Prowind Windfarm Ivesti Srl	Bucharest	RO	720,455,300.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Prowind Windfarm Viisoara Srl	Bucharest	RO	142,540,400.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%
Proyectos Universitarios de Energías Renovables SL	Alicante	ES	27,000.00	EUR		Equity	Enel Green Power España SLU	33.33%	23.37%
Proyectos y Soluciones Renovables SAC	San Miguel	PE	1,000.00	PEN		Line-by-line	Enel Green Power Partecipazioni Speciali Srl	99.90%	99.98%
							Energía y Servicios South America SpA	0.10%	
PSG Energy Private Limited	Hyderabad	IN	100,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
PT Enel Green Power Optima Way Ratai	Jakarta	ID	10,002,740.00	USD		Line-by-line	Enel Green Power SpA	90.00%	90.00%
Puerto Santa María Energía I SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Puerto Santa María Energía II SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Pulida Energy (RF) (Pty) Ltd	Johannesburg	ZA	10,000,000.00	ZAR		Line-by-line	Enel Green Power South Africa (Pty) Ltd	52.70%	52.70%
Pumpkin Vine Wind Project LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Quatiara Energia SA	Niterói	BR	13,766,118.96	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Queens Energy Storage LLC	Andover	US	-	USD		Line-by-line	Enel Energy Storage Holdings LLC (formerly EGP Energy Storage Holdings LLC)	100.00%	100.00%
Raleigh Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Ranchland Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Ranchland Wind Holdings LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Ranchland Wind Project II LLC	Andover	US	1.00	USD		Line-by-line	AzureRanchII Wind Holdings LLC	100.00%	100.00%
Ranchland Wind Project LLC	Andover	US	-	USD		Line-by-line	Rockhaven Ranchland Holdings LLC	100.00%	100.00%
Ranchland Wind Storage LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Rattlesnake Creek Holdings LLC	Delaware	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Rausch Creek Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
RC Wind Srl	Milan	IT	10,000.00	EUR		-	Enel Green Power Italia Srl	0.50%	0.50%
RE Arroyo LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Reaktortest SRO	Trnava	SK	66,389.00	EUR		-	Slovenské elektrárne AS	49.00%	16.17%
Rebuilding Agente Rehabilitador SL	Madrid	ES	250,000.00	EUR		Equity	Endesa X Servicios SLU	50.00%	35.06%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Red Cardinal Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Red Centroamericana de Telecomunicaciones SA	Panama City	PA	2,700,000.00	USD		-	Enel SpA	11.11%	11.11%
Red Dirt Wind Holdings I LLC	Dover	US	100.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Red Dirt Wind Holdings LLC	Wilmington	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Red Dirt Wind Project LLC	Dover	US	1.00	USD		Line-by-line	Red Dirt Wind Holdings LLC	100.00%	100.00%
Red Fox Wind Project LLC	Wilmington	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Red Stag Energy Storage Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Red Top Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Redes y Telecomunicaciones S de RL de Cv	San Pedro Sula	HN	82,395,000.00	HNL		-	Livister Latam SLU	95.00%	18.53%
Regal Rising Solar Project Limited Partnership	Calgary	CA	-	CAD		Line-by-line	Enel Alberta Solar Inc.	0.10%	100.00%
							Enel Green Power Canada Inc.	99.90%	
Ren Wave Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Renovables Andorra SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Renovables Brovales 400 kV SL	Seville	ES	5,000.00	EUR		Equity	Baylio Solar SLU	6.24%	44.98%
							Dehesa de los Guadalupes Solar SLU	6.24%	
							Emintegral Cycle SLU	16.99%	
							Enel Green Power España SLU	22.20%	
							Furatena Solar 1 SLU	6.24%	
							Seguidores Solares Planta 2 SLU	6.24%	
Renovables de Guatemala SA	Guatemala City	GT	1,924,465,600.00	GTQ		Line-by-line	Enel Colombia SA ESP	100.00%	47.18%
							Enel Guatemala SA	0.00%	
Renovables La Pedrera SLU	Zaragoza	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Renovables Manzanares 400 kV SL	Madrid	ES	5,000.00	EUR		Equity	Enel Green Power España SLU	27.86%	30.84%
							Stonewood Desarrollos SLU	16.12%	
Renovables Mediavilla SLU	Zaragoza	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Renovables Teruel SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Ribina Renovables 400 SL	Pozuelo de Alarcón	ES	3,000.00	EUR		Equity	Enel Green Power España SLU	39.24%	27.51%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Riverbend Farms Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Riverview LP	Alberta	CA	-	CAD		Line-by-line	Enel Alberta Wind Inc. Enel Green Power Canada Inc.	51.00% 1.00%	51.00%
Riverview Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Roadrunner Solar Project LLC	Andover	US	100.00	USD		Line-by-line	Enel Roadrunner Solar Project Holdings LLC	100.00%	100.00%
Roadrunner Storage LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Rochelle Solar LLC	Coral Springs	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Rock Creek Wind Holdings I LLC	Dover	US	100.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Rock Creek Wind Holdings II LLC	Dover	US	100.00	USD		Line-by-line	Rock Creek Wind Holdings LLC	100.00%	100.00%
Rock Creek Wind Holdings LLC	Wilmington	US	-	USD		Line-by-line	EGPNA Preferred Wind Holdings II LLC	100.00%	100.00%
Rock Creek Wind Project LLC	Clayton	US	1.00	USD		Line-by-line	Rock Creek Wind Holdings LLC	100.00%	100.00%
Rock Prairie Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Rockhaven Ranchland Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Rockhaven Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Rockhaven Ranchland Holdings LLC	100.00%	100.00%
Rocky Caney Holdings LLC	Oklahoma City	US	1.00	USD		Equity	Enel Kansas LLC	10.00%	10.00%
Rocky Caney Wind LLC	Albany	US	-	USD		Equity	Rocky Caney Holdings LLC	100.00%	10.00%
Rocky Ridge Wind Project LLC	Oklahoma City	US	-	USD		Equity	Rocky Caney Wind LLC	100.00%	10.00%
Rodnikovskaya WPS	Moscow	RU	6,010,000.00	RUB		Line-by-line	Enel Green Power Rus Limited Liability Company	100.00%	100.00%
Roha Renewables India Private Limited	Gurugram	IN	100,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
Rolling Farms Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Rosy Range Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Rusenergosbyt LLC	Moscow	RU	18,000,000.00	RUB		Equity	Enel SpA	49.50%	49.50%
Rusenergosbyt Siberia LLC	Krasnoyarsk City	RU	4,600,000.00	RUB		Equity	Rusenergosbyt LLC	50.00%	24.75%
Ruthton Ridge LLC	Minneapolis	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	51.00%	51.00%
S4ma Developments Spółka Z Ograniczoną Odpowiedzialnością	Wrocław	PL	5,000.00	PLN		Line-by-line	Enel Green Power SpA	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Saburoy SA	Montevideo	UY	100,000.00	UYU		-	IFX Networks LLC	100.00%	19.50%
Sacme SA	Buenos Aires	AR	12,000.00	ARS		Equity	Empresa Distribuidora Sur SA - Edesur	50.00%	29.66%
Saddle House Solar Project LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Salt Springs Wind Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Salto de San Rafael SL	Seville	ES	462,185.98	EUR		Equity	Enel Green Power España SLU	50.00%	35.06%
San Francisco de Borja SA	Zaragoza	ES	60,000.00	EUR		Line-by-line	Enel Green Power España SLU	66.67%	46.75%
San Juan Mesa Wind Project II LLC	Wilmington	US	-	USD		Line-by-line	Padoma Wind Power LLC	100.00%	100.00%
Sanosari Energy Private Limited	Gurugram	IN	100,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
Santo Rostro Cogeneración SA in liquidation	Seville	ES	207,340.00	EUR		Equity	Enel Green Power España SLU	45.00%	31.55%
Sardhy Green Hydrogen Srl	Sarroch	IT	10,000.00	EUR		Equity	Enel Green Power Italia Srl	50.00%	50.00%
Saugus River Energy Storage LLC	Dover	US	100.00	USD		Line-by-line	Enel Energy Storage Holdings LLC (formerly EGP Energy Storage Holdings LLC)	100.00%	100.00%
Savanna Power Solar 10 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Savanna Power Solar 12 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Savanna Power Solar 13 SLU	Seville	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Savanna Power Solar 4 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Savanna Power Solar 5 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Savanna Power Solar 6 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Savanna Power Solar 9 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Se Služby Inžinierskych Stavieb SRO	Kalná Nad Hronom	SK	200,000.00	EUR		Equity	Slovenské elektrárne AS	100.00%	33.00%
Seccionadora Almodóvar Renovables SL	Malaga	ES	5,000.00	EUR		Equity	Enel Green Power España SLU	37.50%	26.29%
Seguidores Solares Planta 2 SLU	Madrid	ES	3,010.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Servizio Elettrico Nazionale SpA	Rome	IT	10,000,000.00	EUR		Line-by-line	Enel Italia SpA	100.00%	100.00%
Set Carmona 400 kV Renovables SL	Seville	ES	10,000.00	EUR		Equity	Enel Green Power España SLU	16.00%	11.22%
Setyl Srl	Bergamo	IT	100,000.00	EUR		Equity	Enel X Italia Srl	27.50%	27.50%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Seven Cowboy PPA LLC	Andover	US	1.00	USD		Line-by-line	EGP North America PPA LLC	100.00%	100.00%
Seven Cowboy Wind Project Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Seven Cowboy Wind Project II LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Seven Cowboy Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Seven Cowboy Wind Project Holdings LLC	100.00%	100.00%
Seven Cowboys Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Shark Power REN 10 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Shark Power SLU	100.00%	70.12%
Shark Power REN 4 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Shark Power SLU	100.00%	70.12%
Shark Power REN 5 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Shark Power SLU	100.00%	70.12%
Shark Power REN 6 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Shark Power SLU	100.00%	70.12%
Shark Power REN 7 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Shark Power SLU	100.00%	70.12%
Shark Power REN 8 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Shark Power SLU	100.00%	70.12%
Shark Power REN 9 SLU	Madrid	ES	3,000.00	EUR		Line-by-line	Shark Power SLU	100.00%	70.12%
Shark Power SLU	Seville	ES	143,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Shepherd Pass Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Shiawassee Wind Project LLC	Wilmington	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Shield Energy Storage Project LLC	Wilmington	US	-	USD		Line-by-line	Enel Energy Storage Holdings LLC (formerly EGP Energy Storage Holdings LLC)	100.00%	100.00%
Shikhar Surya (One) Private Limited	Gurugram	IN	340,100,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
SIET - Società Informazioni Esperienze Termoidrauliche SpA	Piacenza	IT	697,820.00	EUR		Equity	Enel Innovation Hubs Srl	41.55%	41.55%
Silt Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Silver Dollar Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Silverware Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Sinergia GP6 Srl	Rome	IT	10,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Sinergia GP7 Srl	Rome	IT	10,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Sistema Eléctrico de Conexión Valcaire SL	Madrid	ES	175,200.00	EUR		Equity	Enel Green Power España SLU	28.13%	19.72%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Sistemas Energéticos Mañón Ortigueira SA	A Coruña	ES	2,007,750.00	EUR		Line-by-line	Enel Green Power España SLU	96.00%	67.31%
Skyview Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Skyview Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
SL Energy SAC	Lima	PE	1,000.00	PEN		Line-by-line	Enel Green Power Perú SAC	99.90%	82.27%
							Enel Perú SAC	0.10%	
Sleep Hollow Solar I LLC	Andover	US	1.00	USD		Line-by-line	Brick Road Solar Holdings LLC	100.00%	100.00%
Slovak Power Holding BV	Amsterdam	NL	25,010,000.00	EUR		Equity	Enel Produzione SpA	50.00%	50.00%
Slovenské elektrárne - Energetické Služby SRO	Bratislava	SK	4,505,000.00	EUR		Equity	Slovenské elektrárne AS	100.00%	33.00%
Slovenské elektrárne AS	Bratislava	SK	1,269,295,724.66	EUR		Equity	Slovak Power Holding BV	66.00%	33.00%
Slovenské elektrárne Česká Republika SRO	Moravská Ostrava	CZ	295,819.00	CZK		Equity	Slovenské elektrárne AS	100.00%	33.00%
Smoky Hill Holdings II LLC	Wilmington	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Smoky Hills Wind Farm LLC	Topeka	US	-	USD		Line-by-line	EGPNA Project HoldCo 1 LLC	100.00%	100.00%
Smoky Hills Wind Project II LLC	Lenexa	US	-	USD		Line-by-line	EGPNA Project HoldCo 1 LLC	100.00%	100.00%
Snowy Knoll Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Snyder Wind Farm LLC	Hermleigh	US	-	USD		Line-by-line	Texkan Wind LLC	100.00%	100.00%
Socibe Energia SA	Niterói	BR	12,969,032.25	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Sociedad Agrícola de Cameros Ltda	Santiago de Chile	CL	5,738,046,495.00	CLP		Line-by-line	Enel Chile SA	57.50%	37.33%
Sociedad Eólica de Andalucía SA	Seville	ES	4,507,590.78	EUR		Line-by-line	Enel Green Power España SLU	64.75%	45.40%
Sociedad Eólica El Puntal SL	Seville	ES	1,643,000.00	EUR		Equity	Enel Green Power España SLU	50.00%	35.06%
Sociedad Eólica Los Lances SA	Seville	ES	2,404,048.42	EUR		Line-by-line	Enel Green Power España SLU	60.00%	42.07%
Sociedad para el Desarrollo de Sierra Morena Cordobesa SA	Cordoba	ES	86,063.20	EUR		-	Endesa Generación SAU	1.82%	1.27%
Sociedad Portuaria Central Cartagena SA	Bogotá	CO	89,714,600.00	COP		Line-by-line	Enel Colombia SA ESP	94.94%	47.17%
							Enel X Colombia SAS ESP	5.05%	
Società Elettrica Trigno Srl	Trivento	IT	100,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Soetwater Wind Farm (RF) (Pty) Ltd	Johannesburg	ZA	1,000.00	ZAR		Equity	Enel Green Power RSA 2 (RF) (Pty) Ltd	55.00%	27.50%
Solana Renovables SL	Madrid	ES	5,000.00	EUR		Equity	Enel Green Power España SLU	49.84%	34.95%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Solas Electricity Srl	Bucharest	RO	17,740,000.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%
Soliloquoy Ridge LLC	Minneapolis	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	51.00%	51.00%
Sona Enerjí Üretím Anoním Şírketí	Istanbul	TR	50,000.00	TRY		Line-by-line	Enel Green Power Turkey Enerjí Yatirimlari Anoním Şírketí	100.00%	100.00%
Sonak Solar Project LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Sotavento Galicia SA	Santiago de Compostela	ES	601,000.00	EUR		Equity	Enel Green Power España SLU	36.00%	25.24%
South Italy Green Hydrogen Srl	Rome	IT	10,000.00	EUR		Equity	Enel Green Power Italia Srl	50.00%	50.00%
South Rock Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
South Wind Energy Srl	Bucharest	RO	2,000.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%
Southwest Transmission LLC	Cedar Bluff	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	100.00%	100.00%
Southwestern Rays Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Spartan Hills LLC	Minneapolis	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	51.00%	51.00%
Spinazzola SPV Srl	Rome	IT	10,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Spring Wheat Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Square Dance Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Sreeja Infrastructure Private Limited	Hyderabad	IN	100,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
Stable Brook Storage Project Limited Partnership	Calgary	CA	-	CAD		Line-by-line	Enel Alberta Storage Inc. Enel Green Power Canada Inc.	0.10% 99.90%	100.00%
Stampede Solar Holdings LLC	Andover	US	1.00	USD		Line-by-line	Enel Green Power Stampede Solar Holdings LLC	100.00%	100.00%
Stampede Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas Development Holdings LLC	100.00%	100.00%
Star Catcher Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Star Energy Single Member P.C.	Maroussi	GR	28,010.00	EUR		Discontinued operations	Enel Green Power Hellas SA	100.00%	100.00%
Station Tales Solar Limited Partnership	Calgary	CA	100.00	CAD		Line-by-line	Enel Alberta Solar Inc. Enel Green Power Canada Inc.	0.10% 99.90%	100.00%
Sterling and Wilson Enel X e-Mobility Private Limited	Mumbai	IN	90,000,000.00	INR		Equity	Enel X Way Srl	50.00%	50.00%
Stillman Valley Solar LLC	Wilmington	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Stillwater Woods Hill Holdings LLC	Wilmington	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Stipa Nayaá SA de Cv	Mexico City	MX	1,811,016,348.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	55.21%	95.37%
							Enel Green Power Partecipazioni Speciali Srl	40.16%	
Stockyard Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Stonewood Desarrollos SLU	Madrid	ES	4,053,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Storey Plains Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Stormy Hills Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Strinestown Solar I LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Suave Energía S de RL de Cv	Mexico City	MX	1,000.00	MXN		Line-by-line	Enel Green Power México S de RL de Cv	0.10%	100.00%
							Enel Rinnovabile SA de Cv	99.90%	
Sublunary Trading (RF) (Pty) Ltd	Bryanston	ZA	13,750,000.00	ZAR		Line-by-line	Enel Green Power South Africa (Pty) Ltd	57.00%	57.00%
Sugar Pine Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Suggestion Power Unipessoal Ltda	Paço de Arcos	PT	50,000.00	EUR		Line-by-line	Endesa Generación Portugal SA	100.00%	70.12%
Suministradora Eléctrica de Cádiz SA	Cadiz	ES	12,020,240.00	EUR		Equity	Endesa Red SAU	33.50%	23.49%
Suministro de Luz y Fuerza SL	Barcelona	ES	2,800,000.00	EUR		Line-by-line	Hidroeléctrica de Catalunya SLU	60.00%	42.07%
Summit Energy Storage Inc.	Wilmington	US	1,000.00	USD		Line-by-line	Enel Green Power North America Inc.	75.00%	75.00%
Sun River LLC	Bend	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	51.00%	51.00%
Sun4 Koryta Spółka Z Ograniczoną Odpowiedzialnością	Wrocław	PL	5,750.00	PLN		Line-by-line	S4ma Developments Spółka Z Ograniczoną Odpowiedzialnością	80.00%	80.00%
Sun4 Torzym Spółka Z Ograniczoną Odpowiedzialnością	Wrocław	PL	5,750.00	PLN		Line-by-line	S4ma Developments Spółka Z Ograniczoną Odpowiedzialnością	80.00%	80.00%
Sundance Wind Project LLC	Dover	US	100.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Sunflower Prairie Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Swather Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Sweet Apple Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
TAE Technologies Inc.	Pauling	US	53,207,936.00	USD		-	Enel Produzione SpA	1.12%	1.12%
							TAE Technologies Inc.	0.00%	
Tasseling Jewel Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Tauste Energía Distribuida SL	Zaragoza	ES	60,508.00	EUR		Line-by-line	Enel Green Power España SLU	51.00%	35.76%
Tecnatom do Brasil Enghenaria e Serviços Ltda	Rio de Janeiro	BR	1,600,000.00	BRL		Equity	Tecnatom SA	90.00%	28.40%
Tecnatom France SAS	Saint Loup de Varennes	FR	1,888,870.38	EUR		Equity	Tecnatom SA	100.00%	31.56%
Tecnatom México SA de Cv	Veracruz	MX	6,000,000.00	MXN		Equity	Inspectores y Consultores Ibercal SLU	0.17%	31.56%
							Tecnatom SA	99.83%	
Tecnatom Servicios Técnicos y Consultoría SLU	Sebastián de los Reyes	ES	3,000.00	EUR		Equity	Tecnatom SA	100.00%	31.56%
Tecnatom UK Ltd	London	GB	1.00	GBP		Equity	Tecnatom SA	100.00%	31.56%
Tecnatom USA Corporation	Wilmington	US	3,000.00	USD		Equity	Tecnatom SA	100.00%	31.56%
Tecnatom SA	Madrid	ES	4,025,700.00	EUR		Equity	Endesa Generación SAU	45.00%	31.56%
Tecnoguat SA	Guatemala City	GT	30,948,000.00	GTQ		Line-by-line	Enel Colombia SA ESP	75.00%	35.38%
Tejo Energia - Produção e Distribuição de Energia Eléctrica SA	Lisbon	PT	5,025,000.00	EUR		Equity	Endesa Generación SAU	43.75%	30.68%
Tenedora de Energía Renovable Sol y Viento SAPI de Cv	Mexico City	MX	2,892,643,576.00	MXN		Equity	Enel Green Power SpA	32.89%	32.90%
Tera Renewables India Private Limited	Gurugram	IN	100,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
Termica Colleferro SpA	Bologna	IT	6,100,000.00	EUR		Equity	Cogenio Srl	60.00%	12.00%
Termoeléctrica José de San Martín SA	Buenos Aires	AR	7,078,298.00	ARS		-	Central Dock Sud SA	0.42%	4.22%
							Enel Generación Costanera SA	1.68%	
							Enel Generación El Chocón SA	5.60%	
Termoeléctrica Manuel Belgrano SA	Buenos Aires	AR	7,078,307.00	ARS		-	Central Dock Sud SA	0.47%	4.71%
							Enel Generación Costanera SA	1.89%	
							Enel Generación El Chocón SA	6.23%	
Termotec Energía AIE in liquidation	La Pobla de Vallbona	ES	481,000.00	EUR		Equity	Enel Green Power España SLU	45.00%	31.55%
Terrer Renovables SL	Madrid	ES	5,000.00	EUR		Equity	Baylio Solar SLU	11.66%	20.73%
							Dehesa de los Guadalupes Solar SLU	8.83%	
							Seguidores Solares Planta 2 SLU	9.08%	

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Texas Sage Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Texkan Wind LLC	Andover	US	-	USD		Line-by-line	Enel Texkan Inc.	100.00%	100.00%
Thar Surya 1 Private Limited	Gurgaon	IN	200,000.00	INR		Equity	Avikiran Surya India Private Limited	100.00%	51.00%
Thunder Ranch Wind Holdings I LLC	Dover	US	100.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Thunder Ranch Wind Holdings LLC	Wilmington	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Thunder Ranch Wind Project LLC	Dover	US	1.00	USD		Line-by-line	Thunder Ranch Wind Holdings LLC	100.00%	100.00%
Thunderegg Storage Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Thunderegg Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Tico Solar 1 SLU	Zaragoza	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Tico Solar 2 SLU	Zaragoza	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Tieton Storage Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Tobivox (RF) (Pty) Ltd	Johannesburg	ZA	10,000,000.00	ZAR		Line-by-line	Enel Green Power South Africa (Pty) Ltd	60.00%	60.00%
Toledo PV AIE	Madrid	ES	26,887.96	EUR		Equity	Enel Green Power España SLU	33.33%	23.37%
Toplet Power Park Srl	Bucharest	RO	2,000.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%
Topwind Energy Srl	Bucharest	RO	2,000.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%
Toro Renovables 400 kV SL	Madrid	ES	3,000.00	EUR		Equity	FRV Zamora Solar 1 SLU	8.28%	5.81%
Torrepalma Energy 1 SLU	Madrid	ES	3,100.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
Tradewind Energy Inc.	Wilmington	US	1,000.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Trading Post Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Trail Ride Canyon Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Transformadora Almodóvar Renovables SL	Seville	ES	5,000.00	EUR		Equity	Enel Green Power España SLU	60.53%	42.44%
Transmisora de Energía Renovable SA	Guatemala City	GT	233,561,800.00	GTQ		Line-by-line	Enel Colombia SA ESP	100.00%	47.18%
							Enel Guatemala SA	0.00%	
							Generadora Montecristo SA	0.00%	
Transportadora de Energía SA - TESA	Buenos Aires	AR	2,584,473,416.00	ARS		Line-by-line	Enel Argentina SA	0.00%	82.27%
							Enel Brasil SA	60.15%	
							Enel CIEN SA	39.85%	

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Transportes y Distribuciones Eléctricas SA in liquidation	Girona	ES	72,121.45	EUR		Line-by-line	Edistribución Redes Digitales SLU	73.33%	51.42%
Trévago Renovables SL	Madrid	ES	3,000.00	EUR		Equity	Furatena Solar 1 SLU	17.73%	24.89%
							Seguidores Solares Planta 2 SLU	17.77%	
Tsar Nicholas LLC	Minneapolis	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	51.00%	51.00%
Tula WPS LLC	Tula	RU	-	RUB		Line-by-line	Enel Green Power Rus Limited Liability Company	100.00%	100.00%
Tulip Grove Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Tumbleweed Flat Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Tunga Renewable Energy Private Limited	Gurugram	IN	96,300,000.00	INR		Line-by-line	Avikiran Energy India Private Limited	100.00%	100.00%
TWE Franklin Solar Project LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
TWE ROT DA LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Twin Lake Hills LLC	Minneapolis	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	51.00%	51.00%
Twin Saranac Holdings LLC	Wilmington	US	-	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Tyme Srl	Bergamo	IT	100,000.00	EUR		Equity	Enel X Italia Srl	50.00%	50.00%
Ufinet Argentina SA	Buenos Aires	AR	9,745,583.00	ARS		-	Ufinet Latam SLU	99.95%	19.50%
							Ufinet Panamá SA	0.05%	
Ufinet Brasil Participações Ltda	Santo André	BR	120,784,639.00	BRL		-	Ufinet Guatemala SA	0.00%	19.50%
							Ufinet Latam SLU	100.00%	
Ufinet Brasil SA	Barueri	BR	51,766,147.00	BRL		-	Ufinet Brasil Telecomunicação Ltda	80.00%	15.60%
Ufinet Brasil Telecomunicação Ltda	Santo André	BR	120,784,638.00	BRL		-	Ufinet Brasil Participações Ltda	100.00%	19.50%
Ufinet Chile SpA	Santiago de Chile	CL	233,750,000.00	CLP		-	Ufinet Latam SLU	100.00%	19.50%
Ufinet Colombia Participaciones SAS	Bogotá	CO	10,001,001,000.00	COP		-	Ufinet Colombia SA	100.00%	17.55%
Ufinet Colombia SA	Bogotá	CO	1,180,000,000.00	COP		-	Ufinet Guatemala SA	0.00%	17.55%
							Ufinet Honduras SA	0.00%	
							Ufinet Latam SLU	90.00%	
							Ufinet Panamá SA	0.00%	
Ufinet Costa Rica SA	San José	CR	25,000.00	USD		-	Ufinet Latam SLU	100.00%	19.50%
Ufinet Ecuador Ufiec SA	Quito	EC	9,865,110.00	USD		-	Ufinet Guatemala SA	0.00%	14.04%
							Ufinet Latam SLU	71.97%	

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Ufinet El Salvador SA de Cv	San Salvador	SV	10,000.00	USD		-	Ufinet Guatemala SA	0.01%	19.50%
							Ufinet Latam SLU	99.99%	
Ufinet FTTH Guatemala Ltda	Guatemala City	GT	7,007,000.00	GTQ		-	Ufinet Latam SLU	51.00%	9.94%
Ufinet Guatemala SA	Guatemala City	GT	3,000,000.00	GTQ		-	Ufinet Latam SLU	99.99%	19.50%
							Ufinet Panamá SA	0.01%	
Ufinet Honduras SA	Tegucigalpa	HN	194,520.00	HNL		-	Ufinet Latam SLU	99.99%	19.50%
							Ufinet Panamá SA	0.01%	
Ufinet Latam SLU	Madrid	ES	15,906,312.00	EUR		-	Zacapa Sàrl	100.00%	19.50%
Ufinet México S de RL de Cv	Mexico City	MX	7,635,430.00	MXN		-	Ufinet Guatemala SA	1.31%	19.50%
							Ufinet Latam SLU	98.69%	
Ufinet Nicaragua SA	Managua	NI	2,800,000.00	NIO		-	Ufinet Guatemala SA	0.50%	19.50%
							Ufinet Latam SLU	99.00%	
							Ufinet Panamá SA	0.50%	
Ufinet Panamá SA	Panama City	PA	1,275,000.00	USD		-	Ufinet Latam SLU	100.00%	19.50%
Ufinet Paraguay SA	Asunción	PY	79,488,240,000.00	PYG		-	Ufinet Latam SLU	75.00%	14.63%
Ufinet Perú SAC	Lima	PE	2,836,474.00	PEN		-	Ufinet Latam SLU	100.00%	19.50%
							Ufinet Panamá SA	0.00%	
Ufinet US LLC	Wilmington	US	1,000.00	USD		-	Ufinet Latam SLU	100.00%	19.50%
Unión Eléctrica de Canarias Generación SAU	Las Palmas de Gran Canaria	ES	190,171,520.00	EUR		Line-by-line	Endesa Generación SAU	100.00%	70.12%
Upington Solar (Pty) Ltd	Johannesburg	ZA	1,000.00	ZAR		Line-by-line	Enel Green Power South Africa (Pty) Ltd	100.00%	100.00%
Usina Eólica Pedra Pintada A Ltda	Rio de Janeiro	BR	653,327.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Usina Eólica Pedra Pintada B Ltda	Rio de Janeiro	BR	748,697.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Usina Eólica Pedra Pintada C Ltda	Rio de Janeiro	BR	805,024.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Usina Eólica Pedra Pintada D Ltda	Rio de Janeiro	BR	653,327.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Usina Fotovoltaica Arinos E 11 Ltda	Rio de Janeiro	BR	221,724,006.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Usina Fotovoltaica Arinos E 12 Ltda	Rio de Janeiro	BR	221,724,006.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Usina Fotovoltaica Arinos E 13 Ltda	Rio de Janeiro	BR	221,724,006.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Usina Fotovoltaica Arinos E 14 Ltda	Rio de Janeiro	BR	221,724,006.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Usina Fotovoltaica Arinos E 15 Ltda	Rio de Janeiro	BR	221,724,006.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Usina Fotovoltaica Arinos E 16 Ltda	Rio de Janeiro	BR	221,724,006.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Usina Fotovoltaica Arinos E 17 Ltda	Rio de Janeiro	BR	221,724,006.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Usina Fotovoltaica Arinos E 21 Ltda	Rio de Janeiro	BR	221,724,006.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Usina Fotovoltaica Arinos E 22 Ltda	Rio de Janeiro	BR	221,724,006.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Usina Fotovoltaica Arinos E 23 Ltda	Rio de Janeiro	BR	221,724,006.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Usina Fotovoltaica Arinos E 24 Ltda	Rio de Janeiro	BR	221,724,006.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
USME ZE SAS	Bogotá	CO	104,872,000.00	COP		AFS	Bogotá ZE SAS	100.00%	47.18%
Ustav Jaderného Výzkumu Rez AS	Řež	CZ	524,139,000.00	CZK		-	Slovenské elektrárne AS	27.77%	9.17%
Vayu (Project 1) Private Limited	Gurugram	IN	30,000,000.00	INR		Line-by-line	Enel Green Power India Private Limited	100.00%	100.00%
Vektör Enerjí Üretím Anoním Şírketí	Istanbul	TR	3,500,000.00	TRY		AFS	Enel SpA	100.00%	100.00%
Ventos de Santa Ângela Energias Renováveis SA	Rio de Janeiro	BR	7,315,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Ventos de Santa Esperança Energias Renováveis SA	Rio de Janeiro	BR	4,727,414.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Ventos de Santo Orestes Energias Renováveis SA	Rio de Janeiro	BR	1,754,031.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Ventos de São Cirilo Energias Renováveis SA	Rio de Janeiro	BR	2,572,010.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Ventos de São Mário Energias Renováveis SA	Rio de Janeiro	BR	2,492,000.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Ventos de São Roque Energias Renováveis SA	Rio de Janeiro	BR	10,188,722.00	BRL		Line-by-line	Enel Brasil SA	100.00%	82.27%
Vientos del Altiplano SA de Cv	Mexico City	MX	1,455,854,094.00	MXN		Equity	Tenedora de Energía Renovable Sol y Viento SAPI de Cv	60.80%	20.00%
Villanueva Solar SA de Cv	Mexico City	MX	205,316,027.15	MXN		Equity	Tenedora de Energía Renovable Sol y Viento SAPI de Cv	60.80%	20.00%
Viruleiros SL	Santiago de Compostela	ES	160,000.00	EUR		Line-by-line	Enel Green Power España SLU	67.00%	46.98%
Viva Labs AS	Oslo	NO	1,047,249.00	NOK		Line-by-line	Enel X International Srl	100.00%	100.00%
Walking Horse Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Wapella Bluffs Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Waseca Solar LLC	Waseca	US	-	USD		Line-by-line	Aurora Distributed Solar LLC	100.00%	74.13%
Waypost Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Weber Energy Storage Project LLC	Wilmington	US	-	USD		Line-by-line	Enel Energy Storage Holdings LLC (formerly EGP Energy Storage Holdings LLC)	100.00%	100.00%
Wespire Inc.	Boston	US	1,625,000.00	USD		-	Enel X North America Inc.	11.21%	11.21%
West Faribault Solar LLC	Wilmington	US	-	USD		Line-by-line	Aurora Distributed Solar LLC	100.00%	74.13%
West Waconia Solar LLC	Wilmington	US	-	USD		Line-by-line	Aurora Distributed Solar LLC	100.00%	74.13%
Western New York Wind Corporation	Albany	US	300.00	USD		Line-by-line	Enel Green Power North America Inc.	100.00%	100.00%
Wharton-El Campo Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
White Cloud Wind Holdings LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
White Cloud Wind Project LLC	Andover	US	1.00	USD		Line-by-line	White Cloud Wind Holdings LLC	100.00%	100.00%
White Peaks Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Whitetail Trails Solar Project LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Whitney Hill Wind Power Holdings LLC	Andover	US	99.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Whitney Hill Wind Power LLC	Andover	US	-	USD		Line-by-line	Whitney Hill Wind Power Holdings LLC	100.00%	100.00%
Whittle's Ferry Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Wild Ox Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Wild Run LP	Alberta	CA	10.00	CAD		Line-by-line	Enel Alberta Wind Inc. Enel Green Power Canada Inc.	0.10% 99.90%	100.00%
Wildcat Flats Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Wilderness Range Solar Project LLC	Andover	US	-	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Wildflower Flats Battery Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Wildflower Flats Solar Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Wind Belt Transco LLC	Andover	US	1.00	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%
Wind Energy Green Park Srl	Bucharest	RO	2,000.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%
Wind Parks Anatolis - Prinias Single Member SA	Maroussi	GR	15,803,388.00	EUR		Discontinued operations	Enel Green Power Hellas Wind Parks South Evia Single Member SA	100.00%	100.00%

Company name	Head quarters	Country	Share capital	Currency	Segment	Consolidation method	Held by	% holding	Group % holding
Wind Parks Katharas Single Member SA	Maroussi	GR	19,932,048.00	EUR		Discontinued operations	Enel Green Power Hellas Wind Parks South Evia Single Member SA	100.00%	100.00%
Wind Parks Kerasias Single Member SA	Maroussi	GR	26,107,790.00	EUR		Discontinued operations	Enel Green Power Hellas Wind Parks South Evia Single Member SA	100.00%	100.00%
Wind Parks Milias Single Member SA	Maroussi	GR	19,909,374.00	EUR		Discontinued operations	Enel Green Power Hellas Wind Parks South Evia Single Member SA	100.00%	100.00%
Wind Parks Mitikas Single Member SA	Maroussi	GR	22,268,039.00	EUR		Discontinued operations	Enel Green Power Hellas Wind Parks South Evia Single Member SA	100.00%	100.00%
Wind Parks Platanos Single Member SA	Maroussi	GR	13,342,867.00	EUR		Discontinued operations	Enel Green Power Hellas Wind Parks South Evia Single Member SA	100.00%	100.00%
Wind Parks Spilias Single Member SA	Maroussi	GR	28,267,490.00	EUR		Discontinued operations	Enel Green Power Hellas Wind Parks South Evia Single Member SA	100.00%	100.00%
Windbreaker Storage Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Winter's Spawn LLC	Minneapolis	US	-	USD		Line-by-line	Chi Minnesota Wind LLC	51.00%	51.00%
WKN Basilicata Development PE1 Srl	Rome	IT	10,000.00	EUR		Line-by-line	Enel Green Power Italia Srl	100.00%	100.00%
Woods Hill Solar LLC	Wilmington	US	-	USD		Line-by-line	Stillwater Woods Hill Holdings LLC	100.00%	100.00%
Xaloc Solar SLU	Valencia	ES	3,000.00	EUR		Line-by-line	Enel Green Power España SLU	100.00%	70.12%
X-bus Italia Srl	Milan	IT	15,000.00	EUR		Equity	Enel X Italia Srl	20.00%	20.00%
Yacylec SA	Buenos Aires	AR	20,000,000.00	ARS		Equity	Enel Américas SA	33.33%	27.42%
Yedesa Cogeneración SA in liquidation	Almería	ES	234,394.72	EUR		Equity	Enel Green Power España SLU	40.00%	28.05%
Yellow Rose Wind Project LLC	Andover	US	1.00	USD		Line-by-line	Enel Kansas LLC	100.00%	100.00%
Yorktown Energy Storage 1 LLC	Boston	US	-	USD		Line-by-line	Enel X North America Inc.	100.00%	100.00%
Zacapa HoldCo Sàrl	Luxembourg	LU	76,180,812.49	EUR		-	Zacapa Topco Sàrl	100.00%	19.50%
Zacapa LLC	Wilmington	US	100.00	USD		-	Zacapa Sàrl	100.00%	19.50%
Zacapa Sàrl	Luxembourg	LU	82,866,475.04	USD		-	Zacapa HoldCo Sàrl	100.00%	19.50%
Zacapa Topco Sàrl	Luxembourg	LU	29,970,000.00	EUR		-	Enel X International Srl	19.50%	19.50%
Zephir 3 Constanta Srl	Bucharest	RO	1,031,260.00	RON		Discontinued operations	Enel Green Power Romania Srl	100.00%	100.00%
Zoo Solar Project LLC	Andover	US	-	USD		Line-by-line	Tradewind Energy Inc.	100.00%	100.00%



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