

**OPEN  
POWER  
FOR A  
BRIGHTER  
FUTURE.**

WE EMPOWER  
SUSTAINABLE  
PROGRESS.



**Sustainability Report**  
2022

Consolidated Non-Financial Statement prepared in accordance  
with Italian Legislative Decree 254/16\_year 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.





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# Enel is Open Power



PURPOSE

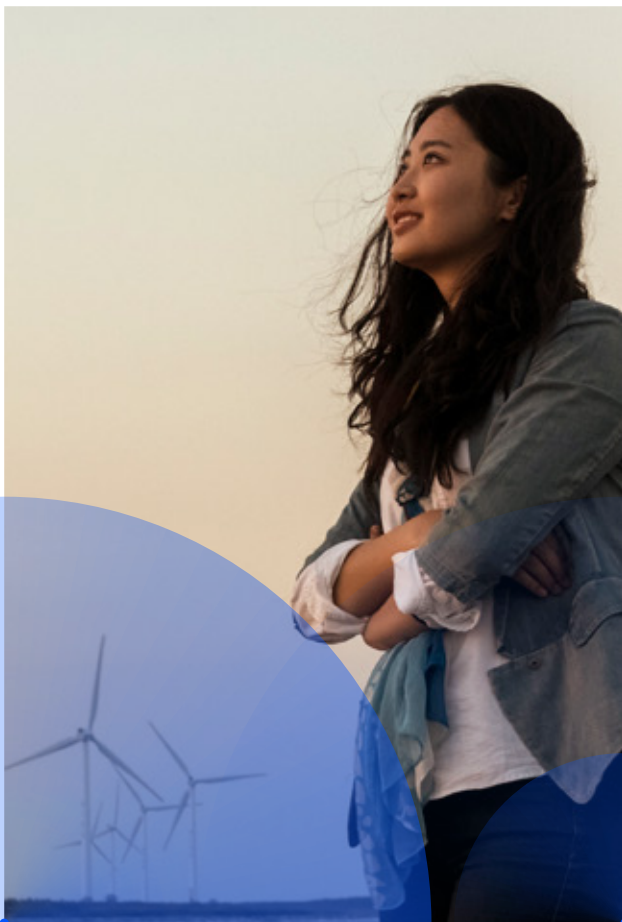
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## VISION

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

# Index

**Enel’s Sustainability Report sets out the commitments and results achieved in ESG (Environmental, Social and Governance) topics, in light also of its stakeholders’ expectations**

It starts with a message to stakeholders from the CEO and the Chairman, followed by the **We empower sustainable progress** section, which outlines the Company as a whole, its business model and main performance indicators, the ESG context in which it operates, the materiality analysis, the main objectives of the 2023-2025 Sustainability Plan, its governance and organization of sustainability, the role of sustainability-linked finance, its positioning in sustainability ratings, indices and benchmarks, as well as information on European taxonomy.

The **Our performance** section is divided by topic and outlines the results and objectives of the Sustainability Plan. Each topic is introduced by the “sustainability dashboard”, which summarizes the key commitments, as well as their state of progress and contribution to the United Nations Sustainable Development Goals (SDGs). The final **appendix** sets out: (i) the criteria used in drafting the report; (ii) the main quantitative indicators relating to sustainability performance (“Sustainability Statement”); (iii) the Content Indexes which provide simplified keys to interpretation in relation to GRI, SASB, TCFD, WEF, PAI and human rights; (iv) the European Taxonomy reporting, the Green Bond Report and the Sustainability-Linked Financing Report.

- [Integrated Annual Report 2022](#) >
- [Report and financial statements at December 31, 2022](#) >



**Guide to navigating the document**

To make it easier to view, in addition to hyperlinks, the document has interactions to assist with navigation.

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# Letter to stakeholders

## 60 years of future and energy

| 2-22 |

### Dear stakeholders,

This year, we're celebrating **60 years of Enel**: a company created to unite Italy and its energy. It now leads the international revolution in renewables and digital grids. We are conducting that revolution sustainably and innovatively, to **decarbonize** energy generation and to **electrify** consumption, promoting a **just transition**.

The year 2022 was **another of great turbulence**, characterized by converging crises: the continuation of the pandemic, the effects of climate change, economic uncertainty, dramatic conflicts that caused tensions in the energy commodity market and contributed to the exacerbation of inequalities and volatility in the supply chain. The context has clarified the need to shift to an approach not limited to resistance during discontinuities, but able to innovate radically and constantly, anticipating and guiding the now-constant changes, to progressively reduce the business-related risks over time and to produce greater economic and social value.

**Enel has been adopting this approach for years**: it has reduced dependence on fossil fuels and supplies from individual countries, **decarbonized** its energy generation, **digitalized** infrastructure, **electrified** consumption and created an **innovation ecosystem**, involving over 500,000 people

from different countries, universities and about 600 startups. We can therefore monitor technological discontinuities and social inequalities and innovate to transform them into a source of competitive advantage, rather than merely undergo them.

A concrete example of this approach is the expansion of **3SUN** in Italy. By 2024, it is due to become the largest solar panel factory in Europe, with a production capacity of 3 GW per year, and will use a world-first innovative technology with a replicable business model, which will be useful to strengthen our independence in the value chain.

Our ability to innovate has also enabled us to create **Gridspertise**, a company that assists other global operators in the **digitalization of distribution networks**. Gridspertise was established as a result of the innovations generated by collaborating with startups and leaders from other sectors. Together with them, we have created **QEd**, a revolutionary solution to digitalize various hardware components in the grid, thus saving costs and raw materials.

Other examples are innovations in the storage sector, such as the completion in Tuscany in 2022 – with the collaboration of an Israeli startup – of the first thermal storage system in the world based on common stones, with no dependence on critical raw materials or use of chemical components.





## Michele Crisostomo

Chairman

To increasingly free ourselves from fluctuations in the price of commodities, in 2022 we accelerated the **decarbonization of power generation**, continuing the development of new renewable capacity and the decommissioning of fossil plants, such as the Bocamina II coal-fired power plant in Chile. Its recent closure means we have become the first electricity company to no longer use coal in the country.

From photovoltaic panels to mini-wind farms, multiple technologies can assist in improving the **reliability of the energy system**. **Customers** can also become producers or can reduce the cost of energy, accelerating the path towards an electrified future. We remained the leader in demand response, with 8.5 GW of capacity managed for energy consumption. Electrification also entails electric mobility, which we are supporting by expanding the infrastructure, with 22,600 owned public charging points installed globally in the last year, and with the development of new technologies and flexible services to improve the customer experience.

Another key element of our ecosystem is the more than 172,000 **suppliers**, thanks to which we can innovate and make our value chain more and more decarbonized and sustainable. We are supporting them towards a sustainable growth that can increase their competitiveness and efficiency, by means of tangible development initiatives and access to services at advantageous conditions.

Constant dialog with the **communities** in the countries where we operate enables us to jointly construct projects



## Francesco Starace

Chief Executive Officer  
and General Manager

and solutions that respond to common priorities, promote local development and result in the creation of shared value in the long term. In 2022, there were already around 5 million global beneficiaries of our projects to foster sustained, inclusive and sustainable economic growth. In Italy, we've been focusing on students leaving school too soon, on access to the world of work for the new generations and on training in the new skills required by the energy transition, including via the circularity of professions linked to the previous energy model, through reskilling and upskilling programs. The School4Life project – intended to support students and teachers to prevent early school leaving – will involve about 15,000 students in the two years from 2022 to 2023, whereas the Energie per Crescere (Energy for Growth) program, extended in early 2023 from the grids to the renewable generation sector, will provide technical training to 5,500 young people.

A key element in the strategy is our **people**: now as much as throughout the 60 years of our history, they design the future of energy systems, with dedication and spirit of service even at the most difficult times and in the most extreme conditions.

Our people have understood – and have helped others to understand – the great value of the resource we work with, and the necessity to use it efficiently and responsibly. By sharing our purpose of “**Open power for a brighter future**” on a broader scale, we commit to making the energy system more and more safe and sustainable for our stakeholders.

COMPANY VIEW

2.



# We empower sustainable progress

## **We were founded 60 years ago**

to bring energy to the territories and communities, the same mission we have today but expanded by innovation, sustainability, and a reliable business model.

## **We aim to contribute to an affordable, secure and sustainable energy system**

by accelerating the decarbonization of our power generation, strengthening the role of distribution networks and creating products and services that make energy transition more effective and simpler in our customers' day-to-day.

## **We have outlined a sustainability strategy supporting the United Nations' 17 Sustainable Development Goals**

with 4 out of the 17 goals guiding our value creation: SDG 13 "Climate Action"; SDG 7 "Affordable and Clean Energy"; SDG 9 "Industry, Innovation and Infrastructure"; SDG 11 "Sustainable Cities and Communities".

## **We commit to a daily continuous improvement**

individually and collectively: people and communities, business, industries and institutions, leveraging growth accelerators (innovation, digitalization, circular economy and sustainability-linked finance).



# We empower sustainable progress

| 2-1 | 2-6 | 303-3 | 303-5 | 305-4 | 401-1 | 404-1 | 405-1 | EU1 | EU2 | EU3 | EU4 |

**In 2022 Enel celebrated its first 60 years:** we were created to bring energy to the territories and communities, the same mission we have today but expanded by innovation, sustainability, and a reliable business model. As a result of the challenge of tackling climate change and the increasing digitalization of the traditional business models of companies in the energy sector, our mission has evolved in order to embrace new ways for making energy accessible thus empowering sustainable progress.

**The current relevance of the climate change challenge, the repeated occurrence of extreme events, a high rate of loss of biodiversity and ecosystemic services** need to be carefully addressed both in terms of preventing them to happen and of adapting to a changing climate.

**The pandemic and the geopolitical conflicts have worsened** the situation and unveiled how much individual countries and regions are intrinsically and structurally weak while making clear that energy independence and achievement of climate objectives require an acceleration of energy policies and a new design of the electricity market to promote the energy transition. By doing so, in the long-term, access to energy will happen at affordable and stable prices, will be secure since it will not be

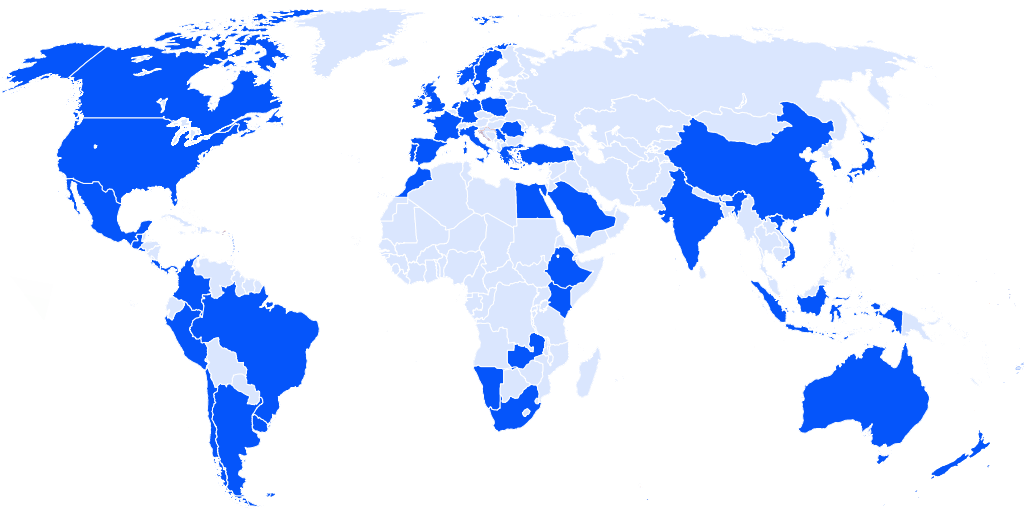
impacted by geopolitical conflicts, and will be sustainable, with no adverse effects on climate and ecosystems. These are key years to achieve the UN 2030 agenda, the Paris Agreement climate objectives and the Kunming-Montreal agreement to stop and invert the trend of biodiversity loss. These objectives can only be reached by giving a push to decarbonization and clean electrification of end-uses, sustained by business models based on circular economy and open to continuous innovation.

**Our contribution to an affordable, secure and sustainable energy system leads us, therefore, first of all to accelerate the decarbonization of our energy generation**, as a result of renewables development, utilization of storage and phase-out of thermal generation. In parallel, **we will strengthen our distributions grids** whose role is to enable the undergoing energy transition, also thanks to digital solutions that accommodate larger volumes of renewable energy, so as to make them more resilient, sustainable and open to all stakeholders in electrification. Finally, **we are developing effective and easy-to-use products** and services for our customers since the change involves all of us, individually and collectively: people and communities, companies, industries and institutions.



# Our sustainable business model and value creation

We have been confirmed as a leading group in the energy sector, with a **presence in 47 countries on five continents**, vertically integrated along the entire value chain.



**47** countries  
more than  
**1,000**  
Subsidiaries  
**65,124**  
Enel employees

PRESENCE

Our purpose, mission, vision and values animate the entire organization and define the aim of the Company itself. **“Open Power for a brighter future: we empower sustainable progress”**, which expresses our daily commitment, the very reason why our people are motivated. Being Open Power means improving everyone’s future, pursuing a sustainable progress that leaves no one behind and leaving a better planet to future generations.

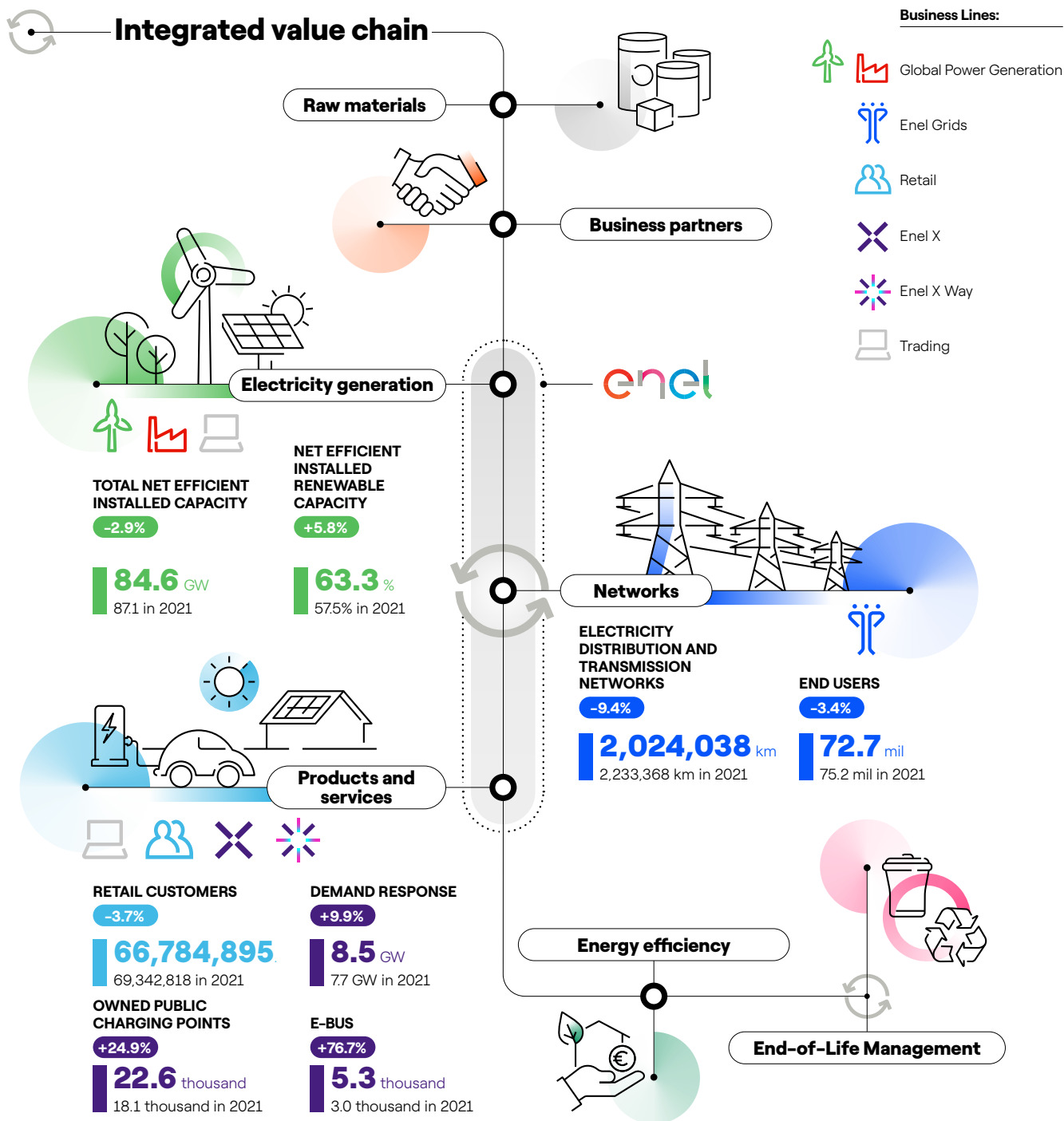
Being Open Power means facing some of the biggest world challenges by combining sustainability and innovation. Open Power means unleashing access to energy: our mission is to connect an increasing number of people to secure and sustainable energy, opening up to new technologies and partnerships, new uses and ways to manage energy itself, while respecting our fundamental values: trust, responsibility, innovation and proactiveness.

**Our business model** is the growth engine. We are active along the full value chain through Business Lines having each a specific focus. We are the world’s largest private operator in the renewable energy sector with **53.6 GW<sup>(1)</sup>** of net efficient renewable capacity, equal to **63.3%** of the entire generation

capacity (**Enel Green Power and Thermal Generation**). We are the largest private electricity distribution company in the world (**Enel Grids**), with approximately **72.7 million end users** connected to our networks, including **45.8 million** with active smart meters. We also manage the largest customer base of any private company (**Enel X Global Retail**), with approximately **66.7 million customers**. In order to increasingly promote electrification of uses, we develop and sell new services and products (**e-Mobility Enel X Way**), like electric mobility public charging point that currently exceed 22.6 thousand. To guarantee a stable energy supply, we operate in more than 30 countries in wholesale energy markets, and this ensures strategic and sustainable services to our customers (**Global Energy & Commodity Management**).








Business is supported by the Global Service Functions (Procurement, Digital Solutions and Global Customer Operations) and Staff Functions (Administration, Finance and Control, Innovation and Sustainability, People and Organization, Communications, Legal and Corporate Affairs, Audit), with every Country combining the global business models with specific local requirements.

(1) If we include managed renewable capacity and BESS in 2022, 59 GW of installed capacity or 66% of total capacity was reached.



Every day our commitment is to develop a **just and inclusive transition that creates value wherever we operate**. We work jointly with our stakeholders (Enel people, suppliers and financial and commercial partners, communities in the areas of influence of our operations, our customers, the financial community, institutions, media, business and sector associations) since we are aware that we belong to the territory and we are an essential element in the lives of people, business and society at large. We strive to combine our industrial objectives with the socio-economic development of our ar-

reas of operation, building solid and positive relationships to achieve sustainable and long-lasting outcome. We engage our stakeholders by leveraging the Open Power approach as defined both in our Code of Ethics and in our Human Rights Policy, and walking the talk through several solid initiatives. A continuous dialog with the individual stakeholders and with the organizations that represent them, which is summarized also in the results of the materiality analysis process that allows us to identify the priority actions and our contribution to the United Nations Sustainable Development Goals (SDGs).

Stakeholders	2022	INPUT	2022	OUTPUT
 <b>Planet</b>	<b>227.8 TWh</b>	Net electricity generation	<b>229 gCO<sub>2eq</sub>/kWh</b>	Intensity of GHG Scope 1 emissions relating to power generation
	<b>0.23 (l/kWh<sub>eq</sub>)</b>	Total specific freshwater withdrawal	<b>218 gCO<sub>2eq</sub>/kWh</b>	Intensity of GHG Scope 1 and 3 emissions relating to Integrated Power
	<b>19.3%</b>	Water withdrawal in water stressed areas	<b>22.9 MtCO<sub>2eq</sub></b>	Scope 3 emissions (gas retail)
	<b>200 No.</b>	Projects for the protection of species and natural habitats	<b>0.07 g/kWh</b>	Specific emissions of SO <sub>2</sub>
	<b>26.5 Mtep</b>	Total direct fuel consumption	<b>0.32 g/kWh</b>	Specific emissions of NO <sub>x</sub>
			<b>45.2 Mm<sup>3</sup></b>	Total water consumption
 <b>Enel people</b>			<b>20.6%</b>	Water consumption in water stressed areas
			<b>9,452 ha</b>	Area covered by natural habitat restoration projects
	<b>65,124 No.</b>	Enel people	<b>6.8%</b>	Turnover
	<b>24.9%</b>	Proportion of women managers to total managers	<b>0.56 i.</b>	Lost Time Injury Frequency Rate
 <b>Community</b>	<b>32.6%</b>	Proportion of women middle managers to total middle managers	<b>47.4 average hours</b>	Training per employee
			<b>42%</b>	Training dedicated to reskilling and upskilling
	<b>1,527 No.</b>	Applications of the shared value creation model (CSV) <sup>(1)</sup>	<b>15.6 mil</b>	Beneficiaries – Access to clean and affordable energy <sup>(2)</sup>
			<b>4.9 mil</b>	Beneficiaries – Decent work and economic growth <sup>(2)</sup>
			<b>3.7 mil</b>	Beneficiaries – Quality education <sup>(2)</sup>
 <b>Suppliers</b>			<b>4,778 mil €</b>	Total Tax Borne
			<b>95.7%</b>	Cooperative Compliance Index
	<b>172,854 No.</b>	Suppliers (FTE)	<b>99%</b>	Suppliers qualified for ESG aspects
	<b>20,435 No.</b>	Active suppliers	<b>62%</b>	Supplies value covered by CFP certification
 <b>Customers</b>			<b>0.48 i.</b>	Lost Time Injury Frequency Rate
	<b>45.8 mil</b>	End users with active smart meters	<b>321 TWh</b>	Electricity sold
	<b>37%</b>	Digital clients	<b>212 No./10k customers</b>	Commercial claims
	<b>22.6 thousand No.</b>	Owned public charging points	<b>231 min.</b>	SAIDI
 <b>Partners</b>			<b>0.7 mil</b>	Beneficiaries of new connections in rural and suburban areas
	<b>10 No.</b>	Innovation hubs	<b>194 No.</b>	Proof of Concept
			<b>60 No.</b>	Solutions adopted in the business
 <b>Financial community</b>			<b>43 No.</b>	Partnership agreements for innovation
	<b>60,068 mil €</b>	Net financial debt	<b>0.40 €/share</b>	Fixed dividend per share (DPS)
	<b>63%</b>	Sustainable sources of financing on total	<b>3.3%</b>	Cost of gross debt
	<b>81.9%</b>	Investments in business activities aligned with the European Taxonomy Regulation	<b>56.7%</b>	EBITDA related to business activities aligned with the European Taxonomy Regulation

(1) An application is interpreted as the use of at least one CSV instrument in relation to an asset, in any phase of the chain of value and in any Business Line. The CSV applications in the BD phase include applications regarding BD opportunities (also at the beginning phases) and business projects output from the pipeline. They can also relate to assets in O&M in the case of modernizing projects or decommissioning activities. The CSV applications in the E&C phase can refer to assets passed to the O&M phase at the end of the year. The number of CSV applications in Infrastructure & Networks (I&N) may refer to the concession area, but also areas identified by municipalities and substations. The value includes companies consolidated using the equity method and companies for which the Build, Sell and Operate (BSO) mechanism has been applied.

(2) Cumulative figures since 2015.

Please refer to the related chapters in this document and to the Sustainability Statement to see the progress of these data.



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**With the planet:** we are committed to defining measures and actions for mitigating the impacts generated by climate change, including the loss of biodiversity and the disappearance of ecosystems, to guarantee a safe, healthy, clean and sustainable environment for the protection of rights of human beings and future generations (please refer to the chapters "[Zero emissions ambition](#)" and "[Conservation of natural capital](#)").



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**With customers:** we analyze their needs to ensure reliable responses and establish lasting relationships, committing ourselves to offering sustainable solutions and services that are affordable, innovative, flexible and attentive to the most vulnerable to ensure equal access to energy (please refer to chapter "[Clean electrification](#)").



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**With people in the Company:** we are committed to having a close relationship with them, particularly by paying greater attention to caring activities and active listening, while promoting internally a culture of inclusion, enhancement of diversity, innovation and business entrepreneurship to face the challenges posed by a constantly changing context (please refer to chapter "[Empowering Enel people](#)").



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**With communities:** we work together to draw up specific action plans and projects intended to promote access to energy, fighting energy poverty, supporting quality education and socio-economic development, starting from a proactive analysis of their needs through a shared value creation model (please refer to chapter "[Engaging communities](#)").



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**With suppliers:** we face the challenges of transition and support their path of change and growth, sharing ideas and innovations (please refer to chapter "[Sustainable supply chain](#)").



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**With the financial community:** we maintain a constant and open relationship, based on principles of integrity and transparency, in compliance with the rules and best practices, in order to increase the level of understanding of the activities carried out by the Group (please refer to the "[Sound governance](#)" chapter).



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**With our partners:** through openinnovability.com, a crowdsourcing platform, the different areas of the Group can interact with startups, industrial partners, small and medium-sized enterprises ("SMEs"), research centers, universities and entrepreneurs, to deal jointly with the challenges of the future and guarantee sustainable progress for all (please refer to chapter "[Innovation](#)").

# Economic value generated and distributed for stakeholders

3-3 | 201-1

Millions of euro

	2022	2021 <sup>(1)</sup>
<b>Economic value generated directly</b>	<b>140,821</b>	<b>85,865</b>
<b>Economic value distributed directly</b>		
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 <sup>(2)</sup>	6,027	4,916
	<b>131,748</b>	<b>78,684</b>
<b>Economic value retained</b>	<b>9,073</b>	<b>7,181</b>

(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 useful indication of how the Group has created wealth for all stakeholders. The increase in the economic value generated directly and the operating costs was caused mainly by the increase in the average prices and intermediate volumes of energy commodities, in par-

ticular gas and electricity. The payments to capital lenders are increasing essentially due to the increase in interest expense, mainly related to the increase in the interest rates following the restrictive monetary policies that were implemented to face the growing inflationary pressure.





# Our strategy for sustainable progress

The strategy developed in recent years has enabled the Group to set out a **vision of the future and progress centered on sustainability** as a key factor in addressing the global challenges of the transition to a decarbonized economy.

A sustainable strategy and an integrated business model that enable us to **contribute to achieving all 17 United Nations Sustainable Development Goals**.

In particular, 4 of the 17 goals guide our creation of value:

- **SDG 13 “Climate Action”**;
- **SDG 7 “Affordable and Clean Energy”**;
- **SDG 9 “Industry, Innovation and Infrastructure”**;
- **SDG 11 “Sustainable Cities and Communities”**.







The focus  
of our  
contribution

**SDG 13.2**

Integrate climate change measures into national policies, strategies and planning

**SDG 7.2**

Increase substantially the share of renewable energy in the global energy mix.

**SDG 9.1**

Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.

**SDG 9.4**

Upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

**SDG 11.2**

Provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

**SDG 11.3**

Enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.

Our actions

**Enel's decarbonization roadmap** covers both direct and indirect emissions along the Group's entire value chain, and consists of four targets certified by the Science Based Targets initiative (SBTi), in line with limiting global warming to 1.5°C.

- **Development of new RES** capacity to have 100% renewable generation facilities by 2040
- **Exit from coal-fired generation by 2027 and gas-fired generation by 2040**
- **Exit from gas retail by 2040**, 100% sales from RES by 2040
- **Enel Capex Plan** fully aligned with the target

Enel's main contribution to SDG 7 focuses on the **decarbonization of the generation mix**, with the progressive **development of renewable energy**, taking advantage of the **hybridization of renewables with storage solutions**, and the concomitant **exit from electricity generation from thermal capacity**

The **digitalization and upgrading of grids** are key objectives to ensure the reliability and security of the energy system. **Grids flexibility and capacity** allow to handle an increasing share of distributed generation and **the increase in the number of connections with new users**

**We develop innovative technologies to make the use of clean electricity increasingly accessible and widespread, accelerating the digitalization of services for greater efficiency in the use of energy itself.** In homes (B2C) through a focus on residential consumption (e.g. heat pumps for home heating and induction plates), **with businesses (B2B)** by guiding them towards the use of customized integrated solutions, starting with consultancy up to the implementation of solutions such as self-production of electricity, installation of trigeneration plants, and **in the public sector (B2G)** we promote the use of a circular model for cities, accompanying them on a path of electrification and digitalization, through the integration of solutions aimed at efficiency and the improvement of services for the benefit of households and the reduction of polluting emissions. Furthermore, **the expansion of electric vehicle charging infrastructure** for Enel is one of the main drivers for the electrification of end-use consumption.

Our goals

- Reduction in GHG Scope 1 emissions intensity relating to power generation<sup>(1)</sup>: **-80%** in 2030 vs 2017
- Reduction of GHG emissions intensity Scopes 1 and 3 relating to Integrated Power<sup>(1)</sup>: **-78%** in 2030 vs 2017
- Reduction in absolute GHG Scope 3 emissions relating to Gas Retail: **-55%** in 2030 vs 2017
- **>80%** of investments (Capex) planned for 2023-2025 aligned with the European Taxonomy Regulation

- **21 GW additional renewable capacity** in the period 2023-2025, of which **~ 4 GW Battery Energy Storage System (BESS)**
- **70% energy production from renewable sources** in 2025

- Improve service quality by reducing the average duration of system interruptions: **SAIDI ~150 min.** in 2025
- Improve **demand response solutions: 12.4 GW** in 2025
- Achieve **48.3 mil users with active smart meters** in 2025

- Instal **31.4 thousand owned public charging points** in 2025
- Serve approximately **13 thousand electric buses** in 2025
- Manage **3.3 mil lighting points (street lighting)** in 2025
- **4,000 municipalities** connected on the YoUrban platform in 2025
- **352 MW storage behind the meter** in 2025

13

7

9

11

**~94%**

Capex aligned with SDGs in the period  
2023-2025

(1) Values of reduction percentages were calculated on an equal perimeter basis, and take into account the 2017 baseline from which GHG emissions from disposed assets from 2017-2022 are excluded, in accordance with SBTi.

# The Sustainability Plan: our commitment

Our sustainability strategy is embodied in **our Sustainability Plan**, defined taking into account the results of the materiality analysis, in synergy with the Strategic Plan, and translated into specific short-, medium- and long-term goals in order to ensure the transparency and verifiability of our journey towards sustainable progress. Every year, these objectives are updated in accordance with a process of continuous alignment with the business strategies, with the results achieved and best practices in order to increasingly integrate sustainability along the entire value chain. At the heart of our sustainability strategy is our **ambition to achieve zero emissions by 2040**, thanks to a sustainable business model based on the development of generation from renewable sources and facilitated by the security and reliability of the grid and the clean electrification of consumption. In all our activities, we always take into account the **needs of our stakeholders**. In this context, innovation,

digitalization, circular economy and sustainable finance act across all sectors and **accelerate growth**. A pathway of sustainable growth that is taken in respect of **nature** and of **human rights**, with the support of a **sound governance** structure.

The **Sustainability Plan 2023-2025** reinforces our decarbonization commitment, considering all Group emissions and confirming our commitment to achieving "No Net Loss" in terms of biodiversity in the development of new infrastructure from 2030, focusing in particular on areas of high biodiversity importance, with respect to forest conservation and the preservation of protected areas. A new objective was defined related to the overall well-being of Enel people, as a factor enabling the development of innovation potential.

## Sustainability Plan 2023-2025



# Our commitment to sustainability



**Elisabetta Ripa**

Global E-Mobility

"Enel X Way has adopted an integrated sustainable business approach: We implement inclusive solutions for every mobility need, accessible to all, and we do this by following Circular by Design logic, which aims to reduce to zero not only our carbon footprint but also that of our customers".



**Antonio Cammisecra**

Global Infrastructure & Networks

"We invest in research, development and the use of low-impact components and innovative solutions that reuse materials from end-of-life grid components, involving the entire supply chain in order to reduce its emissions to zero".



**Salvatore Bernabei**

Global Power Generation

"We work passionately every day to realize our mission 'To promote progress with sustainable energy' by investing in renewable energy development and innovation together with our colleagues and partners and with the communities that host our plants".



**Francesco Venturini**

Enel X Global Retail

"We accompany our customers on a sustainable growth path: from simple consumers to active decision-makers in energy consumption and generation choices, capable of seizing economic, environmental and social opportunities with commodity-integrated electrification solutions".



**Claudio Machetti**

Global Energy and Commodity Management

"We improve and integrate sustainability into our margin optimization and risk management processes for the Group. Anti-fragility research and collaboration with our stakeholders is our vision to sustainable progress".



**Nicola Melchioti**

Global Customer Operations

"Turning every interaction into an opportunity to bring satisfaction and happiness to our customers. This is our goal, for which we are focusing on listening, simplification and the design of a more sustainable future for each of our customers".



**Guido Stratta**

People and Organization

"People are the key to enabling the energy transition. Through continuous learning, work-life balance, inclusion and a culture of safety we take care of their well-being and motivation, a requirement for achieving our goals".



**Ernesto Ciorra**

Innovation and Sustainability

"Let us work for a fairer and more inclusive society, creating economic and social value that fuels progress that is truly sustainable and open to everyone!".



**Alberto De Paoli**

Administration, Finance and Control

"Sustainability is our starting point and main purpose. It is the engine of our business proposition and growth perspectives. It is a place where technological evolution, profit and the wealth of people can find a perfect synthesis without frictions and the path where the old concept of capitalism is evolving into the new Stakeholder Capitalism proposition. Our Zero Emission Ambition plan makes it clear that we know where we want to arrive and the leadership role we want to continue to play".



**Francesca Di Carlo**

Global Procurement

"It is critical for us to include the supply chain in our sustainability strategy, sharing measurable goals consistent with our SBTi-certified decarbonization road map and stimulating innovation as a lever for acceleration".



**Roberto Deambrogio**

Communications

"For Enel, being sustainable is the only way to create long-term value. Sustainability is integrated into our investments and the Group's industrial strategy from the very beginning, taking into account the needs of each stakeholder and thus creating shared value".



**Giulio Fazio**

Legal and Corporate Affairs

"Reinterpreting the role of the corporate lawyer from a sustainable perspective means creating value for society, investors and stakeholders. And to this end it is crucial not to limit ourselves to the letter of the law but to use the regulations to provide solutions and create opportunities".



**Silvia Fiori**

Audit

"We have integrated SDGs and sustainability KPIs into our risk assessment to enable us to assess the adequacy and effectiveness of the risk control measures in the processes that also take into account their contribution to achieving the Group's sustainability goals".



**Carlo Bozzoli**

Global Digital Solutions

"The great opportunity offered by digitalization is the essential factor in implementing the energy transition and achieving zero emissions. In the coming years, the focus will be on sustainable coding to ensure greater quality, safety and inclusiveness".

## Zero emissions ambition

Read more... 

At the center of Enel's sustainability strategy lies the **ambition to achieve zero emissions in 2040**, in line with the goal of limiting global warming to below 1.5 °C. Specific targets, validated by SBTi (Science Based

Targets initiative), have been defined, covering both direct emissions generated by our plants and indirect upstream and downstream emissions produced by our suppliers and customers.



2030



**-80%**

reduction of GHG Scope 1 emissions intensity relating to power generation (compared to 2017)<sup>(2)</sup>



**-78%**

reduction of GHG Scope 1 and 3 emissions intensity relating to Integrated Power (compared to 2017)<sup>(2)</sup>



**-55%**

reduction of absolute GHG Scope 3 emissions relating to Gas Retail (compared to 2017)

2023-2025



**>80%**

of investments (Capex) planned for 2023-2025 aligned with the European Taxonomy

**PROJECT: ADAPTATION: A CLIMATE-PROOF FUTURE** 

### Legend



Target included in the short- and long-term remuneration plan for Top Management



Target included in sustainability-linked financial instruments

<sup>(2)</sup> The values of the reduction percentages have been calculated on an equal perimeter basis, and take into account the 2017 baseline, which excludes GHG emissions from assets disposed in the 2017-2022 period, in accordance with SBTi.



## Clean electrification

Read more... 

The transition to decarbonization is supported by the growing **development of renewable energies**, reaching **53.6 GW<sup>(3)</sup>** of installed capacity in 2022, and by the phase-out of coal-fired generation by 2027 and gas-fired by 2040. It is also supported by an approach to innovation as an accelerator in the creation of sustainable value, an example of which is the construction of the 3SUN Gigafactory photovoltaic panel plant in Catania.

**The extension and digitalization of the grids**, which have 72.7 million end users, make it possible to accommodate greater volumes of energy produced from renewable sources and to offer an increasingly high-quality, secure and reliable service. One of the main objectives in this regard is strengthening our commitment to reducing the average frequency (SAIFI) and duration (SAIDI) of interruptions of electricity supply. Furthermore, we are committed to further extending access to electricity in rural and suburban areas in the countries in which we operate, to communities with no electricity supply, aiming to reach 7.1 million beneficiaries by 2030.

By offering new, innovative and inclusive products and services, we can **accompany our customers on their journey to clean electrification and the transformation of their energy habits** in everyday life. We are able to do this through network flexibility and consumption optimization services such as demand response,<sup>(4)</sup> but also by bringing

energy ever closer to our customers, for example through the development of energy communities.<sup>(5)</sup> We also continue supporting the spread of electric mobility, expecting to reach 31,400 owned public charging points in 2025 (22,600 in 2022), as well as serving around 13,000 electric buses (over 5,000 in 2022).



2025

**70%**

energy production from renewable sources




**~150 min SAIDI**

System Average Interruption Duration Index (min)

**31.4 thousands**

owned public charging points

**PROJECT: SARDINIA: THE PERFECT ISLAND FOR A SUSTAINABLE MODEL** 

(3) Including managed renewable capacity and BESS in 2022, 59 GW of installed capacity or 66% of total capacity was reached.

(4) A digital platform service open to commercial and industrial customers that enables greater network flexibility and stability and more efficient use of infrastructure and energy resources by optimizing consumption.

(5) An energy community consists of an association of citizens, businesses, local governments and small/medium-sized enterprises that decide to join forces with the aim of producing, trading and consuming energy from renewable sources on a local scale.

## People

Read more... 

**The value of the relationships we establish with our stakeholders** is a core focus of our commitment to achieve a just transition, focusing on those most exposed in the transition to a decarbonized economy. We promote specific resettlement programs supported by upskilling and reskilling activities and

For the **people who work at the Company**, we are also committed on a daily basis to building an inclusive working environment in which diversity and uniqueness are valued and individual development is encouraged, including through the further extension and diversification of the training offer. Our attention is increasingly focused on the well-being of our people and on enabling their engagement and innovative potential: in pursuing this direction, a new goal related to the overall well-being of Enel people has been defined. Women in the company account for 23.4% of the total, thanks to a special focus on gender diversity, which also in a broader, cultural and generational sense, aims to enhance resources even before they join the company

**Our suppliers** are indispensable for us to enhance sustainable progress and realize the process of transformation of the energy and digital system, encouraging them to commit to a sustainable path. The basis of our purchasing processes is loyalty, transparency and collaboration, and we ask our suppliers not only to guarantee the quality standards required, but also to commit to adopting best practices in terms of human rights and of the impact of their activity on the environment. This commitment is translated into concrete actions: at the qualification stage, when assessing suppliers based on social and environmental factors, when requesting certifications at the tender stage, or in

we are committed to dedicating 40% of the total training fund to these programs in 2025. We support our suppliers on this new journey to repurpose their resources and skills and we develop projects and activities at a local level with the communities involved in the transition process.

and throughout all people management processes.

Read more... 

2025



**45%**

women in Top Manager succession plans

**61%**

Overall Global Wellbeing Index

**PROJECT: BACK TO SCHOOL** 

the application of rankings and/or targets concerning the carbon footprint of suppliers.

Read more... 

2025

**75%**

supplies' value covered by Carbon Footprint certification

**PROJECT: ENERGY FOR SCHOOLS** 

**Responsible relations with the communities** where we operate aim to promote economic and social development through sustainability projects. From the expansion of infrastructure to professional education and training programs, as well as projects that support cultural and economic activities and promote access to energy, rural and suburban electrification, tackling energy poverty and promoting social inclusion for the more vulnerable categories.

[Read more...](#) 

**2015-2030**

**5 million**

beneficiaries of the projects to ensure inclusive and equitable quality education (SDG 4)

**20 million**

beneficiaries of projects to provide access to affordable, reliable, sustainable and modern energy (SDG 7)

**8 million**

beneficiaries of projects to promote sustained, lasting, inclusive and sustainable economic growth (SDG 8)

**PROJECT:** RUTA PEHUENCHE 

## Growth accelerators

[Read more...](#) 

**Innovation, circular economy, digitalization and sustainable finance are the growth accelerators** of Enel's

We constantly work **on innovation** and foster open collaboration with our partners, including start-ups, SMEs, large companies, academia, internal and external experts, and investors. A widespread culture of Innovability® (innovation and sustainability) means that the whole Company aims to renew itself continually, thereby ensuring its survival in the long term. We constantly strive to find innovative solutions to support environmental protection but also to create more socially inclusive conditions.

[Read more...](#) 

sustainability strategy that embrace and enhance all strategic themes crosswise.

**2023-2025**

Scale-up of **126** solutions in the business

Launch of **445** Proof of Concept to test innovative solutions

**PROJECT:** NET ZERO GRID 



For years, we have been constantly rethinking how we do things with a **circular economy** approach, focusing on innovation not only in technology, but also in business models, involving the entire value chain. Adopting a circular and sustainable model as an integral part of the energy transition process also allows us to lower our dependence on raw materials, particularly on “critical” raw materials, ensuring not only the competitiveness of the business model, but also full social and environmental sustainability across the chain. Suffice to look at the increasing attention to raw materials, the basis for the production of solar panels and batteries, a major focus considering the topic of their scarcity compared to demand.

[Read more...](#) 

Finally, the energy transition process cannot disregard aspects such as **digitalization and cyber security**, through which the Group is committed to disseminating the most advanced solutions and to strengthening verification activities in order to prevent possible cyber attacks (Ethical Hacking, Vulnerability Assessment).

[Read more...](#) 


The importance of **sustainable finance** is growing to accelerate the achievement of the 2030 Agenda goals, through investments that link financial strategy to the Company’s sustainability goals. At Enel, sustainable finance plays a crucial role in supporting the growth of the Group, accounting for 63% of the gross debt at the end of 2022 and contributing to a gradual reduction in the cost of debt, through the recognition of the value of sustainability. Furthermore, 92% of investments

2030

**92%**

Circularity improvement<sup>(6)</sup>

**Double Economic CirculAbility®**  
compared to the baseline year 2020<sup>(7)</sup>

**PROJECT:** WIND NEW LIFE 

2025

**1,400**

cyber security verification activities per year  
(Ethical Hacking, Vulnerability Assessment, etc.)

**PROJECT:** PLATFORMS 

(Capex) in 2022 were aligned with the UN Sustainable Development Goals (SDGs).

[Read more...](#) 

2025

**~70%**

sustainable financing sources (sustainable finance instruments/total financial instruments)

(6) The circularity improvement index measures lower material and fuel consumption of the Group’s plants throughout their life cycle compared to 2015.

(7) The “Economic CirculAbility®” KPI considers the Group’s overall EBITDA (euros) and compares it with the amount of resources consumed, both fuel and raw materials, by the different business activities (tons).



## Nature

Read more... 



**Protecting natural capital and biodiversity**, tackling climate change, and contributing to sustainable economic development are strategic factors in the planning, operation and development of our activities. From the perspective of the energy and digital transformation process, mitigating the effects of increasing environmental degradation and climate change cannot be achieved without taking into account their social impact and the principles of inclusion and equity. In particular, this translates into an everyday commitment to the conservation and preservation of nature and biodiversity, by reducing and mitigating the potential negative effects on the planet that may result from various Group activities, to protect current and future generations.

The environmental strategy is also strengthened by a circularity approach, which focuses on reducing the consumption of non-renewable resources and maximizing the value of those already used and of the goods produced, by integrating sustainability from the design phase to the decommissioning of plants, also through innovative solutions.

2030

Preservation of biodiversity:

**No Net Loss**

**-85%**

reduction of specific SO<sub>2</sub> emissions

**-70%**

reduction of specific NO<sub>x</sub> emissions

**-65%**

reduction of specific freshwater withdrawal

**PROJECT:** BIODIVERSITY TO PROTECT HUEMUL 

In this context, we have defined specific targets related to the reduction of emissions (including SO<sub>2</sub>, NO<sub>x</sub>), freshwater withdrawal through responsible use of water resources and waste generated through a structured management system. We have also committed to achieving No Net Loss in terms of biodiversity for new infrastructures from 2030, commencing its adoption on selected projects in areas of high biodiversity importance starting from 2025.



## Human rights

Read more... 

**Our commitment to human rights** is reflected in an integrated, cross-cutting approach that takes into account the needs of our stakeholders along the entire value chain. In this way, we promote knowledge and the

**The protection of health and safety** for all those who work with and for us is a shared responsibility at every level, through the integration of safety in processes and training, in the relationship with contractors, in the management and analysis of accidents and in the continuous quality controls.

Read more... 

Underpinning the business processes and activities in which we are engaged is a **sound governance framework**, which enables to guarantee our stakeholders the application of transparency, fairness and integrity

In the 2022 Sustainability Report, an **overview of all the objectives in the 2023–2025 Sustainability Plan** is provided at the beginning of each chapter, in the dashboards. For example, the dashboard header represents the link between the material topics, the issues in the Sustainability Plan and the United Nations Sustainable Development Goals, to which the objectives related to the specific issue

growth of a constructive dialogue that can really help to effectively address the challenges in terms of the social impact of a decarbonized economy.

Read more... 



**-1%**

Injuries with absence from work frequency rate compared to the previous year<sup>(8)</sup>

**PROJECT: ROBOTS AND SAFETY** 

principles in support of our business model and its implementation on a daily basis, as well as of our entire sustainability strategy.

Read more... 

### Material topics (I level)

**Double materiality**

• Decarbonization of the energy mix

### Plan

**Zero emissions ambition**

### SDG



(8) This index is calculated by establishing the ratio between the number of injuries (all injuries, also those with 3 days of absence or less) and hours worked/1,000,000. In line with GRI, the target reported here takes into account calculation methods that are slightly different from what has been included in Chief Executive Officer's short-term variable compensation, reported in the Report on Remuneration Policy.

# Our governance of sustainability

| 2-9 | 2-12 | 2-13 | 2-14 | 2-24 |

Our governance structure is inspired by international best practices in terms of independence, transparency, inclusiveness and accountability, and permeates the various

strategic and operational processes at all levels of the Company, ensuring effective and efficient management of activities in line with the Company's purpose and values.

## Integrating sustainability into company strategy and processes

For us, sustainability is an essential part of our company processes and lies at the heart of our strategy to meet the global challenges of the transition to a decarbonized economy. This integration is possible thanks to structured processes throughout the Group, starting with an analysis of the context and macro-trends that allows us to assess economic, social and environmental challenges, analyze the associated risks and seize the relative opportunities. This in turn allows us to understand the context in which we operate, supporting our growth and our path towards

sustainable progress. Context analysis is therefore crucial in order to identify the actual and potential impact of our activities, as well as serving as a guide in the definition and planning of our short-, medium- and long-term targets, which are realized through the implementation of specific actions and the development of projects and initiatives in support of our sustainability strategy. Every stage of this process relies on respect for human rights as a fundamental element in the pursuit of **sustainable success**.



A key element of the approach described is the **adoption of the ESG (Environmental, Social and Governance) indicators** throughout the entire value chain, not only to report the results achieved, but above all to anticipate decisions and guide our actions. We are constantly committed to managing and measuring our performance on all relevant aspects, considering economic, business and ESG issues in reporting on activities and defining the objectives underlying the strategy. This model is fully in line with the requirements of the United Nations' Global Compact, of which Enel has been an active member since 2004, which stress the importance of ever-increasing integration of sustainability throughout all corporate strategies. In 2022, we also officially launched our ENEL STAKECAP<sup>TM</sup> model, proposing the adoption of new financial metrics to represent the creation and distribution of sustainable value to the different categories of stakeholders with whom

we establish a quality relationship, measured using ESG metrics.

Our commitment to transparent and robust reporting of our performance on all ESG aspects is essential in order for us to ensure access to information for all our stakeholders, as well as for ESG rating agency assessments to support investors in assessing the sustainability of our business model.

A commitment evidenced by our active participation in various international and European contexts in initiatives and actions to develop and revise frameworks and standards for measuring corporate sustainability, including the European Financial Reporting Advisory Group (EFRAG)'s drafting of the European sustainability reporting standards. Please refer to the "[Our participation in ESG standards/frameworks and sustainability networks](#)" paragraph for further details in this chapter.

## The Enel governance model for sustainability

| 2-9 | 2-10 | 2-17 | 2-18 |

Enel's organizational and corporate governance model ensures that sustainability issues are appropriately taken into consideration in all relevant company decision-making processes, by defining specific tasks and responsibilities for the main corporate governance bodies.

The **Board of Directors** plays a central role in corporate governance as the body vested with powers related to the strategic, organizational and control policies of the Company and Group, and pursues the sustainable success of the same. In this context, the Board of Directors takes into account the need to pursue sustainable success particularly: (i) when defining Company and Group strategies; (ii) when drawing up the remuneration policy for the Chief Executive Officer/General Manager and Key Management Personnel, defining specific sustainability objectives the achievement of which is linked to a significant component of the variable pay; and (iii) with regard to the Company's Internal Control and Risk Management System ("SCIGR"), aimed at the effective and efficient identification, measurement, management and monitoring of the main corporate risks, including those of an ESG nature.

Enel applies diversity criteria, also in relation to gender, in the composition of the Board of Directors, in line with the priority goal of ensuring adequate competence and professionalism of its members and in compliance with its **Diversity Policy**, approved in 2018. The Board of Directors, whose term expires with the approval of the financial statements for the 2022 financial year, in providing shareholders with its **guidance on the optimal size and compo-**

**sition of the Board of Directors**, with a view to its renewal by the Ordinary Shareholders' Meeting scheduled for May 2023, expressly took into account the criteria set out in the Diversity Policy. These guidelines, which include sustainability among the competencies deemed relevant, are summarized in a special document that was published in good time on the Company's website in anticipation of the Shareholders' Meeting called to renew the Board.

In order to provide Directors with an adequate overview of the Group's business sectors, including sustainability issues, a comprehensive **induction program** was organized commencing in the second half of 2020, followed by specific examination of the topics of corporate governance and climate change during 2021. During 2022, the induction program continued with further examination of the topics of cyber security and risk governance.

Furthermore, in order to regulate the way in which the Company engages with institutional investors and with all shareholders and bond holders, in March 2021 the Board of Directors adopted a specific Policy (called "**Engagement Policy**"). In this regard, during 2022, the Company maintained an ongoing dialogue with institutional investors, also with reference to certain profiles concerning sustainability, with a particular focus on climate change.

The Board of Directors has also established internal board committees with the power to investigate, propose and advise, in order to ensure an adequate internal division of its functions, as well as a related parties committee. In particular, the following committees have been established:



- **Corporate Governance and Sustainability Committee**, which among other things assists the Board of Directors on sustainability issues, including issues relating to climate change and the dynamics of the Company's interaction with all stakeholders. More specifically, with regard to sustainability issues, the Committee examines: (i) the guidelines of the Sustainability Plan and the materiality matrix – which identifies the material topics for stakeholders in light of the Enel Group's industrial strategies – periodically assessing achievement of the objectives defined in the Plan itself; (ii) the way in which the sustainability policy is implemented; (iii) the general outline and structure of the content in the Non-Financial Statement and the Sustainability Report, which may be summarized in a single document. In 2022, it addressed sustainability issues in 4 of the 6 meetings held.
- **Control and Risks Committee**, which is tasked, among other things, with supporting the assessments and decisions of the Board of Directors relating to the SCIGR, also with regard to risks that may be relevant from a sustainability perspective, and to the approval of periodic financial and non-financial reports. During 2022 it dealt with sustainability issues in 8 of the 14 meetings held;
- **Nomination and Compensation Committee**, which is tasked, among other things, with supporting the Board of Directors in its assessments and decisions relating to the size and optimal composition of the Board itself and its Committees, as well as the remuneration of Directors and Key Management Personnel. In this regard, the remuneration policy for 2022 provides for specific sustainability targets the achievement of which is linked to a significant component of the variable pay of the Chief Executive Officer/General Manager;
- **Related Parties Committee**, which performs the tasks required by the CONSOB regulations and by the specific Enel procedure governing transactions with related parties.

Furthermore, in line with the power structure currently in force within the Company:

- the **Chairman** of the Board of Directors acts as a link between the executive and non-executive directors and is responsible for ensuring the effective operation of the board; he also plays a **proactive role in the process of approving and monitoring corporate and sustainability strategies**;
- the **Chief Executive Officer** is primarily responsible for

the management of the Company and acts as the director in charge of the establishment and maintenance of the SCIGR. Also, in exercising the powers granted, **he has defined a sustainable business model** by identifying a strategy aimed at guiding the energy transition to a low carbon model;



- the **Innovability® Function** (Innovation and Sustainability), which reports directly to the Chief Executive Officer, manages all activities relating to sustainability and innovation. The Holding units responsible for Enel S.p.A.'s operations, particularly the sustainability, circular economy, and community relations processes, play a guidance and coordination role for the Sustainability and Innovation units located in the various countries and Business Lines. In particular, the Holding's Sustainability Planning and Performance Management and Human Rights unit, responsible for the management of sustainability planning, monitoring and reporting processes, including compliance with the European taxonomy, as well as the management of ESG ratings, sustainability indices and the Human Rights Policy, also reports to the Group's Chief Financial Officer (CFO), in order to ensure the ever-greater integration of these issues into corporate strategies and corporate reporting;
- the **Global Business Lines, Countries, Global Service Functions** and **Holding Functions** integrate ESG factors into their decision-making and operating processes, to create long-term sustainable value, thanks to the presence of dedicated Sustainability structures in all Countries, Business Lines and Global Service Functions. At the local level, the expectations of the various stakeholders are identified, and specific sustainability plans defined, in line with the Group strategy.

With specific reference to **governance for the management of climate change**, please refer to the "[Zero emissions target](#)" chapter of this document.

Furthermore, the Group CEO chairs the **Cyber Security Committee**, which consists of the Group's front line and the purpose of which is to approve the IT security strategy and periodically check the progress of its implementation. For more information on the activities carried out by the corporate bodies, please refer to the [Enel Report on Corporate Governance and Ownership Structure](#), available at [www.enel.com](http://www.enel.com), governance section, as well as the chapter on "Sound Governance" in this document.

# Our participation in ESG standards/frameworks and in sustainable development organizations

2-28

-  Network/organizations
-  Standard/framework



## 1. Global Reporting Initiative

The Enel Group has been a member of the **Global Reporting Initiative (GRI)** since 2006, and part of the GRI Community since 2016. In 2022 Enel continued to engage with the other members of the Global Sustainability Standards Board and played an active role in completing the work of the "**Business Leadership Forum on the SDGs**", once again confirming its efforts to achieve the SDGs, while demonstrating commitment, accountability and transparency through corporate reporting. Since 2020, Enel has been part of the Global Sustainability Standards Board, the independent body that has the exclusive responsibility for developing and issuing the Global Reporting Initiative (GRI) Standards.



## 2. IFRS Sustainability Alliance

Even following the initial merger of IIRC and SASB into the **Value Reporting Foundation**, and then into the current **IFRS Sustainability Alliance**, in 2022 Enel continued to engage with the new organization to promote transparent, reliable and comparable reporting on environmental, social and governance issues.

## 3. Taskforce on Climate-Related Financial Disclosures (TCFD)

Enel has supported the Taskforce since the publication of the first recommendations in June 2017, promoting transparent and reliable information on the climate. In 2020, Enel was also a member of the TCFD Advisory Group which puts together recommendations on scenario analyses.

## 4. Science Based Targets initiative (SBTi)

Enel has certified through SBTi four targets, referring to both direct and indirect emissions along the entire value chain, with respect to the 2030 and 2040 horizons, in line with 1.5 °C and the criteria and recommendations of SBTi and its reference standards.



## 5. Taskforce on Nature-related Financial Disclosures (TNFD) Forum

In 2022, Enel continued to collaborate as a member of the **TNFD Forum**, a multi-stakeholder advisory group that supports the new **Taskforce on Nature-related Financial Disclosures (TNFD)** to provide a global framework by 2023 for companies and financial institutions to assess and report risks and opportunities linked to their operation's impact on nature and biodiversity. In October 2022, Enel was also selected as one of the companies that are part of **TNFD Pilot Program**, which will test the new TNFD framework under the WBCSD's guidance as part of three groups (energy, land use and built environment).

## 6. Science Based Target Network (SBTN) for Nature

After joining the **Science Based Target Network's Corporate Engagement Program** in 2021, Enel again committed to SBTN's goals and vision, and helped develop methods and tools in line with its targets. SBTN – a unique collaboration of not-for-profit and world-leading organizations – provides companies with guidance to set science-based goals for nature, water, oceans, land and biodiversity.



## 7. United Nations Global Compact

In 2004 Enel joined the United Nations Global Compact by committing to its ten founding principles on human rights, labor standards, environmental protection and anti-corruption. In 2022, Enel continued to be part of the "**CFO Coalition for the SDGs**", which it co-chairs, and sits on the new **Advisory Board**. Enel is also a member of the **Just Transition Think Lab** and a Patron of the new **Transformational Governance** portfolio, an initiative to explore new decision-making models to help companies be more responsible, ethical, inclusive and transparent. The Group also took part in Uniting Business LIVE organized by the Global Compact during the UN General Assembly week.



## 8. Sustainable Energy for All

Since 2011, Enel has been a partner of **Sustainable Energy for All**, an international organization that works in collaboration with the United Nations and global leaders in the public and private sector to advance SDG 7. Since 2020, the Group CEO has chaired the organization's Administrative Board, a position it will hold up until 2023. Enel upheld its commitment to the Energy Compacts in 2022: in addition to the **Group's Energy Compact** and that for the **green electrification of Sardinia** launched in 2021, the Group presented the **Santiago Energy Compact** to boost photovoltaic capacity and promote end-use electrification in the city of Santiago de Chile, helping to further progress on SDG 7 as reported in the **2022 Annual Progress Report**. In 2022 Enel also took part in the SEforALL Forum held in Kigali from May 17 to 19.



## 9. CSR Europe

Enel has been a member of CSR Europe since 2005. From 2016 to 2020, the Group served as vice-chair of the Board (of which it is currently a member) and was re-elected in 2022 for a further three-year term. Enel also joined the organization's new flagship initiative – the “Leaders Hub for an Inclusive Green Deal” – which focuses on a just transition for an inclusive Green Deal, where Enel has been engaged in the Steering Committee and workforce, communities and consumers working groups. The Group also played a key role in the **European SDG Summit** where the various working groups in which Enel took part presented their results:

- **Business Roadmap for Just Transition** of the People Leaders Hub;
- **Building Inclusive Workplaces Blueprint**, outcome of the People Centered Approach workshops;
- **Upskilling & Reskilling Report** of the Upskill4Future Project launched in 2021.

The Group also continued its work on the Biodiversity & Industry platform.

Lastly, we entered into a dialog to develop a performance indicator for companies on tax transparency and responsible tax behavior, and participated in the working group to draw up a blueprint and paper on composite raw materials.



## 10. World Business Council for Sustainable Development

Since 2016, Enel has been a member of the **World Business Council for Sustainable Development** and is represented both on the Board (of which the CEO is a member), and at Liaison Delegate level. In 2022, the Group continued to be involved in multiple programs and projects, including SOS 1.5 and Energy Transformation, for which it is also a member of the Steering Committee. Enel also joined the new **Business Commission to Tackle Inequality** initiative, of which Chairman Crisostomo serves as Commissioner. The Group has also played an active role in the following projects: “Healthy People, Healthy Business”, “Nature-based solutions” and “Mobility Decarbonization”. During the WBCSD Council Meeting, Enel was engaged in the dialogue on Business priorities for the global stocktake and Towards zero-emission mobility & buildings operations.



## 11. Sustainable Business Roundtable (SBRT)

In 2016, Enel joined the **Sustainable Business Roundtable (SBRT)**, and in 2022 it participated in meetings focusing on “The Board’s Role in Sustainability” and “Creating Sustainable Customer Value”.



## 12. Global Investors for Sustainable Development (GISD) Alliance

In 2022, Enel continued to uphold its commitment to the **Global Investors for Sustainable Development (GISD) Alliance**, an integral part of the UN **Strategy for Financing the 2030 Agenda for Sustainable Development**, of which the Group’s CEO is a member.

Enel has been an active contributor in the Alliance’s discussions on mobilizing investments in support of sustainable development, particularly in defining specific industry metrics related to the SDGs and their integration into existing reporting frameworks.



## 13. First Movers Coalition

In 2022, Enel signed a letter of commitment to join the **First Movers Coalition** – an initiative led by the US Presidency and State Department in close collaboration with the **World Economic Forum** at the WEF Annual Meeting in Davos. This global initiative is dedicated to decarbonizing **hard-to-abate industrial sectors** which are currently responsible for 30% of global emissions; Enel also joined the working group dedicated to **Steel**.



## 14. Sustainable Stock Exchanges Initiative

In 2022, Enel confirmed its participation in the **Sustainable Stock Exchanges Initiative** as an Official Supporter, and expressed its interest in participating in the new Advisory Board dedicated to Voluntary Carbon Markets.



## 15. GreenBiz Executive Network Europe

In 2022, Enel signed a new partnership with the **European GreenBiz executive network**, which supports large companies with achieving an even more deep-rooted sustainable transformation and increasingly ambitious development goals.



## 16. World Climate Foundation

In early 2023, Enel joined the **World Climate Foundation**, a multi-stakeholder and multi-sector network to promote the transition to a zero-emission and nature-positive planet through multilateral dialogue and partnerships, as well as investment in sustainable solutions.

# Our materiality analysis and priorities for action

2-29

3-1

3-2

3-3

Considering the analysis of the ESG context, the materiality analysis process, via the involvement of stakeholders and relevant experts, makes it possible to define the material topics, that is the topics that represent the organization's most significant impacts on the economy, environment and people, in-

cluding impacts on human rights. The material topics are our action priorities based on which we define the sustainability goals targeted toward creating sustainable short, medium and long-term value and the content to be included in the documents that comprise Corporate Reporting.

## The materiality analysis process framework



### Context analysis

Identification and analysis of key **ESG megatrends**, current and future, to identify their risks, limit their impacts, and fully grasp their related opportunities

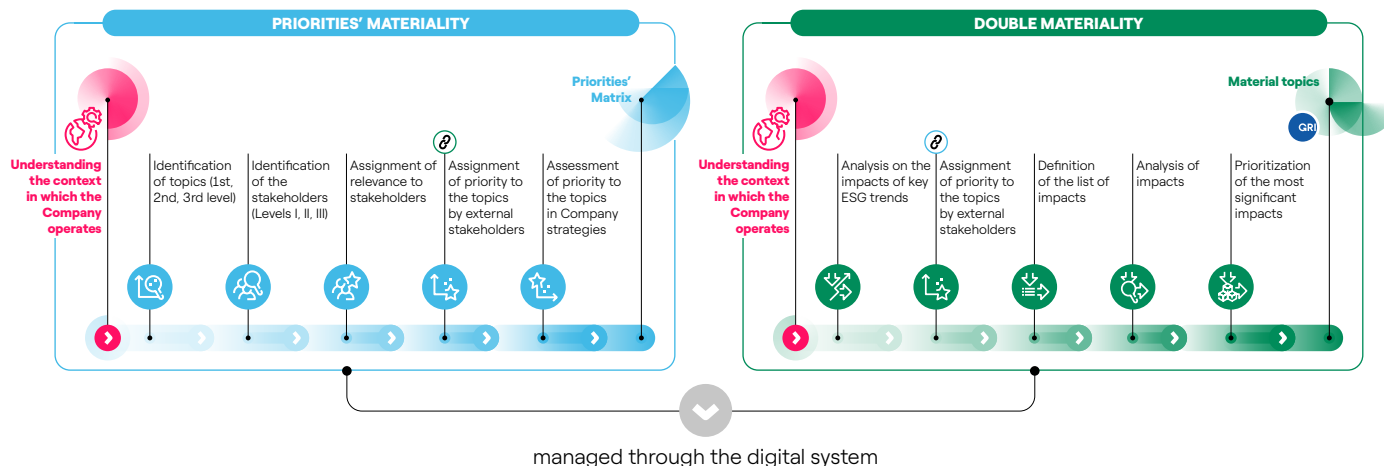
We involve our stakeholders and relevant experts

### Priorities' Matrix

Identification and assessment of priority topics for the **Company** (Y-axis) and its key **stakeholders** (X-axis) representing the Group's **Priorities' matrix**

### Double materiality

Identification of **material topics** based on the assessment of the **impacts generated** and **impacts suffered** (*impact materiality and financial materiality*)





Enel performs the materiality analysis based on the most widespread international standards, including the Universal Standard GRI 2021 (Global Reporting Initiative), AA1000 (Accountability 1000) and taking into consideration the new requirements introduced on a European level by the Corporate Sustainability Reporting Directive (CSRD) and the Exposure Drafts of the European Sustainability Reporting Standards (ESRS) made available by EFRAG (European Financial Reporting Advisory Group). The Value Reporting Foundation – SASB and Compass SDG, which supports companies in adapting their strategies to the United Nations Sustainable Development Goals, were also considered.

Over the past two years, the perspective for identifying the priorities attributed by the Company and its stakeholders to ESG topics has been enriched by the view of the most significant generated and incurred impacts for the Company (the so-called **Double materiality** – impact materiality and financial materiality). From the point of view of “double materiality”, the impact model is of fundamental impor-













tance, because it makes it possible for the Company to identify the **material topics** and therefore concentrate on them in the best way possible, both in terms risks as well as opportunities.

Therefore if the **analysis of the most significant impacts guides the identification of the material topics, the priority topics direct the Company’s further efforts for following the strategic choices.**

The materiality analysis process includes a significant activity of **involving the stakeholders**, which makes it possible to always be open to listening to the individuals or interest groups that are influenced or could be influenced by the organization’s activities. Every year we start multiple types of initiatives in order to receive information about what is perceived by internal and external stakeholders in terms of priorities, satisfaction and impact of the submitted ESG topics.

The list of material topics (level I and II) is provided below.

## Material topics (Levels I-II)

BUSINESS & GOVERNANCE	 <b>Decarbonization of the energy mix</b> <ul style="list-style-type: none"> <li>Climate change</li> <li>Use of energy</li> </ul>	 <b>Innovation, circular economy and digital transformation</b> <ul style="list-style-type: none"> <li>Ecosystem of innovation and sustainability</li> <li>Digitalization and cyber security</li> <li>Circular economy</li> </ul>	 <b>Products and services for electrification and digitalization</b> <ul style="list-style-type: none"> <li>New technologies and solutions for homes, condominiums, cities, industries and financial activities</li> <li>Electric mobility</li> </ul>	 <b>Customer centricity</b> <ul style="list-style-type: none"> <li>Ability to meet customer needs</li> <li>Quality of customer relations</li> </ul>
	 <b>Infrastructure and networks</b> <ul style="list-style-type: none"> <li>Improvement and development of grids</li> <li>Operational management of grids</li> </ul>	 <b>Sound governance and fair corporate conduct</b> <ul style="list-style-type: none"> <li>Fairness in management conduct</li> <li>Structure of the Board of Directors and Top Management</li> <li>Fair and transparent communications</li> </ul>	 <b>Economic and financial value creation</b> <ul style="list-style-type: none"> <li>Investment attraction</li> <li>Long-term value creation strategy</li> </ul>	
	 <b>Occupational health and safety</b> <ul style="list-style-type: none"> <li>Health and safety of employees of contractors operating on Enel sites</li> <li>Health and safety of employees</li> </ul>	 <b>People management, development and motivation</b> <ul style="list-style-type: none"> <li>Quality of corporate life</li> <li>People development</li> <li>Valuing employee diversity</li> </ul>	 <b>Sustainable supply chain</b> <ul style="list-style-type: none"> <li>Responsible management of the procurement of goods, services and works</li> <li>Respect for human rights in the supply chain</li> </ul>	 <b>Engaging local and global communities</b> <ul style="list-style-type: none"> <li>Social and economic development of local communities</li> <li>Consultation with the local community in the development of new projects</li> </ul>
ENVIRONMENT	 <b>Conservation of eco-systems and environmental management</b> <ul style="list-style-type: none"> <li>Water management</li> <li>Protection of biodiversity and natural capital</li> <li>Environmental governance</li> </ul>			

The detailed information regarding the materiality analysis process and the activities for stakeholder involvement is

provided in chapter “[Materiality analysis process and results for 2022](#)” of this document.

# Our commitment to continuous improvement

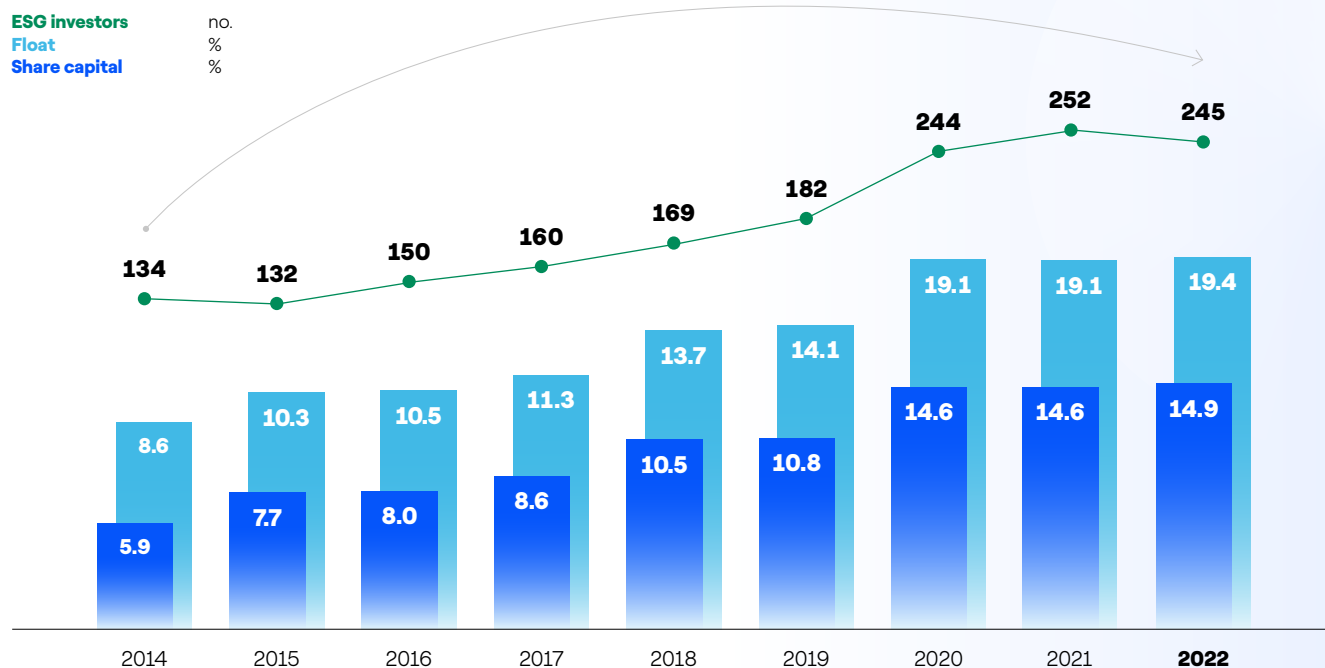
## Sustainable investments

Sustainability represents a fundamental lever for creating economic and financial value. For this reason a consistent number of investors have integrated ESG issues in their investment portfolio over the past years in order to minimize financial risk and guarantee higher returns.

Thanks to international development and growing profitability, together with a strong sustainability policy and strategy targeted toward energy transition, as well as the adoption of best practices regarding transparency and corporate governance, Enel shareholders include national and international investment funds, insurance companies, pension and ethical funds. Since 2014, ESG investment funds (active and passive) have more than doubled their

share of Enel's share capital, reaching 14.9% at the end of 2022, up as compared to December 31, 2021 (14.6%). Their share of total institutional investors is also increasing, reaching 26.2% at the end of 2022, compared to 24.6% of the previous year. In absolute terms, 245 (vs 252 at the end of 2021) investors with investment funds consider not only the Group's financial performance but also the environmental, social and governance practices that Enel is integrating into its business strategy and all activities along the entire value chain. Furthermore, again at the end of 2022, 42.1% of Enel's capital was held by investors who were signatories of the United Nations Principles for Responsible Investment (UN PRI).

### Growth in ESG investors




# Sustainability-linked finance

In Enel, sustainable finance plays a crucial role in supporting Group growth, representing approximately 63% of gross debt at the end of 2022. In particular, structured transactions amounting to more than **23 billion euros equivalent** were carried out.

Sustainable finance means synergy between private and public finance. Private finance conveys private capital towards sustainable investments, i.e. for the benefit of companies whose strategic action is intended to achieve certain sustainability objectives, reflecting the economic and financial value of sustainability in a lower cost of debt. Public finance, on the other hand, stimulates the creation of sustainable investments, through grants and loans at subsidized interest rates. In 2020, Enel was the first company in the world to set up a **"Sustainability-Linked Financing Framework"**, an all-encompassing document that extends the sustainability-linked approach to all financial debt instruments. Indicators, targets and principles have been defined that govern the development of sustainable finance throughout the Group with ambition and transparency, linking the financial strategy to the sustainability objectives. The "Sustainability-Linked Financing Framework" was updated in January

2021, January 2022 and subsequently in February 2023, in line with the annual updates of the Group's Strategic Plan. In the last updated in February 2023, three new KPIs ("Scope 1 and 3 GHG emissions intensity relating to Integrated Power (gCO<sub>2eq</sub>/kWh)", "Absolute Scope 3 GHG emissions relating to gas retail (MtCO<sub>2eq</sub>)" and "Proportion of Capex aligned to the EU Taxonomy (%)") were included in the framework, which contribute toward reaching SDG 7 and SDG 13 and the European Environmental Objective of Climate Change Mitigation.

The Group's financial instruments and operations can therefore have an interest rate or other financial or structural terms linked to reaching the goals associated with the reduction in direct and indirect greenhouse gas emissions (SDG 13 "Climate action"), the increase in installed capacity powered by renewable sources (SDG 7 "Affordable and clean energy") and the percentage of total Capex, carried out during a certain period, in activities that are qualified as sustainable from an environmental point of view according to the criteria specified in article 3 of the regulation on EU Taxonomy (2020/852). The KPIs and targets included in the latest update of Enel's Sustainability-Linked Financing Framework, published in February 2023, are listed below.

KPI	Actual values	Sustainability Performance Targets (SPT)					
	2022	2022	2023	2024	2025	2030	2040
GHG Scope 1 emission intensity related to power generation (gCO <sub>2eq</sub> /kWh)	229		148	140	130	72	0
GHG Scope 1 and 3 emission intensity related to Integrated Power (gCO <sub>2eq</sub> /kWh)	218				135	73	0
Absolute Scope 3 GHG emissions relating to gas retail (MtCO <sub>2eq</sub> )	22.9				20.9	11.4	0
Percentage of installed renewable capacity (%) <sup>(1)</sup>	63.1% 	60%	65%	66%	76%	85%	100%
Proportion of Capex aligned to the EU Taxonomy (%)	81.9%	————— >80% —————					

Target:  Outdated

(1) Excluded from the calculation are 531.1 MW of acquired capacity, deriving from power plants acquired by the Group, according to what is indicated by the contractual documentation of the individual instruments.

Having achieved a percentage of renewable installed capacity of 63.1% of total installed capacity as of 2022, Enel has reached the target set in all those financial instruments in which the interest rate, or other financial or structural terms of the transaction, are linked to the achievement of a percentage of renewable installed capacity of 60% or more. Particularly noteworthy is the achievement of the targets set by the first sustainability-linked bonds issued by Enel Finance International NV (EFI) in 2020 in Pound Sterling. The trend of the five above-mentioned KPI, at

the relative date of reference, will be verified by an external verifier. Furthermore, Enel will report every year on its performance regarding the five KPI, as appropriate, in its Annual Financial Statements and/or Sustainability Report – Non-Financial Statement and/or on its website.<sup>(9)</sup>

In 2022 the Group, through its financial subsidiaries, EFI and, for the first time EFA (Enel Finance America, LLC), issued approximately 12 billion euros in **sustainability-linked bonds** in various markets and currencies.

(9) <https://www.enel.com/investors/investing/sustainable-finance/sustainability-linked-finance/sustainability-linked-bonds>.

For this reason, it is worth recalling that in June 2022 EFI launched a multi-tranche bond emission on the market in US dollars and linked one of the tranches to the Group's goal of reaching zero emissions of "Scope 1 GHG emissions intensity relating to power generation ( $\text{gCO}_{2\text{eq}}/\text{kWh}$ )" by 2040. This was the first time ever for an energy multinational.

In May 2022, Enel and EFI increased the amount of the current Sustainability-Linked Revolving Credit Facility from 10 billion euros to 13.5 billion euros, the world's largest sustainable credit line linked to SDG 13.

With regard to **commercial papers**, in April 2022 EFI renewed and increased its commercial paper program from 6 to 8 billion euros, which is linked to KPI "Scope 1 GHG emissions intensity relating to power generation ( $\text{gCO}_{2\text{eq}}/\text{kWh}$ )" of less than or equal to 148  $\text{gCO}_{2\text{eq}}/\text{kWh}$  by 2023 and less than or equal to 140  $\text{gCO}_{2\text{eq}}/\text{kWh}$  by 2024.

Furthermore, Enel has signed agreements with different financial counterparties for derivative instruments and sustainable guarantees, both linked to the Group's ability to reach its sustainability goals over the next years.

In February 2023, EFI launched a sustainability-linked bond in two tranches for a total of 1.5 billion euros: the new issue combined for the first time world-wide a KPI linked to the taxonomy of EU with a KPI linked to the United Nations sustainable development goals ("SDG"), also providing for goals of complete decarbonization.

In the field of **public finance**, the Group supports the economic recovery plan and aims to become a strategic partner for the adoption of the Green Deal and the Recovery Plan at both the national and European level. The objective is to drive a sustainable, rapid and effective recovery, through a wide pipeline of construction projects focused on decarbonization, electricity grids and electrification, allowing the green and digital transition of the European

economy to be accelerated, with a significant impact in terms of GDP, employment and reduction of  $\text{CO}_2$  emissions and in full alignment with the European Taxonomy. To this end, the Group has identified potential investments of approximately 4.3 billion euros for the period 2023-2030, with a direct impact on the Group through the ownership and the stewardship model. These initiatives are focused on green hydrogen, renewables and storage, revitalization of the photovoltaic manufacturing industry, smart grids, network resilience and charging infrastructure for electric mobility. The Group has also promoted partnerships with both public and private entities, with a view to achieving the decarbonization and electrification of consumption through the spread of electric bus fleets, the transition towards 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 intended to accelerate the mobilization of capital to support sustainable growth, through the use of **sustainability-linked financial instruments**.

More specifically, in 2022 the Group signed subsidized loans for a total of 1.8 billion euros, which, as in the case of private financing, provide for the inclusion of sustainability-linked mechanisms linked to SDG 13. Among the main operations, a special mention must be made of the sustainability-linked borrowings for a total of 800 million dollars by EFA, a Group company, and EKF (Danish export-credit agency), the first sustainability-linked borrowings agreement for the latter.

In the coming years, Enel will continue to make use of sustainable finance tools, with the aim of achieving a sustainable debt share of the Group's total debt of approximately 70% by 2025.

## Participation in international round tables to promote sustainable finance

The focus on sustainable finance is being confirmed, strengthening Enel's commitment to key global stakeholders, through the co-chairmanship of the United Nations Global Compact's CFO Coalition for the SDGs and involvement in the UN Global Investors for Sustainable Development (GISD) Alliance.

After the launch of "Principles on Integrated SDG Investments and Finance", the CFO Coalition focused its work on analyzing the targets defined by companies for the SDGs and the relative KPIs, business cases for the adoption of an SDG finance & investment strategy, and development of profiles by macro sector. In this context, the CFOs therefore invested more than 110 billion dollars in support of

the SDGs achieving an increase of 55% in SDG finance as compared to the previous year. Furthermore, an Advisory Board was established, which includes Enel, which will provide sector-specific and geographical skills, help coordinate exchanges between CFOs and the largest community of sustainable finance on specific issues, and will provide information and contacts for the recruitment of new Coalition members.

Equally important are the results obtained from the collaboration with the GISD Alliance, such as the update of the Model Mandate, which is a guide for asset owners to guarantee that the management and sustainability goals are fully reflected in the agreements and contracts with

the managers of these assets. Furthermore, as Enel is a member of the GISD Alliance, contribution was given to the joint statement of the Alliance as a response to the public consultation launched by the International Sustainability Standard Board (ISSB) in terms of sustainability reporting. Also the work performed on a European level through our stakeholder of reference, CSR Europe, was considerable. In fact, on occasion of the European SDG Summit 2022, Enel participated in the roundtables: "The Role of Double Ma-

teriality in Sustainability Reporting" regarding how double materiality is integrated in the CSRD and how companies can approach it, and "The Challenge of Circularity in the Green Transition" regarding the circular economy and the energy transition.

Also worth mentioning is Enel's involvement in the series of interviews on sustainable finance organized by the UN Sustainable Stock Exchanges Initiative.

## Our position on and commitment to the European Taxonomy

**Enel welcomes the development of the European Union (EU) Taxonomy Regulation**, as it provides a standardized, science-based classification system to identify environmentally sustainable economic activities.

The EU Taxonomy Regulation acts as an important enabler to promote sustainable investments and accelerate the decarbonization of the European economy, while at the same time creating reliability and transparency for investors and supporting companies in planning the Net-Zero transition.

**We are fully committed to reporting on the implementation of the European Taxonomy Regulation** pursuant to its Article 8 thereof and the Delegated Act which further specifies the content, methodology and presentation of information to be disclosed by companies of both a financial and non-financial nature.

**As regards the Climate Delegated Act, which establishes criteria for verifying the contribution to climate mitigation and adaptation, we welcome the different thresholds defined in the Taxonomy based on climate and environmental sciences**, such as the specific emission limit of 100 gCO<sub>2eq</sub>/kWh (taking into account the whole life cycle) to measure the substantial contribution to the climate change mitigation target set for most energy production technologies, as it is derived from a robust, science-based process.

However, there are some activities that, although not covered under the EU Taxonomy Regulation, are critical to promoting the well-being of the public, especially in the short and medium term, while contributing to the sustainable development in the long term.

As regards the energy industry, there are some important sustainability-related issues that the European Commission did not consider when developing the technical screening criteria, as they were outside the main scope of

the EU Taxonomy Regulation. These issues include energy security, grid reliability or energy transition, which are crucial for Europe's well-being and are appropriately addressed by other policies, funds and regulations at EU and Member State level.

The EU Taxonomy Regulation is still in a developmental stage, and a number of important Delegated Acts are still being finalized at the time of publication of this Sustainability Report. These include acts that will detail the criteria for the remaining four objectives (sustainable use and protection of waters and marine resources; transition to a circular economy, pollution prevention and control, and protection and restoration of biodiversity and of ecosystems) as well as those that will identify economic activities that do not have a significant harmful impact on environmental sustainability and those that do significantly damage it. **Completion of the entire regulatory process should ensure that all globally recognized economic activities are considered, thereby reducing current uncertainties regarding implementation of the process itself.**

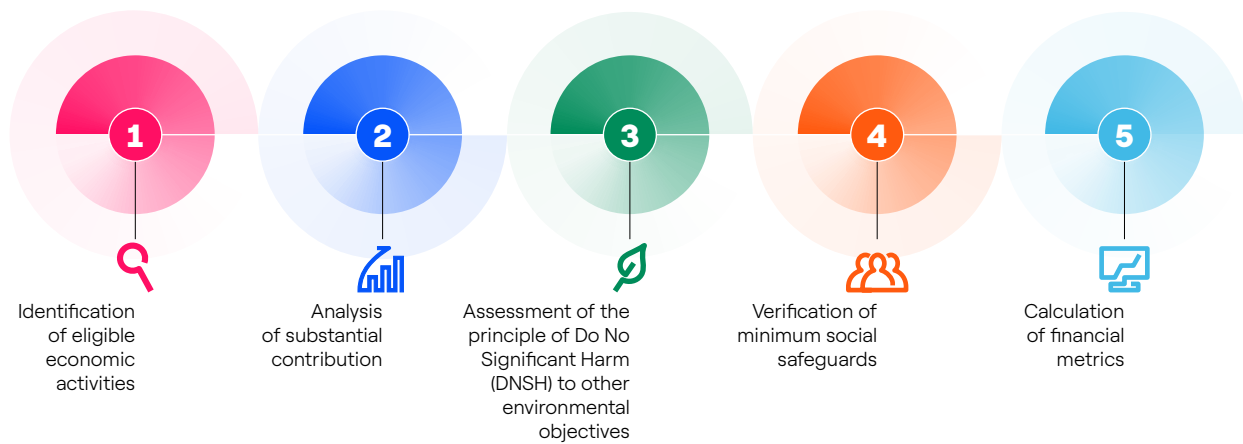
Going beyond the disclosure requirements of the Taxonomy, Enel has included the **Capex alignment** percentage as one of the key performance indicators of the **Sustainability-Linked Financing Framework** used to define the Company's sustainable financial instruments. With this important move forward, Enel reinforces the role of the Taxonomy as a driver to promote sustainable investment decisions and show how sustainability can be fully integrated into the financial landscape.

Enel holds its annual Capital Markets Day to align its capital allocation with the EU Taxonomy set out in its Business Plan. In particular, in 2022 Enel announced **a target in excess of 80% Capex alignment for the period 2023-2025** as part of its contribution to climate mitigation.



## Our implementation process and eligible activities

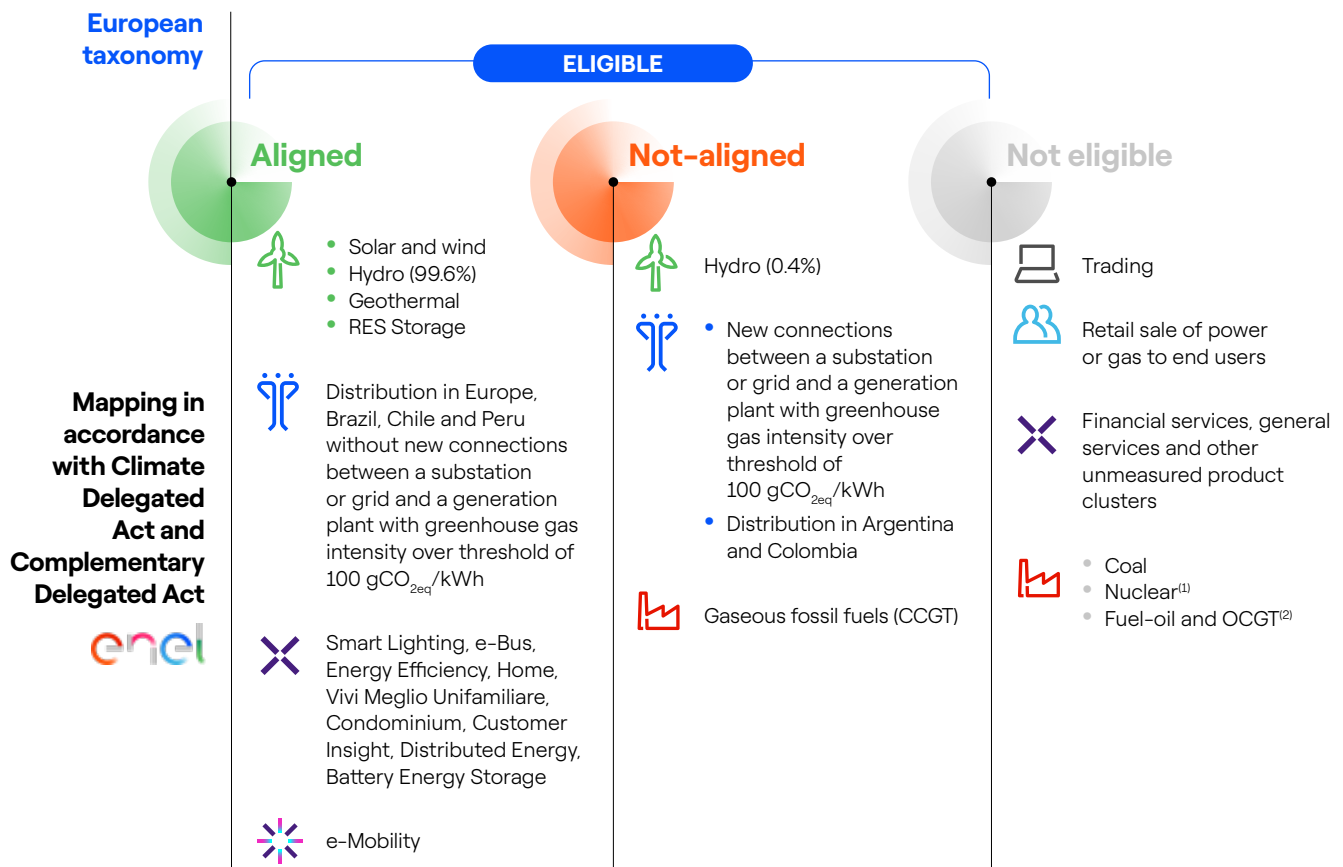
In 2020 we defined a **structured process for implementing the European Taxonomy** based on **5 phases**:



Over the past year, we have updated our eligibility analysis according to the process under the final version of the Climate Delegated Act published in the Official Journal of the European Union in December 2021 and under the Com-

plementary Delegated Act published in the Official Journal of the European Union in July 2022.

Below are the activities of the business classified according to the European Taxonomy (Art. 8 EU Reg. 852/2020).



(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.

The high level of alignment of our economic activities with the EU Taxonomy Regulation in 2022, made possible by their substantial contribution to the climate change mitigation

objective while respecting the principle of doing no significant harm (DNSH) to other environmental objective and observing the minimum social safeguards, is shown below:

#### % 2022 alignment of business activities to the European Taxonomy

<b>56.7%</b> of ordinary gross operating profit (EBITDA)	The EBITDA percentage of Taxonomy eligible and aligned businesses decreased in 2022 compared to 2021 <sup>(10)</sup> (63.9%), primarily due to changes in revenue (see details below).
<b>21.4%</b> of turnover	In 2022, there is a strong increase in absolute terms in turnover compared to 2021 <sup>(10)</sup> (33.9%). This increase was most pronounced in non-aligned activities, such as power generation from gaseous fuels, and non-eligible activities, such as trading and marketing of electricity and gas and power generation from coal, mainly due to the market situation with high prices and higher thermal generation. The aligned turnover therefore decreases by 12%.
<b>81.9%</b> of capital expenditure (Capex)	The actual 2022 Capex for eligible aligned activities is 4.5% higher than the Capex planned for 2022 in the Strategic Plan 2022-2024 for the same activities. This change is mainly due to higher investments in absolute terms in eligible and aligned activities than planned (over €0.5 billion) and also to adjustments made in the EU taxonomy accounting process, such as the integration of costs accounted for under IFRS 16 Leases, paragraph 53 (h), which had not been taken into consideration in the Strategic Plan 2022-2024.
<b>66.9%</b> of operating expenditure (Opex)	The percentage of Opex of Taxonomy eligible and aligned activities increased in 2022 compared to 2021 (60.8% in 2021 <sup>(10)</sup> ), mainly due to higher maintenance costs incurred in renewable energy production and Taxonomy-aligned distribution activities.

Details of the steps related to the implementation process and results for each KPI (EBITDA, turnover, Capex and Opex) and specific tables on nuclear and fossil gas activities as required by Commission Delegated Regulation (EU) 2022/1214 of 9 March 2022 amending Delegated Regulation (EU) 2021/2139 concerning economic activi-

ties in certain energy sectors and Delegated Regulation (EU) 2021/2178 concerning specific public disclosures for these economic activities are provided in the appendix to the Sustainability Report in the chapter "Our position on and commitment to the European Taxonomy".

(10) The 2021 figure has been restated based on methodological changes mentioned in the section "Process for calculating the financial metrics".

# Sustainability ratings, indices and benchmarks

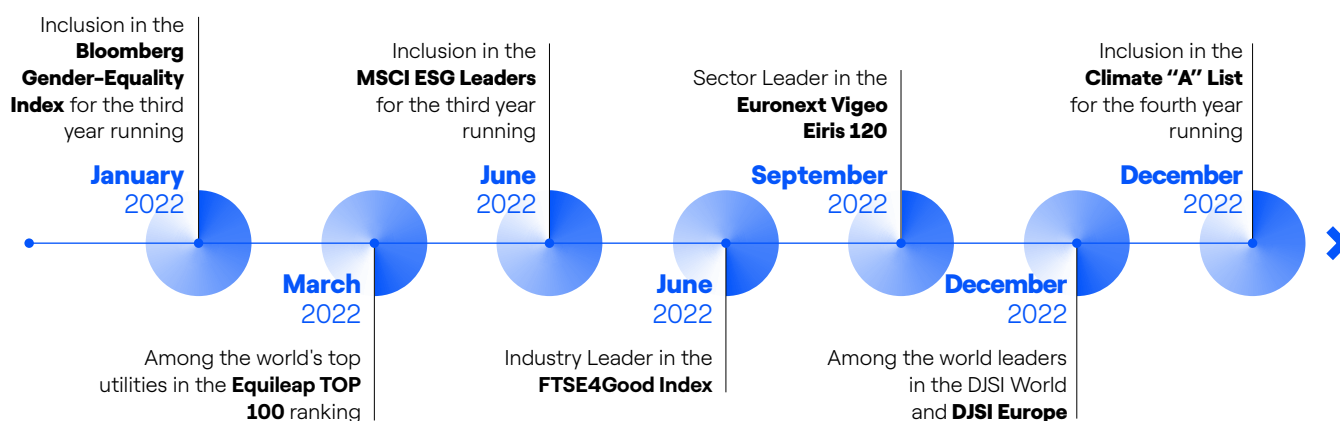
ESG analysts and rating agencies continuously monitor Enel's sustainability performance, by different methods, in relation to environmental, social and governance issues. ESG ratings are a strategic tool to support investors in assessing sustainable business models and identifying risks and opportunities linked to the sustainability in their investment portfolio, aiding the development of active and passive sustainable investment strategies.

Enel is constantly committed to managing and reporting all ESG aspects, considering the assessments of the rating agencies as an important opportunity to improve its performance in terms of sustainability and devising specific action plans with the involvement of the various company units and Business Lines. The main actions implemented

also thanks to these plans have concerned: increasing the transparency of performance related to ESG issues, reinforcing the process of due diligence of human rights, the complete mapping and assessment of the climatic associations with respect to the Paris objectives, defining and reporting the biodiversity "No Net Loss" target, improving the reporting of Scope 3 emissions, in particular those related to the supply chain.

**In 2022, Enel maintained its positioning in the main ESG indices and rankings, reaching leadership positions in most cases.** Enel was also the first company to fully align its company reporting to the **Net-Zero Company CA100+** Benchmark and was included in the **Just Transition Assessment** of the World Benchmarking Alliance.

## Key milestones 2022:



## Main ESG Indices & Rankings



## Main ESG ratings

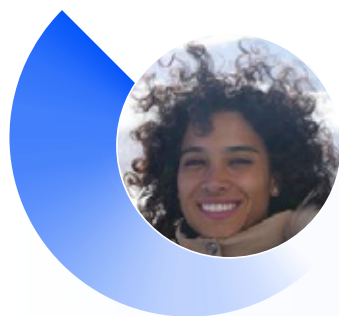
	Rating	Ranking	Sector average	Scale (low   high)
MSCI	<b>AAA</b>	<b>Top 10</b> / 144 utilities	BBB	CCC   AAA
Sustainalytics ESG Risk Rating	<b>21</b> (Medium risk))	<b>30 / 296</b> electric utilities	33.2	100   0
S&P ESG Scores	<b>90</b>	<b>2 / 250</b> electric utilities	32	0   100
CDP	<b>A</b> (climate) <b>B</b> (water)	-	B B	D-   A
Refinitiv ESG Rating	<b>92</b>	<b>1 / 302</b> electric utilities	-	0   100
FTSE Russell ESG Rating	<b>4.9</b>	<b>1 / 41</b> electric utilities	2.8	0   5
Vigeo Eiris ESG Rating	<b>75</b>	<b>1 / 65</b> electric utilities	52	0   100
ISS ESG Score	<b>B</b>	-	C	D-   A+
Reprisk Rating	<b>42</b>	-	48	100   0



## Advisory panel

This year too, we have involved a group of external experts (advisory panel) to strengthen our sustainability reporting. The panel helps to assess and improve the quality and credibility of our Sustainability Report and to increase our level of ambition.

In particular, for the 2022 Sustainability Report, two sustainability experts were involved, with specific reference to issues related to corporate strategy and sustainable finance.



**Anjali Pandit**

(Head of Sustainable Bonds –  
EMEA & Americas, HSBC)

*"This year's Sustainability Report also confirms Enel's leadership in reporting to the market and communicating its sustainability performance in a transparent manner. The report is a structured representation of Enel's enormous commitment to analyzing and reporting on the impacts resulting from its capacity to innovate and grow, by supporting workers and communities to achieve the objectives of combating climate change and conserving natural capital."*

Anjali Pandit is Head of Sustainable Bonds for EMEA and the Americas. She runs a team of ESG specialists across New York and London who support issuers in the public, private sectors and financials. She is responsible for supporting strategic clients with navigating ESG trends in fixed income markets and enhancing engagement on ESG with investors through labelled ESG frameworks or increased disclosure. Anjali represents HSBC on the ICMA EXCOM for the Principles. Anjali has an extensive background in ESG having worked across the private, public and financial sector as a sustainability expert. Previously Anjali worked at BNP Paribas, where she led ESG for BNP Paribas' debt syndicate desk, developing deep relationships with both ESG bond issuers and investors. Anjali also worked in the corporate sector at Tata Group, in various roles including as a manager for public policy in the Group Chairman's office & heading marketing for an ESG data solutions offering for their IT business, TCS. She has also worked with a number of non-profit or social businesses such as Al Gore's The Climate Reality Project, Greenlight Planet, the Obama Administration and The International Energy Agency.



**Paolo Taticchi**

(Vice preside e professore ordinario di Strategia aziendale e  
sostenibilità presso lo University College London)

*"Enel's approach to reporting reflects a clear effort at transparency, as well as great maturity in the ability to quantify ESG metrics. My feedback focused on simplifying the language and improving the graphics to make them easier for readers to comprehend."*

Paolo Taticchi is Deputy Director and Professor in Strategy and Sustainability at the School of Management, University College London, one of the top ten universities in the world.

He has authored numerous scientific articles and books. His academic work has seen him teach and develop projects in over 20 countries, conduct training for Fortune Global 500 companies and give keynote speeches at major corporate and government summits.

Paolo is currently a consultant for major organizations in the United Kingdom, United States, Canada, Italy and India, and a scientific advisor to the Italian Ministry of Ecological Transition. His profile and projects have been featured over 350 times in international media such as the Financial Times, Forbes, Sky and CNN.

In 2018, he was cited by Poets & Quants and by Forbes in the top 40 business professors aged under 40 in the world. In 2021, Il Sole 24 Ore named him the most influential Italian under the age of 40 in the world.

The experts provided input on our process of determining the structure of the document and the contents relating to the chapter “Our sustainable progress”, which gives an

overall view of the management of sustainability in the Enel Group. Panel members are unpaid.



## COMPANY VIEW

# 3.

# Materiality analysis

## We analyze the context

to identify and analyze the main current and future ESG megatrends, to limit risk and impact, and take full advantage of their opportunities.

## We involve the different categories of internal and external stakeholders

to always be open to listening to the individuals or interest groups that are influenced or could be influenced by the organization's activities.

## We define the Priorities' Matrix

by identifying and evaluating priority topics for the Company and its main stakeholders.

## We assess the impacts generated and suffered (Double materiality)

to identify the **material topics**, that is the topics that represent the organization's most significant impacts on the economy, environment and people, including impacts on human rights.



# Materiality analysis process and results for 2022

## The sustainability context

| 2-12 | 2-29 | 3-1 | 3-3 | 201-2 |

In order to evaluate the economic, social and environmental challenges, identify the risks, limit their impacts and take full advantage of the relative opportunities as part of the broader materiality analysis process, an analysis of the main current and future ESG megatrends was carried out.

Within today's complex scenario, new generation and consumption models are emerging, dictated by ongoing technological and demographic changes, as well as by new economic and geopolitical balances.

Based on the main publications within the scope of the Electric Utilities sector and the current public policies, the analysis of the sustainability context identified **14 main ESG megatrends**, which include the **digital revolution, definition of new governance models, climate and demographic change, preservation of resources**. These phenomena influence both today and in the future the economic, social and environmental dimensions of sustainable development and often are mutually conditioned and act in combination, reinforcing their individual impact. The technological revolution and digitalization have in several cases accentuated income disparity and the consequent increase in inequalities. Climate change

is contributing to displacement from rural to urban areas, and therefore to demographic changes in countries. Safeguarding resources entails the need to use and adopt technologies with a lower environmental impact. The impacts of the 14 ESG megatrends identified in the social, economic and environmental context were analyzed and evaluated using a specific questionnaire completed by **external, national and international stakeholders and experts**. The results confirm **climate change, the digital revolution and the preservation of resources as the main ESG megatrends**, and highlight the **increase in inequalities** as a further area of focus in the current and future scenarios.

Furthermore, due to the nature of its business and its geographical distribution, the Enel Group is exposed to various types of ESG risk, identified within the reference framework relating to the risk categories adopted by Enel, of which there are six: **strategic, financial, operational, governance and culture, digital technology, and compliance**. For further details and a description of the actions intended to mitigate their effects and ensure their correct management, refer to the chapter "[Sound governance](#)" in this document.



# Our materiality analysis framework

| 2-29 | 3-1 | 3-3 |

Through the materiality analysis, which involves various categories of internal and external stakeholders, the material topics, namely the topics that represent the organization's most significant impacts on the economy, environment, people and human rights, are defined. The results of this analysis are used to help define the objectives to be included in the Strategic Plan and the Sustainability Plan, the achievement of which is contributed to by the various Group Functions and Business Lines, as well as the topics covered by the Sustainability Report and other Corporate Reporting documents.

As a result of the continuous monitoring of stakeholder expectations ("dynamic materiality"<sup>(1)</sup>), the traditional way of looking at the priorities of ESG topics ("Priorities' Materiality") has been enriched by incorporating a view of the significance of the impacts generated and suffered (impact materiality and financial materiality) by the Company in the reference context ("**Double Materiality**").

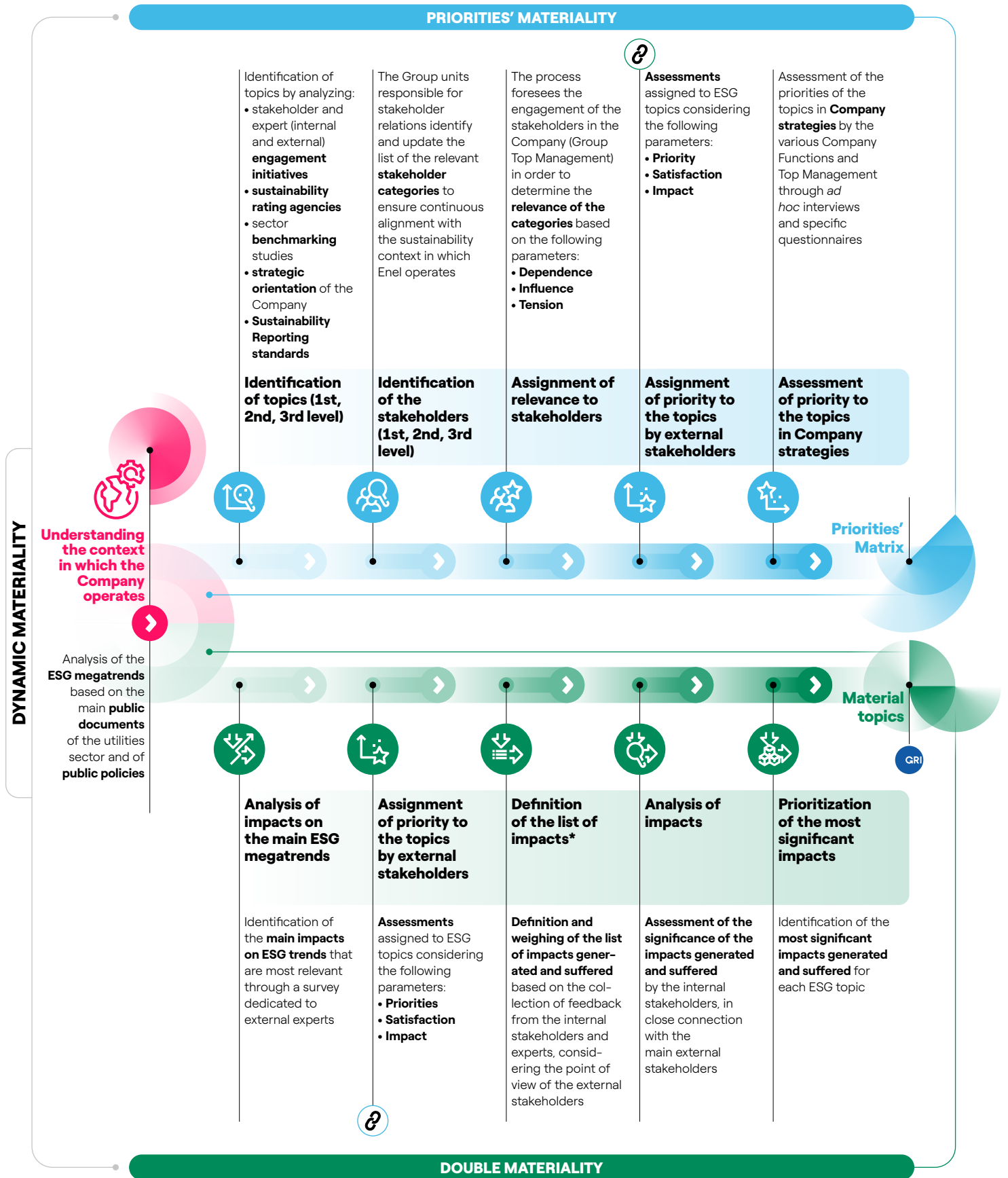
The impact analysis model is of fundamental importance as it enables the Company to identify the **material topics** and focus on the best way to manage them, both in terms of risk management as well as in terms of strengthening opportunities. In addition, the Company must recognize **its strategic priorities**, taking into account also the view of its stakeholders. Identifying the priority ESG topics with which the Company wants to engage therefore strengthens the profile of impact management.



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(1) The concept of dynamic materiality – announced in 2020 by the World Economic Forum in the document "Embracing the new age of materiality" – represents materiality as a dynamic process according to which what may be financially irrelevant today can become material tomorrow.

## Materiality analysis



\* The identified impacts are linked to the main ESG megatrends and the 1st, 2nd and 3rd level priority topics.

Activity carried out in both processes

From a “double materiality” perspective, according to which the Company can influence and be influenced by ESG topics, the **topics are material** to one or both of the following dimensions:

- **impact materiality:** in line with the GRI 2021 standard, which identifies and analyzes material topics in terms of the impacts generated by the Company, namely the effects that the organization has or could have on the economy, the environment, people, and human rights,

which in turn can indicate their contribution (negative or positive) to sustainable development;

- **financial materiality:** in line with the main publications currently available (SASB, ISSB), which identifies and analyzes the material topics from a financial point of view, namely those that affect or could affect the Company’s financial condition or operating results, and are therefore most relevant to investors.

## Reference standards and governance of the materiality analysis process

The materiality analysis was developed in line with the GRI 2021 and the AccountAbility AA1000 Stakeholder Engagement Standard (AA1000SES), taking into account the draft of the ESRS 1 standard – General Requirements prepared by EFRAG (European Financial Reporting Advisory Group), the Value Reporting Foundation – SASB standard and the SDG Compass, which supports companies in adapting their strategies to comply with the UN SDGs.

The Holding’s Sustainability Planning, Performance Management and Human Rights unit, as part of the Innovability Function, is responsible for analyzing materiality at Group level and plays a guidance and coordination role, providing guidelines and methodological support for the country, Company and site level analysis conducted by local managers, with the involvement of stakeholders and the key figures at Company level.

The materiality analysis and the relative results, such as the material topics identified, are subject to specific examination by the Corporate Governance and Sustainability Committee, set up within the Board of Directors, when examining the Sustainability Plan guidelines. Furthermore, the Corporate Governance and Sustainability Committee and the Control and Risks Committee issue prior opinions

on the Sustainability Report, which includes the materiality analysis, and submit them to the Board of Directors’ meeting called to approve the Report.

The collection, aggregation and processing of data relating to the engagement and analysis initiatives of the stakeholders and experts involved are managed through a dedicated computer system (“e-mia®: Engagement – materiality & impact analysis”), which also allows the best stakeholder engagement and monitoring practices to be shared within the Group in line with the Company’s organizational model. The results, which are updated annually, are presented to the Group, the individual companies, the Business Lines/Corporate Functions and sites (potential or actual operating sites), as well as to the different categories of stakeholders. Every two years, an analysis is carried out with a view to possibly reviewing the topics and categories of stakeholders so as to take into account any significant changes in the internal and external context of the Company. In 2022, the scope of the materiality analysis included 21 countries, covering all continents where the Group is present. In particular, in 2022, new sites were added in Chile, Greece and Peru, with increasing integration of the results due to the application of the Creating Shared Value (CSV) tools to the Group’s assets.



# Priorities' materiality

## Identification of the topics

| 2-29 | 3-1 |

The topics subject to the 2022 analysis cover the entire sustainable business model and are classified into three categories: business and governance topics, social topics and environmental topics, divided into three levels to cover all the different cases.

In defining the ESG topics, multiple sources were considered and various stakeholder categories were directly and indirectly involved. The instruments used include:

- the main ESG megatrends revealed in the sustainability context analysis (please refer to the section on "[The sustainability context](#)"). A specific questionnaire, addressed to external stakeholders and experts, was used to identify the main ESG megatrends. The latter were correlat-

ed with the materiality analysis topics, thus serving as a guide in defining the relative impacts;

- the topics of greatest interest to sustainability rating agencies;
- sector benchmarking studies;
- Sustainability Reporting standards;
- the strategic guidance of the Company as well as input from experts inside and outside the organization.

We define and update the list of ESG topics every two years, with the support of the various units involved each year in the analysis process.



## Identification of the stakeholders

| 2-29 |

The stakeholders involved in the 2022 materiality analysis represent the individuals or interest groups that are affected or could be affected by the organization's activities, with a view to successfully implementing its strategies and achieving its goals. We regularly involve our stakeholders through numerous listening initiatives in order to capture their expectations and identify potential and future impacts (please refer to the section on the "[Priorities' Matrix](#)"). The stakeholders are grouped into categories, classified on three levels, in line with the structure of the topics analyzed.

The first level stakeholder categories are the following:

- Businesses and trade associations
- Customers
- Financial community
- Institutions

- Civil society and local and global communities
- Media
- Enel people
- Suppliers and contractors

Please refer to the table in section "[Assignment of priority to the topics by external stakeholders](#)", which shows the stakeholder categories with their respective degree of relevance).

With the support of the various units responsible for stakeholder relations, which are involved in the analysis process every year, we identify and update the list of relevant stakeholder categories every two years, in order to define a complete list of actual and potential stakeholders and to ensure continuous alignment with the sustainability context in which Enel operates.



## Assignment of relevance to stakeholders

2-29

The process of assigning stakeholder relevance is conducted in accordance with the applicable standards and entails the involvement of the business units responsible for stakeholder relations and an assessment of each stakeholder according to their respective relevance.

Dependence	Importance of the relationship for the stakeholder, indicating groups or individuals who directly or indirectly depend on the activities, products or services and associated services, or on which the organization depends in order to operate
Influence	Importance of the relationship for the Company, indicating groups or individuals that may have an impact on the organization or on a stakeholder for strategic or operational decision-making
Tension	Temporal dimension of the relationship, indicating groups or individuals who require the immediate attention of the organization on broader financial, economic, social or environmental topics

(See table in the section "Assignment of priority to the topics by external stakeholders", which shows the stakeholder categories with their respective degree of relevance).

In particular, the analysis carried out at Group level shows that the relevance of "Suppliers and Contractors" stakeholder has grown over the last year, particularly given the awareness of their key role in managing the energy tran-

In 2022, a specific questionnaire was put to the Top Management at the Business Line and country level, who were asked to assess the **relevance of the categories based on the following parameters:**

sition process. On the other hand, the relevance of the stakeholder "Enel people", as a strategic player in the pursuit of sustainable business and continuous improvement of the Company, remains constant.

## Assignment of priority to the topics by external stakeholders

2-29 | 3-1 | 3-2 | 3-3

Having identified the topics and stakeholder categories and weighted them according to their respective relevance, the materiality analysis process then proceeds with an **assessment of the priorities assigned to the topics by the external stakeholders**, taking into account the related impacts generated on the economy, the environment, people, and human rights (horizontal axis of the priorities and expectations matrix) (please refer to the "2022 Priorities' Matrix"). An analysis of the priorities assigned by the Group's relevant stakeholders results in the definition of the priority topics for stakeholders, based on which the potential and actual impacts of the Company are defined.

In 2022, the priorities assigned to the topics were identified thanks to the implementation of approximately **460 engagement initiatives** (surveys, focus groups, interviews, document analysis, etc.) with relevant stakeholders for the Group. Less than 1% of the assessments were carried out indirectly, through interviews with the business units responsible for the relationship with the reference stakeholder ("self-assessment"), demonstrating the objectivity of the analyses carried out. The engagement initiatives

used in the materiality analysis are part of the various engagement initiatives carried out during the year by the Group's various units. These initiatives include: customer satisfaction surveys; the "Wellbeing Global Survey", aimed at collecting expectations and the degree of satisfaction regarding the numerous initiatives promoted by the Company concerning the physical and psychological wellbeing of Enel people; questionnaires from sustainability rating agencies; customer complaints; relations with analysts and investors, representative and trade associations; institutional relations at national and local levels, as well as with trade unions; media monitoring and opinion polls. In some cases, where necessary, *ad hoc* materiality analysis initiatives were implemented, including an online questionnaire for suppliers or focus groups aimed at specific categories of stakeholders.

The following table shows, for each internal and external stakeholder category identified at 1st Level and involved in the materiality analysis process, the respective degree of relevance, the engagement initiatives used, the priority topics and the Company's response methods.

# Relevance

## PARAMETERS:

**Dependence** importance of the relationship for the stakeholder

**Influence** importance of the relationship for the Company

**Tension** temporal dimension of the relationship

List of 1st level stakeholders	Type of engagement	no. <sup>(1)</sup>	Engagement initiative	no. <sup>(1)</sup>	Main high/very high priority topics for stakeholders	Our response to stakeholders in the CHAPTERS/paragraphs of the Report
<b>Businesses and trade associations</b> 	<b>Qualitative assessment</b>	<b>45</b>	Focus group	<b>8</b>	<ul style="list-style-type: none"> <li>Infrastructure and networks</li> <li>Decarbonization of the energy mix</li> <li>Occupational health and safety</li> </ul>	CLEAN ELECTRIFICATION – Electrification of uses, Digitalization of grids  ZERO EMISSIONS AMBITION  OCCUPATIONAL HEALTH AND SAFETY
			One-on-one interview	<b>8</b>		
			Open response questionnaire	<b>1</b>		
			Indirect survey	<b>1</b>		
			Additional indexes	<b>16</b>		
			Survey with focus on ESG topics	<b>5</b>		
			Document analysis	<b>6</b>		
<b>Customers</b> 	<b>Survey</b>	<b>22</b>	Surveys sent directly by the e-mia® system for assessment of ESG topics priority	<b>22</b>	<ul style="list-style-type: none"> <li>Infrastructure and networks</li> <li>Customer centricity</li> <li>Occupational health and safety</li> </ul>	CLEAN ELECTRIFICATION – Electrification of uses, Digitalization of grids  CLEAN ELECTRIFICATION – Electrification of uses  OCCUPATIONAL HEALTH AND SAFETY
	<b>Textual analysis<sup>(2)</sup></b>	<b>3</b>	Textual analysis based on external sources	<b>3</b>		
	<b>Qualitative assessment</b>	<b>48</b>	Focus group	<b>6</b>		
			One-on-one interview	<b>4</b>		
			Open response questionnaire	<b>5</b>		
			Additional indexes	<b>6</b>		
			Survey with focus on ESG topics	<b>13</b>		
			Document analysis	<b>14</b>		
	<b>Survey</b>	<b>23</b>	Surveys sent directly by the e-mia® system for assessment of ESG topics priority	<b>23</b>		
	<b>Textual analysis<sup>(2)</sup></b>	<b>1</b>	Textual analysis based on external sources	<b>1</b>		

(1) An engagement initiative could involve multiple stakeholder categories.

(2) The textual analyses are performed using the artificial intelligence of the e-mia® system.

List of 1st level stakeholders	Type of engagement	no. <sup>(1)</sup>	Engagement initiative	no. <sup>(1)</sup>	Main high/very high priority topics for stakeholders	Our response to stakeholders in the CHAPTERS/paragraphs of the Report
<b>Financial community</b> 	<b>Qualitative assessment</b>	<b>39</b>	Focus group	<b>10</b>	<ul style="list-style-type: none"> <li>Decarbonization of the energy mix</li> <li>Sound governance and fair corporate conduct</li> <li>Products and services for electrification and digitalization</li> </ul>	INNOVATION DIGITALIZATION CLEAN ELECTRIFICATION
			One-on-one interview	<b>2</b>		
			Additional indexes	<b>21</b>		
			Survey with focus on ESG topics	<b>4</b>		
			Document analysis	<b>2</b>		
	<b>Survey</b>	<b>12</b>	Surveys sent directly by the e-mia® system for assessment of ESG topics priority	<b>12</b>		- Electrification of uses SOUND GOVERNANCE
<b>Institutions</b> 	<b>Qualitative assessment</b>	<b>69</b>	Focus group	<b>6</b>	<ul style="list-style-type: none"> <li>Preservation of ecosystems and environmental management</li> <li>Decarbonization of the energy mix</li> <li>Occupational health and safety</li> </ul>	CONSERVATION OF NATURAL CAPITAL ZERO EMISSIONS AMBITION OCCUPATIONAL HEALTH AND SAFETY
			One-on-one interview	<b>21</b>		
			Indirect survey	<b>1</b>		
			Additional indexes	<b>17</b>		
			Survey with focus on ESG topics	<b>13</b>		
			Document analysis	<b>11</b>		
	<b>Survey</b>	<b>29</b>	Surveys sent directly by the e-mia® system for assessment of ESG topics priority	<b>29</b>		
	<b>Textual analysis<sup>(2)</sup></b>	<b>6</b>	Textual analysis based on external sources	<b>6</b>		
<b>Civil society and local and global communities</b> 	<b>Qualitative assessment</b>	<b>83</b>	Focus group	<b>15</b>	<ul style="list-style-type: none"> <li>Occupational health and safety</li> <li>Decarbonization of the energy mix</li> <li>Preservation of ecosystems and environmental management</li> </ul>	OCCUPATIONAL HEALTH AND SAFETY ZERO EMISSIONS AMBITION CONSERVATION OF NATURAL CAPITAL
			One-on-one interview	<b>26</b>		
			Indirect survey	<b>1</b>		
			Additional indexes	<b>17</b>		
			Survey with focus on ESG topics	<b>24</b>		
	<b>Survey</b>	<b>44</b>	Surveys sent directly by the e-mia® system for assessment of ESG topics priority	<b>44</b>		
	<b>Textual analysis<sup>(2)</sup></b>	<b>22</b>	Textual analysis based on external sources	<b>22</b>		

(1) An engagement initiative could involve multiple stakeholder categories.

(2) The textual analyses are performed using the artificial intelligence of the e-mia® system.

List of 1st level stakeholders	Type of engagement	no. <sup>(1)</sup>	Engagement initiative	no. <sup>(1)</sup>	Main high/very high priority topics for stakeholders	Our response to stakeholders in the CHAPTERS/paragraphs of the Report
<b>Media</b> 	<b>Qualitative assessment</b>	<b>24</b>	<ul style="list-style-type: none"> <li>Focus group</li> <li>Indirect survey</li> <li>Additional indexes</li> <li>Survey with focus on ESG topics</li> <li>Document analysis</li> </ul>	<ul style="list-style-type: none"> <li>3</li> <li>1</li> <li>17</li> <li>1</li> <li>2</li> </ul>	<ul style="list-style-type: none"> <li>Infrastructure and networks</li> <li>Engaging local and global communities</li> <li>Preservation of ecosystems and environmental management</li> </ul>	CLEAN ELECTRIFICATION – electrification of uses, digitalization of the grids  ENGAGING COMMUNITIES  CONSERVATION OF NATURAL CAPITAL
	<b>Survey</b>	<b>13</b>	Surveys sent directly by the e-mia® system for assessment of ESG topics priority	13		
<b>Enel people</b> 	<b>Qualitative assessment</b>	<b>54</b>	<ul style="list-style-type: none"> <li>Focus group</li> <li>One-on-one interview</li> <li>Additional indexes</li> <li>Survey with focus on ESG topics</li> <li>Document analysis</li> </ul>	<ul style="list-style-type: none"> <li>22</li> <li>3</li> <li>9</li> <li>19</li> <li>1</li> </ul>	<ul style="list-style-type: none"> <li>Sound governance and fair corporate conduct</li> <li>Decarbonization of the energy mix</li> <li>People management, development and motivation</li> </ul>	SOUND GOVERNANCE  ZERO EMISSIONS AMBITION  EMPOWERING ENEL PEOPLE
	<b>Survey</b>	<b>43</b>	Surveys sent directly by the e-mia® system for assessment of ESG topics priority	43		
<b>Suppliers and contractors</b> 	<b>Qualitative assessment</b>	<b>37</b>	<ul style="list-style-type: none"> <li>Focus group</li> <li>One-on-one interview</li> <li>Open response questionnaire</li> <li>Additional indexes</li> <li>Survey with focus on ESG topics</li> <li>Document analysis</li> </ul>	<ul style="list-style-type: none"> <li>7</li> <li>7</li> <li>2</li> <li>7</li> <li>13</li> <li>1</li> </ul>	<ul style="list-style-type: none"> <li>Sound governance and fair corporate conduct</li> <li>Occupational health and safety</li> <li>Sustainable supply chain</li> </ul>	SOUND GOVERNANCE  OCCUPATIONAL HEALTH AND SAFETY  SUSTAINABLE SUPPLY CHAIN
	<b>Survey</b>	<b>27</b>	Surveys sent directly by the e-mia® system for assessment of ESG topics priority	27		

(1) An engagement initiative could involve multiple stakeholder categories.

Since 2016, in order to more precisely define the topics on which the Company needs to focus, Enel has been combining the stakeholders' assessment of priorities with an **analysis of their satisfaction** with the topics identified. The 2022 results of the **expectations** analysis show a substantial alignment between the priorities assigned by stake-

holders and their level of satisfaction. It should be noted that the topic related to the "Sustainable supply chain" experienced an increase in satisfaction in terms of positioning compared to 2021, denoting appreciation for Enel's strong commitment to managing the environmental and social impacts associated with the supply chain.



# Assessment of priority to the topics in Company strategies

2-29

For the purposes of drawing up the 2022 Priorities' Matrix, Enel assessed the priority of the topics in its strategies (vertical axis of the Priorities' Matrix), taking into account the guidelines set by the Strategic Plan, the objectives of the Functions/Business Lines and the commitments made

by the Group through its own policies and conduct criteria. This analysis involved the Company's various Functions and Top Management (Chief Executive Officer and Chairman) through *ad hoc* interviews and specific questionnaires.

## Priorities' Matrix

3-1 | 3-2

The aspects covered in the previous paragraphs, namely the priority of topics for stakeholders and in corporate strategies, contribute to the development of the Priorities' Matrix.

The process makes it possible to identify the priorities for stakeholders and the Company at both Group and country level, down to each Business Line/Corporate Function and individual asset (understood as a potential or effective operating site).

In 2022, the analysis covered 21 countries, 64 companies and 36 sites and considered 463 engagement initiatives involving stakeholders relevant to the Group.

Shown below are:

- the **2022 Priorities' Matrix of the Enel Group**, which considers the contributions of the main companies involved in the process, weighted according to their relevance in relation to the type of business in which they operate;
- the **main 2022 priorities** – in consolidated view – of **some of the main companies** participating in the materiality analysis process.

The following are some of the main priority topics and how they should be handled.

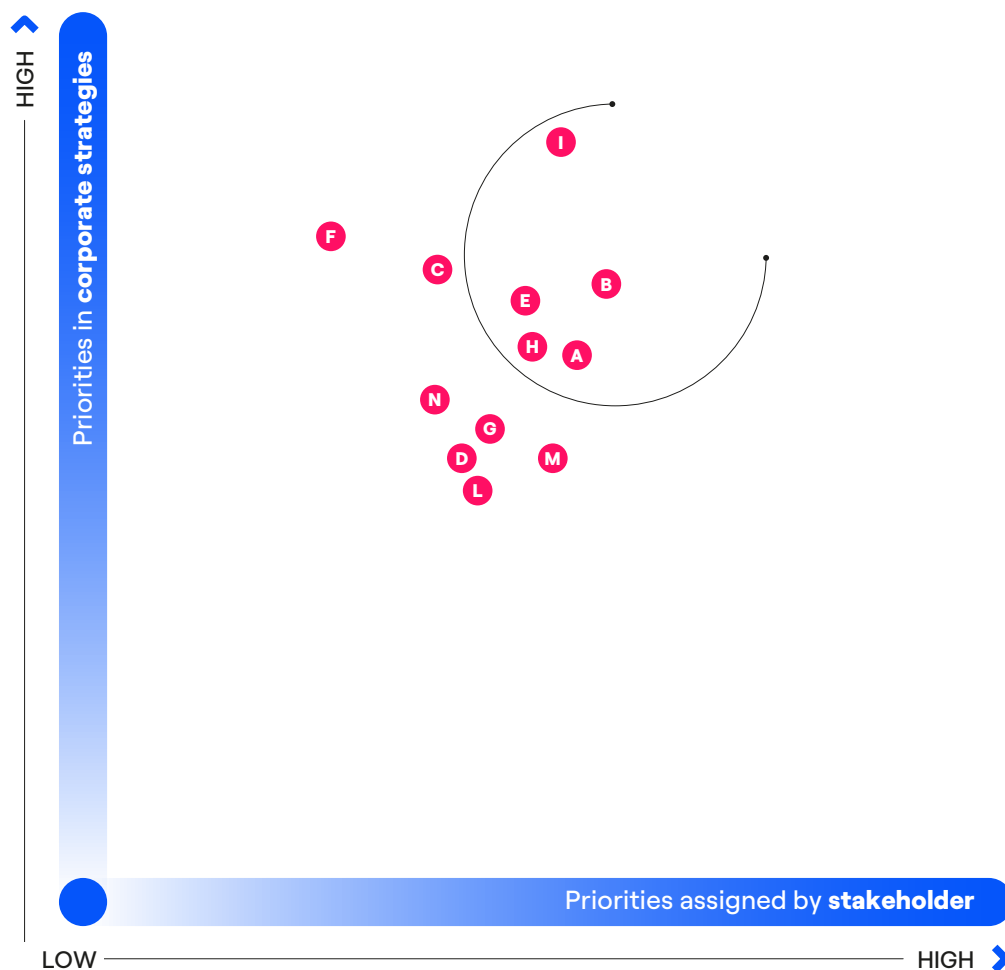
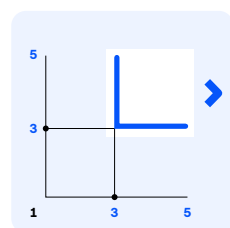
- **Occupational health and safety** – Enel considers the health, safety, mental and physical integrity of people to be among the Group's main priorities. Optimal management of this topic helps to generate trust and boost the commitment of people in relation to the work they perform, also helping to improve performance and raise productivity and efficiency. As a confirmation of Enel's constant commitment to safety in 2022, the Lost Time Injury Frequency Rate (LTIFR) for Enel and contractor companies combined was down by 22% compared to 2021.

- **Decarbonization of the energy mix** – The fight against climate change has become one of the key challenges facing companies. In the utilities sector in particular, this has led to the development of regulations and public policies aimed at promoting a global zero emissions economy, in which electrification of the energy demand plays a key role. Institutional investors are devoting ever-greater attention to the management and results of companies in relation to climate change. In this context, Enel has set specific objectives for the reduction of greenhouse gas (GHG) emissions, focusing on the growth of renewable capacity and the gradual closure of coal plants (please refer to the "[Sustainability Plan 2023-2025](#)" and the "[Zero emissions ambition](#)" sections of this document).
- **People management, development and motivation** – In line with our Open Power approach, we work every day to create an open, inclusive and dynamic working environment that seeks to incorporate diversity, attract new talent and empower our people. In particular, Enel's commitment to closing the gender gap and ensuring equal pay continues with tangible results, the result of actions that affect all stages of women's career paths in the organization. The Long-Term-Incentive Plan 2022 actually supports these trends, confirming the target "percentage of women in Top Management succession plans" of 45% by the end of 2025, with a view to continuing a policy of preparing a suitable pool for managerial appointments in the near future.

The priority topics for stakeholders and the Company thus defined are subject to analysis according to the double materiality approach, which aims to identify the material topics (please refer to the section "[Material topics](#)").

## 2022 Priorities' Matrix

-  **21** Countries
-  **64** Companies
-  **36** Sites
-  **463** Engagement initiatives



### Business and governance topics

- A** Infrastructure and networks
- B** Decarbonization of the energy mix
- C** Customer centricity
- D** Products and services for electrification and digitalization
- E** Sound governance and fair corporate conduct
- F** Economic and financial value creation
- N** Innovation, circular economy and digital transformation

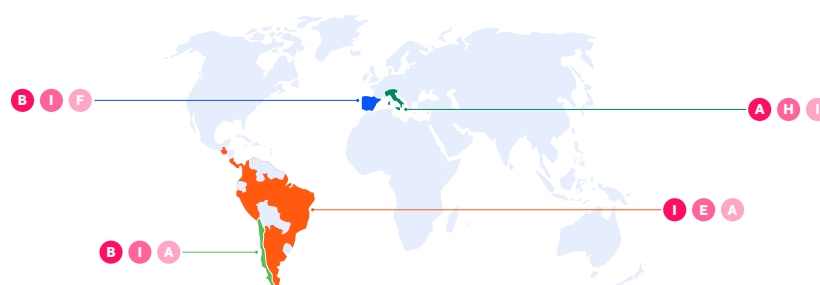
### Social topics

- G** Engaging local and global communities
- H** People management, development and motivation
- I** Occupational health and safety
- L** Sustainable supply chain

### Environmental topics

- B** Decarbonization of the energy mix
- M** Preservation of ecosystems and environmental management

## The main 2022 priorities for the Countries<sup>(1)</sup>



(1) The 2022 materiality analysis concerned 21 countries. The chart shows the results of only some of the main companies that participated in the process. As concerns Enel Américas, in 2022 Uruguay did not participate in the materiality analysis process.

# Double materiality

## Definition, analysis and prioritization of the most significant impacts .

3-1 | 3-2 | 3-3 |



The materiality analysis process has evolved and the traditional view is now complemented with that of double materiality, in which financial materiality and impact materiality each represent an equally important perspective. Through the involvement of the Group's key stakeholders and internal and external experts, the process seeks to analyze the most significant impacts in order to identify material topics, taking into account – especially for negative impacts – the due diligence process and the relative results.

Enel has therefore **identified the impacts** based on the following activities:

- **analysis of the main ESG megatrends:** a survey of external (national and international) stakeholders and experts, with the aim of assessing the impacts of the main ESG megatrends through an analysis of the context in which we operate. (please refer to the section "[The sustainability context](#)");
- **assignment of priority to the topics by external stakeholders:** more than 460 engagement initiatives involving the Group's main external stakeholders (for example, through surveys, focus groups, desk analysis, etc.), in order to assess the priority, satisfaction and impact of ESG topics (please refer to the section "[Assessing priorities and satisfaction of topics assigned by stakeholders](#)");
- **definition of the impacts list:** direct involvement of internal stakeholders and experts in defining and weighting the list of impacts generated and suffered on the basis of their feedback, also taking into account the views of external stakeholders. The impacts list has therefore been subject to thorough analysis and review by experts who internally oversee business activities, giving rise to positive and negative impacts that affect or may affect the relationship with the Group's relevant stakeholders.

Once the impacts have been identified, Enel proceeds with their analysis, that is with the assessment of the respective significance, both on a material level of the impact as well as financial materiality level, through the involvement of the Group's internal stakeholders and experts who, in performing their business activities, have a greater relationship with the main stakeholders and so have a complete view of the actual and/or potential impacts in the external context in which Enel operates.

**As regards the impact materiality**, in 2022, Enel strengthened the methodology for analyzing the impacts generated by the Company to bring it into line with the provisions of GRI 2021. Following the pilot project launched in 2019 and its completion in 2020 and 2021, with the involvement of all the countries participating in the process, in 2022 the Group conducted an impact materiality analysis which, through the involvement of the relevant stakeholders and experts and based on the best practices dictated by the due diligence process, identified the impacts generated by the Company on the economy, the environment and people, considering any violations of human rights as among the negative impacts and the contribution to sustainable development among the positive impacts. The impact analysis was carried out by each local Sustainability and Holding unit in order to assess the **significance of the impacts**, a process involving the Group's internal experts and stakeholders who, in performing their business activities, have a close relationship with the main stakeholders and so have a complete view of the actual and/or potential impacts in the external context in which Enel operates. This analysis took into account the internal company context, including upstream and downstream activities in its value chain, the main stakeholders, and the best practices dictated by the due diligence process, and assessed the (actual and potential) positive and negative impacts generated by the Company. Negative impacts were analyzed

according to their significance based on the degree of severity<sup>(2)</sup> and likelihood, in the case of potential impacts. Positive impacts were analyzed according to their significance<sup>(3)</sup> and based on their scope and direct and indirect contribution to the SDGs, in line with the commitment made by the Group, and with respect to the management instruments put in place to monitor the objectives set. On the basis of the impact materiality assessment, for reporting purposes the **most significant positive and negative impacts generated** (actual and/or potential) were selected according to their highest degree of significance for each material topic (1st Level). The table below shows:

- the most significant impacts – associated with ESG megatrends, the material topic (1st, 2nd, 3rd Level) and related GRI – both positive and negative generated directly and indirectly by the Company vis-à-vis the exter-

nal context;

- type: whether actual or potential;
- the time horizon for their occurrence (short-, medium- or long-term);
- impact management: the Company strategies and performance, in line with the management of the main types of risk faced by the Enel Group;
- additional information: whether the reported impact is or could be a human rights concern; the reference SDGs; the phase of the value chain affected by the impact; the stakeholders that can or could be positively or negatively affected by the impact; whether the topic related to the reported impact is a priority for the stakeholders involved in the materiality analysis process; reference to the Sustainability Plan and to the chapter of the Report that describes in detail the management methods and results related to the impact.

(2) The severity of an actual or potential negative impact is determined by the following parameters:

- scale: how severe the impact is;
- scope: how widespread the impact is;
- irremediable character: how difficult it is to counteract or repair the resulting damage.

(3) The significance of a positive impact is determined by the scale and scope of the impact, as well as by the probability of the impact in the event it is potentially positive.









## Table of the most significant impacts

### POSITIVE IMPACTS

ESG megatrend	Material topic (I level)	Material topic (II, III level)	Description of the impact	Relevant GRI <sup>(1)</sup>	Type <sup>(2)</sup> – Duration <sup>(3)</sup>
<b>Climate change, Resources preservation</b>	Decarbonization of the energy mix	<b>Climate change</b> – Reduction in CO <sub>2</sub> emissions	Contribution to the achievement of international and national goals to achieve a zero-emission global economy and society and to limit the increase in the global average temperature (1.5 °C – 2 °C)	GRI 305: Emissions	Actual ●●●➤
<b>Resources preservation</b>	Decarbonization of the energy mix	<b>Energy use</b> – Reducing energy consumption	Major and widespread commitment to efficient and sustainable use of energy in all business processes through initiatives to improve and accelerate the transition to more efficient technologies aimed at reducing energy consumption and promoting renewable sources	GRI 302: Energy	Actual ●●○➤
<b>Urbanization, Digital revolution</b>	Infrastructure and networks	<b>Network improvement and development</b> – Development of micro-grids and rural electrification	Guarantee grid extension and micro-grid solutions in rural and suburban areas through the creation of new grid connections	DMA (former EU23): Access to energy	Actual ●●●➤
<b>Resources preservation</b>	Preservation of ecosystems and environmental management	<b>Protecting biodiversity and natural capital</b> – Conservation and promotion of local natural heritage	Strong and widespread commitment to biodiversity through initiatives aimed at protecting and restoring habitats and natural capital, in particular in protected areas and in respect of threatened species, and the adoption of location and design criteria that can guarantee no-net-deforestation, No Go in natural UNESCO World Heritage sites and no net loss of biodiversity	GRI 304: Biodiversity	Actual ●●○➤
<b>Well-being</b>	Occupational health and safety	<b>Safety of contractors working at Enel sites</b> – Promotion of a safety culture among contractors working at Enel sites	Decrease in the number of injuries and illnesses among contractors, thanks to improved safety culture	GRI 403: Occupational health and safety GRI 410: Safety practices	Actual ●●●➤
<b>Inclusion and gender equality, Future work</b>	People management, development and motivation	<b>Quality of corporate life</b> – Work-life balance	Increasing workers' quality of life and well-being by improving work-life balance and psychological/physical well-being	GRI 401: Employment	Actual ●●○➤
<b>Inclusion and gender equality, Future work</b>	People management, development and motivation	<b>Valuing workers' diversity</b> – Valuing disabilities, Valuing age diversity, Valuing gender diversity, Valuing other diversities	Valuing diversity (e.g. inclusion of people with disabilities, diversity in terms of age, gender, ethnicity, etc.) to develop and attract new talent and ensure their recruitment	GRI 405: Diversity and equal opportunity	Actual ●○○➤



Priority for stakeholders and the Group



Impact relevant on human rights

(1) "–" is reported where the material topic is not currently covered by a specific GRI (2) Type: actual/potential  
(3) Duration: ●○○➤ Short term (up to 1 year) ●●○➤ Medium term (2 to 5 years) ●●●➤ Long term (>5 years)



Impact management	Relevant SDG	Stakeholders involved	Stage in value chain	Ref. in Sustainability Plan and 2022 Sustainability Report chapter
<p>Enel has brought forward its commitment by 10 years, from 2050 to 2040, to complete the decarbonization process of its entire value chain, by reducing its own direct and indirect emissions to zero (so-called "Net-Zero").</p> <p>To this end, Enel has constructed a roadmap that includes medium-term objectives to 2030 against 2017 as a benchmark, as certified by the Science Based Targets initiative (SBTi) in line with the 1.5 °C pathway. In particular, the Company has committed to reducing (i) direct greenhouse gas emissions per kWh by 80%; (ii) emissions related to electricity sales per kWh by 78%; (iii) total emissions related to the retail sale of gas by 55%; (iv) other total direct and indirect emissions by 55%. The Group's strategic actions make it possible to mitigate the potential risks and exploit the opportunities associated with transition variables. In this context, capital employment is centered on decarbonization through the development of assets for generation from renewable sources (aimed at achieving 100% renewable installed capacity by 2040), on enabling infrastructure linked to the development of networks, and on the implementation of platform models, fully exploiting technological and digital evolution which will favor consumption electrification and the development of new services for end customers.</p>	13	Civil society and local and global communities Customers Financial community Enel people Media Institutions		Zero emissions ambition
<p>Commitment to an efficient and sustainable use of energy is guaranteed through the adoption of energy efficiency measures and improvement of energy consumption in all industrial processes. In pursuit of this objective, the transition to more efficient and renewable technologies plays a decisive role in promoting a process of electrification of energy consumption.</p>	12 13	Civil society and local and global communities		Nature Conservation of natural capital
<p>Enel is constantly at work to develop and improve the efficiency of the transport and distribution network, in coordination with the other entities operating on the network infrastructure in various capacities. Enel carries out actions of network development, modernization, and maintenance on the infrastructure existing in all Countries, to improve the quality of the service delivered and reduce the number and duration of outages (SAIDI and SAIFI).</p> <p>Reaching and connecting vast rural and remote areas of the world means integrating technological innovation with socio-economic development. In fact, Enel Grids has carried out numerous electrification projects, in which grid extension solutions are adopted, depending on the specific context. In particular, Enel aims to guarantee access to energy in rural and suburban areas by increasing the number of new connections and at the same time making the grid increasingly innovative, digital and resilient, including through the spread of the latest smart meters.</p>	7 9 11	Businesses and trade associations Civil society and local and global communities Customers Institutions Media Enel people Suppliers and contractors		Clean electrification
<p>In environmental and natural ecosystems, Enel is implementing suitable actions in order to protect, restore and conserve biodiversity, in species and natural habitats, respecting the principle of mitigation hierarchy (avoid, minimize, restore and compensate), as well as suitable terrestrial, marine and river monitoring activities to check the effectiveness of the adopted measures. In this context, the Group acknowledges that protecting the environment and natural resources, combating climate change and contributing to sustainable economic development are strategic factors in the planning, operation and development of our activities. This commitment is reflected in a dedicated principle in the Policy on Human Rights, in line with the environmental policy which also includes respect for biodiversity.</p> <p>Enel is an active part of the international debate with stakeholders and the networks with the most influence on the topic (for example, Business for Nature, Taskforce on Nature-related Financial Disclosure, World Business Council for Sustainable Development and Science Based Targets for Nature) regarding natural and biodiversity topics.</p> <p>Enel implements prevention, mitigation and recovery programs and plans regarding the impacts on ecosystems and natural habitats in all critical and/or significant sites for all our assets.</p>	14 15	Businesses and trade associations Civil society and local and global communities Institutions		Nature Conservation of natural capital
<p>Enel considers the health, safety and psychological and physical well-being of individuals the most precious asset to be protected at all times of life. It is therefore committed to developing and promoting a robust safety culture for the people who work with and for the Group. Enel's commitment is demonstrated in the Group's Policy on Human Rights, the "Declaration of Commitment to Health and Safety" and the "Stop Work Policy". In particular, the approach towards suppliers is to consider each of them as a partner with whom to share the cardinal principles of safety and the environment. Enel is committed to developing and disseminating a robust culture of health, safety and well-being throughout its entire corporate perimeter, in order to guarantee a workplace that is free of risks to health and safety, and to promote behaviors oriented towards "work-life integration". It is therefore actively committed to promoting personal and organizational well-being as enabling factors for the engagement and innovative potential of the people who work with us, including suppliers and contractors. The following are implemented for suppliers: a continuous process of field inspections and consequence management; a Contractor Safety Partnership program, to share Enel's core values on safety; a Safety Support activity plan with improvement pathways and support for the training of contractor staff.</p>	8	Suppliers and contractors Enel people		Occupational health and safety
<p>Enel is committed to developing and disseminating a robust culture of health, safety and well-being throughout the entire corporate perimeter, in order to guarantee a workplace that is free of risks to health and safety, and to promote behaviors oriented towards "work-life integration". It is therefore actively committed to promoting personal and organizational well-being as enabling factors for the engagement and innovative potential of people. Enel's commitment is demonstrated in the Group's Policy on Human Rights. Enel has defined a global well-being framework that focuses on people, considering psychological well-being, work-life balance, and physical, social, economic, ethical and cultural well-being to be fundamental.</p>	3 4 5 8 10	Enel people		Empowering Enel people
<p>Enel promotes the principles of diversity, inclusion, equal treatment and opportunity and is committed to guaranteeing the right to working conditions that respect the dignity of every person and to creating a working environment in which people are treated fairly and valued for their uniqueness. This commitment is reflected in the Policy on Human Rights, and in the adoption of a Diversity and Inclusion Policy, published in parallel with adoption of the seven Women Empowerment Principles (WEP) promoted by the UN Global Compact and UN Women, in compliance with the UN Sustainable Development Goals. The most significant initiatives include actions dedicated to a systematic impact on the various aspects of the gender gap and inclusion, specific listening and support services made available to people during the pandemic, projects dedicated to people with vulnerabilities, awareness initiatives on LGBTQ+ topics and cultural diversity.</p>	5 8 10	Enel people		Empowering Enel people

ESG megatrend	Material topic (I level)	Material topic (II, III level)	Description of the impact	Relevant GRI <sup>(1)</sup>	Type <sup>(2)</sup> – Duration <sup>(3)</sup>
New governance models	 Sound governance and fair corporate conduct	 Fairness in management conduct	Contributing to internal awareness and dissemination to external stakeholders (contractors, business partners) of the principles of integrity and ethics in business conduct	GRI 1: Foundation GRI 2-2-22: Statement on sustainable development strategy; 2-23: Policy commitments; 2-24: Embedding policy commitments GRI 205: Anti-corruption GRI 206: Anti-competitive behavior GRI 415: Public policy	Actual ●○○➤
Increase in inequalities	Engaging local and global communities	 Social and economic development of communities – Development and maintenance of local supply chains, Employment development in areas where we maintain a presence, Infrastructure development in areas where we maintain a presence, Transfer of skills and upskilling among the local population, Support for entrepreneurial activities in the community, Access to basic goods	Social and economic development in the areas where the Group operates, by means of economic investments aimed at promoting the energy transition	GRI 413: Local communities	Actual ●●●➤
Increase in inequalities	Sustainable supply chain	 Responsible management of the procurement of goods, services and work – Integration of environmental, safety and sustainability criteria and performance in purchasing management	Contribution to reducing Enel's supply carbon footprint through a sustainable supply chain	GRI 204: Procurement practices GRI 308: Supplier Environmental Assessment	Actual ●●●➤
New economy, Digital revolution, New mobility, Urbanization	Products and services for electrification and digitalization	Electric mobility – Deployment of electromobility infrastructure	Promoting the electrification of cities through electric mobility	-	Actual ●●○➤
Empowered customer	Customer centricity	 Ability to meet customer needs – Quality and timeliness of the commercial offering	Increasing the quality of services provided to customers (e.g. promotion of accessible products and services, promotion of "slow shopping" and inclusive offers, etc.).	GRI 417: Marketing and labelling DMA (former EU23): Access to energy Disclosure of EU DMA information (former EU24)	Actual ●●●➤
New economy, Digital revolution, Resources preservation	Innovation, circular economy and digital transformation	Innovation and sustainability ecosystem – Promotion of partnerships, Development of the Innovation Hub&Lab network, Support and relationships with startups, Intellectual property, Dissemination of the culture of innovation and sustainability, Crowdsourcing	Supporting adequate dissemination of innovation and the digitalization process to find the best solutions on a global scale and to accelerate the development of new business models (e.g. promoting partnerships, development of innovation hubs and laboratory networks, etc.)	-	Actual ●●○➤
New economy, New governance models	Economic and financial value creation	 Long-term value creation strategy – Business Ownership model, Business Stewardship model	Increase in investments/financial resources to support the energy transition and low-carbon technologies	GRI 201: Economic performance GRI 2-2-6: Activities, value chain and other business relationships	Actual ●●○➤



Priority for stakeholders and the Group



Impact relevant on human rights

(1) "-" is reported where the material topic is not currently covered by a specific GRI (2) Type: actual/potential

(3) Duration: ●○○➤ Short term (up to 1 year) ●●○➤ Medium term (2 to 5 years) ●●●➤ Long term (&gt;5 years)













Impact management	Relevant SDG	Stakeholders involved	Stage in value chain	Ref. in Sustainability Plan and 2022 Sustainability Report chapter
<p>Enel rejects corruption in all its direct and indirect forms, given that it is acknowledged as one of the factors that undermines institutions and democracy, ethical values and justice, well-being and the development of societies. This commitment is reflected in the Policy on Human Rights and through the anti-corruption program known as the "Zero Tolerance of Corruption Plan", one of the pillars on which our Anti-Corruption Management System is structured. In this context, Enel has adopted as part of its corporate governance specific compliance programs, i.e.: the Code of Ethics, the Zero Tolerance of Corruption Plan ("ZTC Plan"), the Policy on Human Rights, the Policy on international sanctions, the Enel Global Compliance Program ("EGCP"), the Model pursuant to Italian Legislative Decree 231/01 and other national compliance programs adopted by Group companies in accordance with their national legislation. Furthermore, to further pursue its commitment to fighting corruption, Enel voluntarily decided to certify its Anti-Bribery Management System (SGPC) in compliance with the requirements of international standard ISO 37001:2016 (international certification of anti-bribery management systems).</p> <p>External staff, working for Enel Group company suppliers, undertake to comply with the ethical clauses set out in their respective contracts, which incorporate references to Enel's commitment in terms of business integrity in the pursuit of its activities.</p> <p>The ongoing monitoring of legislative and regulatory developments at the local, national and international levels is guaranteed by the operations of specific company Functions with competence in relation to these matters. Continuous training takes place by means of various dissemination and communication initiatives, as well as awareness campaigns regarding the principles of integrity and ethics in business conduct.</p>	16 17	Enel people Suppliers and contractors		Sound governance
<p>The Group's approach is aimed at creating shared value with the communities with which it operates and collaborates. This approach, integrated into the business, is based on listening to the local needs of stakeholders.</p> <p>The Group aims at the economic and social development of the context in which it operates through numerous projects aimed at sustainability, involving an increasing number of beneficiaries.</p>	3 8 9	Businesses and trade associations Civil society and local and global communities Suppliers and contractors Enel people Institutions Customers		Engaging communities
<p>Enel contributes to the creation of a resilient and sustainable supply chain, by promoting co-innovation projects with a view to decarbonization and circular economy.</p> <p>As part of the tendering process, increasingly challenging emissions targets are set, which also take into account the possible contributions of innovation. To this end, Enel has adopted a process of defining mandatory requirements and rewarding factors (sustainability K) relating to ESG and circular economy. Data – requested during the tendering stage – enables us to measure emissions for the entire supply chain, and is the first step in the decarbonization pathway.</p> <p>Enel works together with suppliers to define criteria, technical requirements and solutions aimed at further strengthening circularity and sustainability in the early stages of the value chain.</p>	12	Suppliers and contractors		Sustainable supply chain Managing human rights
<p>Enel considers the electrification of transport as the key to decarbonizing consumption, using digitalization as an accelerator for the development of increasingly innovative, flexible and integrated services. In this context, electric mobility plays a fundamental role demonstrated by the continuous spread of new services and products, such as charging points for electric vehicles, which are increasingly common throughout the country.</p>	9 11	Businesses and trade associations Civil society and local and global communities Suppliers and contractors Enel people Institutions Customers		Clean electrification
<p>Enel promotes the dissemination of innovative and inclusive products and services, such as automatic payments, e-billing, the "slow shopping" method (aimed at creating meaningful experiences for customers with disabilities through specific dedicated channels, using accessible apps and digital services).</p> <p>Enel monitors the rate of customer satisfaction in every country in which it operates through specific surveys and analysis of customer feedback.</p>	9 11	Businesses and trade associations Customers Civil society and local and global communities		Clean electrification
<p>In conjunction with the various Functions and Business Lines, the Holding Innovability Function® (Innovation and Sustainability), reporting directly to the CEO, manages innovation activities in conformity with regulations currently in force and with the Group's compliance programs.</p> <p>With the aim of supporting the Group's Strategic Plan and responding to the innovation needs of the business, an Innovation Plan is defined annually.</p> <p>Starting from the Innovation Plan, shared with the Top Management and submitted for the approval of the Holding Innovation Committee (chaired by the Director of Innovability®), innovative solutions are sought to be tested and scaled globally through innovation tools (e.g. intelligence, crowdsourcing) and collaboration with startups, SMEs, large companies and the academic world.</p>	9 11 12 13 17	Businesses and trade associations Civil society and local and global communities Media Suppliers and contractors Enel people		Innovation
<p>Capital employment is centered on decarbonization through the development of assets for generation from renewable sources, on enabling infrastructure linked to the development of networks, and on the implementation of platform models, fully exploiting technological and digital evolution which will favor consumption electrification and the development of new services for end customers.</p>	8	Businesses and trade associations Civil society and local and global communities Suppliers and contractors Enel people Financial community Institutions Customers		Zero emissions ambition Clean electrification



## Table of the most significant impacts

### NEGATIVE IMPACTS

ESG megatrend	Material topic (I level)	Material topic (II, III level)	Description of the impact	Relevant GRI <sup>(1)</sup>	Type <sup>(2)</sup> – Duration <sup>(3)</sup>
<b>Climate change, Resources preservation</b>	 Decarbonization of the energy mix	 <b>Climate change</b> – Reduction in CO <sub>2</sub> emissions	Failure to contribute to the fight against climate change due to the increase in CO <sub>2</sub> emissions deriving from the operation of thermoelectric plants	GRI 305: Emissions	Potential ●●●➤
<b>Urbanization, Digital revolution</b>	 Infrastructure and networks	<b>Operational grid management</b> – Grid maintenance	Reduction of electricity transmission caused by overload issues in the national grid	DMA (former EU23): Access to energy System efficiency (EU12)	Potential ●○○➤
<b>Resources preservation</b>	Conservation of ecosystems and environmental management	 <b>Water management</b> – Wastewater treatment, recycling and reuse	Negative environmental damage (e.g. depletion of natural water resources with consequent decay of related ecosystem services, pollution and/or deterioration of water and soil) due to inadequate water management (e.g. excessive water withdrawals in relation to the resource regeneration capacity and ecosystem needs, particularly in water-stressed areas, uncontrolled discharges or leaks of wastewater, effluents with an excessive heat load or pollutants)	GRI 303: Water and effluents GRI 306: Effluents and waste	Potential ●●●➤
<b>Well-being</b>	 Occupational health and safety	 <b>Health and safety of workers of contractors operating on Enel sites</b> <b>Worker safety</b> – Promotion of safety culture among workers, Management and monitoring of worker safety	Increase in the number of workplace injuries suffered by workers and contractors, due to lack of safety management and monitoring	GRI 403: Occupational health and safety GRI 410: Safety practices	Potential ●●●➤
<b>Inclusion and gender equality, Future work</b>	 People management, development and motivation	 <b>People development</b> – Recruitment and remuneration policies	Decrease in the ability to attract talent and increased worker turnover due to inadequate hiring and compensation policies and benefit programs	GRI 401: Employment	Potential ●○○➤
<div>  <b>Priority for stakeholders and the Group</b>  <b>Impact relevant on human rights</b> </div> <p> <b>(1)</b> “–” is reported where the material topic is not currently covered by a specific GRI    <b>(2) Type:</b> actual/potential  <b>(3) Duration:</b> ●○○➤ Short term (up to 1 year)    ●●○○➤ Medium term (2 to 5 years)    ●●●➤ Long term (&gt;5 years)         </p>					





Impact management	Relevant SDG	Stakeholders involved	Stage in value chain	Ref. in Sustainability Plan and 2022 Sustainability Report chapter
The roadmap of the decarbonization process envisages the gradual phase-out of coal-fired capacity by 2027, in addition to the progressive expansion of generation from renewable sources.	13	Civil society and local and global communities Businesses and trade associations Financial community Media Enel people Customers Institutions Suppliers and contractors		Zero emissions ambition
Enel, as DSO (Distribution System Operator), follows the network code of the TSO (Transmission System Operator) that governs the countries in which it operates). Enel constantly invests in network development, renewal and maintenance on the infrastructure existing in all Countries, with the primary aim of improving the quality of the service delivered and reducing the number and duration of outages.	7	Customers Civil society and local and global communities Businesses and trade associations Financial community Media Enel people Institutions Suppliers and contractors		Clean electrification
The adoption of ISO 14001-certified Environmental Management Systems certified within the Group ensures the presence of structured policies and procedures to identify and manage the environmental risks and opportunities associated with all corporate activities. Enel is constantly monitoring all power generation sites located in zones at risk of water scarcity (water stressed areas) in order to ensure efficient use of water resources. Mapping of production sites falling within water stressed areas is done in line with the criteria of GRI 303 (2018) with reference to the conditions of "(baseline) Water Stress". With the aim of identifying technological solutions to reduce consumption, particular attention is paid to assets present in areas with a high level of water stress. The risk of water scarcity is also mitigated by the growth of generation from renewable sources, which do not essentially depend on the availability of water for their operation. In this context, the Group acknowledges that protecting the environment and natural resources, combating climate change and contributing to sustainable economic development are strategic factors in the planning, operation and development of our activities. This commitment is reflected in a dedicated principle in the Policy on Human Rights, including in line with the environmental policy which also includes respect for biodiversity.	6 14	Businesses and trade associations Civil society and local and global communities Institutions		Nature Conservation of natural capital
Enel is committed to developing and disseminating a robust culture of health, safety and well-being throughout the entire corporate perimeter, in order to guarantee a workplace that is free of risks to health and safety, and to promote behaviors oriented towards "work-life integration". It is therefore actively committed to promoting personal and organizational well-being as enabling factors for the engagement and innovative potential of the people who work with us, including suppliers and contractors. Each person must feel that they are responsible for their own health and safety as well as for the health and safety of others. This is also expressed in integrating health and safety into training processes and activities. Enel's commitment is demonstrated in the Group's Policy on Human Rights. The Group has developed a Health and Safety Management System in compliance with international standard BS OHSAS 45001, based on identifying hazards, qualitative and quantitative risk assessment, and on planning and implementing preventive and protective measures. This system also considers the rigorous selection and management of contractors and suppliers, promoting their involvement in continuous safety performance improvement programs. In particular, these 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 workers and contractors, also in relation to exogenous health risk factors that may not be strictly related to work activities.	8	Enel people Suppliers and contractors		Occupational health and safety
In line with our Open Power approach, we work every day to create an open, inclusive and dynamic working environment that seeks to incorporate diversity, attract new talent and empower our people. The new digital tools to support the selection process favor full participation and inclusion of all the candidates involved, using gamification experiences at a global level and a video interview supported by artificial intelligence, aimed at an in-depth exploration of the aptitudes of the young talent involved. Over the last year, several initiatives, most of which have been digital, have been developed in relation to talent attraction and employer branding, aimed at building a corporate identity that is attractive to potential candidates. New regulations have also been released at a global level, which also include the e-profile tool as an opportunity to enhance people's hard and soft skills, their aspirations and their motivations for change.	3 8	Enel people		Empowering Enel people

ESG megatrend	Material topic (I level)	Material topic (II, III level)	Description of the impact	Relevant GRI <sup>(1)</sup>	Type <sup>(2)</sup> – Duration <sup>(3)</sup>
<b>New governance models</b>	 Sound governance and fair corporate conduct	 <b>Structure of the Board of Directors and Top Management</b> – Balanced structure and diversity of the Board of Directors	Worsening of external stakeholders' perception of the Group's inclusion practices due to the lack of diversity in the governing bodies of subsidiaries	GRI 406: Non-discrimination  GRI 2-2-9: Governance structure and composition; 2-10: Nomination and selection of the highest governance body	Potential ●●●➤
<b>Increase in inequalities</b>	Engaging local and global communities	 <b>Consultation with the local community in the development of new projects</b> – Dialog, sharing and engagement on shared goals	Possible conflicts or opposition from local communities due to the lack of sharing of the environmental and socio-economic benefits of the project	GRI 413: Local communities	Potential ●●●➤
<b>Increase in inequalities</b>	Sustainable supply chain	 <b>Respect for human rights in the supply chain</b> – Integration of human rights and labor rights criteria and performance into fuel supply management	Procurement of goods and services produced by activities related to potential human rights violations (e.g. exploitation of unskilled and low-paid workers)	GRI 414: Supplier Social Assessment	Potential ●○○➤
<b>New economy, Digital revolution, New mobility, Urbanization</b>	Products and services for electrification and digitalization	<b>New technologies and solutions for Homes, Condominiums, Cities, Industry and financial activities</b>	Reduction of positive environmental impacts due to possible delays in the installation, maintenance and repair of renewable energy technologies (energy-efficient products and services)	–	Potential ●●●➤
<b>Empowered customer</b>	Customer centricity	 <b>Ability to meet customer needs</b> – Optimizing products and services for the most vulnerable customers	Increase in the number of vulnerable customers and energy poverty due to an increase in the price of electricity	GRI 417: Marketing and labelling  DMA (former EU23): Access to energy  DMA EU (former EU24): Disclosure of information (standardize this wording whenever it can be found in the tables for both impacts and GRI issues)	Potential ●○○➤
<b>New economy, Digital revolution, Resources preservation</b>	Innovation, circular economy and digital transformation	<b>Circular economy</b> – Use of sustainable inputs, Dissemination of circular economy culture	Reduced availability of global/local raw materials due to failure to implement circular economy practices	GRI 301: Materials GRI 306: Waste	Potential ●●●➤
<b>New economy, New governance models</b>	Economic and financial value creation	<b>Long-term value creation strategy</b> – Business Ownership model, Business Stewardship model	Reduction of investments in maintenance of existing assets, in favor of those aimed at building new capacity	GRI 201: Economic performance  GRI 2-2-6: Activities, value chain and other business relationships	Potential ●●●➤



Priority for stakeholders and the Group



Impact relevant on human rights

(1) "–" is reported where the material topic is not currently covered by a specific GRI (2) Type: actual/potential

(3) Duration: ●○○➤ Short term (up to 1 year) ●●○➤ Medium term (2 to 5 years) ●●●➤ Long term (&gt;5 years)



Impact management	Relevant SDG	Stakeholders involved	Stage in value chain	Ref. in Sustainability Plan and 2022 Sustainability Report chapter
Within the best practices adopted by Enel with regard to subsidiaries, it is envisaged that, without prejudice to applicable legislation, the selection of members of the Board of Directors of these companies must aim to integrate different professional and managerial experiences and skills (including specific skills in the business sector concerned, as well as in economic, financial and legal matters), and combine them where possible, with the integration of diversity of gender, age and role.	16 17	Civil society and local and global communities Enel people Businesses and trade associations Suppliers and contractors	   	Sound governance
Via the Group approach aimed at Creating Shared Value (CSV), since the beginning of the project Enel has been involving local communities, making them aware and informing them of topics connected to climate change, and explaining the benefits and effects of the energy transition, not only for the environment but also for the socio-economic development of the areas where Enel operates.	8	Civil society and local and global communities Businesses and trade associations Suppliers and contractors	  	Engaging communities
The protection of human rights aspects within Enel's supply chain is guaranteed by the supplier qualification system as well as by the entire procurement process. The qualification system requires suppliers to commit to adopting best practices in terms of human rights and working conditions, impact on communities, dissemination of principles regarding respect for human rights, throughout their value chain. The General Terms and Conditions of Contract also require compliance with relevant current legislation and regulations, and for suppliers to sign up to the principles to which Enel has committed in the Policy on Human Rights, Code of Ethics, Zero Tolerance of Corruption Plan, and global compliance programs.	12	Civil society and local and global communities Suppliers and contractors Businesses and trade associations		Sustainable supply chain Human rights management
The Enel X Global Retail Business Line was set up in order to respond to the new scenarios opened up by the electrification process and to design offers that are increasingly adapted to customer needs, and is therefore aimed at providing a fast and timely service to customers. Enel mitigates the risk related to the lack and/or delays in the supply of raw materials through the diversification of its suppliers. Any delays in the supply chain due to the scarcity of raw materials are appropriately mitigated by Enel through the diversification of suppliers.	7 9 11 13	Civil society and local and global communities Customers Enel people Suppliers and contractors	   	Clean electrification
The Group has committed to a "just energy transition for all", including by offering innovative and inclusive services for customers of all ages, weak, destitute or marginalized customers, vulnerable families in line with the provisions of the Policy on Human Rights. In all the countries in which the Group operates, we also provide forms of support that make it easier for certain sections of the population to pay electricity and gas bills, thus allowing equal access to energy. One example is the action taken in Italy and Spain through the so-called "social bonus", but also in Romania, Brazil, Peru and Colombia where initiatives have been promoted dedicated to providing adequate support to vulnerable sections of society and who in particular are affected by the increase in energy costs.	11 12	Businesses and trade associations Civil society and local and global communities Customers	 	Clean electrification
We apply the circular economy throughout the goods' lifecycle: from the design stages of the supply chain to their use and ultimately reuse in a new cycle at the end of their service life. Enel pursues the objective of separating its business from the consumption of resources; to monitor this transition to circularity, we have developed an "Economic CirculAbility" KPI, which takes the Group's overall EBITDA (in euros) and compares it with the amount of resources consumed, both fuel and raw materials, throughout the value chain by the different business activities (expressed in tons). Enel has committed to doubling its performance in relation to this KPI by 2030 compared to 2020, i.e. to halve the amount of resources consumed compared to the EBITDA generated.	12	Businesses and trade associations Civil society and local and global communities Customers Suppliers and contractors	   	Circular economy
Enel guarantees investments aimed at supporting the energy transition while ensuring the continuous maintenance of existing plants to make them resilient and enable them to meet the challenges of climate change.	8	Businesses and trade associations Civil society and local and global communities Enel people Customers Suppliers and contractors Financial community	 	Zero emissions ambition

The impacts and associated material topics that have been determined through this process are used to identify the financial risks and opportunities related to the organization's impacts and for financial assessment purposes.

As regards **financial materiality**, in 2022 the Group conducted an assessment, analyzing and identifying the material topics from a financial perspective, namely those that affect or could affect the Company's financial condition or operating results, and are therefore most relevant to investors.

The financial materiality analysis was performed by each Local Sustainability and Holding unit, in order to assess the **significance of impacts** arising from the external context. This entailed the involvement of relevant stakeholders and experts within the organization who have a close relationship with the main stakeholders, and thus a comprehensive view on sustainability aspects related to risks and opportunities that influence or may influence substantially the Company's cash flows, development, performance, positioning, cost of capital or access to borrowings in the short, medium or long term.

In conducting the financial materiality analysis, Enel also considered the relevance of ESG topics according to the SASB Standard for the prevailing Electric Utilities sector and the Gas Utilities, Solar Technology and Wind Technology sectors.

On the basis of the financial materiality assessment, for reporting purposes the **most significant potential<sup>(4)</sup> positive and negative impacts** were selected according to their highest degree of significance for each topic of the materiality analysis. The table below shows:

- the most significant impacts – associated with ESG megatrends, the material topic (1st, 2nd, 3rd Level) and related GRI – both positive and negative in suffered directly and indirectly by the Company from the external context;
- the time horizon for their occurrence (short-, medium- or long-term);
- impact management: the Company strategies and performance, in line with the management of the main types of risk faced by the Enel Group;
- alignment with the SASB Standard for the prevailing Electric Utilities sector and the Gas Utilities, Solar Technology and Wind Technology sectors, and the material topic (1st Level) related to the impact;
- additional information: whether the reported impact is or could be a human rights concern; the reference SDGs; the phase of the value chain affected by the impact; the stakeholders that can or could be positively or negatively affected by the impact; whether the topic related to the reported impact is a priority for the stakeholders involved in the materiality analysis process; reference to the Sustainability Plan and to the chapter of the Report that describes in detail the management methods and results related to the impact.

(4) For financial reporting input purposes, the financial materiality analysis looked at the actual and potential impacts suffered by the Company from a financial point of view. However, in order to select the most significant impacts for reporting, it focused on potential ones with a view to assessing the potential economic effects on the Company.



























## Table of the most significant impacts

### POSITIVE IMPACTS

ESG megatrend	Material topic (I level)	Material topic (II, III level)	Description of the impact	Relevant GRI <sup>(2)</sup>	Duration <sup>(3)</sup>
<b>Climate change, Resources preservation</b>	 Decarbonization of the energy mix 	 <b>Climate change</b> – Adaptation to extreme weather events	Promoting the establishment and timely implementation of adaptation plans to improve the resilience of plants to natural disasters and respond promptly to regulatory changes, helping to reduce potential costs and losses due to damage and/or operational failures	GRI 201: Economic performance GRI 305: Emissions GRI 304: Biodiversity GRI 303: Water and effluents DMA (former EU23): Access to energy System efficiency (EU12)	●●●➤
<b>Urbanization, Digital revolution</b>	 Infrastructure and networks 	 <b>Improvement and development of networks</b> – Improvement of quality in energy distribution	Increased investment in infrastructure resilience to reduce climate risk	System efficiency (EU12)	●●●➤
<b>Resources preservation</b>	 Preservation of ecosystems and environmental management 	 <b>Environmental governance</b> – Environmental policies	Anticipating changes in national and international legislation and standards through the adoption of an overcompliant strategy aimed at a role as a global environmental best performer with respect to the most stringent regulatory compliance requirements	GRI 2-27: Compliance with laws and regulations	●○○➤
<b>Well-being</b>	 Occupational health and safety 	 <b>Worker safety</b> – Promotion of a worker safety culture <b>Safety of contractors working at Enel sites</b> – Promotion of a safety culture among contractors working at Enel sites	Decrease in the number of workplace injuries to workers and contractors, thanks to an adequate social and cultural context on health and safety topics	GRI 403: Occupational health and safety GRI 410: Safety practices	●●○➤
<b>New governance models</b>	 Sound governance and fair corporate conduct	<b>Fairness and transparency in communication</b> – Fairness and transparency of ESG information	Positive financial performance as a result of the implementation of good corporate governance practices, relevant for key ESG indices and investors	GRI 2-2-23: Policy commitments; 2-24: Embedding policy commitments; 2-25: Processes to remediate negative impacts GRI 206: Anti-competitive behavior GRI 415: Public policy	●●○➤
<b>Increase in inequalities</b>	 Sustainable supply chain 	 <b>Responsible management of the procurement of goods, services and work</b> – Integration of environmental, safety and sustainability criteria and performance in purchasing management	Improving brand reputation by working with sustainability-compliant suppliers	GRI 204: Procurement practices GRI 308: Supplier Environmental Assessment	●●○➤
<b>New economy, Digital revolution, New mobility, Urbanization</b>	Products and services for electrification and digitalization	<b>New technologies and solutions for Homes, Condominiums, Cities, Industry and financial activities</b>	Changes in consumer behaviour towards more sustainable, electrified and digitalized solutions	-	●●○➤
<b>New economy, Resources preservation</b>	 Innovation, circular economy and digital transformation 	<b>Circular economy</b> – Use of sustainable inputs, Dissemination of circular economy culture	Increased reuse of materials thanks to the adoption of circular economy practices	GRI 301: Materials GRI 306: Waste	●●○➤
<b>New economy, New governance models</b>	Economic and financial value creation	<b>Investment attraction</b>	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 subsidised support tools (funds and calls) for the transition.	GRI 201: Economic performance	●●○➤



Priority for stakeholders and the Group



Impact relevant on human rights

(1) SASB



Material topic from a financial point of view for SASB (Sustainability Accounting Standards Board)



































































(2) “-” is reported where the material topic is not currently covered by a specific GRI

(3) Duration: ●○○➤ Short term (up to 1 year)

●●○➤ Medium term (2 to 5 years)

●●●➤ Long term (>5 years)













Impact management	Relevant SDG	Stakeholders involved	Stage in value chain	Ref. in Sustainability Plan and 2022 Sustainability Report chapter
The Group adopts solutions for adaptation to weather and climate events in order to manage effectively chronic and acute phenomena of interest for each activity and Business Line. Adaptation solutions may concern both actions implemented in short-term and long-term decision making, such as the planning of investments in response to climate phenomena. Adaptation activities also include procedures, policies and best practices. For new investments, action can also be taken early in the design and construction phase to reduce the impact of climate risks by through risk and vulnerability assessments at the design stage, and to take any chronic effects into account (e.g. the inclusion of climate scenarios in long-term renewable resource estimates).	13	Businesses and trade associations Civil society and local and global communities Customers Financial community Enel people Institutions Media Suppliers and contractors	        	Zero emissions ambition
In the Enel Grids Business Line, the Enel Group has adopted an approach known as "4R" to cope with extreme weather events (1. Risk Prevention; 2. Readiness; 3. Response; 4. Recovery). In a suitable policy, it defines the measures required, both when preparing for an emergency on the grid, and to quickly restore service ex post, i.e. once the climatic events have caused damage to the assets and/or disconnections.	9 13	Businesses and trade associations Civil society and local and global communities Customers		Clean electrification
Enel plays an active and leadership role in international meetings and in the discussion and application of new national and international standards regarding environmental topics in order to align and anticipate their organizational implications. A structured control plan combined with actions and improvement objectives inspired by the best environmental and social practices, with requirements higher than those linked to simple environmental regulatory compliance, mitigates the risk of impacts on the environment and on human rights, of legal disputes and misalignment with the benchmark international standards that represent best practices.	6 12 14 15 16	Businesses and trade associations Civil society and local and global communities Institutions	        	Nature Conservation of natural capital
Enel considers the health, safety and psychological and physical well-being of individuals to be the most precious asset to be protected at all times of life, at work, at home and during leisure time. In this context, the Group promotes a context based on principles of health and safety, through global and local awareness raising campaigns to promote healthy lifestyles, screening programs aimed at preventing the onset of illnesses, vaccination campaigns and availability of medical services. This structured approach is described in the new version of the "Health and Well-being" Policy, and defines in three main steps – health surveillance, prevention and well-being – the path for promoting good health and well-being. Enel's commitment is also demonstrated in the Group's Policy on Human Rights, the "Declaration of Commitment to Health and Safety" and the "Stop Work Policy".	8	Enel people Suppliers and contractors	        	Occupational health and safety
Enel has adopted as part of its corporate governance specific compliance programs, i.e.: the Code of Ethics, the Zero Tolerance of Corruption Plan ("ZTC Plan"), the Policy on Human Rights, the Policy on international sanctions, the Enel Global Compliance Program ("EGCP"), the Model pursuant to Italian Legislative Decree 231/01 and other national compliance programs adopted by Group companies in accordance with their national legislation. Furthermore, to further pursue its commitment to fighting corruption, Enel voluntarily decided to certify its Anti-Bribery Management System (SGPC) in compliance with the requirements of international standard ISO 37001:2016 (international certification of anti-bribery management systems).	16	Financial community Businesses and trade associations	        	Sound governance Our commitment to continuous improvement
Enel promotes partnerships with companies that maximize their positive impacts on the environment and has created partnerships to increase the sensitivity and overall level of sustainability in the value chain. It has also organized numerous meetings with contractors on the topics of decarbonization, circularity, human rights and supply chain mapping, with the aim of sharing common practices and approaches and of pushing the supply chain towards the sustainability standards required by the international community.	12	Financial community Suppliers and contractors	        	Sustainable supply chain
The energy sector is changing, and at the same time the way we use energy is evolving. Enel is therefore committed to creating and offering individuals, companies and government bodies products and services to make everyday life, from mobility to home automation, easier and more efficient.	11	Customers	 	Clean electrification Digitalization
We apply the circular economy throughout the goods' lifecycle: from the design or purchase stages through to their use and reuse in a new cycle at the end of their service life. In order to minimize the use of scarce natural resources, Enel defines and implements circular economy practices along all business lines, involving both its supply chain and end customers.	12	Businesses and trade associations Civil society and local and global communities Suppliers and contractors	        	Circular economy
At Enel, sustainable finance plays a crucial role in supporting the growth of the Group which, through the recognition of the value of sustainability, contributes to a gradual reduction in the cost of debt. Sustainable finance means synergy between private and public finance. Private finance conveys private capital towards sustainable investments, i.e. for the benefit of companies whose strategic action is intended to achieve certain sustainability objectives, reflecting the economic and financial value of sustainability in a lower cost of debt. Public finance, on the other hand, stimulates the creation of sustainable investments, through grants and loans at subsidized interest rates.	8	Businesses and trade associations Financial community Institutions	        	Zero emissions ambition Our commitment to continuous improvement



## Table of the most significant impacts

NEGATIVE IMPACTS

ESG megatrend	Material topic (I level)	Material topic (II, III level)	Description of the impact	Relevant GRI <sup>(3)</sup>	Duration <sup>(3)</sup>
<b>Climate change</b>	 Decarbonization of the energy mix <sup>(2)</sup> SASB <sup>(1)</sup>	 <b>Climate change</b> – Adaptation to extreme weather events <sup>(2)</sup>	Increase in extreme weather events (e.g. cyclones, droughts, floods, storms, heat waves and fires) due to climate change, resulting in damage or reduced efficiency of power generation and distribution facilities and supporting infrastructure, causing capacity to be downgraded, operations temporarily stopped or shut down completely.	GRI 201: Economic performance GRI 305: Emissions GRI 304: Biodiversity GRI 303: Water and effluents DMA (former EU23): Access to energy System efficiency (EU12)	●●●➤
<b>Urbanization, Digital revolution</b>	 Infrastructure and networks SASB <sup>(1)</sup>	<b>Operational grid management</b> – Grid maintenance	Potential damage to the network caused by third parties causing malfunctions in the continuity of the service provided and with possible penalties for failure to restore within the established time	DMA (former EU23): Access to energy System efficiency (EU12)	●○○➤
<b>Resources preservation</b>	 SASB <sup>(1)</sup> Preservation of ecosystems and environmental management	 <b>Environmental governance</b> – Environmental policies	Stricter and emerging legislation on activities, products and/or services aimed at reducing the environmental impact on nature and local communities, resulting in increased operating costs and fines, loss of licenses and/or revenues or blocked assets	GRI 2-27: Compliance with laws and regulations	●●○○➤
<b>Well-being</b>	 Occupational health and safety SASB <sup>(1)</sup>	 <b>Worker safety</b> – Promotion of a worker safety culture <b>Safety of contractors working at Enel sites</b> – Promotion of a safety culture among contractors working at Enel sites	Increase in the number of workplace injuries to workers and contractors, due to an inadequate social and cultural context on health and safety topics	GRI 403: Occupational health and safety GRI 410: Safety practices	●○○➤
<b>Inclusion and gender equality, Future work</b>	 People management, development and motivation	 <b>People development</b> – Upskilling and Reskilling	Lack of institutional support to incentivize and promote new skills and job opportunities in the organization	GRI 404: Training and Education	●●○○➤
<b>New governance models</b>	 Sound governance and fair corporate conduct	<b>Fairness in management conduct</b>	Rising demand for corporate transparency and accountability from the financial community, impacting ESG ratings and securities performance	GRI 1: Foundation GRI 2-2-22: Statement on sustainable development strategy; 2-23: Policy commitments GRI 2-2-23: Policy commitments; 2-24: Embedding policy commitments GRI 205: Anti-corruption GRI 206: Anti-competitive behavior GRI 415: Public policy	●●○○➤



Priority for stakeholders and the Group



Impact relevant on human rights

(1) SASB



Material topic from a financial point of view for SASB (Sustainability Accounting Standards Board)




(2) The climate and biodiversity crises are linked. As stated in the report by the workshop co-sponsored by IPBES-IPCC on biodiversity and climate change, "limiting global warming to ensure a habitable climate and protecting biodiversity are mutually supporting goals, and their achievement is essential for sustainably and equitably providing benefits to people." Climate change is one of the main causes of biodiversity loss, given that the destruction of ecosystems undermines nature's ability to regulate greenhouse gas (GHG) emissions and to protect itself from extreme weather conditions, thus accelerating climate change and increasing its vulnerability.

(3) "-" is reported where the material topic is not currently covered by a specific GRI

(4) Duration: ●○○➤ Short term (up to 1 year) ●●○○➤ Medium term (2 to 5 years) ●●●➤ Long term (>5 years)



Impact management	Relevant SDG	Stakeholders involved	Stage in value chain	Ref. in Sustainability Plan and 2022 Sustainability Report chapter
Enel makes use of procedures to manage adverse events through monitoring activities, weather forecasts and short-, medium- and long-term scenario analysis, to provide for the definition of actions to protect and increase resilience, both for existing assets and for those under construction. Also, best practices are implemented in relation to physical events to ensure prompt recovery of plant and grid operating conditions following adverse events.	13	Civil society and local and global communities Customers Financial community Enel people Suppliers and contractors		Zero emissions ambition
Enel promptly monitors network operations, to carry out maintenance on the infrastructure existing in all countries, to improve the quality of the service delivered and reduce the number and duration of outages (SAIDI and SAIFI).	7 9	Civil society and local and global communities Customers Media Enel people Suppliers and contractors		Clean electrification
In relation to risks that may arise from regulatory factors and developments in legislation, Enel has intensified its relations with institutional bodies, and is proactive in the removal/reduction of all potential elements that could compromise its positive environmental and social impact.	6 12 14 15 16	Businesses and trade associations Civil society and local and global communities Financial community Institutions		Nature Conservation of natural capital
The health, safety and psychological and physical well-being of individuals is the most precious asset to be protected at all times of life. In order to promote a suitable context in terms of health, safety and well-being within the perimeter of the Enel Group, with the aim of implementing plans composed of preventive measures and measures to protect the health of workers and anyone working for the Group, on both a local and global level. A listening and psychological support service was renewed for 2022, the purpose of which is to provide workers with a customized help program in an anonymous, free and confidential manner.	8	Enel people Suppliers and contractors		Occupational health and safety
Enel has developed upskilling and reskilling programs to support the energy transition: upskilling programs focus on developing existing professional skills, adding new skills based on the needs dictated by innovative technologies and processes; reskilling programs are aimed at creating new professional profiles, replacing skills that have become obsolete or are no longer needed, and which enable people to work on new activities.	4 8 10	Civil society and local and global communities Institutions Enel people Suppliers and contractors		Empowering Enel people
Enel maintains dialogue with investors based on principles of fairness and transparency, in compliance with EU and national regulations on market abuse, as well as in line with international best practices. In order to regulate the methods for developing dialog with the financial community, Enel has adopted a specific Policy (the "Engagement Policy"), which clarified to a large extent the practices already followed by Enel, and also took into account the best practices adopted with regard to corporate governance. By means of dialog with shareholders and bondholders, the Enel Investor Relations unit constantly collects feedback on how to integrate and improve the Group's reporting process and make its communications as effective as possible, meeting the needs of the financial markets.	16	Businesses and trade associations Financial community		Sound governance Our commitment to continuous improvement

ESG megatrend	Material topic (I level)	Material topic (II, III level)	Description of the impact	Relevant GRI <sup>(2)</sup>	Duration <sup>(3)</sup>
Increase in inequalities	SASB <sup>(1)</sup> Engaging local and global communities	 <b>Social and economic development of communities</b> – Transfer of skills and upskilling among the local population	Lack of skilled workforce among members of the community in which the Company operates	GRI 413: Local communities	●●○➤
Increase in inequalities	SASB <sup>(1)</sup> Sustainable supply chain	 <b>Respect for human rights in the supply chain</b> – Integration of human rights and labor rights criteria and performance into fuel supply management	Reputational damage due to the Company's suppliers' failure to respect workers' rights	GRI 414: Supplier Social Assessment	●●○➤
New economy, Digital revolution, New mobility, Urbanization	SASB <sup>(1)</sup> Products and services for electrification and digitalization	<b>New technologies and solutions for Homes, Condominiums, Cities, Industry and financial activities</b>	Poor availability of raw materials, products and spare parts for construction and installation, resulting in delays and price increases	-	●●○➤
Empowered customer	SASB <sup>(1)</sup> Customer centricity	<b>Quality relations with customers</b> – Effective and fair relations with customers	Low customer loyalty and satisfaction due to poor-quality service	GRI 417: Marketing and labelling	●●○➤
New economy, Digital revolution	Innovation, circular economy and digital transformation	 <b>Digitalization and cyber security</b> – Cyber security	Cyber attacks by cyber criminals, cyber activists, state-sponsored action groups impacting business continuity, asset functionality and sensitive data protection	-	●○○➤
New economy, New governance models	Economic and financial value creation	<b>Long-term value creation strategy</b> – Business Ownership model, Business Stewardship model	Insufficient actions and tools by institutions to support an acceleration of the energy transition, resulting in uncertainty and slowdown for investments in renewable and low-carbon technologies	GRI 201: Economic performance GRI 2-2-6: Activities, value chain and other business relationships	●●○➤



Priority for stakeholders and the Group



Impact relevant on human rights

(1) SASB



Material topic from a financial point of view for SASB (Sustainability Accounting Standards Board)

(2) “-” is reported where the material topic is not currently covered by a specific GRI

(3) Duration: ●○○➤ Short term (up to 1 year)

●●○➤ Medium term (2 to 5 years)

●●●➤ Long term (&gt;5 years)





Impact management	Relevant SDG	Stakeholders involved	Stage in value chain	Ref. in Sustain- ability Plan and 2022 Sustainability Report chapter
Enel is committed to promoting training programs dedicated to the local communities in which it operates, as well as training projects developed with local institutions aimed at the socio-economic development of communities.	4 8	Civil society and local and global communities Suppliers and contractors Enel people		Engaging communities
The selection of the best partners and the execution of contracts according to the highest standards of sustainability are guaranteed by our analysis and monitoring of the entire procurement process: • during the qualification stage, potential suppliers are evaluated according to criteria related to human rights (including occupational health and safety) and the impact of their activities on the environment; • during the tender stage, there are specific mandatory sustainability requirements and reward factors (sustainability K), in order to contribute to the promotion of responsible practices at a systemic level; • throughout the term of the contract, Enel monitors compliance with the requirements and reward factors (Supplier Performance Management).	12	Suppliers and contractors Businesses and trade associations Enel people Civil society and local and global communities		Sustainable supply chain Human rights management
Enel is committed to minimize any risks associated with the availability of goods/raw materials and related price volatility through: • early contracting for procurement; • diversification of supply sources, in terms of suppliers and geographical areas; • use of derivative financial instruments to hedge exposure.	9 12	Customers Suppliers and contractors		Circular economy
The Group is committed to guaranteeing a high level of service quality and to maximizing customer satisfaction, anticipating market needs in order to ensure reliable responses and establish lasting relations based on dialog, collaboration and trust: aspects that refer not only to the supply of electricity and/or natural gas, but also and above all to the intangible aspects of the service perceived by the customer (improvement in communications over contact channels and back office processes, as well as monitoring of complaints, reporting and requests for information). Enel also monitors the rate of customer satisfaction in every country in which it operates, with timely analyses aimed at understanding progress and at prompt implementation of any corrective actions.	11	Civil society and local and global communities Customers		Clean electrification
Enel respects the confidentiality and rights to privacy of its stakeholders and is committed to the proper use of the data and information provided by people who work with the Group, by customers and by other stakeholders. This commitment is also reflected in the Group's Policy on Human Rights. The Group has designed and adopted a holistic framework of processes aimed at governance of cyber security topics, applicable across the board to the Information Technology (IT), Operational Technology (OT) and Internet of Things (IoT) sectors. Moreover, the Group has defined and adopted a risk management method for IT security in accordance with risk-based and "cyber security by design" approaches, by integrating the safety requirements along the entire solution and service life cycle. In particular, the framework adopted by the Group addresses the monitoring of cyber risks, through eight processes aimed at: ensuring cyber security governance by guiding the strategy and issuing policies and procedures to respond to the main existing and emerging national and international regulations on cyber security; identifying and assessing cyber risks, by defining and implementing the related processing actions; providing architectural guidelines and engineering support for the protection of the Group's solutions and infrastructures (IT/OT/IoT); monitoring the IT security posture through process and technology checks; guiding and managing cyber incident prevention and response activities; managing the entire life cycle of the Group's digital identities and access control; guiding and managing training and awareness initiatives on cyber security at Group level, by leveraging behaviour and the human factor.	9 11	Enel people Civil society and local and global communities Customers		Digitalization
In relation to risks that may arise from regulatory factors, relations were intensified with local government and regulatory bodies, adopting an approach based on transparency, collaboration and proactiveness in addressing and removing sources of instability of the legislative and regulatory framework. In addition, for improved orientation of the strategic development guidelines, the evolution of the external context and the competitive landscape are constantly monitored, both inside and outside the utilities world.	8	Businesses and trade associations Civil society and local and global communities Customers Financial community Institutions Suppliers and contractors		Zero emissions ambition

# The material topics

| 3-1 | 3-2 | 3-3 |






The impact analysis model is of fundamental importance as it enables the Company to identify the **material topics** and focus on the best way to manage them, both in terms of risk management as well as in terms of strengthening opportunities. In addition, the Company must recognize **its strategic priorities**, taking into account also the view of its stakeholders. Identifying the priority ESG topics with which the Company wants to engage therefore strengthens the profile of impact management.

The **assessment of the impacts generated and suffered** and their relative significance guides the identification of the material topics: identify, within each 1st Level **material**





**topic**, which **2nd-3rd level topics are material**. The result of this analysis are used to help identify and define the objectives to be included in the Strategic Plan and the Sustainability Plan, the achievement of which is contributed to by the various Group Functions and Business Lines, as well as the topics covered by the Sustainability Report and other Corporate Reporting documents.

The list of 1st, 2nd and 3rd Level material topics is provided below together with the respective reference GRI as a monitoring and management indicator and the reference to the Sustainability Plan and Sustainability Report 2022.






	Material topics (1st level)	Material topics (2nd, 3rd level)	GRI	Ref. Sustainability Plan and Sustainability Report 2022
BUSINESS & GOVERNANCE	 <b>Decarbonization of the energy mix</b>	<ul style="list-style-type: none"> <li>• <b>Climate change</b> <ul style="list-style-type: none"> <li>— Reduction of CO<sub>2</sub> emissions</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 305: Emissions</li> </ul>	Zero emissions ambition
		<ul style="list-style-type: none"> <li>• <b>Climate change</b> <ul style="list-style-type: none"> <li>— Adaptation to extreme weather events</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 305: Emissions</li> <li>• GRI 304: Biodiversity</li> <li>• GRI 303: Water and effluents</li> <li>• GRI 201: Economic performance</li> <li>• DMA (former EU23): Access to energy</li> <li>• System efficiency (EU12)</li> </ul>	Zero emissions ambition
		<ul style="list-style-type: none"> <li>• <b>Use of energy</b> <ul style="list-style-type: none"> <li>— Reduction of energy consumption</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 302: Energy</li> </ul>	Conservation of natural capital
	 <b>Innovation, circular economy and digital transformation</b>	<ul style="list-style-type: none"> <li>• <b>Ecosystem of innovation and sustainability</b> <ul style="list-style-type: none"> <li>— Promotion of partnerships</li> <li>— Development of the Innovation Hub&amp;Lab network</li> <li>— Support and relationship with start-ups</li> <li>— Intellectual property</li> <li>— Dissemination of a culture of innovation and sustainability</li> <li>— Crowdsourcing</li> </ul> </li> </ul>	—*	Innovation
		<ul style="list-style-type: none"> <li>• <b>Digitalization and cyber security</b> <ul style="list-style-type: none"> <li>— Cyber Security</li> </ul> </li> </ul>	—*	Digitalization
		<ul style="list-style-type: none"> <li>• <b>Circular economy</b> <ul style="list-style-type: none"> <li>— Dissemination of a culture of a circular economy</li> <li>— Use of sustainable input</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 301: Materials</li> <li>• GRI 306: Waste</li> </ul>	Circular economy Nature Conservation of natural capital
	 <b>Products and services for electrification and digitalization</b>	<ul style="list-style-type: none"> <li>• <b>New technologies and solutions for homes, condominiums, cities, industries and financial activities</b></li> </ul>	—*	Clean electrification Digitalization
		<ul style="list-style-type: none"> <li>• <b>Electric mobility</b> <ul style="list-style-type: none"> <li>— Deployment of infrastructures for electric mobility</li> </ul> </li> </ul>	—*	Clean electrification – Electrification of uses Growth accelerators – digitalization
	 <b>Customer centricity</b>	<ul style="list-style-type: none"> <li>• <b>Ability to meet customer needs</b> <ul style="list-style-type: none"> <li>— Quality and timeliness of the commercial offer</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 417: Marketing and labelling</li> <li>• DMA (former EU23): Access to energy</li> <li>• Communication of DMA EU information (former EU24)</li> </ul>	Clean electrification
		<ul style="list-style-type: none"> <li>• <b>Quality of customer relations</b> <ul style="list-style-type: none"> <li>— Effective and fair relationship with customers</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 417: Marketing and labelling</li> </ul>	Clean electrification
	 <b>Infrastructure and networks</b>	<ul style="list-style-type: none"> <li>• <b>Improvement and development of grids</b> <ul style="list-style-type: none"> <li>— Development of microgrids and rural electrification</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• DMA (former EU23): Access to energy</li> </ul>	Clean electrification
		<ul style="list-style-type: none"> <li>• <b>Improvement and development of grids</b> <ul style="list-style-type: none"> <li>— Improvement of the quality in energy distribution</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• System efficiency (EU12)</li> </ul>	Clean electrification
		<ul style="list-style-type: none"> <li>• <b>Operational management of grids</b> <ul style="list-style-type: none"> <li>— Grid maintenance</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• DMA (former EU23): Access to energy</li> <li>• System efficiency (EU12)</li> </ul>	Clean electrification

\* – : the material topic is not currently covered by a specific GRI.

Material topics (1st level)		Material topics (2nd, 3rd level)	GRI	Ref. Sustainability Plan and Sustainability Report 2022
BUSINESS & GOVERNANCE	 <b>Sound governance and fair corporate conduct</b>	<ul style="list-style-type: none"> <li>• <b>Fairness in management conduct</b></li> </ul>	<ul style="list-style-type: none"> <li>• GRI 205: Anti-corruption</li> <li>• GRI 2 - 2-23: Commitment in terms of policy, 2-24: Integration of commitments in terms of policy</li> <li>• GRI 415: Public policy</li> <li>• GRI 206: Anti-competitive behavior</li> <li>• GRI 1: Fundamental principles</li> <li>• GRI 2-2-22: Declaration on the sustainable development strategy, 2-23: Commitment in terms of policy, 2-24: Integration of commitments in terms of policy</li> </ul>	Sound governance
		<ul style="list-style-type: none"> <li>• <b>Structure of the Board of Directors and Top Management</b> <ul style="list-style-type: none"> <li>— Balanced structure and diversity of the Board of Directors</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 406: Non-discrimination</li> <li>• GRI 2 - 2-9 Structure and composition of governance, 2-10: Appointment and selection of the highest governance body</li> </ul>	Sound governance
		<ul style="list-style-type: none"> <li>• <b>Fair and transparent communications</b> <ul style="list-style-type: none"> <li>— Fairness and transparency of ESG information</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 415: Public policy</li> <li>• GRI 206: Anti-competitive behavior</li> <li>• GRI 2 - 2-23: Commitment in terms of policy, 2-24: Integration of commitments in terms of policy, 2-25: processes targeted toward remedying negative impacts</li> </ul>	Our commitment to continuous improvement
	 <b>Economic and financial value creation</b>	<ul style="list-style-type: none"> <li>• <b>Investment attraction</b></li> </ul>	<ul style="list-style-type: none"> <li>• GRI 201: Economic performance</li> </ul>	Zero emissions ambition Our commitment to continuous improvement
		<ul style="list-style-type: none"> <li>• <b>Long-term value creation strategy</b> <ul style="list-style-type: none"> <li>— Business Ownership model</li> <li>— Business Stewardship model</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 201: Economic performance</li> <li>• GRI 2 - 2-6: Activities, value chain and other business relations</li> </ul>	Zero emissions ambition Clean electrification
SOCIAL	 <b>Occupational health and safety</b>	<ul style="list-style-type: none"> <li>• <b>Health and safety of workers of contractors operating on Enel sites</b> <ul style="list-style-type: none"> <li>— Promotion of a culture of safety among workers of contractors who operate at Enel sites</li> <li>— Management and monitoring of contractor safety</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 403: Occupational health and safety</li> <li>• GRI 410: Safety practices</li> </ul>	Occupational health and safety
		<ul style="list-style-type: none"> <li>• <b>Worker health and safety</b> <ul style="list-style-type: none"> <li>— Promotion of a safety culture among workers</li> <li>— Management and monitoring of worker safety</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 403: Occupational health and safety</li> <li>• GRI 410: Safety practices</li> </ul>	Occupational health and safety
	 <b>People management, development and motivation</b>	<ul style="list-style-type: none"> <li>• <b>Quality of corporate life</b> <ul style="list-style-type: none"> <li>— Work-life balance</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 401: Employment</li> </ul>	Managing human rights Empowering Enel people
		<ul style="list-style-type: none"> <li>• <b>People development</b> <ul style="list-style-type: none"> <li>— Hiring and remuneration policies</li> <li>— Upskilling and reskilling</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 401: Employment</li> <li>• GRI 404: Training and education</li> </ul>	Empowering Enel people
		<ul style="list-style-type: none"> <li>• <b>Valuing worker diversity</b> <ul style="list-style-type: none"> <li>— Valuing disabilities</li> <li>— Valuing age diversity</li> <li>— Valuing gender diversity</li> <li>— Valuing other diversities</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 405: Diversity and equal opportunity</li> </ul>	Empowering Enel people Managing human rights



	Material topics (1st level)	Material topics (2nd, 3rd level)	GRI	Ref. Sustainability Plan and Sustainability Report 2022
SOCIAL	 Sustainable supply chain	<ul style="list-style-type: none"> <li>• <b>Responsible management of the procurement of goods, services and works</b> <ul style="list-style-type: none"> <li>— Integration of environmental, safety and sustainability performance criteria in procurement management</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 204: Procurement practices</li> <li>• GRI 308: Supplier Environmental Assessment</li> </ul>	Sustainable supply chain Managing human rights
		<ul style="list-style-type: none"> <li>• <b>Respect for human rights in the supply chain</b> <ul style="list-style-type: none"> <li>— Integration of the criteria and performance related to human rights and labor in the management of fuel procurement</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 414: Supplier Social Assessment</li> </ul>	Sustainable supply chain Managing human rights
	 Engaging local and global communities	<ul style="list-style-type: none"> <li>• <b>Social and economic development of local communities</b> <ul style="list-style-type: none"> <li>— Development and maintenance of the local supply chains</li> <li>— Employment development in the areas of presence</li> <li>— Infrastructural development in the areas of presence</li> <li>— Transfer of skills and reinforcement of the skills of the local population</li> <li>— Support for entrepreneurial activities in the community</li> <li>— Access to primary goods</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 413: Local communities</li> </ul>	Engaging communities
		<ul style="list-style-type: none"> <li>• <b>Consultation with the local community in the development of new projects</b> <ul style="list-style-type: none"> <li>— Dialog, sharing and engagement in common objectives</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 413: Local communities</li> </ul>	Engaging communities
ENVIRONMENT	 Preservation of ecosystems and environmental management	<ul style="list-style-type: none"> <li>• <b>Water management</b> <ul style="list-style-type: none"> <li>— Treatment, recycling and use of wastewater</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 303: Water and effluents</li> <li>• GRI 306: Water effluent and waste</li> </ul>	Nature Conservation of natural capital
		<ul style="list-style-type: none"> <li>• <b>Protection of biodiversity and natural capital</b> <ul style="list-style-type: none"> <li>— Conservation and promotion of the local natural heritage</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 304: Biodiversity</li> </ul>	Nature Conservation of natural capital
		<ul style="list-style-type: none"> <li>• <b>Environmental governance</b> <ul style="list-style-type: none"> <li>— Environmental policies</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• GRI 2-27: Compliance with laws and regulations</li> </ul>	Nature Conservation of natural capital





TOPIC VIEW

4.



# Our performance

## **Ambition of zero emissions and clean electrification**

lies at the heart of the strategy we are implementing in a sustainable and innovative way, to favor a **just transition**.

## **People are the mainstays of sustainable progress,**

not only ours, but also customers, suppliers, communities, institutions, the financial community, the media, companies and trade associations.

## **Innovation, circular economy, digitalization and sustainable finance**

are the growth accelerators, and embrace and enhance all strategic themes across the board.

## **Protection of nature and respect for human rights**

form our daily commitment to the current and future generations.

# Zero emissions ambition

## Material topics (I level)

## Plan

## SDG



- Decarbonization of the energy mix



Below the 2022 results related to the targets of the previous 2022–2024 Sustainability Plan, the resulting progress and the targets of the 2023–2025 Sustainability Plan, which may be redefined, added to, or surpassed with respect to the previous Plan.

SDG	Activities	2022 results	Progress	2023–2025 targets	Tag
13	Reduction in GHG Scope 1 emissions intensity relating to power generation <sup>(1)</sup>	<ul style="list-style-type: none"> <li>229 gCO<sub>2eq</sub>/kWh</li> <li>-40% vs 2017<sup>(2)</sup></li> </ul>	● ● ●	<ul style="list-style-type: none"> <li>130 gCO<sub>2eq</sub>/kWh in 2025</li> <li>-80% in 2030 vs 2017</li> </ul>	E
13	Reduction of GHG emissions intensity Scopes 1 and 3 relating to Integrated Power <sup>(1)</sup>	<ul style="list-style-type: none"> <li>218 gCO<sub>2eq</sub>/kWh</li> <li>-36% vs 2017<sup>(3)</sup></li> </ul>	● ● ●	<ul style="list-style-type: none"> <li>135 gCO<sub>2eq</sub>/kWh in 2025</li> <li>-78% in 2030 vs 2017</li> </ul>	E
13	Reduction of absolute GHG Scope 3 emissions relating to Gas Retail	<ul style="list-style-type: none"> <li>22.9 MtCO<sub>2eq</sub></li> <li>-10% vs 2017</li> </ul>	● ● ●	<ul style="list-style-type: none"> <li>20.9 MtCO<sub>2eq</sub> in 2025</li> <li>-55% in 2030 vs 2017</li> </ul>	E
13	Reduction of additional absolute GHG emissions (Scopes 1+2+3) <sup>(1)</sup>	-24% vs 2017 <sup>(4)</sup>	N.A.	-55% in 2030 vs 2017	E
13 17	MBA-PhD training about resilience and energy transition in the countries where the Group operates	204 people involved	● ● ●	600 people involved in the period 2023–2025	E S G

- (1) The values of the reduction percentages were calculated on an equal perimeter basis, and therefore take into account the 2017 baseline and the 2022 value, both restated to exclude GHG emissions from assets disposed in the 2017–2022 period, in accordance with SBTi.
- (2) The restated value that excludes GHG emissions from assets in operation during 2022 and disposed before the end of the year is 217 gCO<sub>2eq</sub>/kWh.
- (3) The restated value that excludes GHG emissions from assets in operation during 2022 and disposed before the end of the year is 210 gCO<sub>2eq</sub>/kWh.
- (4) The restated value that excludes GHG emissions from assets in operation during 2022 and disposed before the end of the year is 17.5 MtCO<sub>2eq</sub>.

## Goals

## Progress

- I Industrial E Environmental S Social  
G Governance T Technological



New



Redefined



Outdated



Not in line




In line



Achieved

N.A. = not applicable

SDG	Activities	2022 results	Progress	2023-2025 targets	Tag
7 13	Promoting the energy transition through conversion projects with the aim of finding new solutions and ways of using them to develop energy conversion, the circular economy, while also promoting innovation <sup>(5)</sup>	Porto Tolle: demolition underway Augusta: demolition completed Bari: demolition completed Livorno: Memorandum of Understanding signed between Enel Logistics and the local port authority, change of use underway Litoral: "Call for Projects" launched	● ● ●	<b>77</b> sites involved in repurposing projects, <sup>(5)</sup> including: <b>Porto Tolle:</b> construction of an open-air tourist village by a third party; demolition by the counterparty <b>Augusta:</b> construction of an innovative research and study centre in areas no longer used of the plant, dedicated to sustainable reclamation, solutions for mitigating the environmental impact of plants and infrastructures, and other areas relating to the energy sector and plant species <b>Livorno:</b> construction of a logistic-customs area in the site areas <b>Bari:</b> construction of an urban park with multifunctional areas (co-living, co-working, co-learning and green areas); demolition by the counterparty <b>Montalto:</b> launch of the Integrated Intervention Program in 2023 for a new integrated energy hub <b>As Pontes, Litoral, Compostilla, Alcudia:</b> continuous research to implement novel initiatives for new industrialization and energy development in the areas <b>Teruel:</b> Coal2RES internal reconversion and social development, training, new projects in the industrial, commercial and tourism sectors in the area	 I E S T

(5) Third-party project initiatives could be developed where in-house redevelopment is not feasible.



# Zero emissions ambition



Climate change represents the main global challenge of this century and Enel plays an active role in the fight against it, by leading the global energy transition towards zero emissions.

As one of the first signatories of the 2019 “**Business Ambition for 1.5 °C**” campaign promoted by United Nations, Enel Group has publicly declared its commitment to develop a **business model in line with the Paris Agreement (COP 21) objectives**, to limit the average global temperature increase to 1.5 °C.

In 2021, we have **brought forward our commitment to zero emissions by ten years, from 2050 to 2040**.

In 2022, we reached a historic new milestone by defining a **decarbonization roadmap** that covers **both direct and indirect emissions throughout the Group’s value chain**. Specifically, four targets have been defined, certified by the Science-Based Targets initiative (SBTi) and in line with keeping global warming within 1.5 °C.

The roadmap currently envisages **reducing all direct and indirect greenhouse gas (GHG) emissions by around 99% by 2040 compared to 2017 throughout the value chain**, beyond the overall threshold set by SBTi (90%). The Group aims to achieve a 100% reduction in all emissions, with a view of overcoming exogenous factors in the

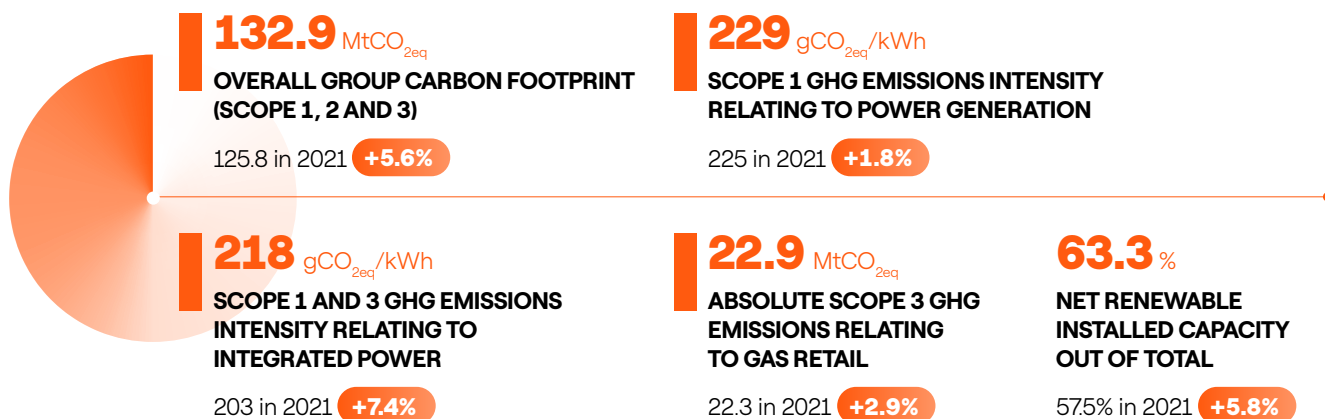
short to medium term such as the development of new technological solutions in the supply chain at large-scale or the improvement of certain market conditions and policies.

Enel aims to promote electrification solutions powered by renewable sources, complete the phase-out of fossil fuels, accelerate renewable sources development, and digitize and upgrade networks. Specifically:

- **by 2025**, Enel will cover about 90% of its fixed-price sales with carbon-free electricity, bringing **renewables to about 75% of total production**.<sup>(1)</sup> In addition, progress towards digitalization of networks will increase the share of digitalized customers to around 80%;
- **by 2027**, Enel will complete the **phase-out of all its coal-fired power plants**;
- **by 2030**, around **85% of the installed capacity will be renewable and 100% of network customers will be fully digitalized**;
- **by 2040** all installed capacity will be **100% renewable**, the Group will have phased-out both thermoelectric generation and retail gas activities and **100% of the electricity sold will be produced from renewable sources**.

(1) Includes generation from managed capacity of 25 TWh in 2025.





**Enel will also lead its customers towards a decarbonized electrification of their consumption.** Firstly, by increasing the share of renewable electricity consumption, Enel customers will reduce their indirect Scope 2 emissions; secondly, by expanding the portfolio of products and services to accelerate the electrification of other sectors, such as transport and construction, while promoting energy efficiency solutions, customers will also reduce their direct Scope 1 emissions.

Through its **business strategy**, the Group is committed to establish drivers, actions and investments required to complete the decarbonization and electrification roadmap, and identifying, assessing and managing the main **climate risks and business opportunities** emerging from the energy transition.

Particular attention is placed on the **climate change adaptation policies** to increase the resilience of the assets along the entire value chain, thereby limiting potentially negative impact and guaranteeing a safe and sustainable energy service in all the countries in which the Group operates.

**Enel is committed to carry out its direct and indirect public advocacy action in line with the Paris Agreement and its objective of limiting global warming within 1.5 °C** through the engagement of institutional stakeholders, trade associations, non-governmental organizations and academics. Enel promotes its point of view on public policies in the fight against climate change and on the pathways of decarbonization and electrification.

In addition, Enel is fully aware of the intrinsic link between **climate change and nature loss**. Rising temperatures, changes in precipitation patterns and extreme weather events impact significantly on ecosystems, forests and biodiversity. The decline of nature also affects the resilience of ecosystems to climate change, and the ability to capture carbon and generate benefits for society. Therefore, Enel's business model aims to synergistically address climate change and **promote the protection and**

**conservation of nature**, as an essential factor in its corporate strategy and everyday operations.

Similarly, there is a strong link between **climate change and the social dimension**. An active role in the fight against climate change focusing on people requires of decarbonization strategies that stimulate social inclusion, and at the same time favors decent work, the pillars of which – according to the International Labour Organization – are full productive employment, the guarantee of rights at work, the expansion of social protection, and the development of social dialogue. As such, Enel fully supports the **principles of a just transition**, so that no one is left behind even in the short term, and recognizes the relevance for its business of the social impacts arising from its climate strategy, aimed at the progressive reduction of emissions in line with the Paris Agreement.

In addition, as a result of a solid corporate governance system that defines roles and responsibilities, **Enel's Board of Directors and Management oversee the main decisions regarding climate**.

In order to guarantee increased **transparency in its communications** and relationships with its stakeholders, the Group periodically reports on its related activities around climate change in line with the international standards of the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB) and is publicly committed to adopting the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD) of the Financial Stability Board. The guidance from the "Enhancement and Standardization of Climate-Related Disclosures" of the SEC (Securities and Exchange Commission), the standards issued on the EFRAG website, and the ISSB's recently published exposure draft are also taken into account.

For details on the alignment of the structure of the chapter relating to the TCFD recommendations, please see the [TCFD Content Index](#) in the 2022 Sustainability Report.

# Enel's roadmap to decarbonization and electrification

## TCFD: Metrics & Targets

In 2022, Enel carried out a **full update of its decarbonization roadmap**. The process was validated by the Science-Based Targets initiative according to the criteria and recommendations related to short-term objectives and according to the SBTi Corporate Net Zero standard. This review included updating existing medium-term (2030) and long-term (2040) objectives, as well as setting new targets, all aligned to a 1.5 °C pathway, as defined by the SBTi, according to IPCC scenarios and other international benchmarks.

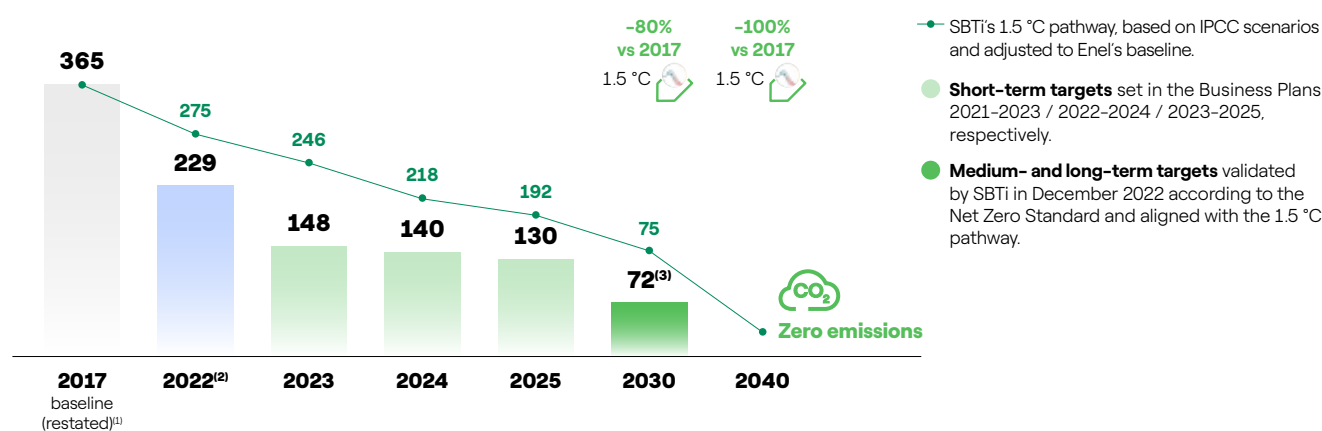
The main updates are:

- 2017 baseline was restated for all targets to exclude those direct and indirect GHG emissions from assets disposed in 2017-2022 period, including thermoelec-

tric and renewable plants and energy distribution assets that were disposed or are no longer consolidated within Enel's financial perimeter, in accordance with the GHG Protocol and SBTi guidelines;

- target ambition on **Scope 1 GHG emissions intensity relating to power generation** has been improved, from 82 gCO<sub>2eq</sub>/kWh to 72 gCO<sub>2eq</sub>/kWh by 2030. This target covers all greenhouse gas emissions (including CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) deriving from the power generation process with respect to total electricity and heat generated by the Group (excluding pumped storage generation to avoid possible double counting in the Scope 2 emissions calculation).

## Scope 1 GHG emissions intensity relating to power generation (gCO<sub>2eq</sub>/kWh)

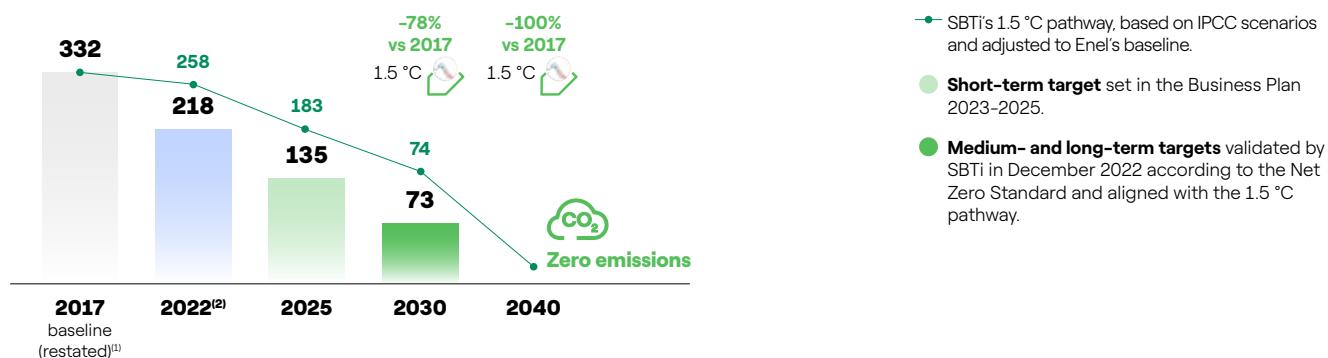


- (1) The 2017 baseline has been restated from 416 gCO<sub>2eq</sub>/kWh to 365 gCO<sub>2eq</sub>/kWh to exclude GHG emissions from assets disposed in 2017-2022 period, in accordance with SBTi.
- (2) 2022 value has not been restated and includes the GHG emissions of assets in operation during 2022 and disposed before the end of the year, according to the consolidation guidelines of the Sustainability Report. The figure, excluding GHG emissions from these assets, is 217 gCO<sub>2eq</sub>/kWh, down 40% compared to the restated baseline.
- (3) Target previously validated by SBTi in 2020 (1.5 °C pathway) of 82 gCO<sub>2eq</sub>/kWh.

- target ambition on **Scope 1 and 3 GHG emissions intensity relating to Integrated Power** has been improved, from 83 gCO<sub>2eq</sub>/kWh to 73 gCO<sub>2eq</sub>/kWh by 2030. This target is calculated as the combination of direct Group GHG emissions (Scope 1 – including CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) from electricity and heat generation and Group indi-

rect GHG emissions (Scope 3) from power generation electricity purchased and sold to end customers (an element of the 3-Fuel and Energy Related Activities subcategory of the GHG protocol Scope 3 standard), divided by power generation (including heat and excluding pumped power storage) and purchase of electricity;

### Scope 1 and 3 GHG emissions intensity relating to Integrated Power (gCO<sub>2eq</sub>/kWh)

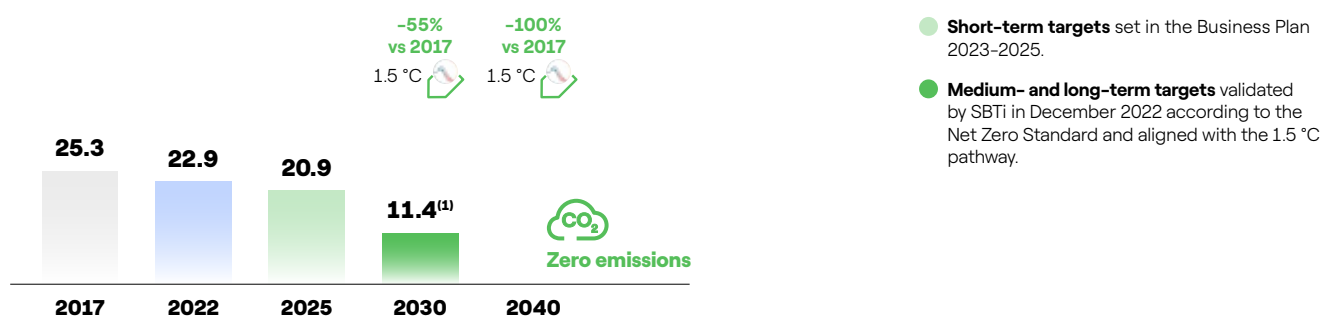


- The 2017 baseline has been restated from 373 gCO<sub>2eq</sub>/kWh to 332 gCO<sub>2eq</sub>/kWh to exclude GHG emissions from assets disposed in 2017-2022 period, in accordance with SBTi.
- The 2022 value has not been restated and includes the GHG emissions from assets in operation during 2022 and disposed before the end of the year, according to the consolidation guidelines of the Sustainability Report. The figure, excluding GHG emissions by these assets, is 210 gCO<sub>2eq</sub>/kWh, down 36% compared to the restated baseline.

- target ambition on **absolute Scope 3 GHG emissions relating to Gas Retail** has been significantly improved from 21.2 MtCO<sub>2eq</sub> to 11.4 MtCO<sub>2eq</sub> by 2030, to increase the

level of alignment with temperature scenarios of the Paris Agreement, from a previous 2 °C pathway to one of 1.5 °C, to which the target is now aligned;

### Absolute Scope 3 GHG emissions relating to Gas Retail (MtCO<sub>2eq</sub>)

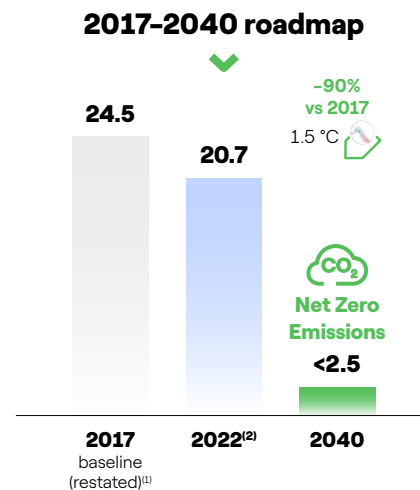
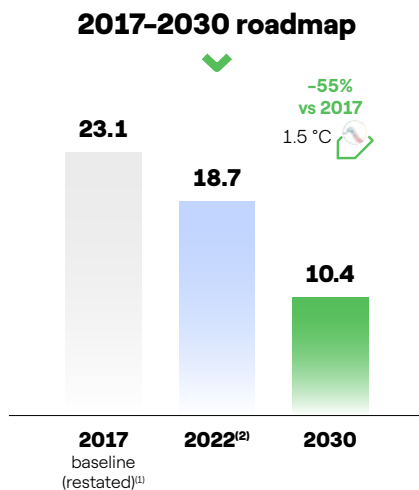


- Target previously validated by SBTi in 2019 (WB2C scenario) of 21.2 MtCO<sub>2eq</sub>.

- new target has been defined for **additional absolute Scope 1, 2 and 3 emissions**. The target covers i) Scope 1 GHG emissions from vehicles fleet and buildings, and losses of SF<sub>6</sub> in distribution assets; ii) all Scope 2 emissions; iii) Scope 3 emissions from the supply chain and all other activities related to fuel purchase and transportation. This objective provides for different levels of coverage of GHG emissions deriving from the supply chain for the 2030 and 2040 targets, allowed by SBTi methodology, which translate into two decarbonization curves:

- 2017-2030 roadmap covers specific supply chain categories that accounted for 40% of supplier emissions in 2017;
- 2017-2040 roadmap covers all supply categories included in the 2017-2030 roadmap and additional ones, which account for 54% of supplier emissions in 2017.

### Additional Scope 1-2-3 emissions (MtCO<sub>2eq</sub>)



● **Medium- and long-term targets** validated by SBTi in December 2022 according to the Net Zero Standard and aligned with the 1.5 °C pathway.

- (1) 2017 baseline has been restated from 25.0 MtCO<sub>2eq</sub> to 23.1 MtCO<sub>2eq</sub> for 2017-2030 roadmap and from 26.5 MtCO<sub>2eq</sub> to 24.5 MtCO<sub>2eq</sub> for 2017-2040 roadmap to exclude GHG emissions from assets disposed in 2017-2022 period in accordance with SBTi.
- (2) 2022 figure has not been restated and includes the GHG emissions of assets in operation during 2022 and disposed before the end of the year, following the consolidation guidelines of the Sustainability Report. The figure, excluding GHG emissions by these assets, is 17.5 MtCO<sub>2eq</sub> for the 2017-2030 roadmap, down 24% compared to the restated baseline and 19.5 MtCO<sub>2eq</sub> for the 2017-2040 roadmap, down 20% from the restated baseline.

- 2017-2030 roadmap covers specific supply chain categories that accounted for 40% of supplier's emissions in 2017.
- 2017-2040 roadmap covers all supply chain categories included in the 2017-2030 roadmap and additional ones, which accounted for 54% of supplier's emissions in 2017.

The first three targets envisage a 100% reduction in emissions generated by 2040, as the Group will produce and sell 100% of energy from renewable sources by then and will no longer maintain a presence in the retail gas market. The fourth objective currently envisages a 90% reduction by 2040 from 2017, with a residual volume of less than 2.5 MtCO<sub>2eq</sub>, which will be neutralized through carbon removal in the event that the current external factors (linked to the supply chain, the market and the regulatory frameworks) that prevent Enel from mitigating them will also be present after 2040.

**The four targets cover the 93.3% of the total direct and indirect GHG emissions reported by Enel in 2022.** Specifically:

- **98.6% of Scope 1 GHG emissions.** Minor sources of GHG

emissions were excluded as they were not directly related to the combustion process for electricity generation or the power distribution activity (such as GHG emissions from ancillary services in renewable power plants and distribution sites, CH<sub>4</sub> leakage in gas-fired plants, and SF<sub>6</sub> leakage in thermal and renewable plants) or of biogenic origin (such as CH<sub>4</sub> emissions from hydroelectric reservoirs);

- **100% of Scope 2 emissions**, including all indirect emissions from electricity consumption and technical grid losses;
- **87% of Scope 3 emissions** for the target set for 2030, compared to 90% for the target set for 2040. Specific categories of the supply chain have been excluded from the scope of the targets.



GHG targets	Core business activity	GHG sources covered (GHG Protocol) <sup>(1)</sup>	Timing	GHG targets	Climatic scenario	Main drivers and actions
Intensity of GHG Scope 1 emissions relating to power generation	Electricity generation	<b>98.2% of Scope 1 GHG emissions<sup>(2)</sup></b>	●○○○	130 gCO <sub>2eq</sub> /kWh	1.5 °C <sup>(3)</sup>	<ul style="list-style-type: none"> <li>Gradual phase-out of coal-fired capacity over the period 2023–2025 (percentage weight of coal-fired capacity in consolidated capacity from about 7% in 2022 to less than 0.5% in 2025).</li> <li>Invest 15 billion euros to accelerate the development of renewable energy by installing 17 GW of new renewable capacity (including about 13 GW at consolidated level) and 4 GW of BESS in the period 2023–2025, reaching 75 GW of renewable capacity (including 4 GW of BESS) by 2025.</li> </ul>
			●●○○	72 gCO <sub>2eq</sub> /kWh (–80% compared to baseline year 2017)	1.5 °C (SBTi certified)	<ul style="list-style-type: none"> <li>Continue the process of decarbonization of electricity generation, thanks to a Group-wide investment plan that will be confirmed at the annual levels of the 2023–2025 plan, reaching a managed capacity of more than 130 GW by 2030, thus bringing the Group's generation facilities to consist of about 85% renewable plants.</li> <li>Exit the coal-fired generation business on a global scale by 2027.</li> </ul>
			●●●○	0 gCO <sub>2eq</sub> /kWh (–100% compared to baseline year 2017) <b>Zero emissions</b>	1.5 °C (SBTi certified)	<ul style="list-style-type: none"> <li>Exit the thermal electricity generation business, achieving a 100% renewable energy mix.</li> <li>No use of carbon removal technologies</li> </ul>
Intensity of GHG Scope 1 and 3 emissions relating to Integrated Power	Sale of electricity	<ul style="list-style-type: none"> <li><b>98.2% of Scope 1 GHG emissions</b></li> <li><b>73.4% of Scope 3 GHG emissions</b> – category 3 (fuel and energy related activities)</li> </ul>	●○○○	135 gCO <sub>2eq</sub> /kWh	1.5 °C <sup>(3)</sup>	<ul style="list-style-type: none"> <li>Increase the share of renewable energy sold to customers by increasing the Group's renewable generation.</li> <li>Increase from about 70% in 2022 to about 90% in 2025 the share of fixed-price power sales covered by carbon-free sources in core countries, while simultaneously increasing the volumes of electricity sold at fixed prices from about 185 TWh in 2022 to about 200 TWh in 2025.</li> </ul>
			●●○○	73 gCO <sub>2eq</sub> /kWh (–78% compared to baseline year 2017)	1.5 °C (SBTi certified)	<ul style="list-style-type: none"> <li>Increase the share of renewable energy sold to customers by increasing the Group's renewable energy generation, reaching a managed capacity of more than 130 GW by 2030, thus bringing the Group's generation facilities to consist of about 85% renewable plants.</li> <li>Continue the strategy of balancing supply and demand and increasing the share of electricity sold at fixed price covered by carbon-free power generation.</li> </ul>
			●●●○	0 gCO <sub>2eq</sub> /kWh (–100% compared to baseline year 2017) <b>Zero emissions</b>	1.5 °C (SBTi certified)	<ul style="list-style-type: none"> <li>Achieve 100% of energy sales from renewable sources by 2040.</li> <li>No use of carbon removal technologies</li> </ul>

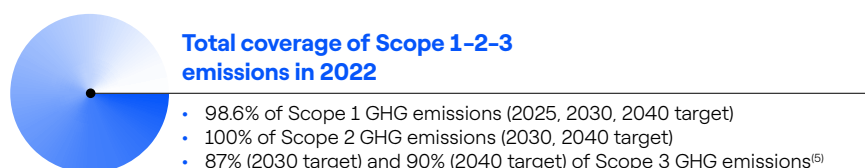
Timing: ●○○○ Short term (2025) ●●○○ Medium-term (2030) ●●●○ Long-term (2040)



GHG targets	Core business activity	GHG sources covered (GHG Protocol) <sup>(1)</sup>	Timing	GHG targets	Climatic scenario	Main drivers and actions
Absolute Scope 3 GHG emissions relating to gas sales in the end market.	Gas sales to the end customer	<b>100% of Scope 3 GHG emissions</b> – category 11 (use of sold products)	●○○>	20.9 MtCO <sub>2eq</sub>	n.a. <sup>(4)</sup>	<ul style="list-style-type: none"> <li>Promote the switch of customers from gas to electricity (especially residential customers) by pushing more efficient electrical technologies (e.g. heat pumps for home heating or induction hobs in kitchens), increasing the electrification rate of our customers in Italy and Spain from 17% in 2022 to over 20% in 2025.</li> <li>Promote electrification-enabling services to end customers: increasing behind-the-meter storage capacity from about 75 MW in 2022 to about 352 MW in 2025, increasing the capacity of photovoltaic panels installed by end customers from about 100 MW in 2022 to about 300 MW in 2025, and increasing demand response capacity from about 8.5 GW in 2022 to about 12.4 GW in 2025.</li> <li>Reduce the volumes of gas sold to end customers from about 10.2 bcm in 2022 to about 4.3 bcm in 2025.</li> <li>Optimize the gas portfolio of customers (especially industrial customers) by reducing the number of customers in the retail gas business from about 6.5 million in 2022 to about 4.4 million in 2025.</li> </ul>
			●●●>	11.4 MtCO <sub>2eq</sub> (~55% compared to baseline year 2017)	1.5 °C (SBTi certified)	<ul style="list-style-type: none"> <li>Promote the switch of customers from gas to electricity (especially residential customers) through the promotion of more efficient electrical technologies (e.g. heat pumps for home heating or induction hobs in kitchens), increasing the electrification rate of our customers in Italy and Spain from 17% in 2022 to over 30% in 2030.</li> <li>Continue the strategic actions envisaged for the short term, by continuing to promote services to end customers that enable the electrification of consumption and achieving a demand response capacity by 2030 of more than 20 GW.</li> <li>Optimize the gas portfolio of customers (especially industrial customers) by continuing to reduce the volume of gas sold to about 3 bcm in 2030.</li> </ul>
			●●●>	0 MtCO <sub>2eq</sub> (~100% compared to baseline year 2017) <b>Zero emissions</b>	1.5 °C (SBTi certified)	<ul style="list-style-type: none"> <li>Achieve 100% sales of energy covered by renewable sources by 2040.</li> <li>Exit from the business of gas sales to retail by 2040.</li> <li>No use of carbon removal technologies.</li> </ul>

Timing: ●○○> Short term (2025) ●●●> Medium-term (2030) ●●●> Long-term (2040)

GHG targets	Core business activity	GHG sources covered (GHG Protocol) <sup>(1)</sup>	Timing	GHG targets	Climatic scenario	Main drivers and actions
Additional absolute Scope 1-2-3 emissions	<ul style="list-style-type: none"><li>Electricity distribution (Scopes 1 and 2)</li><li>Fleet management of vehicles, buildings and other assets (Scopes 1 and 2)</li><li>Supply chain management (Scope 3)</li><li>Purchase of fuels (Scope 3)</li></ul>	<ul style="list-style-type: none"><li>• <b>0.4%</b> of Scope 1 GHG <b>emissions</b> ●●○&gt;</li><li>• <b>100%</b> of Scope 2 GHG <b>emissions</b></li><li>• <b>28.6%</b> of Scope 3 GHG <b>emissions</b> – category 1 (purchase of goods and services) for the 2030 target and 43.0% for the 2040 target<sup>(5)</sup></li></ul>		10.4 MtCO <sub>2eq</sub> (~55% compared to the baseline year 2017)	 1.5 °C (SBTi certified)	<ul style="list-style-type: none"><li>Invest a total of 15 billion euros in distribution networks over the period 2023-2025, of which 11% to increase digitalization and 47% to improve the resilience and quality of networks, thus helping to reduce network losses and related emissions. Replace existing components of the distribution network infrastructure with SF<sub>6</sub>-free solutions.</li><li>Electrify the fleet and buildings by 2030.</li><li>Implement a circular procurement approach and increase the number of contracts that include the measurement of the carbon footprint of products and services purchased by Enel by incentivizing their reduction in a decarbonization pathway shared with our suppliers. Strengthen the dialogue with manufacturers or raw materials and other utilities to define effective and long-term common decarbonization strategies.</li><li>Phase out coal-fired generation by 2027, mitigating all GHG emissions related to coal supply.</li></ul>
		<ul style="list-style-type: none"><li>• <b>26.6%</b> of Scope 3 GHG <b>emissions</b> – category 3 (fuel and energy related activities) ●●●&gt;</li></ul>	<2.5 MtCO <sub>2eq</sub> (~90% compared to the baseline year 2017) <b>Net zero emissions</b>	 1.5 °C (SBTi certified)	<ul style="list-style-type: none"><li>Promote the digitalization of the distribution network and replace existing network infrastructure components with SF<sub>6</sub>-free solutions.</li><li>Implement a circular procurement approach and increase the number of contracts that include the measurement of the carbon footprint of products and services purchased by Enel by incentivizing their reduction in a decarbonization pathway shared with our suppliers. Strengthen the dialogue with manufacturers or raw materials and other utilities to define effective and long-term common decarbonization strategies.</li><li>Zero emissions from gas extraction activities by exiting the business of both electricity generation from gas and gas sales to end customers.</li></ul>	



- (1) Percentages based on total GHG emissions in 2022.
- (2) Marginal Scope 1 GHG emissions not directly related to the combustion process of fossil fuels for power generation in thermal power plants were excluded, representing 1.4% of total Scope 1 emissions in 2022. In any case, the GHG emissions covered by all of the above targets together represent 98.7% of total Scope 1 and 2 emissions in 2022 and are therefore above the 95% threshold required by SBTi.
- (3) The target meets the 1.5 °C path set by SBTi for the electricity service sector (sectoral decarbonization approach, SDA), although it could not be officially validated because SBTi does not certify targets with a timeframe of less than five years from the date of submission.
- (4) The target could not be officially validated because SBTi does not certify targets with a timeframe of less than five years from the date of submission. Furthermore, SBTi has not defined a sectoral decarbonization approach for these types of emissions, so the level of ambition cannot be verified.
- (5) Two different percentage limits to the supply chain GHG Scope 3 target have been defined, as allowed by the SBTi methodology, which requires at least 67% of Scope 3 emissions to be covered for the 2030 target, and at least 90% for the 2040 target.

Timing: ●○○> Short term (2025) ●●○> Medium-term (2030) ●●●> Long-term (2040)

# Enel's impact on climate change

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## Enel's impact on climate change in 2022

	<div>➤</div> CO <sub>2</sub> free generation <sup>(1)</sup>	<div>➤</div> Digitalization of the grid	<div>➤</div> Electrification of the energy demand and promotion of energy efficiency	
Positive impacts	81.6 million t <sub>eq</sub> of avoided CO <sub>2</sub> <ul style="list-style-type: none"><li>Avoided CO<sub>2</sub> emissions from electricity generation</li><li>Contribution to CO<sub>2</sub> emission reduction in other sectors<sup>(2)</sup> through a zero-emission energy mix</li></ul>	45.8 million end users with active smart meters <ul style="list-style-type: none"><li>By providing data in quasi real time, smart meters permit an efficient management of the energy supply and demand, promoting informed and sustainable consumption</li></ul>	22.6 thousand publicly owned charging points for electric mobility <ul style="list-style-type: none"><li>Contribution to CO<sub>2</sub> emission reduction in other sectors through the electrification of consumption, including transport by promoting electric mobility</li></ul>	
	99 MW <ul style="list-style-type: none"><li>Increase in storage capacity<sup>(3)</sup></li></ul>	2.6 number of service interruptions per client (SAIFI) <sup>(4)</sup> <ul style="list-style-type: none"><li>A reliable and resilient grid helps reduce the CO<sub>2</sub> emissions associated with grid losses</li></ul>	3 million smart public lighting points <ul style="list-style-type: none"><li>Energy efficiency solutions for reducing consumption (residential, city and industry)</li></ul>	
	Value chain	Generation	Networks	Retail
Negative impacts	52.1 million t <sub>eq</sub> CO <sub>2</sub> <ul style="list-style-type: none"><li>Direct greenhouse gas emissions for electricity generation (Scope 1)<sup>(5)</sup></li></ul>	3.3 million t <sub>eq</sub> CO <sub>2</sub> <ul style="list-style-type: none"><li>Indirect greenhouse gas emissions associated with technical losses from the grid (Scope 2)<sup>(6)</sup></li></ul>	28.4 million t <sub>eq</sub> CO <sub>2</sub> <ul style="list-style-type: none"><li>Indirect greenhouse gas emissions associated with the purchase of electricity sold to the end customer (Scope 3)</li></ul>	
	10.3 million t <sub>eq</sub> CO <sub>2</sub> <ul style="list-style-type: none"><li>Indirect greenhouse gas emissions from fuel extraction and transportation (Scope 3)</li></ul>		22.9 million t <sub>eq</sub> CO <sub>2</sub> <ul style="list-style-type: none"><li>Indirect greenhouse gas emissions associated with the use of natural gas sold in the retail market (Scope 3)</li></ul>	
	➤Thermal production	➤Technical losses from the grid	➤Sales of retail electricity and gas	

- (1) Includes the generation of renewable and nuclear energy.  
 (2) The GHG Protocol requires the consumption of electricity to be considered when calculating the Company's carbon footprint as indirect emissions (Scope 2).  
 (3) Includes the contribution of the Global Power Generation Business Line.  
 (4) SAIFI, System Average Interruption Frequency Index.  
 (5) Other Scope 1 emissions were indicated in the paragraph "Our carbon footprint".  
 (6) Other Scope 2 emissions were indicated in the paragraph "Our carbon footprint".

Electricity is essential to guarantee the sustainable progress of modern societies and represents a key factor in reaching the goals of the United Nations 2030 Agenda, in particular SDG 7, to guarantee everyone accessible, reliable, sustainable and modern energy, and SDG 13, regarding climate action.

**Electricity generation** has always played a key role in climate change, as the use of fossil fuels is a considerable source of greenhouse gas emissions. Technological development, in particular in the area of renewable energies, has completely transformed this scenario by making electricity one of the main solutions for reducing the carbon footprint worldwide. Enel is aware of these impacts and implements specific actions to minimize them, promoting the decarbonization of the energy system and the electrification of the energy demand. As a result, this reduces the greenhouse gas emissions along the entire value chain.

Enel's **power generation from fossil fuels** (mainly gas and coal) traditionally represents the main source of greenhouse gas emissions. In particular, in 2022 the direct emissions (Scope 1) relating to power generation from fossil fuels were about 52.1 mil t<sub>eq</sub> CO<sub>2</sub>, whereas indirect emissions (Scope 3) relating to the extraction and transport of fuels were 10.3 mil t<sub>eq</sub> of CO<sub>2</sub>. Enel is reducing this impact by accelerating the phase out of coal-fired plants, with a reduction of capacity in 2022 of around 2.5 GW compared to 2021. In parallel, the Group is increasing the development of renewable capacity that, together with the contribution of nuclear generation, has avoided 81.6 mil t<sub>eq</sub> of CO<sub>2</sub> emissions. Furthermore, Enel is actively committed to the development of electricity storage systems that support the integration of renewable capacity, with a total installed capacity of 316 MW in 2022. Decarbonization of the energy mix also has a positive impact on the reduction of customers' indirect greenhouse gas emissions (Scope 2)

associated with the acquisition of electricity to cover their energy demand.

**Electricity grids' management** involves indirect greenhouse gas emissions (Scope 2) associated with technical energy losses on the grid of 3.3 mil t<sub>eq</sub> of CO<sub>2</sub> in 2022 (according to the "location based" calculation methodology). Enel is actively investing in the digitalization and automation of the electricity grid to reduce these losses and increase reliability, while promoting the diffusion of renewables in the energy system.

Concerning the **end customer**, the use of the products sold by Enel's customers generates GHG emissions that are accounted for as indirect (Scope 3). In particular, the emissions connected to the purchase of electricity to be sold to customers equaled approximately 28.4 mil t<sub>eq</sub> of CO<sub>2</sub>, whereas those related to the use of gas sold equaled 22.9 mil t<sub>eq</sub> of CO<sub>2</sub>. Enel regularly monitors these emissions and adopts measures aimed at minimizing them. Furthermore, it offers its customers technical solutions to reduce carbon emissions related to their energy consumption in a wide range of sectors, including transport, property management as well as industrial processes and services. For example, with Enel X the Group is promoting the deployment of owned public charging infrastructure for electrical vehicles (22,600 charging points installed in 2022), the development of energy efficiency solutions, distributed generation, consultancy services, smart public lighting and circular cities.

**Emissions** related to the **activities of the Group's suppliers** amounted to 14.2 mil t<sub>eq</sub> of CO<sub>2</sub> in 2022. To reduce this impact, Enel adopts a circular procurement approach and includes assessments of the carbon footprint of the products and services involved in the purchasing processes and encourages their reduction.

# Advocacy about climate change policies

Within the framework of its commitment to climate change, Enel is firmly committed to promoting and defining:

- **ambitious climate and decarbonization targets** consistent with the objectives set by the Paris Agreement;
- **effective and efficient implementation mechanisms** capable of exploiting market dynamics, by fully supporting the role of carbon pricing;
- **constant dialog on climate issues within multi-stakeholder initiatives**, actively contributing to groups and coalitions such as the Just Transition Think Lab and Caring for Climate under the UN Global Compact, the SOS 1.5 and Policy Advocacy and Member Mobilization (PAMM) projects of the WBCSD (World Business Council for Sustainable Development), and the World Bank's Carbon Pricing Leadership Coalition (CPLC);
- **private sector leadership on decarbonization** through its continued participation in initiatives such as the CEO Alliance, WEF CEO Climate Leaders Alliance, IETA (International Emissions Trading Association), FMC (First Movers Coalition), and regional and national trade associations.

**Enel is committed to ensuring that its direct advocacy activities are aligned with the objectives of the Paris Agreement**, involving institutional stakeholders, trade associations, non-governmental organizations and academia, in order to promote the Group's vision on climate and policies to eliminate greenhouse gas emissions. Stakeholder engagement contributes to the evolution of the regulatory framework towards ambitious climate goals and promotes an economy in which carbon pricing plays a fundamental role in orientating long-term investments.

In particular, Enel interacts directly with policy makers, contributes to the positioning of trade associations, and engages with a broader set of stakeholders to build consensus and support for specific policy proposals.

Enel supports the integration of carbon pricing into the decision-making process in all countries where it operates. In doing so, it underlines the importance of well-functioning mechanisms for carbon taxation and emissions trading. These must be able to provide short- and medium-term predictability to support market efficiency, as well as strong long-term price signals to support investment and innovation.

**The worldwide coordination of Enel's global public policy positioning on climate is ensured by the Energy and Cli-**

**mate Policies unit.** This unit is responsible for developing global scenarios and position papers on climate policies with the support of the Country and Global Business Lines. Its objective is to guide Enel's national and local advocacy activities, thanks to a continuous dialog with institutions and the widest possible range of stakeholders active in the climate debate. In this sense, Enel is also committed to ensure continuous and full alignment with the objectives of the Paris Agreement within the associations of which it is a member.

**During 2022, the Group represented its interests and promoted its position vis-à-vis the European institutions (Commission, Parliament, Council) with the aim of orientating legislative proposals and decisions that could have affected the EU's Climate and Energy Policy Framework, and the Group's activities.** In carrying out these activities, Enel is committed to acting in a transparent and responsible manner. In this sense, it is listed on the European Transparency Register,<sup>(2)</sup> the specific activities of which are linked to the main EU legislative and/or policy proposals (including the European Green Deal, Fit for 55, the REPowerEU plan, ETS reform, Air Quality Directives, Sustainable Finance, State Aid and Competition, Hydrogen). The dedicated website contains a public list of meetings Enel has held with the EU Commissioners, members of their Cabinets and EC Directors-General between December 2014 and January 2023. Specifically, for 2022, issues discussed included: the European Green Deal, Energy Taxation Directive (ETD), Carbon Border Adjustment Mechanism (CBAM), the Renewable Energy Directive, and the ETS Directive. In addition, Enel's positions and responses to EU consultations (such as the Critical Raw Materials Act) are made public, together with a list of the main professional associations and think-tanks in which Enel is active.

**In all countries, Enel's pursues its advocacy efforts through specific activities and broader stakeholder engagement on decarbonization and energy transition issues.** The approach is similar to that adopted at global level. The objectives of the Enel Group's advocacy policy include promoting greater climate ambition, carbon pricing, accelerating the deployment of renewable technologies, developing and upgrading infrastructure through smart grid technologies to support the energy transition, and electrification as a means for decarbonizing energy end-uses. In this context, through the "Energy Transition Roadmap" engagement

(2) <https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=6256831207-27&locale=en#en>, number 6256831207-27. By registering, Enel signed the Transparency Register Code of Conduct, and also declared that it is bound by its own Code of Ethics.



platforms, Enel engages with a wide range of stakeholders on the definition and implementation of the actions needed to pursue the Paris Agreement goals. These platforms take decarbonization by 2050 as a starting point, then proceed to identify the technology mix needed to reach this and the medium-term goal for 2030, and to develop specific policy recommendations aimed at achieving this transformation.

## The Group's positioning on the main climate policies

During 2022, several regulatory and legislative events took place, both specific to the climate and concerning energy and environmental issues related to it.

The number of dossiers on which Enel focuses its advocacy increases annually and, in particular, our main positions are as follows:

### Globally:

- **as part of the United Nations Framework Convention on Climate Change (UNFCCC), Enel has been active in promoting greater ambition in the implementation of the Transparency Governance Framework**, in the full mobilization of carbon finance envisaged by the Paris Agreement, together with rapid development of international cooperation envisaged by Article 6 of the same Agreement. In this sense, Enel also played an active role during the various preparatory events for COP 27 in Sharm el-Sheikh. In particular, Enel has asked: to efficiently accelerate the energy transition by guiding the world's economies on the path to Net-Zero, as recalled by the latest IPCC Report; to prepare the stocktaking planned for COP 28; to catch up in mobilizing finance to support mitigation and adaptation in developing countries; finalizing the implementing provisions of Article 6 on cooperation in terms of climate change;
- **Enel promotes greater climate ambition in line with the Paris Agreement**, in a just transition framework. Enel's advocacy in this area is implemented through ad hoc engagement on specific legislative proposals (e.g. the European Climate Law), but also through broader stakeholder engagement at national level through Enel's Energy Transition Roadmap platform (see above). Through such platforms, Enel promotes NDCs (Nationally Determined Contributions) that fully reflect the highest possible climate ambition and are fully in line with the requirements of the Paris Agreement;
- **Enel has strongly promoted carbon pricing in the form of both carbon tax and emissions trading**. In particular, Enel believes that the adoption of these mechanisms

based on Cap and Trade systems should be preferred in industrialized economies and industrial sectors where operators can effectively manage and internalize the price signals recorded on the market in their decision-making processes. Conversely, carbon-pricing mechanisms should tend to take the form of carbon taxes in countries with weaker institutions and in sectors characterized by distributed emission sources, and where non-economic barriers are significant. The Enel Group strongly supports carbon pricing as a means to decarbonize economic systems efficiently and effectively around the world. Enel's positions on the adoption of carbon pricing are conveyed both directly and through participation in the activities of organizations such as IETA, CPLC, Eurelectric and WBCSD. In 2022, specific activities were dedicated and aimed at analyzing and promoting carbon pricing, at global, regional (EU and Latin America) and national (EU member states, Brazil, Argentina, Chile, Guatemala, Panama, Costa Rica, Colombia and Peru) levels.

### At European level:

- The **European Green Deal**, together with recent acceleration as a result of the **REPowerEU** plan to reduce Europe's energy dependence, represents for Enel a unique opportunity to accelerate the EU's path to a fully decarbonized and sustainable economy, especially when aligned with the mobilization of significant resources to ensure a rapid recovery from the ongoing crises. For Enel, the EU's climate and environmental goals require a new industrial strategy to reach climate neutrality, and an action plan for the circular economy, pursuing the decarbonization of each sector. The energy sector must aim to be fully decarbonized ahead of other sectors, as such ensuring decarbonization through direct and indirect electrification. For example, the study "Powering our buildings: how policies can support energy efficiency through building electrification", developed together with FIRE (Italian Federation for the Rational Use of Energy) and IEECP (Institute for European Energy and Climate Policy), addresses energy improvement and decarbonization of the building sector;
- Enel has supported EU proposals for **reform of the Emissions Trading System (ETS)**, which must be strengthened to pursue the EU's higher climate ambition and supported by a Carbon Border Adjustment Mechanism. The revision of the ETS Directive is in line with Enel's positioning. The overall ambition of the scheme has been reinforced with a target of reducing emissions by 62% by 2030 compared to 2005 levels. The EU ETS has been extended to new activities in hydrogen production and maritime transport. A separate ETS for transport and for the heating of buildings has been launched with differ-

ent clauses to ensure their sustainability with a view to a just transition. The functioning of the market has been improved through a revision of the Market Stability Reserve (MSR), aimed at increasing price stability and balancing any surplus allowances on the ETS market. Finally, the revision of the EU ETS has taken place alongside the adoption of the Carbon Border Adjustment Mechanism to provide greater climate ambition while reducing the risks of carbon leakage;

- Enel has supported a revision of the **Effort Sharing** regulation that fully exploits the decarbonization potential of energy end-uses in the EU's increased climate ambition. The review aimed to update the Effort Sharing Regulation (ESR) targets of individual member States in an upwards direction, in line with the higher ambition of 2030. The ambition also needed to be aligned with 2050 climate neutrality, to avoid the technological lock-in of emitting technologies and infrastructure. However, the impact on prices and energy bills must be carefully managed when adopting the recently revised regulation;
- Enel has welcomed the publication of the **hydrogen and gas market decarbonization package** by the European Commission. The package also includes the proposed regulation on reducing methane emissions throughout the value chain in the energy sector and introduces new requirements for measuring, reporting and verifying emissions, as well as emission abatement measures. In addition, the regulation also proposes rules to increase transparency on methane emissions associated with fossil fuel imports;
- Enel supports the European Commission's proposal on an upward revision of the EU's 2030 energy efficiency target to at least 36% for final energy consumption and at least 39% for primary energy consumption to achieve the ambition of reducing greenhouse gas emissions by 2030. Significant energy efficiency improvements are needed to achieve the Net-Zero emissions target by 2050. As such, the proposed revision of the Directive, as part of the "Delivering on the European Green Deal" package, raises the level of ambition of the EU's energy efficiency target and makes it binding;
- Enel welcomes the Commission's initiative to review the Renewable Energy Directive and increase its ambitiousness. It believes that the main contributions to efficient decarbonization of the energy sector, as well as buildings, heating and cooling, transportation and industry, will come from further end-use electrification (direct and indirect electrification for sectors that are difficult to abate emissions by means of green hy-

drogen). In this regard, low carbon fuels should be excluded from the scope of this Directive. Enel believes that the EU regulatory framework should provide long-term predictability for investors, as well as simplified and standardized authorization procedures. Finally, Enel supports a technology-neutral approach that at the same time creates the necessary conditions for the penetration of fully sustainable technologies;

- as part of the European Commission's hydrogen strategy, the Enel Group actively promotes **green hydrogen** (generated by electrolysis powered by 100% renewable energy). Enel believes that this is the only truly sustainable generation pathway for hydrogen, powered by renewable sources with zero greenhouse gas emissions. Hydrogen is best used as a complement to electrification, not as a competitor. It has an efficient role in decarbonizing those parts of the economy that cannot be electrified easily or economically, for example, hard-to-abate sectors such as heavy industry, aviation and shipping. In addition, Enel participated in 2022, together with many other multinationals, in two different working groups within the "Energy Pathway" project promoted by WBCSD, with the aim of participating in the discussion on how to stimulate the development of projects and, at the same time, the hydrogen market;
- as part of its **smart and sustainable mobility strategy**, the Enel Group is actively promoting e-mobility as a key factor in reducing road transport emissions and contributing to the achievement of EU energy efficiency targets. Since 2011, the EU has been involved in the process of updating its transport policy framework to reduce emissions in this sector, particularly road transport. Mobility is a critical aspect of social inclusion and a determining factor in human well-being, especially for disadvantaged groups. Recognized as an essential service in the European pillar of social rights, transport meets a fundamental need in enabling citizens to integrate into society and the labor market. By far the most serious challenge facing the transport sector is to reduce its emissions significantly and become more sustainable. The European Green Deal calls for a 90% reduction in GHG emissions from transport so that the EU can become a climate neutral economy by 2050, including working towards a zero pollution ambition. In addition, in 2021 the European Commission unveiled the "EU Urban Mobility Framework", complementing the proposed revised guidelines for the Trans-European Network. The new EU Urban Mobility Framework outlines a common list of measures and initiatives for with which EU cities can address the challenge of making their mobility more sustainable. Finally, in 2022 Enel participated in the

Mobility Decarbonization working group promoted by WBCSD, with the aim of encouraging the decarbonization of road transport, facilitating the development of new technologies for zero-emission vehicles and the creation of new charging infrastructure;

- Enel fully supports the **European building renovation strategy** and actively participates in discussions on the proposed review of the Energy Performance of Buildings Directive. The building sector is one of the most lagging industries as regards decarbonization due to criticalities in the value chain, in building efficiency, and in choice of energy source. Enel believes it can contribute substantially to the decarbonization of the building sector by installing efficient electrical technologies such as heat pumps, charging infrastructure for mobility and solar panels on roofs, improving building efficiency through electrification and digitalization, making buildings dynamic elements of the energy system through storage, remodeling of demand, and electric vehicle charging;
- Enel has involved various stakeholders in the European Commission's **New Circular Economy Action Plan**, stressing the importance of ensuring the circularity of the main supply chains, particularly in relation to electric vehicles, batteries and renewable energy technologies. Furthermore, Enel's advocacy has highlighted the need to develop appropriate circular economy metrics and to focus on the high potential of urban environments through the implementation of a clear vision of circular smart cities;
- within the framework of the Zero Pollution dossier and other environmental dossiers, the Enel Group is actively promoting the **maximization of synergies between decarbonization and other environmental policies**. In this context, synergies of climate and air quality policies are perhaps the most critical, and electricity technologies can play a key role in combating climate change, improving local air quality and increasing the circularity of the EU's economic system. The revision of the Air Quality Directive, proposed by the Commission in 2022, has proved crucial to strengthen the role that clean technologies can play in improving air quality for European citizens. Soil management is vital for a circular economy that aims to develop sustainable models capable of encouraging the coexistence of different activities and creating synergies and mutual benefits, such as agri-voltaics. The new soil strategy published in November 2022 is a step in the right direction. However, its scope should also be extended to the redevelopment of brownfield sites and the reuse of brownfields to avoid further land acquisition and soil pollution.

**In the USA and Canada**, the main dossiers on which the Enel Group has taken action with advocacy actions include:

- the US Inflation Reduction Act (IRA), aimed at incentivizing the deployment and generation of clean energy technologies. The law is expected to provide new incentives for clean energy and facilitate a 40% reduction in the US economy's greenhouse gas emissions by 2030. Enel has supported the IRA, presenting its assessments to Congress and working with trade associations to inform and model the design elements of policies within the law;
- the US Uyghur Forced Labor Prevention Act (UFLPA), the impact of which has been particularly significant on imports from the Xinjiang Uyghur Autonomous Region in China. In June 2022, the provisions for major solar energy importers came into force. Enel has supported the sector's action to develop supply chain traceability programs and, with trade associations, has opposed any presence of forced labor in supply chains, in line with the public commitment made in this regard through the human rights policy;
- in California, the mobilization of financing for distributed generation and resilience: funds have been allocated to support resources (generation and storage) distributed at low/zero emissions, but also for demand management on electricity grids. In addition, a commitment has been made to accelerate the electrification of transport. Enel has supported the allocation of these funds and met and provided its assessments to the legislature, working with trade associations;
- the Massachusetts Climate Bill enacted in August 2022, which aims to promote a 50% reduction in emissions compared to 1990 by 2030. The law includes a target of developing energy storage of 1 GWh by 2025 and requires all new sales of passenger vehicles to be zero-emission by 2035. There are also discounts for the sale of electric vehicles and incremental incentives for low-income buyers. Enel has supported the legislation and has met and provided targeted evaluations to the legislature, working with trade associations;
- the increase in the carbon price in Alberta, with a carbon price trajectory to 2026 aligned with the forecasts of the Canadian Federal Government. Starting January 1, 2023, the federal carbon price will increase from CAD 50 to 65 per ton of GHG emissions, with subsequent annual increases bringing the tax to CAD 170 per ton by 2030. Enel has supported the pricing trajectory and has met directly with government officials and representatives, working with trade associations.

**In Latin America**, the main dossiers on which the Enel Group has taken action with advocacy actions include:

- in Peru, the Supreme Decree 003-2022-MINAM, which declares the climate emergency of national interest and provides for the actions to be taken by the various ministries, with the aim of reducing emissions to achieve the NDC objectives under the Paris Agreement. In this sense, the country has committed to accelerate the process of reducing emissions compared to the 2030 trend scenario to 30%, for the unconditional target of its NDC, to 40% in the case of a conditional target. It has also committed to achieving carbon neutrality by 2050. Enel has supported the strengthening of the Peruvian NDC (Nationally Determined Contribution), which will increase the development possibilities of renewable companies, and worked in 2022 on the Energy Transition Roadmap project in Peru together with the consulting firm Deloitte, as well as with public and private stakeholders;
- in Colombia, the Climate Action Act, which aims to regulate the objectives of the NDC and some other aspects, such as greenhouse gas inventories for the country's industrial sector. Enel has also promoted the adoption of the law through a special project, Energy Transition Roadmap, implemented with the support of the consulting firm CREE and in collaboration with public and private stakeholders;
- also in Colombia, Resolution 172, approved in 2022, establishing the Presidential Cabinet Intersectoral Commission on Climate Action. Enel has promoted the establishment of the Commission that will be tasked with verifying the country's progress and requirements regarding the implementation of measures aimed at respecting the international obligations acquired by the State in terms of climate action;
- in Costa Rica in September 2022, the Ministry of Environment and Energy published the Regulation of Chapter III of Law No. 9518 on Incentives and Promotion of Electric Transport, which regulates the application of temporary tax incentives for electric vehicles, as well as a temporary exemption from property tax for electric vehicles. Enel supported the publication of the law and promoted it, including through the Energy Transition Roadmap project, carried out with the support of the consulting firm Deloitte and in collaboration with public and/or private stakeholders;
- in Panama, the approval of Decree-Law No. 10, which adopts the National Climate Action Plan (PNAC). The Plan is seen as a crucial tool in promoting short- and long-term national and sectoral ambitions of climate policies,

in order to facilitate and ensure the implementation of the NDC. Enel supported the promulgation of the Decree and promoted a collaboration network to support the dissemination and awareness of the results, providing the recommendations that emerged from the Energy Transition Roadmap project carried out in the country;

- in Guatemala, the development of an NDC, which envisages reducing greenhouse gas emissions by 11.2% by 2030 compared to the baseline scenario, as a target not conditional on international support. In 2022, Enel also worked in Guatemala on an energy transition roadmap for the country with the aim of proposing scenarios that will enable it to comply with the commitments made in the NDC;
- in Argentina, the decision to maintain the commitment made in the NDC 2020, ratifying the commitment to reduce emissions by 27.7% by 2030, compared to the first NDC presented in 2016. Also in this case, as in other countries, Enel has promoted advocacy actions with the development of the Energy Transition Roadmap project. Enel also promoted the adoption of Resolution no. 370 of 2022, which provides for a mechanism for the sale of electricity from renewable sources for distributors of the Wholesale Electricity Market (MEM) through the Renewable Energy Forward Market (MATER);
- in Chile, Enel implemented advocacy activities in support of the adoption of Law no. 21,455. This piece of legislation aims to address the challenges of climate change in the country and establishes climate governance mechanisms, setting the goal of carbon neutrality to be achieved by 2050 at the latest. Enel's vision is aligned with the law. This is also the background to Enel's decision to exit coal-fired generation in the country, which ended in September 2022 with the closure of the Bocamina II plant;
- again in Chile, in June 2022, the Ministry of Economy, Development and Tourism implemented Council Agreement No. 3121 of 2022, which creates the "Committee for the Development of the Green Hydrogen Industry" and establishes the rules that will govern its operation. The Committee's objective will be to accelerate the sustainable development of this industry by supporting the national strategy for green hydrogen. Enel has actively participated with several key players in the development of green hydrogen in the country and, moreover, has contributed to the public debate with the Energy Transition Roadmap project together with the consulting firm energiE, in collaboration with public and private stakeholders;

- in Brazil, Enel promoted the publication of Decree No. 11,075. It defines the procedures for the Sectoral Plans for Climate Change Mitigation and creates the National Greenhouse Gas Emission Reduction System (SINARE), in order to establish emission reduction targets for compliance with the national NDC. In addition, Resolution no. 6 of June 2022 of the National Energy Policy Council establishes the National Hydrogen Program (PNH2) and creates a Committee with the aim of coordinating and supervising the planning and implementation of the PNH2. Enel has also supported the strengthening of climate ambition envisaged by Brazil's second NDC update. This strengthening aims to increase emissions reductions by up to 50% by 2030 and achieve greenhouse gas neutrality by 2050. Enel has positively assessed these developments, which will increase the possibilities of development of renewable companies. It has supported legislative action with the Energy Transition Roadmap project carried out with the support of Deloitte and in collaboration with public and private stakeholders.

**On the African continent**, the main climate dossiers on which Enel has carried out advocacy activities are:

- in South Africa, the Climate Change Act, which creates a regulatory framework that will enable an effective response to climate change and a long-term transition to a low-carbon economy. The provisions of this law are in line with the Enel Group's operational objectives for renewable development in South Africa;
- in Morocco, Enel has promoted the adoption of a new law aimed at regulating the production of its own electricity, while guaranteeing the security of the national network and compliance with the principles of transparency and non-discrimination between the various market players. For the first time, the law also provides for the right of access to electricity storage services, as well as the right to sell the excess to the TSO.

**In the Asia Pacific region**, the main dossiers on which Enel's advocacy actions have focused are:

- in South Korea, the opening of the Power Purchase Agreement (PPA) market. It enables renewable generators to sell electricity directly to end users. Enel sees this initiative as a significant step towards the development and use of renewable energy. In addition, the first auction program dedicated to onshore and offshore wind has been launched. Enel also supported this legislative initiative as auctions conducted in a transparent and

structured manner are recognized as one of the best support mechanisms for the development of renewable energy;

- also in South Korea, the 10th Basic Plan for Electricity Supply and Demand has been finalized. It envisages that the national generation mix to 2036 will be dominated by nuclear and renewables, with a gradually decreasing role for fossil fuels. Hydrogen and ammonia will be used in LNG and coal-fired power plants to reduce emissions. In this context, Enel has supported the development of renewable energy, but considers it inefficient to use hydrogen to produce electricity;
- in Vietnam, Enel promoted the finalization of a new and more ambitious NDC and, in particular, the strengthening of the unconditional objective of reducing greenhouse gas emissions by 15.8% by 2030 compared to a business-as-usual scenario of the reference year 2010. Subject to international support and financing, the 2030 reduction target has been raised to 43.5%. In this context, the country also reiterated its goal of achieving carbon neutrality by 2050. Enel supported this decision as it will accelerate the decarbonization of Vietnam by offering development opportunities for renewable sources and end-use electrification;
- in Australia, the Enel Group supported the plans of the new Federal Labor Government, aimed at mobilizing new financing for the expansion of the transmission grid and the establishment of a program to attract greater investments in the renewable energy sector;
- In India, ancillary services regulations have been adopted, establishing the introduction of Secondary Reserve Ancillary Services (SRAS) and Tertiary Reserve Ancillary Services (TRAS). The regulations allow all types of technology to provide SRAS and TRAS, including battery energy storage systems (BESS). Enel is in favor of these regulations and believes that they encourage the development of renewable sources and distributed storage;
- India's Ministry of Energy has also issued the Green Energy Open Access Rules. The objective of this regulation is to increase the availability and use of renewable energy and to promote the growth of the sale of energy from renewable sources with open access. Enel welcomed the enactment of this regulation as it believes that it fosters new opportunities for the development of renewable sources.



In addition to the direct advocacy activities, Enel is actively contributing to the debate on how best to address the challenge of climate change through **specific initiatives**. In 2022, these included:

- **the GSEP (Global Sustainable Electricity Partnership) Global Electrification Monitor, aimed at illustrating the state of the art of decarbonization of energy end-uses through electrification.** The initiative was launched during the annual GSEP CEO Summit held in 2022 in Marrakech. Through the use of specific indicators for the 15 countries analyzed, it highlights to what extent the penetration of electrification in end-uses is in line with the International Energy Agency's scenarios for achieving the objectives set by the Paris Agreement. Also in this context, GSEP hosted a High-Level Dialogue on electrification during New York Climate Week 2022. In this context, 14 companies have signed the Catalyzing Electrification agreement, to accelerate electrification of energy end-uses, aimed at reducing greenhouse gases;
- **development and collaboration on several Energy Transition Roadmap projects, to stimulate debate on how best to accelerate the reduction of greenhouse gas emissions.** In this context, in Europe Enel collaborated with the Enel Foundation and Ambrosetti on the Energy Transition Roadmaps for Italy and Spain and supported Eurelectric in the work to define the new decarbonization roadmap for Europe. In Latin America, Enel has completed Energy Transition Roadmap projects in several countries, including Chile, Brazil, Peru, Panama and Costa Rica. In several cases, the results of these projects were presented and discussed in the context of COP 27 events;

- **strengthening commitments to Sustainable Development Goal 7 through the Energy Compacts (EC) promoted by UN-Energy and SEforALL.** Compacts are voluntary commitments by companies, governments and other stakeholders to accelerate action for universal access to clean and affordable energy for all. In this context, the Group announced Enel Chile's new Energy Compact, promoted in collaboration with the Universidad del Desarrollo and the Government of the Santiago Metropolitan Region, which aims to electrify the entire bus fleet by 2030 and expand the network of charging stations for electric vehicles, both public and private;
- **participation in a number of specific advocacy initiatives, through letters and appeals developed under ad hoc alliances.** For example, the Enel Group, together with over 150 business leaders, has signed an open letter by CLG Europe to the President of the European Commission, Ursula von der Leyen, to invite the EU to strengthen energy security by accelerating the green transition through the REPowerEU plan. In addition, Enel has participated in lobbying activities in support of the 100 gCO<sub>2</sub>/kWh threshold – published in the Delegated Acts of the European Taxonomy – which allows an activity to be defined as environmentally sustainable if its CO<sub>2</sub> emissions are below this threshold. Enel not only supports compliance with this threshold, but also asks to specify how this threshold should be reduced over time until it reaches zero by 2050. Finally, through the We Mean Business Coalition, the Group signed a declaration during COP 27, together with over 270 companies and civil society leaders, reaffirming its commitment to limit global warming to 1.5 °C, while ensuring a just transition and a fair and inclusive future for all, and calling on governments to maintain it as a goal during the negotiations.

## Enel's commitment to fight against climate change through associations and organizations

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The Group plays an active role in various industry and multi-stakeholder associations and organizations with the aim of promoting issues concerning energy transition and the commitment to fight climate change at national and global level. **Enel is committed to ensuring that the various industry associations, business networks and think tanks of which it is a member operate in full compliance with the objectives of the Paris Agreement and the decarbonization roadmap established by the Group.** Enel therefore systematically verifies the **consistency of the associations' positions with the climate policies shared at the Group level.** This verification process is carried out in two stages: (i) **before joining the association**, through an in-depth analysis of the body's by-laws, in line with the Climate Policy issued in September 2021; (ii) **after joining the association**, by actively contributing to its work and/or taking positions of responsibility within it or promoting the Enel Group's position within working groups. Finally, **a review of the level of alignment of the associations with Enel's strategy is conducted annually.**

Where an association is found not to be in line with the objectives of the Paris Agreement and Enel's climate risk mitigation strategy, the Company assesses whether the misalignment could compromise the effectiveness of Enel's advocacy and participation, and may eventually decide to withdraw from the association.

By way of example, in recent years we have withdrawn our participation from some associations whose views on climate policies and how to achieve the energy transition were persistently different from Enel's in terms of fighting climate change and pursuing the goals set forth in the Paris Agreement. On the other hand, it may happen that in some associations, despite the existence of a misalignment, Enel decides to continue to be a member with the aim of influencing and aligning association decisions with its own vision of achieving the targets set by the Paris Agreement.

Back in 2020, an initial selection of the main industrial associations and organizations was carried out to identify alignment with Enel's climate position, an activity that continued in 2021.

In 2022, the analysis for assessing alignment with the Paris Agreement was extended to cover all associations involved in climate advocacy activities, of which Enel is a global member. In addition, as in 2021, **the list of the main associations most involved in climate advocacy activities with which Enel collaborates worldwide** (<https://www.enel.com/content/dam/>

[enel-com/documenti/investitori/sostenibilita/2022/enel-engagement-associations-involved-climate-policy-advocacy.pdf](https://www.enel.com/documenti/investitori/sostenibilita/2022/enel-engagement-associations-involved-climate-policy-advocacy.pdf)) was also published for 2022, including the assessment, for each of them, of the alignment with the Paris Agreement. This alignment was carried out on the basis of a specific methodology using targeted evaluations on the science of climate change, climate policies at global and national level, disclosures on the topic, and technologies proposed.

In particular, in 2022, the Enel Group identified for each country and/or region of presence and/or interest the main associations involved in advocacy activities of climate policies and conducted, for each of them, a qualitative assessment in order to identify the association's level of alignment with the Paris Agreement. This assessment was carried out on the basis of six main dimensions:

- i. Climate Science** – the extent to which the association involves itself in the issues related to climate change and in the results and evidence of the Reports published by the IPCC (Intergovernmental Panel on Climate Change);
- ii. Climate Policy** – the extent to which the association supports the UNFCCC process and other global policy initiatives;
- iii. Carbon Pricing Climate Policies** – the extent to which the association supports Carbon Pricing (Carbon Tax, Emissions Trading);
- iv. Non Carbon Pricing Climate Policy** – the extent to which the association supports other types of climate policies related to energy efficiency, renewable energy and GHG regulation;
- v. Communication** – the extent to which the association communicates on climate issues;
- vi. Energy Transition & Zero Carbon Technologies** – the extent to which the association supports innovative and effective technologies in the fight against climate change.

The methodology developed by Enel for assessing the alignment of associations to the Paris Agreement provides, in particular, that to each of the six dimensions listed above is assigned a level of alignment (high, medium or low). Then, a numerical score is given to each of the dimensions, which reflects the level of alignment assigned. The average of the scores of the six dimensions generates the final result of alignment of the association to the Paris Agreement, which can be: high, medium/high, medium, medium/low or low.

In general, Enel believes that the most effective approach when an association is not aligned with the Paris Agreement is to remain in such association with the aim of orienting and aligning its decisions with Enel's own vision of achieving the targets set by the Paris Agreement. However, in those cases where the yearly assessment of the level of alignment with the Paris Agreement for an association result to be "low", then Enel will activate an escalation strategy encompassing the following steps:

- Step 1: raise the issue, within the association, of the lack of alignment to the Paris Agreement to initiate an in-depth discussion with the aim of improving the alignment.
- Step 2: if, despite of the measures described in Step 1, the assessment of the level of alignment to the Paris Agreement still results to be "low" for two consecutive years, then the issue will be brought to the attention of the CEO, who will assess possible counteractions which may also include the decision for Enel to leave the association.

The following table summarizes the main results of the re-

view of industry associations, conducted during 2022, according to the methodology of assessment of alignment with the Paris Agreement as set out above. In particular, for each association listed, the following information is reported: (i) brief description of the association; (ii) main actions taken by the association in 2022 and its assessment of alignment with the Paris Agreement; (iii) Enel's main roles within the association; (iv) Enel's main actions developed in 2022 within the association.

Industry association	Description	Main actions undertaken by the association in 2022 and level of alignment with the Paris Agreement	Enel's main roles within the association	Main actions taken by Enel within the association in 2022
<b>Eurelectric</b>	The Union of the Electricity Industry - Eurelectric is the sector association which represents the common interests of the electricity industry at pan-European level, plus its affiliates and associates on several other continents. The association counts over 34 full members, representing over 3,500 companies in Europe.	Eurelectric contributes to the development and competitiveness of the electricity industry, provides effective representation of the industry in public affairs and promotes the role of a low-carbon electricity mix. The level of alignment with the Paris Agreement was deemed "high".	Enel is well represented in the association, with more than 40 delegates from Group companies in Italy, Spain and Romania holding key positions within the association (at decision-making level and in the Committees, such as the Electrification and Sustainability Committee or the Sustainability Working Group).	<p>In 2022, Eurelectric contributed to two major studies:</p> <ul style="list-style-type: none"> <li>• Market Design, developed by Compass Lexecon (expected publication date: March 2023);</li> <li>• Decarbonization speedways, which analyzes the EU's path towards carbon neutrality by 2050.</li> </ul> <p>Enel actively contributed to both initiatives, providing know-how, content and resources.</p> <p>Earlier this year, Eurelectric launched a report – co-produced with EY – at the EVision event, focusing on how electric vehicles and charging stations can become an asset for the networks that support them. The Head of Global e-Mobility at Enel X Way, spoke at the session "Ensuring the right regulatory framework for accelerating electric mobility".</p> <p>During the Power Summit 2022, Enel participated by organizing a session on Market Design. During the year, Enel helped support the development of Eurelectric's positions and advocacy actions on the Fit for 55 package.</p> <p>In 2022, Enel continued to serve as Chair of the Electrification and Sustainability Committee, Eurelectric's key committee for discussing and deciding on electrification, energy efficiency policies, and sustainability, including decarbonizing the economy beyond the power sector, one of the core themes of Eurelectric's vision.</p>

Industry association	Description	Main actions undertaken by the association in 2022 and level of alignment with the Paris Agreement	Enel's main roles within the association	Main actions taken by Enel within the association in 2022
<b>WindEurope</b>	WindEurope is the voice of companies and organizations operating in the wind industry. It actively promotes wind energy in Europe and worldwide, has over 450 members and is active in over 40 countries.	Through effective communication and engagement in policy-making processes, WindEurope facilitates national and international policies and initiatives that strengthen the development of European and global wind energy markets. The level of alignment with the Paris Agreement was deemed "high".	Enel has participated in the association as a member of the Board and as Chair of the Working Group Market and Investment Working Group; Enel also participates with experts in all the association's working groups.	During 2022, Enel collaborated with WindEurope in the European Parliament and Council on the provisions of the "Fit for 55" package and REPowerEU, including in particular the revision of the Renewable Energy Directive. Enel has strengthened its presence in the association, especially on the priorities of electrification and in the debate on market design. Enel has participated in the main events organized by the association and has contributed to the major publications, reports and public letters issued by the association.
<b>SolarPower Europe</b>	SolarPower Europe represents organizations active along the entire PV value chain, with the aim of defining the regulatory environment and improving business opportunities for solar photovoltaics in Europe.	Among the objectives of the association is the successful positioning of solar PV based energy solutions in the European context through dedicated studies and energy market analysis. Through effective communication and engagement in policy-making processes, SolarPower Europe facilitates national and international policies and initiatives that strengthen the development of European and global solar energy markets. The level of alignment with the Paris Agreement was deemed "high".	During 2022, Enel's presence was confirmed within the Board, the Advocacy Committee and through the participation of experts in 12 of the association's 14 Workstreams.  Enel continued its work within the Renewable Hydrogen and Electrification Workstream as Chair and Co-Chair of the Industrial Strategy Workstream.	During 2022, Enel collaborated with SolarPower Europe in the European Parliament and Council on the provisions of the "Fit for 55" package and REPowerEU, including in particular the revision of the Renewable Energy Directive. Enel is strengthening its presence in the association, especially on generation priorities and in the debate on market design. Enel has participated in the association's main events, including the "CEOs Retreat" and the SolarPower Summit in April 2022, the Sustainability Solar Europe event in October 2022 and various initiatives, including the sponsorship of the Solar Stewardship Initiative (SSI).
<b>The European Association for Storage of Energy (EASE)</b>	EASE, located in Brussels, Belgium, is the leading member-supported association representing organizations active across the entire energy storage value chain. EASE supports the deployment of energy storage to support the cost-effective transition to a resilient, climate-neutral, and secure energy system.	EASE promotes the role of storage in a decarbonized energy system. The level of alignment with the Paris Agreement was deemed "high".	Enel chairs the association. Enel is also active in the Applications & Economics Working Group.	Enel has worked on numerous joint position papers and common recommendations to address specific regulatory challenges that could affect the storage value chain. In addition, it has collaborated with the association to respond to the EC's numerous public consultations, for example the "Renewable Energy Projects – Power Acquisition Processes and Agreements" (April 2022). Enel also contributed to the position paper on the next market design review (December 2022) and was an exhibitor and sponsor at the fifth "EASE Energy Storage Global Conference" in October 2022. Several Enel representatives attended the event to discuss the latest developments on energy storage technologies, regulatory and policy frameworks, and the future of the storage market.

Industry association	Description	Main actions undertaken by the association in 2022 and level of alignment with the Paris Agreement	Enel's main roles within the association	Main actions taken by Enel within the association in 2022
<b>SmartEn</b>	SmartEn is the association of market players promoting decentralized and decarbonized power generation in favor of flexible demand for renewable energy sources.	SmartEn promotes the energy transition through smart cooperation between consumption, distribution, transmission and generation, acting as an equal partner in an integrated energy system. The level of alignment with the Paris Agreement was deemed "high".	Enel's presence at the top of the association's structure was confirmed in 2022 with its re-election to the Board and to the position of Chair of the Distributed Flexibility Task Force. Enel also participates with experts in the Digital Agenda and e-mobility working groups.	In 2022, the President of the EU DSO Entity (Enel's e-distribuzione representative) joined the SmartEn Advisory Council with the aim of bringing the DSOs' perspective on market flexibility to the association. Enel has worked on numerous position papers and shared recommendations relating to the energy efficiency of the system, the empowerment of energy users and the decarbonization of the energy sector, proposing the Group's positioning on the "Fit for 55" package. Finally, Enel sponsored the event on "Demand-Side Flexibility: Quantification of Benefits in the EU" (28 September 2022) and participated as a speaker at the event with two high-level representatives.
<b>RES4Africa</b>	RES4Africa brings together a network of international leaders from across the clean energy value chain and supports the creation of an enabling environment for renewable energy investments and strategic partnerships. RES4Africa serves as a bridge between members and partners in emerging markets to exchange perspectives and expertise.	The "renewAfrica" initiative was officially launched at European level in 2019. It is a European initiative supported by multiple stakeholders to accelerate the transition to sustainable energy in Africa. It promotes the creation of a European program capable of catalyzing investment in renewable energy for the future sustainable development of the continent. RES4Africa is a member of the Africa-Europe Foundation, a platform launched in 2021 by Friends of Europe and the Mo Ibrahim Foundation to facilitate multi-stakeholder dialog, catalyze collaboration and unlock new opportunities that can transform dialog into action. The level of alignment with the Paris Agreement was deemed "high".	Enel Green Power is one of the funding partners and chairs the association, with the current CEO of Enel Green Power taking the role.	Participation in working groups, events, co-definition of work priorities, co-drafting of position papers.
<b>World Business Council for Sustainable Development (WBCSD)</b>	The WBCSD is a global organization led by the CEOs of more than 200 international companies working together to accelerate the transition to a Net-Zero, nature positive and more equitable future.	The WBCSD works to support leading sustainability companies to drive integrated actions to address global challenges through the sharing of best practice and the development of tools and guides that can stimulate and advance members on their own pathway to sustainability. The level of alignment with the Paris Agreement was deemed "high".	Enel holds the role of Council Member, through the CEO.	In 2022, Enel actively participated in climate-related projects (for example, Policy Advocacy and Member Mobilization, SOS 1.5, Energy Pathway and Mobility Decarbonization), as well as contributing to the creation of position papers and publications.



Industry association	Description	Main actions undertaken by the association in 2022 and level of alignment with the Paris Agreement	Enel's main roles within the association	Main actions taken by Enel within the association in 2022
<b>United Nations Global Compact (UNGC)</b>	The United Nations Global Compact is the largest global corporate sustainability initiative, created with the goal of promoting a sustainable economic model through the development and implementation of sustainable practices and policies.	UNGC works to create a sustainable and inclusive global economy by supporting companies to do business responsibly, aligning strategies with the ten principles on human rights, labor, environment and anti-corruption, as well as taking action to promote the goals of the 2030 Agenda. The level of alignment with the Paris Agreement was deemed "high".	Enel co-chairs the CFO Coalition, and is also the Patron of the new Transformational Governance initiative.	The Group has participated in working groups and meetings concerning, inter alia, the Just Transition Think Lab, as well as contributing to the creation of position papers and publications.
<b>American Clean Power Association</b>	American Clean Power (ACP) is the voice of companies across the wind, solar, storage, and transmission industries that are powering America's future and providing cost-effective solutions to the climate crisis, while creating jobs, spurring massive investment in the US economy, and driving high-tech innovation across the nation.	ACP focuses on US federal legislative and administrative advocacy, while also supporting advocacy at State level. It supports policies that will transform the US power grid into a low-cost, reliable, renewable energy system, including support for renewable energy demand, sensible reforms, permitting, transmission system construction, predictable international trade rules, and workforce development. The level of alignment with the Paris Agreement was deemed "high".	Enel holds a position on the Board of Directors of ACP.	Advocacy for federal legislation to accelerate the deployment of wind, solar, energy storage, transmission and green hydrogen technologies. Commitment to collaborate with the association to promote clean energy.
<b>Confindustria</b>	Confindustria is the main association representing manufacturing and service companies in Italy. Its members include over 150,000 small, medium and large companies. Confindustria's mission is to promote the development of enterprises as the driving force behind the country's economic, social and civil growth.	Development of workshops, seminars and summary documents including observations and/or proposals suggested by the association regarding energy and environmental issues in local, national and European contexts. The level of alignment with the Paris Agreement was deemed "medium/high".	In addition to holding important roles in local and national associations, Enel takes part in various technical working groups (most of all, the Energy and Environment Working Groups), seeking to promote activities in line with climate targets.	Advocacy activities for specific initiatives such as: preliminary draft analysis of the "Operating Methods" relating to the draft regulation governing the Waste Traceability System and the National Electronic Register for Waste Traceability (RENTRI); analysis and submission of comments on the proposal for an EU regulation on F-gases; analysis and preparation of amendment on excavated earth and rocks in small construction sites; contributions for Confindustria positioning documents on the public consultation on the PNRR measure on agrivoltaic.
<b>Edison Electric Institute</b>	The Edison Electric Institute (EEI) is the association that represents all investor-owned US electric utilities.	EEI focuses on US federal legislative and administrative advocacy, while also supporting advocacy at regional and State level. It works to encourage policies that support investor-owned private utilities, with a focus on decarbonization. The level of alignment with the Paris Agreement was deemed "medium".	Enel is a member of various working groups.	Enel carries out federal lobbying activities in the United States (legislative and administrative), advocacy activities at the FERC and at the ISO/RTOs, as well as direct and indirect State lobbying activities (through funding). In addition, Enel supports greater penetration of renewables for utilities.
<b>Clean Energy Council</b>	The Clean Energy Council (CEC) is the spearhead of the clean energy industry in Australia. It represents hundreds of leading companies operating in the solar, wind, energy efficiency, hydro, bioenergy, energy storage, geothermal and marine sectors, along with over 5,800 solar installers as members.	Its mission is to work with local, State and Federal governments to solve technical, policy and financial problems in the challenges faced by the clean energy sector. The level of alignment with the Paris Agreement was deemed "high".	Enel is a key member with a strategic presence in important working groups and committees, such as the Policy and Advocacy Advisory Committee.	Participation in meetings, committees and working groups.

Industry association	Description	Main actions undertaken by the association in 2022 and level of alignment with the Paris Agreement	Enel's main roles within the association	Main actions taken by Enel within the association in 2022
<b>Solar Energy Industries Association</b>	The Solar Energy Industries Association (SEIA) is the national trade association for the solar and solar + storage industries. SEIA advocates policies that will enable solar to reach 30% of US electricity generation by 2030, to create jobs in every community, and to establish fair market rules that promote competition and the growth of reliable, low-cost solar power.	SEIA focuses on US Federal legislative and administrative advocacy. It works to defend the interests of the solar energy industry. The level of alignment with the Paris Agreement was deemed "high".	Enel is a member with a presence in several working groups.	Active participation to promote large-scale solar power and address the critical issues in the sector.
<b>International Emissions Trading Association (IETA)</b>	IETA is a non-profit corporate organization with more than 100 members across companies, geographic areas and disciplines promoting the use of carbon trading as a lever to pursue global climate ambition.	IETA's mission is to enable companies to engage in climate action and establish effective market-based trading systems for greenhouse gas (GHG) emissions. In pursuit of its mission, it aims to: a) promote an integrated view of carbon markets and prices; b) participate in the design and implementation of national and international rules and guidelines; and c) provide up-to-date and credible information on emission trading. The level of alignment with the Paris Agreement was deemed "medium/high".	Enel holds a position on the Board of IETA, contributing to help focus IETA's attention on ensuring the truly sustainable implementation of Emissions Trading systems worldwide. Enel is also active in working groups and task forces.	Participation in dedicated high-level workshops in European and international forums on GHG markets and trading systems; position papers supporting the Group's position on the EU ETS; promotion of market mechanisms and participation in GHG markets; engagement with Latin American policy makers.
<b>Confederación Española de Organizaciones Empresariales (CEOE)</b>	CEOE is the national business association representing and defending Spanish companies and entrepreneurs. CEOE voluntarily integrates two million companies and freelancers from all business sectors. In Europe, it is an active part of BusinessEurope, which brings together European business associations. It actively supports the international negotiation on climate change, participating in the process and assisting the COP.	It represents and defends Spanish companies and entrepreneurs in economic, social and taxation matters etc. before the government, State agencies, trade unions, political parties and international institutions. It analyzes laws and government proposals, and makes proposals on behalf of its members. The level of alignment with the Paris Agreement was deemed "high".	Endesa is a member of the commission for industry, international relations, health and consumer affairs, and the finance economy.	Participation in various commissions where topical issues at the European and Spanish level are analyzed, and in several work groups.
<b>Kyoto Club</b>	Kyoto Club is a non-profit organization, which members are business companies, associations and local municipalities and governments engaged in reaching the greenhouse gas reduction targets set by the Kyoto Protocol, by the EU ones for 2030 and by the December 2015 Paris Agreement.	Development of documents, position papers, workshops, training courses, campaigns and projects aimed at professionals, operators in the sector, public administrators and students concerning the latest issues in the energy-environment sector, from renewables to e-mobility and the circular economy. The level of alignment with the Paris Agreement was deemed "high".	Enel is a member of the Kyoto Club and participates in round tables on renewable development, energy efficiency, environmental education and resilience to climate change.	Joint working tables on renewables development, specific advocacy activities and policy proposals on the energy transition.

Industry association	Description	Main actions undertaken by the association in 2022 and level of alignment with the Paris Agreement	Enel's main roles within the association	Main actions taken by Enel within the association in 2022
<b>Elettricità Futura</b>	Elettricità Futura is the main association of Italian electric utilities. It defends their interests and creates value by supporting the sector in the energy transition process.	Elettricità Futura represents associates and their issues on institutional tables in Italy and Europe. It promotes networking among companies through meetings and initiatives on specific topics, including working groups and technical tables on energy and energy transition issues. The level of alignment with the Paris Agreement was deemed "medium/high".	Enel is a shareholder in Elettricità Futura and actively participates in working groups and technical tables.	Positioning on the European Commission's "Fit for 55" package; positioning on support measures for renewable energy communities; discussion tables on sustainable hydrogen.
<b>European Heat Pump Association (EHPA)</b>	The European Heat Pump Association (EHPA) is the voice of the European heat pump industry in Brussels. The association works to define a European policy to enable the heat pump industry to thrive and become the first choice for heating and cooling by 2030.	The EHPA supports, communicates and provides expert political, technical and economic input to European, national and local authorities and its members. It organizes high-level events, and manages and participates in several EU projects. All its activities are aimed at accelerating the development of the market for heat pumps for heating, cooling and hot water production. The level of alignment with the Paris Agreement was deemed "medium/high".	Enel is a member of various committees and task forces, and participates in a number of working groups.	Enel joined EHPA in 2022, sharing with the association the objectives of electrification and achieving the "Fit for 55" targets at European level.
<b>Bettercoal</b>	Bettercoal is the internationally recognized standard that works toward a responsible global coal supply chain. Bettercoal assesses coal producers according to the three ESG – Environment, Social and Governance – pillars, according to the criteria set out in its code of conduct, and develops plans for each company it assesses to improve their business practices. Founded by a group of major coal buyers, Bettercoal aims at constant improvements in sustainability practices in coal mining.	During 2022, as members of Bettercoal within the working group dedicated to Colombia, we participated in the delegation that traveled to Colombia, for the first time since 2018, with the aim of further improving the understanding of the critical issues surrounding coal mining in the country. We can therefore promote better relations with all stakeholders involved in this complex environment, from businesses to government and from international NGOs to local communities. During the visit, several meetings were organized with about 64 stakeholders, including business associations, communities and local governments. In addition, in 2022, following the change in international scenarios, a new working group was established, dedicated specifically to South Africa. The level of alignment with the Paris Agreement was deemed "high".	Enel is a member of various working groups and is represented on the association's Board.	Enel has promoted specific sustainability issues with regard to coal producers.

Industry association	Description	Main actions undertaken by the association in 2022 and level of alignment with the Paris Agreement	Enel's main roles within the association	Main actions taken by Enel within the association in 2022
<b>European Business Council – Energy Committee</b>	The European Business Council (EBC) currently represents around 2,500 European companies and individuals, which become its members of it through their respective national chambers of commerce or business organizations. Many of these companies participate directly in one or more of the EBC's many sectoral committees, whose work covers a wide variety of economic sectors. The EBC consists of 22 sectoral committees, whose work aims to improve the local business environment in a wide range of economic sectors.	EBC's core mission is to foster a barrier-free business and investment environment that makes doing business in Japan less difficult and costly. The level of alignment with the Paris Agreement was deemed "high".	Enel is a member of several committees and working groups.	Enel has participated in the drafting of a white paper on Demand Response.
<b>Red Argentina de Pacto Global</b>	The largest corporate social responsibility initiative in the country, with over 900 participants and a presence in 20 provinces. Its goal is to mobilize the business sector and other stakeholders to commit to the 10 universal principles of the United Nations and, consequently, to undertake the purpose of contributing to the solution of the greatest challenges facing the planet and humanity between now and 2030: the Sustainable Development Goals approved by the United Nations General Assembly in September 2015.	The association treats global goals as local issues, as the cooperation of all stakeholders, both public and private, in every corner of the planet and structured at global and local levels, will be necessary to make substantial progress on the common and shared 2030 Agenda. The local Network, launched in 2004, currently has a Board of Directors consisting of 34 members, whose mandate is renewed every two years at a Shareholders' Meeting. The level of alignment with the Paris Agreement was deemed "high".	Enel is a member of various working groups and actively participates in a number of workshops.	Enel has actively participated in the debate and workshops on climate and energy issues as organized by the association.

For the full list of the main associations and the related assessment, follow this link to the Enel website: <https://www.enel.com/content/dam/enel-com/documenti/investitori/>

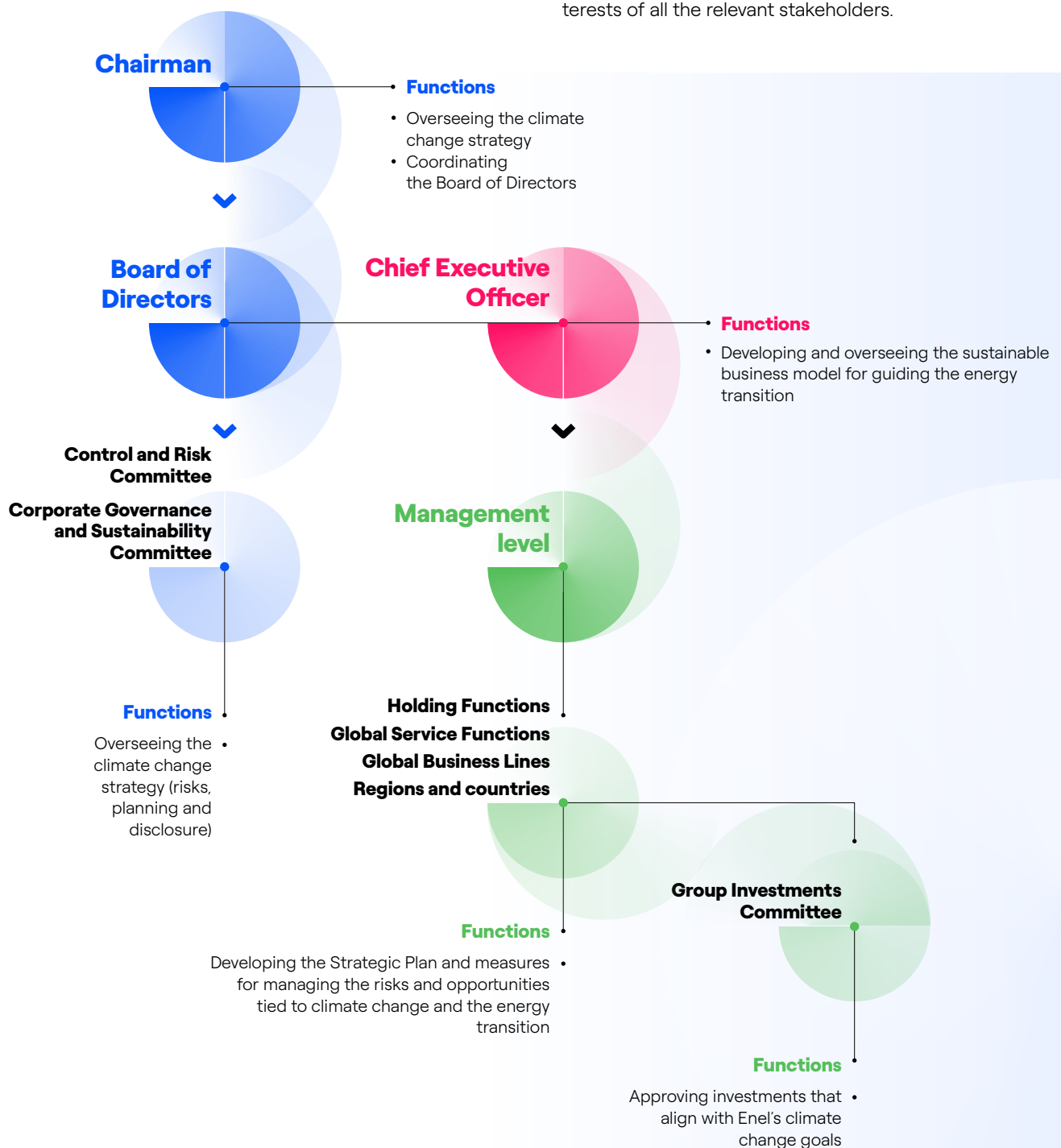
[sostenibilita/2022/enel-engagement-associations-involved-climate-policy-advocacy.pdf](https://www.enel.com/content/dam/enel-com/documenti/investitori/sostenibilita/2022/enel-engagement-associations-involved-climate-policy-advocacy.pdf).

# Enel's governance model to face climate change

2-9 | 2-12 | 2-13 | 2-19 | 2-20 | 2-21 | 2-24 | TCFD: Governance

## Competences of corporate bodies

The corporate governance system adopted by Enel is oriented toward the goal of sustainable success, as it aims to create value for shareholders over the long term, promote awareness of the importance of the Enel Group's operating activities, from an environmental and social point of view, and the consequent need to adequately consider the interests of all the relevant stakeholders.





## The Board of Directors of Enel SpA:

- Pursuant to the Articles of Association, the Board of Directors of Enel SpA is endowed with broad power for the **ordinary and extraordinary administration** of the Company and has the authority to carry out any action deemed appropriate for the implementation and achievement of the corporate purpose.
- It plays a **central role in corporate governance** as the body vested with powers related to the strategic, organizational and control policies of the Company and the Group, the sustainable success of which it pursues. In this context, the Board examines and approves the Company's strategy, including the annual budget and the Business Plan (which incorporate the main objectives and actions planned, including with regard to sustainability issues, to drive the energy transition and tackle climate change), taking into consideration the analysis of issues relevant to the generation of long-term value and thus promoting a sustainable business model.
- It plays a **guidance role and provides an assessment of the adequacy of the Internal Control and Risk Management System** (so-called "ICRMS"). In this regard the Board defines the nature and level of risk compatible with the strategic objectives of the Company and the Group, including in its assessments any elements that may be relevant in the perspective of the Company's sustainable success. The ICRMS consists of the set of rules, procedures and organizational structures aimed at enabling the identification, measurement, management and monitoring of the main corporate risks, including risks related to climate change and, more generally, risks that the Group's activities may determine in the fields of environment society, personnel and human rights.
- The Board **defines the remuneration policy** for Directors, Auditors and Key management personnel, based on the pursuit of the Company's sustainable success and considering the need to arrange, retain and motivate people with the skills and professionalism required by the role covered, submitting this policy to the Shareholders' Meeting for approval.
- During 2022, the Board addressed **climate-related issues**, reflected in the strategies and related implementation methods in **12 of the 16 meetings held**, in particular during: (i) the review and approval of the Business Plan of the Company and the Group; (ii) the definition of Enel's remuneration policy for 2022; (iii) the review of the contents of the Sustainability Report for the 2021 financial year, coinciding with the Consolidated Non-Financial Statement pursuant to Legislative Decree no. 254/2016 for the same year. In addition, it discussed climate-re-

lated issues as part of the in-depth studies dedicated to operations related to the decarbonization strategy and sustainable finance, as well as in relation to investor dialog activities.

In accordance with the provisions of the Italian Civil Code, the Board of Directors has delegated part of its management responsibilities to the Chief Executive Officer and based on the recommendations of the Italian Corporate Governance Code, and provided for under the relevant CONSOB regulations, has appointed the following Board Committees which provide recommendations and advice.

## The Corporate Governance and Sustainability Committee:

- **Assists the Board of Directors in assessment and decision-making activities concerning the Company's and Group's corporate governance** and sustainability, including climate change issues and the dynamics of the Company's interaction with all the stakeholders.
- With regard to sustainability issues, it **examines, *inter alia***, (i) the guidelines of the **Sustainability Plan, including the climate objectives** defined therein, as well as the Priorities' Matrix, which identifies the priority issues for stakeholders in light of the Group's industrial strategies; (ii) **the methods for implementing the sustainability policy**; (iii) **the general approach and structure of the contents of the Non-Financial Statement and the Sustainability Report** (possibly as a single document), as well as the completeness and transparency of the information contained therein, including on climate change, and their consistency with the principles laid down by the reporting standard used, issuing a prior opinion on this matter to the Board of Directors called upon to approve these documents.
- During 2022, the Board dealt with **climate-related issues**, reflected in the strategies and related implementation methods in **3 of the 6 meetings held**, in particular during the review of: (i) the Sustainability Report for the 2021 financial year, coinciding with the Consolidated Non-Financial Statement pursuant to Legislative Decree no. 254/2016 for the same year; (ii) the materiality analysis and the guidelines of the Sustainability Plan 2023-2025; (iii) updates on the main activities carried out in 2022 by the Enel Group in the field of sustainability, on the status of implementation of the Sustainability Plan 2022-2024 and regarding Enel's inclusion in the main sustainability indices.

## The Control and Risk Committee:

- The Committee has the task of **supporting the Board of Directors' assessments and decisions relating to the ICRMS**, also as concerns climate risks and those relating to the approval of periodic annual and interim financial and non-financial reports.
- **It assesses the suitability of annual and interim financial and non-financial information** to represent correctly the business model, the strategies of the Company and the Group it heads, the impact of the Company's activities and achievements, coordinating with the Corporate Governance and Sustainability Committee as regards periodic non-financial information.
- **It examines the relevant issues for the purposes of the ICRMS dealt with in the Non-Financial Statement and the Sustainability Report** (possibly as a single document) and containing the Company's climate disclosure, issuing a prior opinion on the matter to the Board of Directors, which is called upon to approve these documents.
- During 2022, the Board dealt with **climate-related issues**, reflected in the strategies and related implementation methods in **8 of the 14 meetings held**, in particular during the review of: (i) assessment of the relevant issues for the purposes of the ICRMS dealt with in the Sustainability Report for the 2021 financial year, coinciding with the Consolidated Non-Financial Statement pursuant to Legislative Decree no. 254/2016 for the same year; (ii) the in-depth analysis of investor dialog 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 in relation to the activities carried out and the existing risks in the respective remits, and to the tools used to mitigate their effects; (iv) the analysis of the degree of compatibility of the main risks related to the strategic objectives of the Business Plan.

## The Nomination and Compensation Committee:

- **Supports the Board of Directors, *inter alia*, in its assessments and decisions relating to the size and optimal composition of the Board itself and its Committees, as well as the remuneration of Directors and Key management personnel.** In this regard, compensation policy for 2022 specifies that a sizeable portion of the variable compensation, both short and long term, of the Chief Executive Officer/General Manager and Key management personnel is connected, *inter alia*, to performance objectives concerning sustainability and climate.

## The Chairman of the Board of Directors:

- In exercising the function of stimulating and coordinating the activities of the Board of Directors, plays a **pro-active role in the process of approving and monitoring corporate and sustainability strategies**, which are strongly oriented toward decarbonization and the electrification of consumption.
- During 2022, the Chairman also chaired the Corporate Governance and Sustainability Committee.

## The Chief Executive Officer:

- In exercising the power he/she holds, the CEO **has defined a sustainable business model** by identifying a strategy targeted toward guiding the energy transition toward a low-carbon model; furthermore, within the scope of the powers assigned, the CEO manages the business activities connected to Enel's commitment to combating climate change.
- **He/she reports to the Board of Directors on the activities carried out when exercising proxies**, including the business activities aimed at maintaining Enel's commitment to tackling climate change.
- **He/she represents Enel in various initiatives dealing with sustainability**, holding relevant positions in institutions of international importance such as the Global Investors for Sustainable Development (GISD) Alliance launched by the United Nations in 2019.
- As the person primarily responsible for the management of the Company, **he/she is the person most empowered to deal with institutional investors**, providing them with any appropriate clarifications on matters falling within the management powers entrusted to him/her, in line with the Policy for the management of engagement with institutional investors and with the generality of Enel's shareholders and bondholders.
- **He/she holds the role of Director in charge of setting up and maintaining the ICRMS.**

## Enel's organizational model

Enel has a management team that assigns the responsibilities related to climate issues to the specific Functions that contribute toward guiding Enel's leadership in energy transition. Each area is responsible for managing the risks and opportunities related to climate change for their own area of competence.

- **The Holding Functions** are responsible for consolidating the scenario analysis and the management of the stra-

tegic and financial planning process aimed at promoting the decarbonization of the energy mix and the electrification of energy demand, as key actions in combating climate change.

- **The Global Business Lines** are responsible for the development of activities related to promoting renewable generation, the optimization of heat capacity, the digitalization of the electricity grid and the development of business solutions that enable energy transition and combating climate change.
- **The Global Service Functions** are responsible for adopting sustainable criteria, including climate change, in supply chain management and developing digital solutions that support the development of technologies enabling energy transition and combating climate change.
- On a local level, **the Regions and Countries** have the task of promoting decarbonization and guiding the energy transition toward a low-carbon business model, within their areas of responsibility. Furthermore, the Europe and Euro-Mediterranean Affairs Function is responsible for defining the Group's position on climate change, low-carbon policies and the regulation of the international carbon market on a European level.

Additionally, **the Group Investments Committee**, chaired by the Chief Executive Officer, grants approval for the expenses for investments related to business development. This committee also has the task of guaranteeing that all investments are fully in line with the Group's commitment to promoting a low-carbon business model and reaching decarbonization by 2040.

## Incentive system

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 will be tied to performance objectives concerning sustainability, including in relation to climate change. Specifically, with regard to:

- the **long-term variable remuneration** of the Chief Executive Officer/General Manager and Key management personnel, for which a performance objective is set, including, since 2018, with regard to the reduction of "Scope 1" greenhouse gas emissions by the Enel Group over the next three years (with a weighting of 10% of the total long-term variable remuneration), deemed suitable to adequately support the achievement of the climate change-related targets in the 2022-2024 Strategic Plan;
- **variable short-term remuneration** (MBO), the targets can include those relating to the specific company Function of each manager. For example, they include objectives related to the introduction of innovative products and services into the business for managers within Holding Functions, the development of renewable energy for managers within the Enel Green Power and Thermal Generation Global Business Line or related to energy transition solutions within the Enel X Global Retail Business Line.

For further details, see "[The Enel governance model for sustainability](#)" section of the 2022 Sustainability Report.

# Climate change and long-term scenarios

3-3 | 201-2 | TCFD: Strategy |

The Enel Group develops short, medium and long-term scenarios for macroeconomic, financial, energy and climate conditions in order to support its processes of planning, capital allocation, strategic positioning, and assessment of risks and resilience of the strategy.

For this purpose, the analysis and benchmarking of external energy transition scenarios was also carried out, which, together with the analysis of relevant reports on macroeconomic and commodity trends was a key starting point for defining the assumptions of Enel's long-term energy scenarios.

## Global energy scenarios are typically classified by scenario families based on the level of climate ambition:

- **Business as usual/Stated policies:** energy scenarios based on business as usual/current policies. They provide a conservative benchmark for the future, representing the evolution of the energy system in the absence of additional climate and energy policies. Currently, these scenarios do not achieve the goals of the Paris Agreement;
- **Paris Aligned:** energy scenarios aligned with the Paris Agreement, i.e., that include a goal of limiting global average temperature increase to "well below 2 °C" compared to pre-industrial levels. To achieve this goal, scenarios in this category consider new and more ambitious policies for decarbonization, end-use electrification, and the development of renewables;
- **Paris Ambitious:** global energy scenarios that chart the path toward Net-Zero GHG emissions by 2050, in line with the most ambitious goal of the Paris Agreement, which is to stabilize the global average temperature rise at 1.5 °C, although with different ranges of probability.

This classification of scenario families was developed over the years and was further expanded in 2021 by collaborating with a working group coordinated by the World Business Council for Sustainable Development (WBCSD), which Enel took part in. The aim of the project was to devise a

common and transparent approach to using public scenarios for companies in the energy industry, helping them to use them in order to assess the risks and opportunities associated with climate change, in line with the Task Force on Climate-Related Financial Disclosures (TCFD). The end result of this work is: (i) a report that provides context for the energy scenarios and describes the shared definition of the scenario families, as well as (ii) an online platform that gathers the variables of a variety of scenarios (WBCSD, 2023, Climate Scenario Analysis Reference Approach).

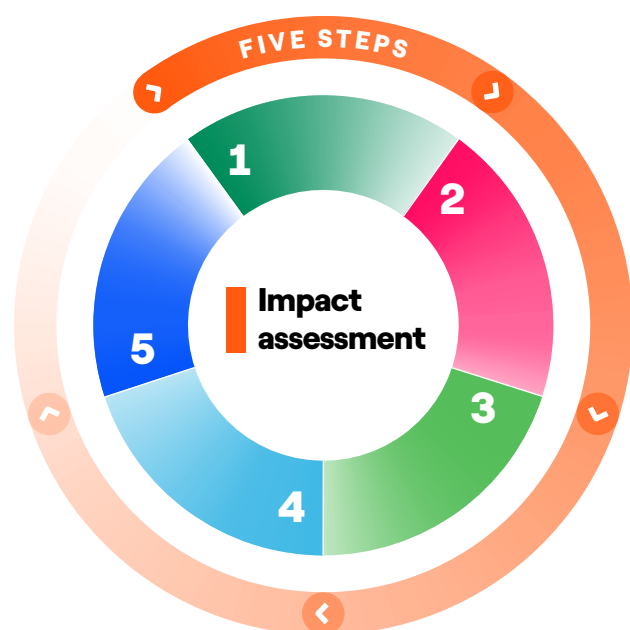
Enel's long-term scenarios are based on an overall framework so as to ensure consistency between the energy transition scenario and the physical climate scenario:

- the "energy transition scenario" describes how the generation and consumption of energy evolves in various sectors in a specific economic, social, policy and regulatory context;
- issues concerning future trends in climate variables (in terms of frequency and intensity of acute and chronic phenomena) define the so-called "physical scenario".

In order to assess the effects of transition and physical phenomena on the energy system, the Group relies on internal models that describe the energy system for each country under analysis, taking into consideration specific technological, social-economic, policy and regulatory aspects.

In 2022, with the aim of fostering global and local cross-functional collaboration to define both physical and energy transition scenarios, while ensuring consistent compliance with the requirements of the TCFD, two internal cross-functional communities dedicated to both physical and transition scenarios were established. These were primarily intended to discuss and define context and benchmark analyses and long-term scenario assumptions, to identify relevant impact categories, and to establish methods for assessing them so as to define strategic and industrial measures.

The adoption of these scenarios and their integration into corporate processes takes account of the guidelines of the TCFD and enables the assessment of the risks and opportunities associated with climate change. The process



that translates the scenario phenomena into information that is useful 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)

## Energy transition scenarios

The energy transition scenarios detail how the generation and consumption of energy evolve in a certain geopolitical, macroeconomic, regulatory and competitive context, depending on the available technology options; they correlate with greenhouse gas emission trends and climate scenarios and, consequently, a specific temperature increase by the end of the century compared to pre-industrial values.

**The main assumptions** considered when defining transition scenarios concern:

- **local policies and regulatory measures to fight climate change**, increase energy security and promote sustainable development, such as measures for reducing carbon dioxide emissions and fossil fuel consumption, for increasing energy efficiency, for consumer electrification, and the amount of renewable electricity generated;
- **the global macroeconomic and energy context** (for example, in terms of gross domestic product, population and commodity prices), also considering international benchmarks;
- **the evolution of technologies for the generation**, conversion and consumption of energy, in terms of both technical operating parameters and costs.

In 2022, Enel updated its framework of medium to long-term energy transition scenarios, and defined scenario narratives based on three main scenario “signposts”, that is, the main drivers of uncertainty in relation to developments in the macroeconomic and energy sectors: achieving the Paris Agreement goals, the escalation of geopolitical tensions in the Russia-Ukraine conflict, and tackling the Covid-19 pandemic.

The Group’s **reference scenario for long-term planning, called the Paris scenario**, is therefore:

- a Paris-aligned scenario, which involves achieving the goals of the Paris Agreement, that is, a rise in the global average temperature below 2 °C compared to pre-industrial levels, and therefore anticipating a higher level of climate ambition than business as usual, but without necessarily assuming that the Net-Zero target will be reached by 2050, considering the current level of overall ambition at a global level;
- a scenario in which the geopolitical tensions heightened by the Russia-Ukraine conflict are expected to have lasting effects, resulting in an acceleration in electrification and renewables, as well as in a greater use of LNG in order to raise the level of security of



supplies in a changed environment, especially in Europe;

- a scenario marked by the expectation that Covid will be contained or become endemic, with a high vaccination rate and no need for large-scale lockdowns.

As for the climate ambition in the reference scenario, it is assumed that consumer electrification will continue to increase and that renewables will be further developed, partly due to the energy security policies adopted (such as REPowerEU in the EU and the Inflation Reduction Act in the United States). In this scenario, globally speaking, governments, companies, organizations and citizens effectively participate in the collective effort to mitigate greenhouse gas emissions.

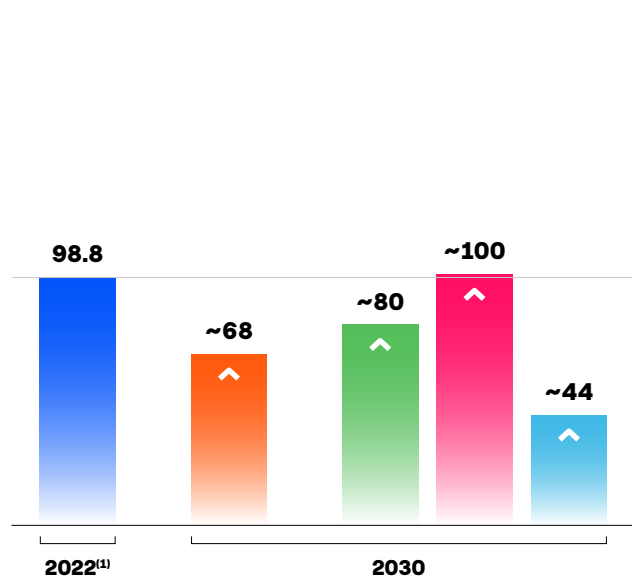
With respect to the possibility of assuming the achievement of the most challenging objective of the Paris Agreement as a benchmark scenario for long-term

planning, i.e. to stabilize the average global temperature within +1.5 °C, some uncertainty clearly remains as to whether certain countries could maintain inertial trajectories, delaying the decarbonization process that will lead to net zero emissions by 2050.

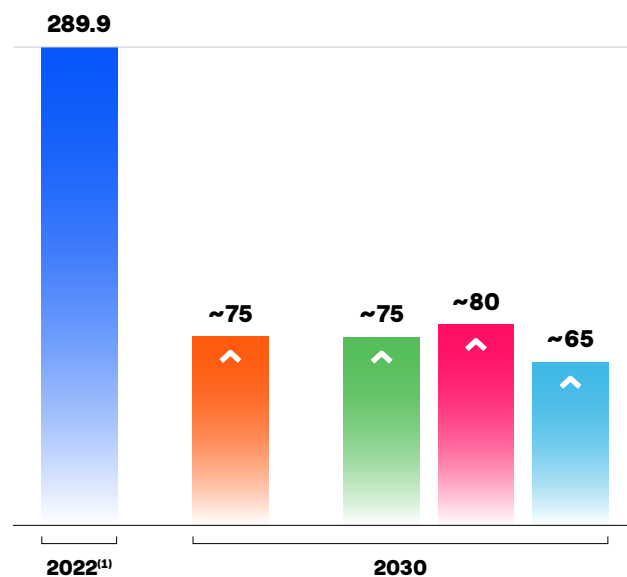
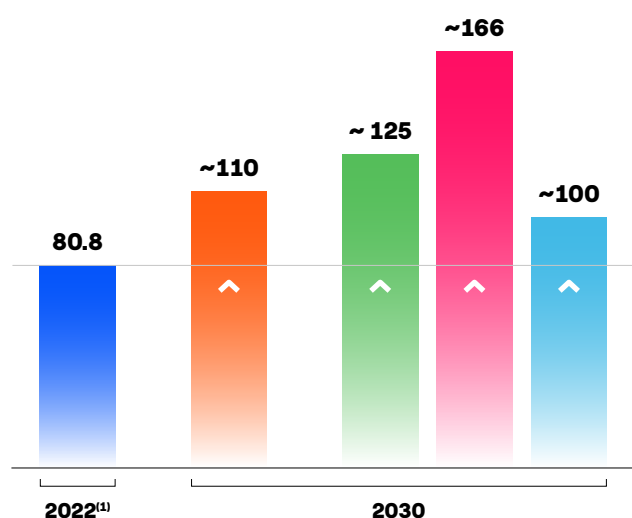
Assumptions concerning commodity price trends as inputs to the Paris scenario are consistent with external scenarios that achieve Paris Agreement goals. In particular, a sustained increase in the price of CO<sub>2</sub>, caused by the gradual reduction of permit supply in the face of growing demand, and a sharp fall in coal prices, due to decreasing demand, are expected by 2030. With regard to gas, it is believed that price tensions will ease in the coming years in light of a realignment between supply and demand at a global level. Finally, oil prices are expected to stabilize gradually, for which we estimate peak demand around 2030.



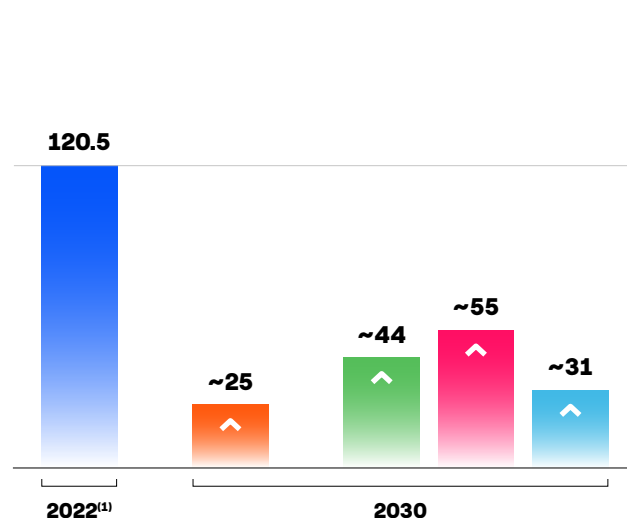
Brent (\$/bbl)



API2 (\$/t)

CO<sub>2</sub> EU - ETS (€/t)

TTF (€/MWh)



● Enel scenario    ● Average benchmark<sup>(2)</sup>    ● 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 reference scenario were defined depending on the degree of climate ambition at global and local level: a “Slower Transition” scenario, marked by a slower speed of transition, and an “Accelerated Transition” scenario, marked by an increase in ambition compared to the reference scenario, specifically with respect to some of the characteristic variables of energy

transition, such as the rate of electrification of final energy consumption, green hydrogen penetration or end users’ attitudes towards more sustainable consumption patterns (e.g. modal shift with regard to public/private means of transport). These scenarios are used for sensitivity analysis in the evaluation of investments, strategic stress tests, risk assessment, and to identify business opportunities.

## Local transition scenarios

Enel's reference scenario – the Paris scenario – covers all the countries and regions in which the Group operates, and therefore entails a climate ambition that is in line with the achievement of the Paris Agreement goals, supported by greater electrification of final energy consumption and the development of renewable capacity.

Local scenarios were broken down based on two complementary approaches:

- a bottom-up approach was taken in the main countries where the Group operates by using fundamental models to simulate the long-term balance of the entire energy system, explicitly demanding that the country as a whole limit its CO<sub>2</sub> emissions. The promotion of scenario variables that are relevant to the Group's activities (including electricity demand, rate of electrification, renewable capacity and distributed generation capacity, the number of electric vehicles and green hydrogen generation) is thus established using dedicated models with a time horizon up to 2050, with the aim of minimizing costs for the system by limiting CO<sub>2</sub> emissions;
- for the other countries of interest, the main variables of each scenario were established by conducting statistical analyses of internal and consensus data, compared with external scenarios that are in line with the Paris Agreement goals, which were made available by accredited national and international bodies and providers.

Internal transition scenarios were defined due to the need for increased modeling flexibility and increased geographical and operational granularity for the main variables that affect Enel's various businesses compared to the scenarios provided by the main external providers. The latter are typically outlined and made public on a global or regional level, with a few exceptions for larger countries, which only rarely coincide with the countries in which the Group operates or has an interest in.

### Europe, focus on Italy and Spain

In the Paris scenario, emissions in European countries are decreasing in line with the European "Fit for 55" package, as a result of increased electrification of final energy consumption, driven by an increased use of renewables in the electricity generation mix.

#### Italy

In Italy, according to the Paris scenario, which is more ambitious than the existing national plan (Integrated Energy and Climate Plan, 2020), electrification is set to increase to 30% by 2030 (from 22% in 2021), with a level of renewable generation sufficient to meet over 70% of electricity demand (instead of around 55% as envisaged in the national plan).

The Slower Transition scenario is based on the assumption that Italy will remain firmly committed to the existing Integrated National Energy and Climate Plan as regards the ambition to reduce emissions, which is a less optimistic macroeconomic scenario than the Paris scenario, particularly in the initial years, with increased pressure when it comes to the price and supply of fossil fuels and raw materials.

The Accelerated Transition scenario has the same ambition of the Paris scenario when it comes to decarbonization. This scenario assumes that authorization processes for renewable energy generation plants will be revised more effectively, resulting in a slight increase in the number of installations, with the costs of technologies for green hydrogen generation falling more rapidly and its subsequent increased penetration in hard-to-abate sectors, at the expense of blue and gray hydrogen (hydrogen produced from gas, respectively with and without the use of CCS technologies). Moreover, the fact that people are becoming more concerned about climate change promotes more "climate-aware" behavior such as a modal shift in the transport sector (with a greater use of low-emission transport – for example, public transport).

#### Spain

In the case of Spain, the level of ambition established in the national plan is in line with the achievement of the Paris Agreement goals; in light of this, the Paris scenario foresees that the electrification rate in 2030 will be of 32% (compared to 24% in 2021) and that the development of renewable capacity will be such that the share of electricity demand met through renewable generation will increase to over 80% (compared to 53% in 2021). The alternative Slower Transition scenario, instead, assumes that there will be a delay in implementing policies for greater penetration of renewables and electric technologies, especially in the case of private cars. The Accelerated Transition scenario has the same ambition of the Paris scenario and envisages that authorization processes for renewables will be quicker. This scenario also assumes that there will be a higher incentive for the electrification of buildings and the complete adoption of the national green hydrogen strategy, which will make it possible to accelerate the construction of renewable energy generation plants coupled with electrolyzers by 2030.

### Latin America, focus on Brazil and Chile

#### Brazil

In the case of Brazil, according to the Paris scenario, which is more ambitious than the existing national plan (*Plano Decenal de Expansão de Energia 2031, 2022*) when it comes to reducing emissions, electrification is set to increase to 25% by 2030 (from 22% in 2021), with a level of renewable

generation sufficient to meet over 88% of electricity demand (instead of around 82% as envisaged in the national plan).

The Slower Transition scenario is based on the assumption of following the increasing emission trend of the existing national plan (*Plano Decenal de Expansão de Energia 2031*), with fewer hydroelectric plants being expanded in favor of new thermal (gas) capacity and a less optimistic macro-economic scenario than the Paris scenario, particularly in the initial years.

The Accelerated Transition scenario increases the ambition of the Paris scenario when it comes to decarbonization, assuming that the regulatory framework for building offshore wind plants will be more quickly defined, resulting in increased exploitation of the potential of this technology, greater penetration of distributed solar generation, and further development of technologies for green hydrogen generation.

### Chile

In the case of Chile, the Paris scenario is developed in line with the Net-Zero scenario set out in the government

document PELP (*Planificación Energética a Largo Plazo*) with regard to reducing emissions, and includes ambitious targets for the generation and export of green hydrogen. As in the government scenario, it involves shutting down all coal-fired power plants by 2035, increasing taxes on CO<sub>2</sub> emissions and achieving high levels of electrification in transport by banning sales of conventional vehicles by 2040 and committing to full electrification of city bus fleets from 2040 onwards.

The Slower Transition scenario is marked by a slower energy transition, centered on implementing existing measures and policies that are less ambitious than the ones included in the Paris scenario.

The Accelerated Transition scenario reaches net zero emissions by 2050 and, compared to the Paris scenario, foresees an acceleration of the electrification process in all economic sectors, including transport. It also brings forward to 2035 the ban on conventional vehicle sales, a more ambitious target for green hydrogen exports, 100% of the electricity generation mix met by renewable sources by 2050, the phase-out of coal by 2030, and an additional increase in taxes on CO<sub>2</sub> emissions.

## The physical climate scenario

Within the aforementioned framework, each scenario narrative was developed in such a way as to ensure consistency between the energy transition scenarios and the climate scenarios.

Climate change is playing an increasingly prominent role in these scenarios, with impacts not only on the transition of the economy towards Net-Zero emissions, but also physical impacts that can be divided into:

- **acute phenomena**, that is, short-term but rather intense phenomena, such as floods, hurricanes, etc., with potential impacts on assets (such as damage and business interruptions);
- **chronic phenomena** related to structural changes in the climate, such as the rising trend in temperatures, rising sea levels etc., which can cause, for example, constant changes in the output of generation plants and in electricity consumption profiles in the residential and commercial sectors.

Such phenomena are analyzed by looking at how they will behave in the future: this is done by selecting the best available data from the output data of climate models at various levels of resolution, as well as historical data.

Among the climatic projections developed by the “Inter-

governmental Panel on Climate Change” (IPCC) on a global scale, the Group has chosen three that are in line with those taken into account in the latest IPCC report as part of the sixth assessment cycle (AR6). Such scenarios are associated with emission patterns that are linked to a level of the so-called Representative Concentration Pathway (RCP), each one being related to one of five social and economic scenarios that the scientific community defines as Shared Socioeconomic Pathways (SSP):

- **SSP1-RCP 2.6**: compatible with a global warming range below 2 °C, compared with pre-industrial levels (1850–1900), by 2100 (the IPCC projects approximately +1.8 °C on average over the 1850–1900 period); the Group associates the SSP1-RCP 2.6 scenario with the Paris and Accelerated Transition scenarios in analyses that take into account both physical variables and transition variables;
- **SSP2-RCP 4.5**: compatible with an intermediate scenario, in which an average temperature increase of around 2.7 °C is expected by 2100 when compared with the 1850–1900 period. The RCP 4.5 scenario best represents the current global climate and political context and the associated transition assumptions. This scenario projects global warming as being consistent with the estimated temperature increase that takes into account current global policies;<sup>(3)</sup> the Group associates the SSP2-

(3) Climate Action Tracker thermometer, global warming estimates for 2100 considering the current “Policies & Action” and “2030 Targets Only” (updated as of November 2022).

RCP 4.5 scenario with the Slower Transition scenario in analyses that take into account both physical variables and transition variables;

- **SSP5-RCP 8.5:** compatible with a scenario where no particular measures are taken to combat climate change. According to this scenario, the global temperature is estimated to increase by around +4.4 °C, compared to pre-industrial levels, by 2100.

The Group sees the RCP 8.5 scenario as a worst-case climate scenario, which is used for assessing the effects of physical phenomena in a context in which climate change is particularly severe, but is not considered likely at present. The RCP 2.6 scenario is used for the assessment of physical phenomena and for analyses that consider an energy transition that is in line with the most ambitious mitigation targets.

The analyses performed on the physical scenarios considered both chronic phenomena and acute phenomena. In describing specific complex events of interest, the Group looks at data and analyses conducted by both private entities and public and academic institutions.

Climate scenarios are global in nature. Accordingly, in order to determine the effects in the areas of relevance for the Group, they must be analyzed locally. The Group's active partnerships include an ongoing collaboration with the Department of Geosciences of the International Centre for Theoretical Physics (ICTP) in Trieste. As part of this collaboration, the ICTP provides projections for the main climate variables with a grid resolution that varies from approximately 12 km to approximately 100 km on the side and a time horizon of 2020-2050. The main variables are temperature, rainfall and snowfall, and solar radiation. With respect to previous analysis carried out, the current studies are based on the use of multiple regional climate models: the one developed by ICTP combined with five other simulations, selected as representative of the ensemble of climate models currently available in the literature. The output of the ensemble represents all the different climate models, which are

averaged together. This technique is usually adopted in the scientific community to obtain a more robust, bias-free analysis mediated by the various assumptions that could characterize the single model.

For certain specific climate variables, such as gusts of wind, the Group also relies on other providers specializing in the topic.

In this phase of the study, the future projections were analyzed for Italy, Spain and all countries of interest to the Group in South America, Central America and North America, obtaining, also due to the use of the ensemble of models, a more definite representation of the physical scenario. In addition, similarly, the Group is also analyzing climate projection data for Africa, South Asia and South-East Asia, so as to cover all the main countries and regions where the Group operates globally.

The ICTP also offers scientific support when it comes to interpreting any other acquired climate data. Climate scenarios are always used for the countries that the Group is interested in, so that climate risk can be uniformly assessed.

Some of these phenomena involve high levels of complexity, as they do not only depend on climatic trends but also on the specific characteristics of the territory, and require an additional modelling activity for their high-resolution representation. For this reason, in addition to the climate scenarios provided by ICTP, the Group also uses Natural Hazard maps, which make it possible to obtain, with a high spatial resolution, the return times of a series of events such as storms, hurricanes and floods. The use of these maps, as described in the section "[Risks and opportunities connected with climate change](#)", is widely consolidated in the Group, which already uses this data based on a historical perspective to optimize insurance strategies. Furthermore, work is underway in order to be able to use this information also when processed in compliance with the projections of the climate scenarios.



## Integration of climate scenarios into the Open Country Risk model

Enel has adopted a quantitative **Open Country Risk** assessment model that can accurately monitor the **level of risk of countries within its scope**, which includes four elements of risk:

- **economic factors:** measuring the economic resilience of each country, which is defined as a balanced position with respect to the external environment, effectiveness of domestic policies, banking and corporate system vulnerability, attractiveness in terms of economic growth and, ultimately, a **quantification of extreme climate events as a source of environmental and economic stress**;
- **institutional and political factors:** assessing the soundness of institutions and of the political context;
- **social factors:** a detailed analysis of social phenomena and of human rights aimed at measuring the degree of well-being, inclusion and social progress;
- **energy factors:** measuring the effectiveness of the energy system and how it fits into the energy transition

and into the fight against climate change, which are crucial factors for assessing the sustainability of investments over a medium to long-term period.

Therefore, this work has made it possible to **also integrate climate change aspects into the Open Country Risk model**.

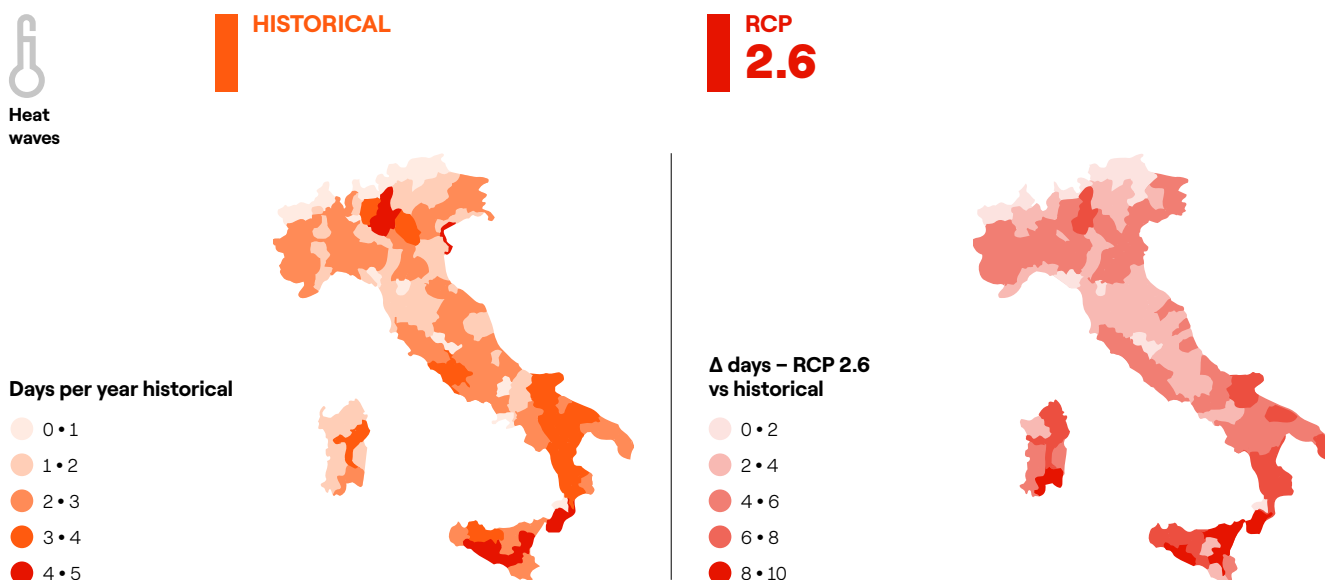
More specifically, by introducing extreme weather events into the Open Country Risk, the evolution of several climate hazards can be assessed, both in the country and on a global scale, in a uniform manner. In particular, a modular approach was adopted that will enable analyses to be progressively improved by including new physical phenomena and fine-tuning methodologies and reference data. **At present, it includes four climate phenomena: two are related to extreme temperatures, one to heavy rainfall and another to drought.** In addition, the possibility of introducing other phenomena such as extreme wind and rising sea levels is being looked into. Phenomena are described with a numerical index, developed by taking into consideration global distribution, with a resolution of approximately 100 km x 100 km and summarized in a composite index.



## Italy

**Acute phenomena:** a number of acute phenomena in Italy were analyzed, such as fire risk, extreme rainfall and heat waves. The first two phenomena were described using standard metrics, which are extensively used in the literature. With regard to heat waves, custom metrics were also defined for Enel Grids, in addition to the standard metrics, which were identified by comparing extreme phenomena

that occurred in the past and that could potentially damage underground grids.<sup>(4)</sup> The results in the RCP 2.6 scenario are shown in the figure. Therefore, the average number of days with heat waves in a year is likely to increase compared to the past, and will be more intense in areas currently affected by this phenomenon. Moreover, the situation is worse 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 studied by calculating the variation of daily rainfall above the 95th percentile, calculated as average annual millimeters in the periods of reference. A general increase in extreme rainfall can be observed in the period 2030–2050 in all analyzed scenarios. However, this is accompanied by a slight decrease in the annual sum of daily precipitation, if we exclude acute rainfall. In addition, this increase is more pronounced in Northeast Italy and along the Tyrrhenian coast.

As already shown in the analyses previously published by the Group, fire risk will also undergo important variations, which increase in the various climate scenarios considered. In particular, fire risk is described through the Fire Weather Index (FWI), a widely used indicator at international level that takes into account temperature, humidity, rain and wind in order to estimate a fire risk index. The data

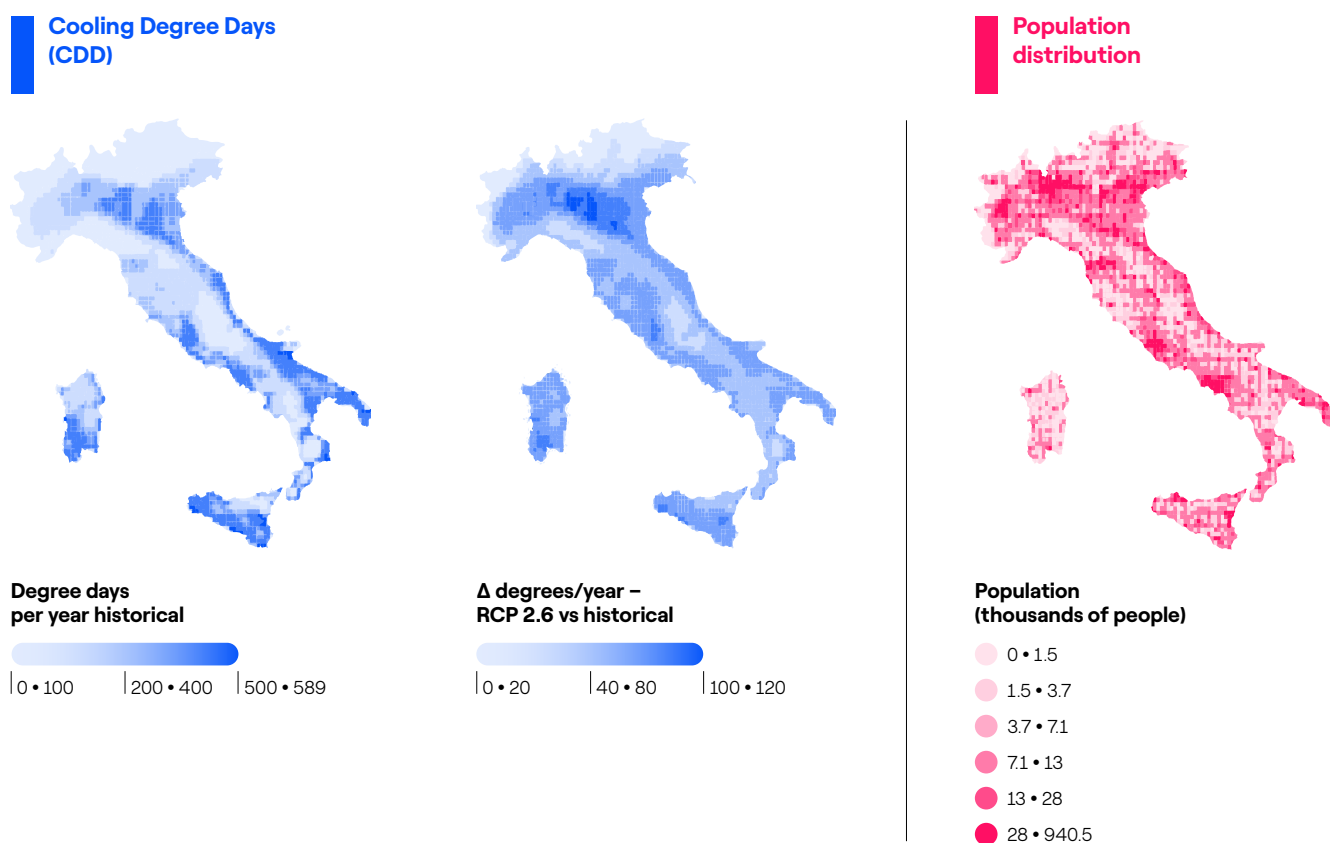
provided by the FWI can be useful in characterizing fire risk trends to support the business in managing it properly. The studies conducted, which examine the change in projections to 2030–2050 compared to 1990–2020, show that in all scenarios there is an increase in the number of high-risk days (index value > 45) in the summer season. This change mainly affects the islands and the southern regions of the country, where the increase in extreme risk days ranges from about +6 to +8 days compared to the historical period.

**Chronic phenomena:** chronic changes in temperature can be analyzed to obtain information on the potential effects on cooling and heating demand in local energy systems. Similar to what was done in 2020, Heating Degree Days (HDD) were used to measure heating requirements, that is

(4) The number of average days per year for each province were calculated, under the following conditions: at least five days in a row with a minimum temperature above the 95th percentile of the historical distribution (1990–2020) and at least 18 °C. In addition, these five days must be characterized by the absence of rain, and at least one day must have a maximum temperature above the 95th percentile of the historical distribution (1990–2020). This metric was calculated by considering the entire country at the original resolution of the climate data (approximately 12 km x 12 km). Therefore, the high-resolution data were aggregated according to each province, considering as a single heat wave the phenomenon occurring at the same time on several pixels within the same province, and considering as duration the maximum width by combining the various pixels.

the sum, extended to all days of the year with  $T_{\text{average}} \leq 15^{\circ}\text{C}$ , of the differences between the indoor temperature ( $T_{\text{indoor}}$  assumed as  $18^{\circ}\text{C}$ ) and the average temperature, and the Cooling Degree Days (CDD), which is the sum, extended to all days of the year with  $T_{\text{average}} \geq 24^{\circ}\text{C}$ , of the differences between the  $T_{\text{average}}$  and  $T_{\text{indoor}}$  (assumed as  $21^{\circ}\text{C}$ ), respectively for heating and cooling requirements. Average country data were averaged over the nation, weighting each geographic node by population through the use of Shared Socioeconomic Pathways associated with each RCP scenario. The figure shows the CDDs, which were calculated across Italy at high resolution for the historical period, and

the expected average variation in the RCP 2.6 scenario. It also shows how the distribution of population is used as a basis for calculation at a national level.<sup>(5)</sup> Generally speaking, an increase in CDDs is observed in the period 2030–2050, which are consistently higher than over the historical period, with an increasing trend in the various scenarios RCP 2.6 (+~45%), RCP 4.5 (+~80%) and RCP 8.5 (+~110%). On the other hand, a reduction in heating demand is observed, which is -8% in the RCP 2.6 scenario, -12% in RCP 4.5 and -16% in RCP 8.5 compared to the 2000–2020 period.



Cooling degree days (CDD) in the historical period (1990–2020) and expected change in the RCP 2.6 scenario. The distribution of population (1990–2020) on the same grid as the climate models is shown on the right, whereby the most densely populated areas that have the biggest impact on the calculation of the country-level metric are clearly visible.

With regard to total rainfall, variations in this phenomenon in the basins of interest for the Group's hydroelectric generation were analyzed. Based on this analysis, in which the period 2030–2050 was compared with the period 1990–

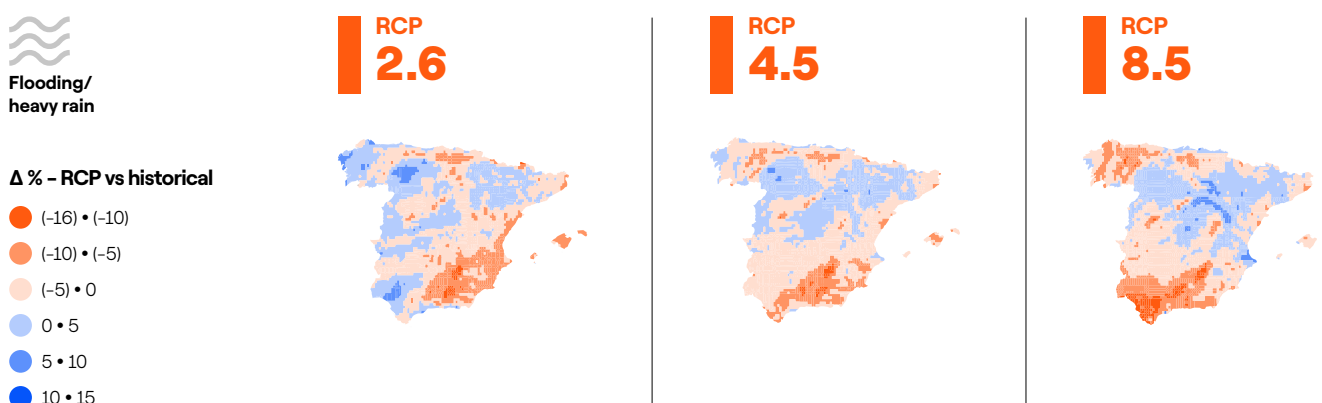
2020, no significant changes emerge, with a general trend of slight decrease in Central and Southern Italy in the RCP 2.6 scenario.

(5) Please note that the population density varies in the various SSPs, while population distribution across the country is much the same.

## Spain

**Acute phenomena:** for Spain, the acute rainfall phenomenon was analyzed first, calculated as average annual millimeters in the periods of reference.<sup>(6)</sup> As shown in the following figure, in which the 2030-2050 period is compared with the historical period 1990-2020, this acute event will be subject to variations throughout most of Spain as early

as in the RCP 2.6 scenario. In particular, heavy rainfall will increase in the north, whereas in the southeast it is expected to decrease. The other scenarios show that there will be a decrease in heavy rainfall in the southern part of the country (in RCP 8.5 this reduction also affects the north-west).

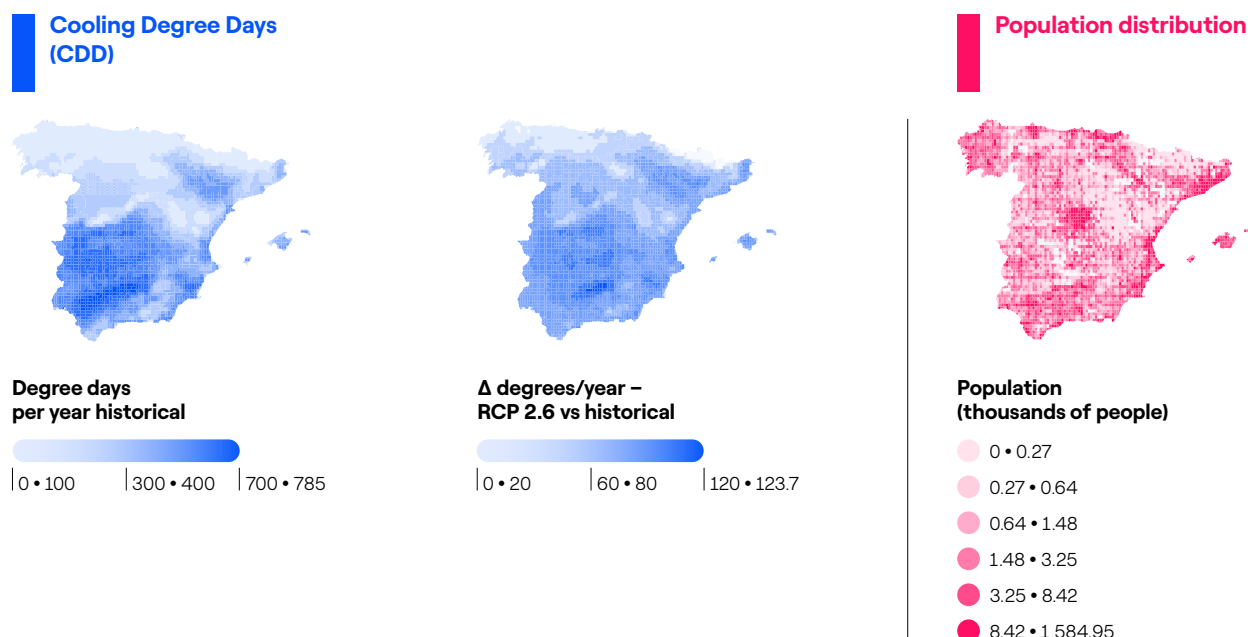


Percentage variation of acute rainfall in different CPRs (2030-2050) compared to the historical value (1990-2020).

With regard to fire risk, the area of Spain that will see the biggest increase, when compared to the historical period, in the number of days per year with Fire Weather Index greater than 45 (i.e. extreme risk) is the center-south, in all future scenarios. This increase is greater in worst-case scenarios (RCP 8.5) than in the RCP 2.6 scenario. Heat waves, as already highlighted in the analyses published previously by the Group, will be more geographically widespread and more frequent in the period 2030-2050, especially in the southern part of the country.

**Chronic phenomena:** analysis of potential cooling and heating demand has been refined and updated in a similar way to that for Italy. In terms of Heating Degree Days and Cooling Degree Days, compared to the period 1990-2020, HDDs are estimated to decrease in all scenarios in the period 2030-2050, from around -10% in RCP 2.6 to -20% in RCP 8.5, and RCP 4.5 in the middle. The data also confirm an increase in CDDs (+34%) in the RCP 2.6 scenario and a change of +61% and +87% in the RCP 4.5 and RCP 8.5 scenarios, respectively.

(6) Extreme rainfall is the sum of daily rainfall above the 95th percentile of the historical distribution in a specific period.



Cooling degree days (CDD) in the historical period (1990–2020) and expected change in the RCP 2.6 scenario. The distribution of population (1990–2020) on the same grid as the climate models is shown on the right, whereby the most densely populated areas that have the biggest impact on the calculation of the country-level metric are clearly visible.

With regard to total rainfall, variations in this phenomenon in the basins of interest for the Group's hydroelectric generation were analyzed. Based on this analysis, the data do

not show appreciable variations when comparing the RCP 2.6 scenario (2030–2050) and the historical period (1990–2020), with a general trend of slight decrease.

## Latin America

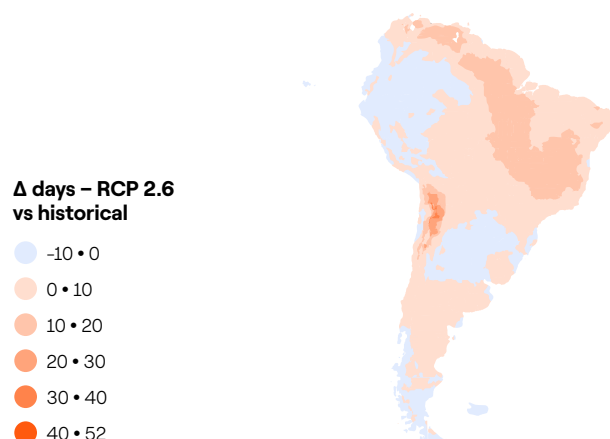
**Acute phenomena:** the fire risk, measured as the number of days per year with a FWI greater than 45 (extreme risk), differs from one area to another. As the figure on the left shows, when comparing the RCP 2.6 scenario (2030–2050) with the historical period (1990–2020), there is an increased number of days at high risk of fires in most parts of Brazil and in the Atacama Desert. In the rest of South America, it stays the same or decreases a little. Interestingly, the risk of fire is particularly high in areas with the lowest

current Normalized Difference Vegetation Index (NDVI) values (as shown in the figure on the right<sup>(7)</sup>), that is, in areas with sparse vegetation. Some areas of the Amazon, in the heart of Brazil, are an exception, as they show not only a sharp increase in the number of days at risk of extreme fire, but also high vegetation coverage. It is essential to combine the fire risk index and vegetation, since the latter can potentially fuel fires and increase the likelihood of fire spreading.

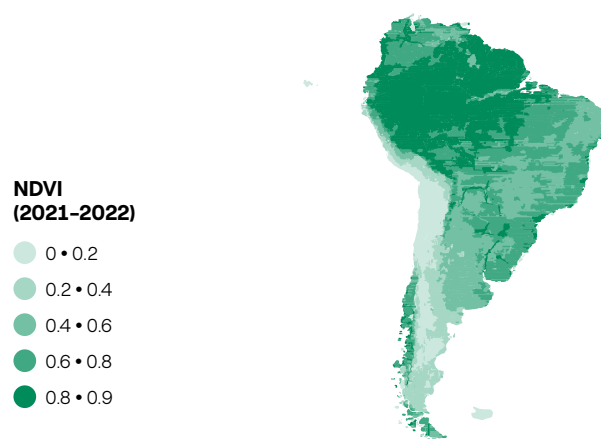
(7) The map in the figure on the right shows processed NASA data on the Normalized Difference Vegetation Index from June 2021 to June 2022. The NDVI quantifies vegetation by measuring the difference between near-infrared light (which is strongly reflected by vegetation) and red light (which is absorbed by vegetation). This is a good indicator of vegetation growth and density. The higher the NDVI, the denser and healthier the vegetation.



## Fire Weather Index RCP 2.6



## Normalized Difference Vegetation Index



Variation in the number of average days per year with a FWI greater than 45 between the RCP 2.6 period (2030–2050) and the historical period (1990–2020) (left) and the NDVI vegetation index from June 2021 – June 2022 (right).

The “Warm Spell Duration Index” (WSDI) is a standard indicator that can be used to evaluate extreme temperatures.<sup>(8)</sup> Comparing the period 2030–2050 with the period 1990–2020, the data show a significant increase in days characterized by heat waves already in the RCP 2.6 scenario, especially in some areas of Brazil, Colombia, Peru and northern Chile. This increase in extreme temperatures will be even more pronounced in worst-case scenarios (RCP 8.5).

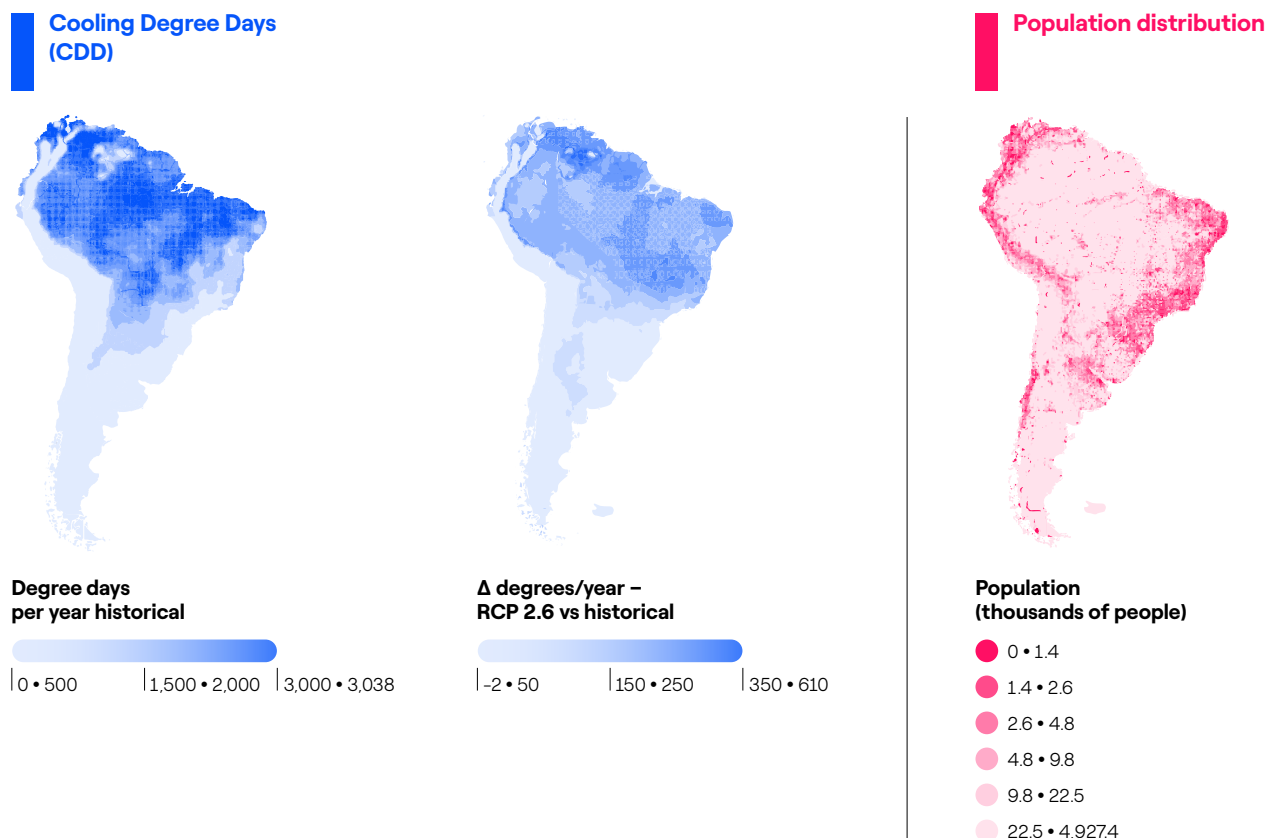
For extreme precipitation, daily rainfall above the 95th percentile was considered, similar to what was done for Italy and Spain. Future changes for this phenomenon are less homogeneous. For some areas, such as northern Brazil and northern Argentina, decreases compared to the historical reference period are expected in the RCP 2.6 scenario. On the other hand, in other areas, such as western Colombia and parts of Brazil and Peru, heavy rainfall increases are expected.

**Chronic phenomena:** a study was carried out on potential changes in heating and cooling demand related to chronic

changes in temperature. Again, changes in Heating Degree Days and Cooling Degree Days over the period 2030–2050, compared to the period 1990–2020, were calculated from data from 6 models, with a resolution of 25 km x 25 km. Average country data were averaged over the nation, weighting each geographic node by population through the use of Shared Socioeconomic Pathways (SSPs) associated with each RCP scenario. In each country studied, CDDs increase progressively in all scenarios: in the RCP 2.6 scenario they increase by 35%<sup>(9)</sup> in Chile, while the increase is between 13% and 18% in the other countries examined. In the RCP 4.5 scenario, this increase becomes 113% for Chile and slightly more than 25% for Argentina, Brazil and Peru, while it stands at 18% for Colombia. The increase in CDDs with respect to the historical period is even more marked in the RCP 8.5 scenario. With regard to HDDs, in the RCP 2.6 scenario considerable reductions are estimated in Colombia (–52%), Brazil (–21%) and Peru (–14%), as well as a slight decrease in Chile (–5%). This trend intensifies in the RCP 4.5 scenario: ~–62% in Colombia, ~–27% in Brazil, ~–20% in Peru and –8% in Chile.

(8) The WSDI considers heat waves characterized by at least 6 consecutive days with a maximum daily temperature above the 90th percentile of the historical distribution.

(9) In Chile, the percentage increase is higher than in the other LATAM countries, since the absolute values of CDD are very low. In fact, historically, CDDs are very close to zero throughout most of the country, with a few degrees Celsius annually only in the central part of the country.



Cooling degree days (CDD) in the historical period (1990–2020) and expected change in the RCP 2.6 scenario. The distribution of population (1990–2020) on the same grid as the climate models is shown on the right, whereby the most densely populated areas that have the biggest impact on the calculation of the country-level metric are clearly visible.

With regard to total rainfall, variations in the basins of interest for the Group's hydroelectric generation were analyzed. Analyses comparing 2030–2050 projections in the three scenarios to the historical period 1990–2009 show a trend of rainfall reductions in Argentina and Colombia. A slight increase or decrease in total rainfall is expected for the RCP 2.6 scenario in Brazil, based on the group of

basins in question. In contrast, in Peru, rainfall will basically stay the same in the RCP 2.6 scenario. Ultimately, in Chile, as in Argentina and Colombia, total rainfall is expected to decrease in the lowest-emission scenario, but this decrease may have already taken place over the last few years (as it is already decreasing compared to historical levels).

## North and Central America

**Acute phenomena:** first of all, the variation of frost days, that is, the average number of frost days per year,<sup>(10)</sup> was analyzed for North America and Central America in several future scenarios (2030–2050) compared to the historical period (1990–2020). As shown in the maps in the following figure, the number of frost days will decrease mainly in the

western part of the macro-region, with major variations in terms of magnitude in worst-case RCP scenarios. It is important to stress the fact that the decrease in frequency does not mean that the intensity of this acute phenomenon has increased, which is a topic that the Group is currently looking into.

(10) For the sake of accuracy, frost days are the number of days per year when the minimum temperature  $T_{min}$  is lower than 0 °C.

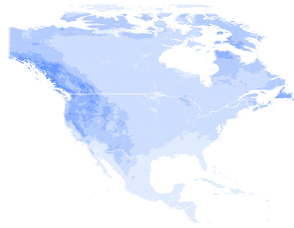


Heavy snow/  
icing

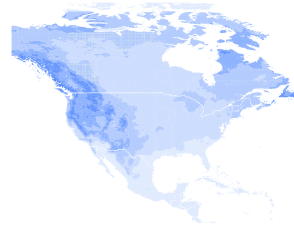
$\Delta$  days/year – RCP vs  
historical

- -17 • -14
- -14 • -12
- -12 • -10
- -10 • -8
- -8 • -6
- -6 • -4
- -4 • -2
- -2 • 1

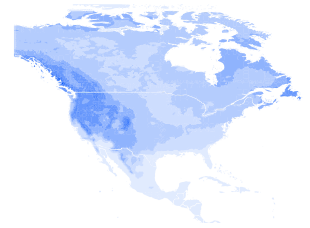
RCP  
2.6



RCP  
4.5



RCP  
8.5



Variation in the average number of frost days per year between the various RCP scenarios (2030–2050) and the model history (1990–2020).

With regard to heat waves, as in the case of South America, the WSDI was studied. When comparing the 2030–2050 period with the historical period 1990–2020, we can expect a significant increase in the number of days characterized by heat waves as early as the RCP 2.6 scenario, especially in Central America and along the west coast of North America. This increase in the WSDI will be even more pronounced in the RCP 8.5 scenario.

The number of days in a year with a high fire risk, namely with a FWI greater than 45, is basically the same across most of the macro-region in the RCP 2.6 scenario (2030–2050) compared to the historical period (1990–2020). In the western part of the US and Mexico, instead, the number of high-risk days is expected to increase, becoming increasingly higher in the worst-case scenario.

Furthermore, acute precipitation is expected to increase in nearly all of North America in the RCP 2.6 scenario compared to the historical period. It is important to highlight the fact that the magnitude of such increases varies from one area to another. Also in the RCP 2.6 scenario, in Central America, heavy rainfall will decrease in the central part of the region. In other areas it will remain the same or will slightly increase.

**Chronic phenomena:** as shown in the figure below, the average annual temperature increases in all future scenarios (2030–2050) compared to the historical period (1990–2020). On the whole, the increases are greater in the RCP 8.5 scenario than in the RCP 2.6 one. In all RCP scenarios, the regions that will get warmer are the ones located in the far north.

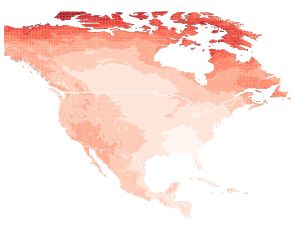


Average  
temperature

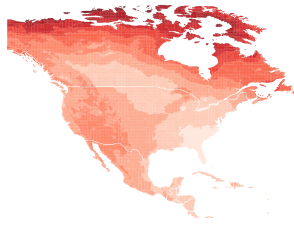
$\Delta$  °C – RCP  
vs historical

- 0.67 • 1
- 1 • 1.5
- 1.5 • 2
- 2 • 2.5
- 2.5 • 2.65

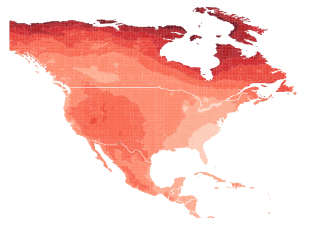
RCP  
2.6



RCP  
4.5



RCP  
8.5



Average temperature variation between the various RCP scenarios (2030–2050) and the model history (1990–2020).

By comparing the various RCP scenarios (2030–2050) and the model history (1990–2020), the expected total annual rainfall tends to decrease in Central America, while in North America it will remain the same or will increase depending on the area.

For further information, please read the [2022 Integrated Annual Report](#).

# The strategy to tackle climate change

3-3 | 201-2 | TCFD: Strategy |

Enel's efforts to fight against climate change are one of the key pillars of the Group's strategy in the short and long term. On the one hand, Enel plays its part in driving the global energy transition towards a zero-emission model as a **mitigation** lever and, on the other hand, by setting up the best **adaptation** measures in order to adapt to changes that will eventually take place, in greater or lesser frequency and intensity.

Mitigation includes all initiatives intended to minimize the direct and indirect impact of the Group's activities on climate change, that is, first and foremost, all measures taken to reduce greenhouse gas emissions.

Adaptation, instead, includes all the initiatives that Enel intends to implement so as to make its assets more resilient, increase its capacity to react to extreme climatic events, and come up with strategic options and business models that will address various needs as the climate changes.

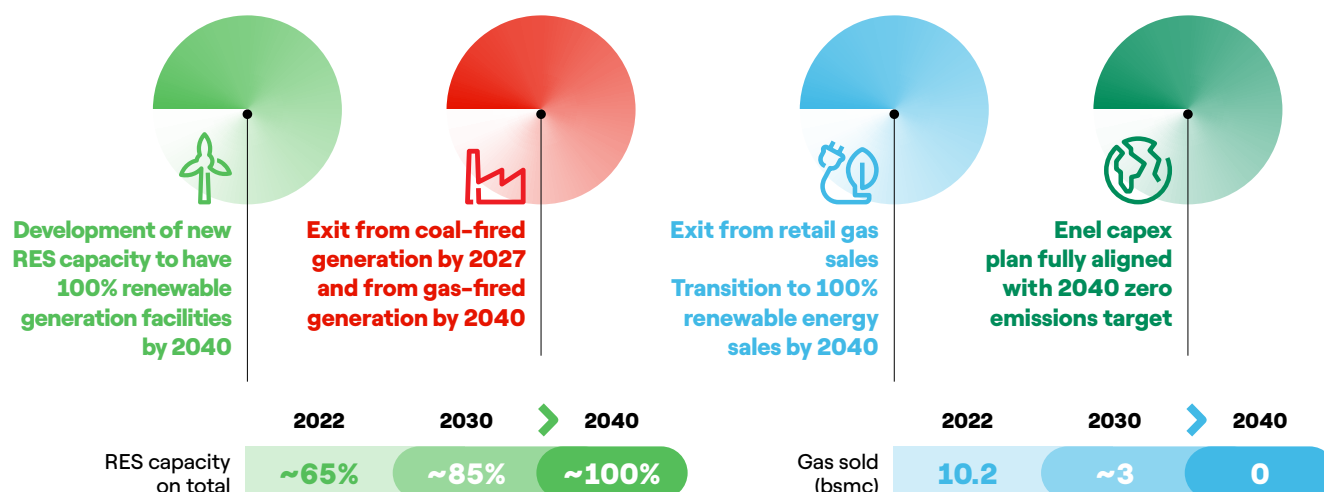
In each of these two areas, there are challenges but also opportunities that the Group is aiming to seize through its strategy. According to Enel's vision, adapting to climate change also entails exploring new business opportunities associated with the changed environment, developing new technologies and creating value from acquired skills.

The impact of climate change can also be mitigated by researching breakthrough technologies that allow for a greener economy by design or which, for example, simply improve performance and circularity.

## Medium and long-term strategy

The Group's decarbonization strategy, combined with its drive toward electrification, once again reaffirms its commitment to achieving zero emissions by 2040. In this respect, goals have also been set with regard to both direct and indirect emissions throughout the Group's value chain. Specifically, the strategy is based on:

- **the decarbonization of the generation mix**, by progressively developing renewable energy while ceasing to produce electricity from thermal power sources;
- **the electrification of final energy consumption**, by promoting new products and services for customers while gradually exiting the business of gas sales to end consumers (to be completed by 2040);
- **the digitalization and upgrade of distribution network**, so as to tackle the ongoing energy transition and ensure service quality for customers.



## Energy mix decarbonization:

Enel expects to reach about 85% of its installed capacity from renewable sources by 2030, compared to around 65% in 2022, also considering the managed and not consolidated capacity (63.3%, considering only the consolidated capacity). In addition, it promotes a gradual reduction in the share of thermoelectric capacity in its energy mix, aiming to phase out coal-fired generation by 2027 and gas by 2040, thus achieving a 100% renewable, zero-emission energy mix by 2040.

## Electrification:

Electric mobility is one of the top priorities in the field of electrification. Expanding the electric vehicle charging infrastructure is one of the prerequisites for achieving widespread use of electric cars and is therefore absolutely essential for the transition to zero-emission mobility. Enel X Way shares the same goal and is currently expanding its charging network even further, with the aim of having more than 4 million charging points by 2030.

Another key aspect is the electrification of residential consumption, which Enel will be encouraging by promoting heat pumps for domestic heating and induction cooktops in kitchens, resulting in an increased electrification rate of Enel's customers from 17% today to around 20% in 2025 and 30% in 2030. This will allow them to reduce their total energy expenditure by 5% by 2025 and by around 20% by 2030, as well as their carbon footprint by 2030 as a result of a reduction in gas sales from approximately 10 bcm today to around 3 bcm in 2030, and then down to zero in 2040.

## Distribution grids:

Moreover, Enel will support electrification also by investing in infrastructure, since grids are the key enablers of the energy transition. Out of the total amount to be invested in grids over the next few years, an increasingly large portion will be spent on expanding the number of connections with new users and on increasing the flexibility and capacity of the grid so that it can handle a growing share of distributed generation. Smart grids, clean energy, and energy efficiency are accessible to Enel customers through new features in each smart meter. The Group has already installed 46 million electronic meters to date and expects to reach 80 million units by 2030.

## Short-term strategy – Investment Plan 2023–2025

The Group's investments in 2023–2025, totaling approximately 37 billion euros, will be primarily aimed at promoting **an integrated industrial supply chain to achieve sustainable electrification**, which is becoming more and more necessary in global energy systems. This will involve supplying around 90% of fixed-price sales in “core” countries (Italy, Spain, the United States, Chile, Brazil and Colombia) with carbon-free electricity in 2025 (compared to 70% in 2022), increasing generation from renewable sources to about 75% of the total, as well as achieving a digitalization rate of grid customers of around 80%. Specifically:

- The Group intends to add around 21 GW of installed renewable capacity (of which around 19 GW in “core” countries) by 2025, so it is well on track to meet its decarbonization targets, in line with the Paris Agreement. The Group intends to develop this renewable capacity through a market-leading pipeline of around 455 GW. Ultimately, the Group is planning to reduce installed thermoelectric capacity by 42% in 2025 (16 GW) compared to 2022 values (27.7 GW).
- As for **end customers**, it plans to accelerate the provision of value-added services and the implementation of a state-of-the-art infrastructure over the next three years, in particular:
  - charging points for electric vehicles (from approximately 0.3 million in 2022 to approximately 1.4 million in 2025);
  - behind-the-meter storage systems (from around 75 MW in 2022 to around 352 MW in 2025);
  - demand response (from around 8.5 GW estimated in 2022 to around 12.4 GW in 2025).
- As for **the grids**, the Group is planning to invest approximately 15 billion euros in the 2023–2025 period, mostly in Europe (more than 80% of investments), since the Group now has a more geographically balanced presence and the regulatory frameworks are favorable, so as to promote the role of grids as enablers of the energy transition and as a driving force in the fight against climate change.

By adopting the **Stewardship business model**, Enel will also be mobilizing Group and third-party investments worth a total of approximately 15 billion euros. Such resources are instrumental in adding new generation from renewable sources, as well as a new infrastructure and services to accelerate the electrification process for the Group's customers.



Around 94% of the Group's total investments in 2023–2025 are in line with the United Nations Sustainable Development Goals ("SDGs"), directly pursuing SDGs 7 ("Affordable and clean energy"), 9 ("Industry, innovation and infrastructure") and 11 ("Sustainable cities and communities"), all of which are functional to SDG 13 ("Climate action"). The investments envisaged in the Group's Strategic Plan are in line with the decarbonization and greenhouse gas reduction targets, based on a specific methodology whereby investments made in renewables and retail pow-

er inherently fall under SDG 7, investments in the distribution network fall under SDG 9, and investments in Enel X are related to SDG 11. Therefore, the 94% referred to above does not include investments in conventional generation (including investments in maintenance) and in retail gas.

In addition, over 80% of the Group's investments in the 2023–2025 period will be aligned with the EU Taxonomy criteria due to their substantial contribution to climate change mitigation.



# Risks and opportunities connected with climate change

3-3 | 201-2 | TCFD: Strategy and Risk Management

The process for defining the Group's strategy is accompanied by a careful analysis of the risks and opportunities connected to it, also including the aspects related to climate change. Every year, before the Board of Directors examines the Strategic Plan, the Control and Risk Committee is presented with a quantitative analysis of the risks and opportunities related to the Group's strategic positioning, which includes aspects related to the climate, such as regulatory factors and weather and climate phenomena.

In order to facilitate the proper identification and management of risks and opportunities related to climate change, a **Group policy** was published in 2021 that describes common guidelines for assessing the risks and opportunities arising from climate change. The "Climate change risks and opportunities" policy defines a shared approach for the integration of climate change and energy transition issues into the Group's processes and activities, thus informing industrial and strategic choices to improve business resilience and long-term sustainable value creation, consistent with the adaptation and mitigation strategy. The main steps considered in the policy are as follows:

- **prioritizing phenomena and scenario analysis.** These activities include the identification of physical and transition phenomena relevant to the Group and the consequent development of scenarios to be considered and developed through analysis and processing of data from internal and external sources. Functions can be developed for the phenomena identified that link the scenarios (e.g. data on the change in renewables) to business operations (e.g. the change in potential output);
- **impact assessment.** Includes all analyses and activities necessary to quantify the effects at the operational, economic and financial levels, depending on the processes into which these are integrated (e.g. design of new constructions or operational performance appraisal, etc.);
- **operational and strategic actions.** Information from previous activities is integrated into processes, informing Group decisions and business activities. Examples of activities and processes that benefit are capital allocation, e.g. for evaluating investments on existing assets or new projects; defining resilience plans, risk management and financing activities and engineering and business development activities.

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 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 operation-

al approaches to managing them, comprising mitigation and adaptation measures. Two main macro-categories of risks/opportunities are identified:

- those connected with developments in physical variables;
- those connected to the evolution of the transition scenarios.

The physical risks are divided into acute (or extreme events) and chronic: the former are linked to extremely intense weather-climatic conditions, while the latter are linked to gradual and enduring changes in climatic conditions.

Extreme events expose the Group to: potential unavailability of assets and infrastructure for longer or shorter periods of time, service restoration costs, inconvenience for customers, etc. Chronic changes in climatic conditions, on the other hand, expose the Group to other risks or opportunities: for example, structural temperature changes can impact electricity demand and affect generation, while changes in rainfall or wind patterns could impact the Group's business in terms of lower or higher output. Generally speaking, adapting to the changes that will most likely take place in the future also leads to efforts in innovation and strategic positioning: it may be possible to develop new businesses and better products in order to live sustainably in a changed environment.

With regard to the energy transition process, marked by a progressive reduction in CO<sub>2</sub> emissions, there are risks and opportunities associated with the changing regulatory and legislative context, with trends in technological and competitive development, with electrification and behavior, and with the resulting market trends.

In line with the climate and transition scenarios that Enel has used to define risks and opportunities, it appears that the main phenomena related to the transition are now becoming evident depending on the behavior adopted by customers, the industrial strategies adopted by various sectors of the economy and regulatory policies, including fiscal policies. By the year 2030, transition trends will be observable as the context evolves: the Enel Group has decided to lead and pave the way for the transition, and is prepared to seize any associated opportunities. As previously mentioned, strategic choices that focus strongly on energy transition, with more than 90% of investments being dedicated to improving some of the SDGs, make it possible to adopt risk mitigation "by design" and to maximize opportunities by maintaining a position that takes into consideration the identified medium and long-term phenomena. Strategic choices go hand in hand with the operational best practices implemented 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	<b>Risk:</b> 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	<b>Risk/opportunity:</b> 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	<b>Risk/opportunity:</b> policies on CO <sub>2</sub> 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	<b>Risk/opportunity:</b> 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	<b>Opportunity:</b> 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 outlined 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 over three time horizons: the short-medium term (1-3 years), in which sensitivity analyses based on the Strategic Plan presented to investors in 2022 can be performed; medium-term (until 2029), in which it is possible to assess the effects of the energy transition; and long-term (2030-2050), in which chronic structural changes in the climate should begin to emerge.

## Transition phenomena: business effects, risks and opportunities

As regards the risks and opportunities associated with transition variables, we consider 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, with priority on events with greater relevancy. The main identified risks and opportunities are described below.

### Policy and Regulation

- **Limits on emissions and carbon pricing:** the enactment of laws and regulations that introduce more stringent emissions limits by government action (non-market driven) and market-based mechanisms.
  - **Opportunities:** Command & Control regulations and market-based mechanisms strengthening CO<sub>2</sub> price signals to foster investment in carbon-free technologies.
  - **Risks:** lack of a coordinated approach among the various actors and policy-makers involved and limited effectiveness of the policy instruments deployed, with an impact on the speed of the trend toward electrification and decarbonization in the various sectors, compared with a decisive group strategy focused on the energy transition.
- **Policies and regulation to accelerate the energy transition and energy security:** introducing policies, regulatory frameworks and market design revisions that promote the energy transition, consequently guiding the energy system toward the use of renewable energy sources as

The following will describe the main sources of risks and opportunities identified, operational best practices for managing weather and climate phenomena, and qualitative and quantitative impact assessments conducted to date. All of the above activities are performed throughout the year through an ongoing effort to analyze, evaluate and manage the information processed. As TCFD states, the process of disclosing risks and opportunities related to climate change will be gradual and incremental from year to year.

the mainstream approach in the energy mixes of countries, greater consumer electrification, energy efficiency, flexibility of the electrical system and upgrading of infrastructure.

- **Opportunities:** creating a more favorable framework for investing in renewables, also through the development of long-term markets (PPAs, CfDs), electrical technologies and distribution networks in line with the Group's strategy.
- **Risks:** lengthy administrative authorization processes and ineffective market design and regulatory frameworks in core countries can lead to reduced asset profitability and limited opportunities for growth.
- **Resilience regulation and adaptation:** improvement of standards or introduction of *ad hoc* mechanisms to regulate investments in resilience in the context of the evolution of climate change.
  - **Opportunities:** benefits from investments that reduce service quality and continuity risks for the community.
  - **Risks:** in the case of especially severe extreme events with a greater-than-expected impact, there is a risk of failure to recover within an adequate timeframe and consequently a risk to Enel's reputation.
- **Financial measures for the energy transition:** developing policies and financial instruments that promote the energy transition, which should be capable of supporting an investment framework and a long-term, credible and stable positioning of policy-makers. 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 not sufficient to provide incentives consistent with an overall positioning tailored to the energy transition, uncertainty or slowdown in the introduction of new instruments and rules due to the deterioration in finances.

## Market

- **Commodity price dynamics:** changes in market dynamics, such as those relating to commodity price volatility, may influence the behavior of traders, policy makers and customers.
  - **Opportunities:** accelerating clean electrification as a solution for cutting energy costs and limiting exposure to commodity volatility. Customers are more likely to switch from conventional fossil-fuel technologies to efficient electrical technologies.
  - **Risks:** a “disorderly” energy transition due to the introduction of potentially distortive measures.
- **Market dynamics:** end users are more likely to choose more sustainable technologies as they are more aware of climate change risks and due to greater regulatory pressure.
  - **Opportunities:** positive effects associated with the growth in electricity demand and the greater room for renewables, also thanks to an increased demand for long-term contracts (PPAs).

## Technology

- **Technology penetration to support the transition:** gradual penetration of new technologies such as storage, demand response and green hydrogen; digital lever for transforming operating models and “platform” business models.
  - **Opportunities:** investments in the development of technology solutions, as well as positive impacts from increased electricity demand and increased room for renewables from green hydrogen generation.
  - **Risks:** slowdowns and interruptions to the raw materials supply chain, including metals for batteries (such

as lithium, nickel and cobalt) and semiconductors, could lead to delays in procurement and/or increased costs, such as to slow down the penetration of renewables, storage and electric vehicles.

## Products and services

- **Electrification of residential 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 residential emissions will expand (for example, the use of heat pumps for heating and cooling).
  - **Opportunities:** increase in electrical consumption in the context of reducing energy consumption, thanks to the improved efficiency of the electric carrier. More opportunities to provide beyond commodity services and the chance of reducing the energy expenditure and carbon footprint of customers. Increasing investment in networks to drive consumer electrification.
  - **Risks:** additional competition in this market segment. This phenomenon depends on whether electricity networks are well developed, which is crucial for ensuring increasing load levels 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 large-scale industrial consumers.
  - **Opportunities:** positive effects of the increase in electricity demand and greater margins connected with the penetration of electric transportation and the relative beyond commodity services.
  - **Risks:** additional competition in this market segment.

The Group has already implemented strategic actions to mitigate the potential risks and exploit the opportunities associated with transition variables. Shared long-term value can be created through an industrial and financial strategy that incorporates ESG factors, with an integrated approach focusing on sustainability and innovation. The strategy focusing on full decarbonization and energy transition enables the Group to be resilient to risks resulting from the introduction of more ambitious policies for reducing emissions. It also maximizes opportunities for developing renewable generation, infrastructure and enabling technologies, partly through geographic positioning in countries with an integrated presence and by promoting stewardship activities.



To quantify the risks and opportunities deriving from the energy transition in the long term, two transition scenarios, described in the paragraph “Energy transition scenarios”. The effects of Slower Transition and Accelerated Transition scenarios have therefore been identified on the variables that can have the greatest impact on the business, in particular electricity demand, influenced by the dynamics of consumer electrification, and therefore of penetration of electrical technologies and the electricity generation mix. These considerations offer a basis for determining the Group’s strategic positioning in terms of resource allocation.

Enel’s reference scenario – the Paris scenario – entails a growing ambition in terms of decarbonization and energy efficiency, supported by greater electrification of final energy consumption and the development of renewable capacity. The dynamics related to the energy transition will bring increasing opportunities to the Group. In particular, in the retail electricity market, progressive electrification of final energy consumption – especially for transport and the residential sector – will lead to a considerable increase in electrical consumption to the detriment of other, more high-emissions energy carriers. Similarly, the gradual increase in the proportion of renewable energy in the energy mix is expected to lead to a reduction in the wholesale price of electricity in the medium to long term. However, this impact is limited, given that the market design based on the system marginal price is unchanged in the medium term. Possible alternative market structures could induce different effects.

In reference to the economic impacts that may result from the change in the transition scenarios, the Group has performed some analyses regarding impacts in terms of EBITDA that the Slower Transition and Accelerated Transition scenarios would bring to the 2030 results compared to the baseline Paris scenario.

With reference to consumer electrification, the Slower Transition scenario encompasses lower penetration rates of the most efficient electrical technologies, in particular electric cars and heat pumps, causing a decrease in electricity demand compared to the Paris scenario, which is estimated to cause limited impacts on the Retail commodity business & beyond. At the same time, lower electricity demand results in less development space for renewable capacity, with impacts on the generation business.

With reference to the Accelerated scenario, a more rapid reduction in the cost of green hydrogen generation technologies is assumed. This results in a higher penetration of this energy carrier, at the expense of blue and gray hydrogen, with a consequent additional effect on domestic electricity demand and renewable capacity installations compared to the Paris scenario.

For the different countries and regions, all scenarios, but to a greater extent the Paris and Accelerated scenarios, will involve a considerable increase in the complexities that will have to be managed by the grids. A significant increase is expected in fact in distributed generation and in other resources, such as storage systems, greater penetration of electric mobility with the relative charging infrastructures, as well as the increasing rate of electrification of consumption and the introduction of new actors with new methods of consumption. This context will involve a decentralization of the extraction/feed-in points, an increase in electric demand and the average requested power, a considerable variation in energy flows, which will require dynamic and flexible grid management. The Group therefore expects that in this scenario incremental investments will be necessary to guarantee the connections and suitable levels of quality and resilience, by promoting the adoption of innovative operating models. These investments must be accompanied by coherent policy and regulation scenarios to guarantee suitable economic returns for the Enel Grids Business Line.

**Time horizon**

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



Upside



Downside

**Quantification - range**

< €100  
mn

€100-300  
mn

> €300  
mn

**Mitigation  
Actions**

Category	Time horizon	Main drivers	Scenario	< €100 mn	€100-300 mn	> €300 mn	Mitigation Actions
Market	Medium	Electrification trend and unit consumption	<b>Accelerated:</b> 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	●			
			<b>Slower:</b> 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	<b>Accelerated:</b> impacts connected to increased volumes associated with an expansion of indirect penetration of electrification through green hydrogen (with potential increase in growth capacity)		●		
			<b>Slower:</b> 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	<b>Accelerated:</b> change in margins as a function of greater penetration of EV and distributed generation	●			
			<b>Slower:</b> 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.

# Physical phenomena: identification, assessment and management of risks and opportunities

## Chronic physical risks

The climate scenarios jointly developed with the International Centre for Theoretical Physics in Trieste, Italy, do not show any certainty of structural changes before 2030, while some structural changes may begin to take place between 2030 and 2050. Basically, even though weather changes are being recorded, which are often significant, it is nevertheless difficult to determine in the short term whether certain phenomena are changing structurally, that is, whether average reference values are already changing. This can be established in the long run with probability intervals.

The main impacts of chronic physical changes can produce similar effects on the following variables:

- **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 and/or reduction in hydroelectric 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 is working 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, chronic events relevant to each technology were identified and analyses of their impacts on manufacturability were initiated.

Event	Priority					
	High	Low	Not relevant	High	Low	Not relevant
	Rain/snow	Wind	Solar radiation	Sea level	Air temperature	River/sea temperature
Thermal	●	●	●	●	●	●
Solar	●	●	●	●	●	●
Wind	●	●	●	●	●	●
Hydro	●	●	●	●	●	●
Storage	●	●	●	●	●	●
Geothermal	●	●	●	●	●	●
Enel Grids	●	●	●	●	●	●
Enel X Global Retail	●	●	●	●	●	●

**The initial scenario analysis has shown that chronic structural changes in the recent trends of physical variables will begin to occur in a considerable manner starting from 2030.**

However, in order to obtain an indicative estimate of the potential impacts, and include the possibility of the early onset of chronic effects, it is possible to test sensitivity of the Industrial Plan to the factors potentially influenced by the physical scenario, regardless of any direct relationship with climate variables. The existing Industrial Plan was created based on the information contained in the average scenarios for chronic phenomena, so that the possible effects of trends in climatic variables could also be taken into consideration.

## **Analyses of the impact of chronic climate change on renewable generation**

A number of *ad hoc* functions were created for each renewable technology (wind, solar and hydroelectric) and plant in order to calculate the impact of the chronic effects of climate change on the generation of our assets. For each variation in climate variables (such as temperature, radiation, wind speed and rainfall), these functions associate likely changes in the electrical output of the plants in our portfolio.

The first step in calibrating these “link” functions was to use the historical data of the weather-climate variables and the internal references of the observed energy output of our plant fleet. This allowed us to obtain “link” functions that meet the specific characteristics of each renewable plant and technology.

As a result, we were able to study the chronic climate impacts for possible future forecasts of climate variables (RCP 2.6, 4.5 and 8.5 scenarios).

In addition to chronic phenomena involving average structural changes, it is also important to study the volatility that is characteristic of weather and, consequently, more short-term. Information obtained from the ranges of variation of chronic trends predicted by climate scenarios was taken as input for strategic planning, as was the historical volatility of meteorological data by analyzing variations in electricity generation (TWh) over the last 10 years.

Weather and climate fluctuations can lead to adjustments, since the output of power plants feeds sourcing for selling energy to customers. This means that reductions in the amount of energy used for renewable generation may lead to sourcing imbalances, which may result in missing

volumes being purchased on the market in order to drive the business strategy. On the other hand, increased generation from renewable sources may lead to reduced purchases of volumes on the market (or even more sales).

Based on the analyses conducted at each plant, which were then aggregated, it was calculated that, on average, hydroelectric generation may slightly decrease in the future (with substantial differences between sites), with average variations at country level ranging between -1% and -5% in the 2030-2050 period in the RCP 2.6 scenario compared to historical values. The average changes in wind power output will largely depend on the location of the assets, with minor variations that can be either positive or negative. Ultimately, the effects for solar technology will be mostly positive, with average increases at a country level of up to 3% in the 2030-2050 period in the RCP 2.6 scenario. Such effects, aggregated at portfolio level, highlight the fact that the geographical and technological diversification plays a role in balancing the different variations.

## **Acute physical risks**

With regard to acute physical phenomena (extreme events), their intensity and frequency can cause significant and unexpected physical damage to assets and generate negative externalities associated with the interruption of service.

Within the scope of scenarios regarding climate change, the acute physical component continues playing an extremely important role when defining the risks to which the Group is exposed, both due to the wide geographical diversification of its asset portfolio and due to the primary importance of the renewable natural resources for the generation of electricity.

In the various cases, the acute physical phenomena such as wind storms, floods, heat waves, severe cold, etc., demonstrate a high level of intensity yet do not have a very high occurrence frequency in the short term, but, considering the medium and long-term climatic scenarios, this will increase considerably in the future.

Hence, for the reasons described above, the Group is currently managing the risk deriving from extreme events in the short term. At the same time, it is extending its methodology also to longer time periods (until 2050) according to the identified climate change scenarios (RCP 8.5, 4.5 and 2.6).

## Methodology for evaluating the risk of extreme events

In order to quantify the risk deriving from extreme events, the Group refers to a consolidated methodology for analyzing the catastrophic risk used in the insurance sector and in IPCC reports<sup>(11)</sup> Through its own insurance business units and the captive insurance company Enel Insurance NV, the Group is managing the various phases connected to risks deriving from natural catastrophes: from the assessment and quantification to the corresponding coverages to minimize the impacts. The methodology applies to all extreme events that can be analyzed, such as wind storms, heat waves, tropical cyclones, floods, etc. In all of these types of natural catastrophes, however, three independent factors can be identified that are summarized below.

- The **probability of the event ("hazard")**, that is, its theoretical frequency over a specific period of time: the "return time". In other words, a catastrophic event that has a return time of 250 years, for example, implies that it can be associated with a probability of 0.4% that it will occur in a year. This information, which is necessary for assessing the frequency of the event, is then associated with its geographical distribution with respect to the various areas where portfolio assets are located.
- Therefore, for this purpose, the Group uses "hazard maps" which associate, for the various types of natural catastrophes, each geographical points on the global map with the corresponding estimate of the frequency associated with the extreme event. This information, which is organized in geo-referenced databases, is provided by global reinsurance companies, meteorological consultancy companies or academic institutions.

- The **vulnerability**, that, in percentage terms, indicates how much value is lost and/or damaged upon occurrence of the catastrophic event. In more specific terms, therefore, it is possible to refer to the damage to the material assets the impact on the continuity of generation and/or distribution of electricity, and also the provision of the electric services offered to the end user.
- The Group creates and promotes specific vulnerability analyses, especially in the case of damage to its assets, related to every technology in its portfolio: solar, wind and hydroelectric power plants, transmission and distribution networks, primary and secondary substations, etc. These analyses are then, of course, focused on the extreme events that have greater impact on the various types of technology: as a result, this defines a matrix that associates the individual natural catastrophic events with the corresponding type of asset that is impacted in a considerable manner.
- The **exposure**, which is the set of economic values in the Group portfolio that can be considerably impacted by the occurrence of natural catastrophic events. Also in this case, the scopes of the analyses are specific to the various generation technologies, for network assets and for the services to the end user.

The combination of the three factors described above (**hazard**, **vulnerability** and **exposure**) provide the fundamental element for assessing the risk deriving from extreme events. From this point of view, the Group differentiates the risk analysis with respect to the climate change scenarios, depending on the specific nature of the various associated time periods. The following table summarizes the scheme adopted for the evaluation of 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 related to the type of extreme event, to the specifics of the damage type and to the technical requirements of the technology under consideration, Vulnerability is essentially independent of time horizons	Group values in the short term
Long term (at 2050 and/or 2100)	Hazard maps and specific studies for different IPCC RCP climate scenarios		Long-term evolution of Group values

(11) L. Wilson, "Industrial Safety and Risk Management". University of Alberta Press.  
T. Bernold. "Industrial Risk Management". Elsevier Science Ltd.  
Kumamoto, H. and Henley, E. J., 1996, Probabilistic Risk Assessment And Management For Engineers And Scientists, IEEE Press, ISBN 0-7803100-47.  
Nasim Uddin, Alfredo H.S. Ang. (eds.), 2012, Quantitative risk assessment (QRA) for natural hazards, American Society of Civil Engineers CDRM Monograph no. 5  
UNISDR, 2011. Global Assessment Report on Disaster Risk Reduction: Revealing Risk, Redefining Development. United Nations International Strategy for Disaster Reduction. Geneva, Switzerland.  
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, UK, and New York, NY, USA.



In the case of the vulnerability of assets within the portfolio, a table for the prioritization of the impacts of the main extreme events on the different technologies has been

defined in collaboration with the Group's relevant Global Business Lines:

Event	Priority						
	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

## Management of risks from short-term extreme events

Over the short term (1–3 years) the Group, in addition to what was illustrated above in terms of risk assessment and quantification, will implement actions targeted toward reducing the impacts on business due to extreme catastrophic events. It is possible to distinguish two main types of actions: defining an effective insurance coverage and the various climate change adaptation activities related to preventing damage that could result from extreme events. The main components of these actions are described below and, in the case of activities related to preventing and mitigating the damage, specific reference is made to the Group's Generation and Infrastructure and Networks Global Business Lines.

## Impacts of acute physical events on the Group

The Enel Group has a well-diversified portfolio in terms of technologies, country and regional distribution and asset size. Consequently, the exposure of the portfolio to natural risks is also diversified. The Group implements various risk

mitigation measures which, as will be described below, include both insurance coverage and other managerial and operational actions aimed at further reducing the Company's risk profile.

Indeed, empirical evidence shows negligible repercussions of such risks, as demonstrated by data for the last 5 years. Considering the most relevant events, defined as those with a gross impact >10 million euros, the cumulative value of the gross impact amounts to ~130 million euros, which represents less than 0.06% of the Group's insured values as of 2022, or ~224 billion euros, most of which are recovered through insurance payouts.

## Enel Group insurances

Every year, the Group defines global insurance programs for its business in the various countries where it operates. The two main programs, in terms of scope of coverage and volumes, are as follows:

- the **Property Program** ("Property Damage and Business Interruption Insurance Program") for material damage that can be caused to the assets and the resulting interruption in business. Therefore, in addition to the cost for the new reconstruction of the asset (or its parts), also the economic losses due to their shutdown in terms of gen-

eration and/or distribution of electricity are also remunerated according to the limits and conditions defined in the policies;

- the **Liability Program** ("General & Environmental Liability Insurance Program"), which covers third party damage following the impacts that extreme events can have on the assets and on the Group's business.

Starting from an effective assessment of the risk, suitable limits and insurance conditions can be defined in the insurance policies and this also applies in the case of natural extreme events related to climate change. In fact, in this latter case, the impacts on business can be considerable but, as shown in cases that occurred in the past and in various areas around the world, the Group has shown absolute resilience thanks to the wide insurance coverage limits, which are also the result of a solid reinsurance structure, as regards the Group's captive company Enel Insurance NV. In this context of effective insurance coverage, the measures implemented by the Group with regard to the preventive maintenance of electricity generation and network assets are equally important. In fact, while the effects of such activities are directly reflected in the mitigation of the impacts of extreme events, they are also an essential prerequisite for optimizing risk financing and for minimizing – compared to the insurance market – the costs of global hedging programs, including the risk associated with natural catastrophic events. This adaptive strategy consists of managerial strategies and actions, not only related to insurance, which change according to boundary conditions; for instance, the Group was able to substantially reverse the sharp upward trend in premiums in insurance markets by modifying its risk retention policies for assets and by

implementing internal risk transfer policies that reward better performing Business Lines when it comes to risk mitigation. From this perspective, the method and information extracted from *ex-post* event analyses play a crucial role in defining processes and practices for mitigating similar events in the future.

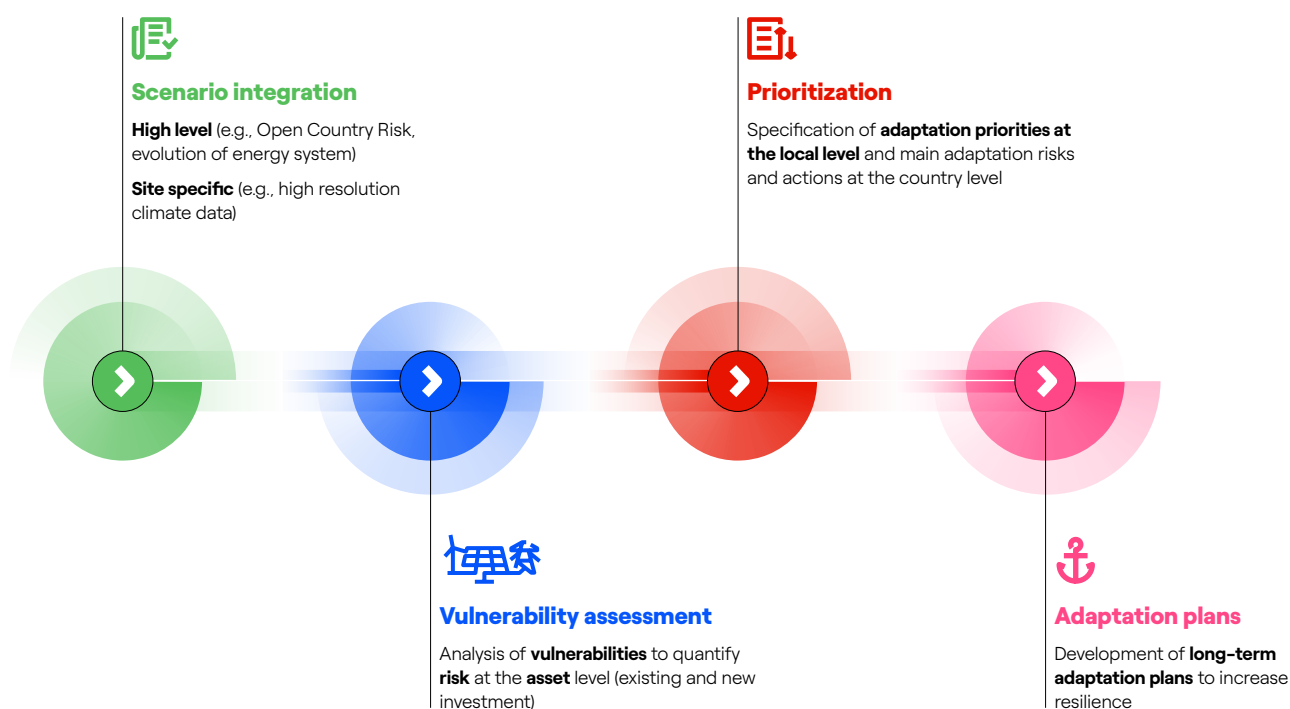
As part of the Property Program, Enel Insurance NV envisages a Premium Refund program for Business Lines related to the loss ratio and the achievement of the Group's SDG goals, thereby contributing to the virtuous circle linked to the Group's adaptation to the challenges posed by climate change.

For further information, please read the [2022 Integrated Annual Report](#).

## Enel's resilience and adaptation to climate change

The application of long-term climate scenarios makes it possible to prepare adaptation plans for the Group's portfolio of assets and activities. Climate scenarios are developed by identifying the physical phenomena that are most relevant to each business (such as heat waves, extreme rainfall, fire risk, etc.) in order to produce analyses that provide not only high-level indications (such as country risk indices that can be compared with each other), which make it possible to study physical impacts at an individual site. This approach applies to both the existing portfolio and to new investments.

By assessing the vulnerability of assets, priority actions to increase resilience can be identified.



# ADAPTATION: a climate-proof future

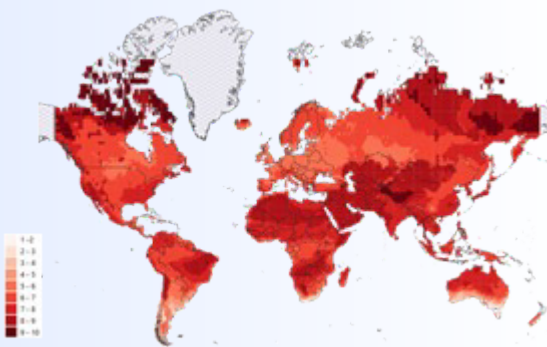
**Mario Ciancarini**

Group Climate Scenarios, Climate Change Adaptation Strategy – AFC Group Strategy



**We are building a climate-proof company, combining mitigation efforts with the ability to understand change and deliver solutions aimed at maintaining profitability and promoting resilient growth models for the benefit of all stakeholders.**

**Climate Risk Index**



*"Adaptation to climate change is only possible by taking a multidisciplinary approach. At Group Strategy, we work together and exchange views with climate change experts in order to translate the latest knowledge into useful information for the Group. Along with all business lines, we apply instruments and expertise so that we can develop solutions that will increase our resilience, our ability to deal with adverse events and to design products and services that support stakeholders' adaptation."*

Since 2018, the Group has been working with the International Center for Theoretical Physics in Trieste to define climate scenarios for the next 30 years and even longer. Since then, we have continued to develop instruments and skills in order to manage, understand and apply a huge amount of data. We now provide the Group with global climate analyses, which are based on data gathered both independently by the scientific community and through partnerships with academic and private institutions and innovation challenges. These analyses look at three different climate scenarios that cover all possible futures.

A project to define a Climate Change Adaptation Plan was launched in 2022, involving staff departments and business lines, with the aim of translating the study of complex physical phenomena and asset vulnerability into tangible actions. The goal is to increase business resilience, enhancing responsiveness to adverse events

and seizing opportunities by creating products and services that will benefit customers and all stakeholders. Besides using high-resolution data and carrying out detailed analyses of individual assets, the approach that was adopted enables global climate risk to be assessed by comparing the evolution of several extreme events in the different countries.

For example, one of several results achieved in collaboration with EGP was the calculation of the expected variation in renewable output from hydroelectric, wind and solar plants between 2030 and 2050. A further example is the study, conducted with Enel Grids, which has estimated that breakdowns could potentially increase as a result of increased heat waves in Italy between 2030 and 2050. These works will continue by incorporating more and more Adaptation into all of the Group's processes so that, by working together, we can build a climate-proof future.

## Adaptation activities




The Group implements solutions to climate change adaptation by taking a comprehensive approach, which involves assessing the potential impacts in order to properly target the measures required to improve the ability to respond to adverse events (Response Management) and to increase business resilience (Resiliency Measures), consequently reducing the risk of adverse events having a negative impact in the future. Moreover, the Group will use the expertise and instruments developed to analyze the effects of climate change in order to create value by devising new business options aimed at offering solutions that will make the adaptation process easier for communities and all stakeholders.

Adaptation solutions may concern both actions implemented in short-term and long-term decision making,

such as the planning of investments in response to climate phenomena. Adaptation activities also include procedures, policies and best practices.

For new investments, action can also be taken early in the design and construction phase to reduce the impact of climate risks by design, for example by taking into consideration climate scenarios and analyses of the vulnerability of assets to specific phenomena in order to implement resilient solutions.

The following table shows a high-level summary that represents the type of actions that Enel implements for proper management of adverse events and to increase resilience to weather phenomena and their evolution due to climate change. Several activities are described in greater detail below.

Business Lines	A. Resiliency Measures – Enhancing asset resilience	B. Response Management – Adverse event management
<b>Enel Green Power and Thermal Generation</b> 	<b>Existing assets</b> 1. Guidelines for hydraulic risk assessment and design 2. Lessons-learned feedback from O&M to E&C and BD  <b>New construction</b> In addition to actions for existing assets: 1. Climate change risk assessments (CCRA) included in environmental impact documentation (pilot)	<b>Existing assets</b> 1. Critical incident and event management 2. Site-specific emergency management plans and procedures 3. Specific tools for forecasting imminent extreme events
<b>Enel Grids</b> 	<b>Existing assets and new construction</b> 1. Guidelines for developing grid resilience enhancement plans (e.g., the “Network Resilience Enhancement Plan” of e-distribuzione)	<b>Existing assets</b> 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.)
<b>Enel X Global Retail</b> 	<b>Existing assets</b> 1. Preliminary analysis of the impacts of medium/long-term climate change	<b>Existing assets</b> 1. Enel X Critical Event Management

## Generation assets resilience

With regard to generation, over time the Group has carried out targeted actions on specific sites and established *ad hoc* management activities and processes.

Actions on specific sites in recent years include, for example:

- improving cooling water management systems for certain plants in order to counter the problems caused by the decline in water levels in rivers, such as the Po 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 reassessment for the hydroelectric plants for flood scenarios using numeric simulations. The processed scenarios are managed with mitigation actions and through interventions on the civil works, dams and intake systems.

The Group adopts several best practices to properly manage the impact of weather events on electricity generation, such as:

- **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, territory surveys** (also using drones), **monitoring of possible vulnerabilities** using digital GIS systems (Geographic Information System) and satellite measurements;
- **advanced monitoring of more than 100,000 parameters** (with more than 160 million historical measurements) detected on dams and hydroelectric civil works;
- **real-time remote monitoring of power plants**;
- **safe rooms in areas exposed** to tornadoes and hurricanes, such as wind plants in Oklahoma, USA;
- **adoption of specific guidelines for carrying out hydrological and hydraulic studies** that are targeted, from the first development phases, toward assessing risks inside the plant and toward the external areas of the plant, with the application of the principle of hydraulic invariance during the design of the draining and mitigation works;
- **check of potential climatic trends for the main project parameters** in order to keep the dimensioning of the systems into account for relevant projects (for example: assessments of the temperature of a cold source to guarantee greater flexibility for cooling the new CCGT) and specific civil works (for example: rainfall assessments for the design of drainage systems in solar plants);
- **estimate of extreme wind speed using updated databases** containing the registers and historical trajectories of hurricanes and tropical storms, with the resulting **selection of the wind turbine technology that is best suited** to the conditions that were found.

In order to be able to promptly react to adverse events, the Group also implements dedicated emergency management procedures with real-time communication protocols, planning and management of all activities to restore operating assets in a short space of time, as well as standard checklists for assessing damage, ensuring that all plants can be put back into service as safely and quickly as possible. One way of minimizing the impacts of climate phenomena is the Lesson Learned feedback process, which is implemented by the technical departments, is governed by the existing operating model and influences future projects.

## Grid assets resilience

In order to deal with extreme climatic events, in the Grids Business Line, the Enel Group has adopted **an approach called “4R”** which, in a dedicated Policy that aims to ensure an innovative strategy for the resilience of distribution networks, defines the measures to be adopted in the phase of preparation for an emergency on the network and to

ensure swift restoration of services ex post, i.e. once the climatic events have caused damage to assets and/or disconnections. The 4R strategy is divided into four phases:

1. **Risk Prevention:** includes actions that make it possible to reduce the probability of losing grid elements due to an event and/or to minimize its effects, such as interventions able to increase the robustness of the infrastructure and maintenance operations. When choosing technical solutions to increase resilience, a catalogue is used to determine which is the best way to intervene for each climatic event and geographic area;
2. **Readiness:** comprises all measures that aim to improve the timeliness with which potentially critical events are identified, ensuring coordination with the Civil Protection Department and local officials, as well as to prepare the necessary resources once a grid disconnection has occurred;
3. **Response:** represents the phase for assessing the operating capacity for facing an emergency when an extreme event occurs, which is directly correlated to the ability to mobilize operating resources in the field and the possibility to perform remote controlled operations to restore service via resilient backup connections;
4. **Recovery:** the final phase which has the goal of reconnecting the grid as soon as possible with ordinary operating conditions, in the cases in which an extreme weather event cause interruptions in service in spite of the previously adopted measures for increasing resilience.

Following this approach, the Business Line has prepared various policies **on specific actions** aimed at dealing with the various aspects and risks inherent in Climate Change, in particular:

- **Policy for preparation and recovery during emergencies:** a policy related to the last 3 steps of the 4R approach which indicates the guidelines and measures targeted toward improving the preparation strategies, mitigating the impact of total interruptions and, finally, restoring service to the largest number of customers possible as quickly as possible.
- **Guidelines for the Resilience Plan of the electricity grid:** a dedicated policy has the objective of identifying the extraordinary climatic events with the greatest impact on the grid, assessing specific KPIs of the AS-IS grid and improving them on the basis of proposed actions in order to finally assess their order of priority. This makes it possible to select the actions that, when implemented, minimize the impact on the grid of particularly critical extreme events in a certain area/region. The Policy is therefore set in the first two phases of the 4R approach, suggesting measures regarding Risk Prevention and Readiness. In Italy, this Policy translates into the Resilience Plan that e-distribuzione has prepared every year



since 2017, and which represents an addendum to the Development Plan that includes ad hoc investments over a 3 year period that aim to reduce the impact of extreme events belonging to a certain critical cluster: heat waves, ice loads and wind storms (falling of tall trees). Around 672 million euros were invested in the period 2017-2021 and a further 262 million euros will also be used in the following three years, as explained in the addendum to the 2022-2024 Plan. In the face of these risks, investments have been planned such as the targeted replacement of bare conductors with insulated cable, in some cases the burying of cables, or solutions that provide re-powering routes that are not vulnerable to the above-mentioned phenomena. As in Italy, similar topics are being examined in other countries too, such as Europe and South America, so as to prepare a process for planning ad hoc investments that can increase the resilience of grids to extreme events, while taking into consideration the specific characteristics of each territory.

- **Policy on the prevention and preparation of the risk of fire for electrical installations:** a policy dedicated to fire risk defines an integrated approach to emergency management applied to forest fires, both in cases in which they are started by events exogenous to the networks and in cases, albeit rare, in which they are caused by the networks themselves and, in any case, are potentially dangerous for Enel plants. The document sets out the guidelines to be implemented in the various areas of presence so as to identify areas/plants at risk, define specific prevention measures (such as evaluating specific maintenance plans and any strengthening measures) and, in the event of a fire, to manage the emergency in the best possible way so as to limit its impact and resume the service as quickly as possible.
- **The implementation of systems for weather forecasting, grid monitoring** and assessing the impact of critical climate phenomena on the grid, preparation of operational plans and organization of special exercises. In this regard, it is particularly important to have prior agreements in place for mobilizing extraordinary resources – which are identified beforehand in order to deal with the emergency – whether internal or from contracting companies. For instance, in Italy, besides installing and putting into operation three experimental stations in order to observe and investigate the phenomenon of

ice-sleeve formation on MV conductors, IoT sensor trials were conducted for monitoring overhead lines in areas that are particularly exposed to snow and wind (Newman project).

## Inclusion of climate change effects in the evaluation of new projects

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

- **Preliminary studies:** in this stage, climate data can offer preliminary screening, through the analysis of specific climate phenomena, such as those shown above in the analysis of physical scenarios, and summary indicators such as the Climate Risk Index, integrated into the Open Country Risk. These data provide a preliminary measure of the most relevant phenomena in the area, among those identified as being of interest for each technology.
- **Estimation of potential output:** climate scenarios will be progressively integrated to allow for an assessment of how climate change will modify the availability of the renewable resource at the specific site. In the preliminary analysis of the impact of chronic climate change on renewable power generation, the approach applied for the moment on a few pilot sites and then scaled to the entire generation portfolio is described.
- **Environmental impact analysis:** the Group has begun to integrate the Climate Change Risk Assessment into the set of documentation produced, which contains a representation of the main physical phenomena and their expected change in the area.
- **Resilient design:** as described above, among the climate change adaptation activities, those aimed at devising resilient assets by design take on great importance. The Group is working to consider progressively analyses based on climate data, for example the increase in frequency and intensity of acute events. These will complement existing analyses based on historical data already in use, in order to increase the resilience of future assets, including any adaptation actions that may be required over the life of the project.

# Enel's performance in fighting against climate change

3-3 | 305-1 | 305-2 | 305-3 | 305-4 | 305-6 | TCFD: Metrics & Targets

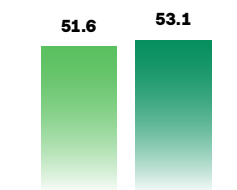
## Our carbon footprint



2021

2022

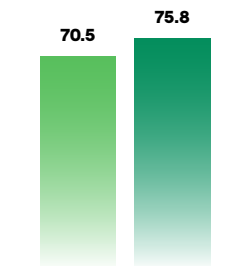
Total **direct GHG**  
emissions Scope 1  
(MtCO<sub>2eq</sub>)



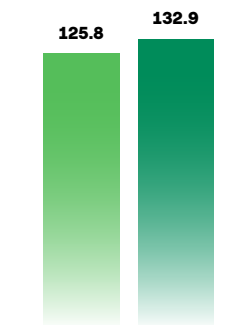
Total **indirect GHG**  
emissions Scope 2  
(MtCO<sub>2eq</sub>)



Total **indirect GHG**  
emissions Scope 3  
(MtCO<sub>2eq</sub>)



Total **GHG** emissions  
(MtCO<sub>2eq</sub>)



Value chain	Generation	Trading	Networks	End customers	Other
<b>Global Business Lines</b>					
<b>GHG Scope 1 direct emissions</b> (MtCO <sub>2eq</sub> )	<p>1 ● 2 ●</p> <p>Generation from thermal sources Other</p>		<p>3 ● 4 ●</p> <p>SF<sub>6</sub> losses in the networks Auxiliary motors in networks</p>		<p>5 ● 6 ●</p> <p>Offices Company fleet</p>
<b>GHG Scope 2 indirect emissions</b> (MtCO <sub>2eq</sub> ) (location based)	<p>7 ●</p> <p>Electricity purchased from the grid</p>		<p>7 ● 8 ●</p> <p>Electricity purchased from the grid Technical losses from the grid</p>		<p>7 ●</p> <p>Electricity purchased from the grid (offices)</p>
<b>GHG Scope 3 indirect emissions</b> (MtCO <sub>2eq</sub> )		<p>9 ● 10 ●</p> <p>Upstream Fuels Electricity purchased for sale</p>		<p>11 ●</p> <p>Sales of gas</p>	<p>12 ● 13 ●</p> <p>Supply chain Transport of other raw materials and waste</p>

Source	Description	2021 MtCO <sub>2eq</sub>	2022 MtCO <sub>2eq</sub>
1 ● Generation from thermoelectric sources	Combustion of fossil fuels in generation activities (CCGT, Oil&Gas and coal thermal plants and Biomass). <sup>(1)</sup> This includes:		
	• CO <sub>2</sub> emissions	50.56	51.93
	• CH <sub>4</sub> (GWP=28) and N <sub>2</sub> O emissions (GWP=265)	0.16	0.18
2 ● Other	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O emissions from fossil fuel use in auxiliary engines in nuclear and renewable plants	0.03	0.02
	NF <sub>3</sub> losses (GWP=16,100) in solar panel generation activity <sup>(2)</sup>	0.00	0.00
	SF <sub>6</sub> losses (GWP=23,500) in insulation systems of power plants	0.03	0.04
	Use of refrigerant gases Fgas and ODS in thermal and hydroelectric plants	0.01	0.01
	CH <sub>4</sub> leakages in gas-fired thermal power plants <sup>(3)</sup>	0.00	0.01
	CH <sub>4</sub> biogenic emissions from hydroelectric basins	0.32	0.32
	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O emissions from transport of fuels (LNG and coal) on vessels under own operational control	0.06	0.15
3 ● SF <sub>6</sub> losses in the networks	SF <sub>6</sub> losses (GWP=23,500) in insulating systems for power distribution activities	0.11	0.11
4 ● Auxiliary motors in networks	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O emissions of fossil fuel use in auxiliary engines in network assets	0.21	0.22
5 ● Offices	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O emissions from diesel and natural gas combustion for heating systems and canteens in offices, including all properties in all Business Lines and Group offices	0.01	0.01
6 ● Company fleet	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O emissions from diesel and gasoline combustion in company fleet vehicles	0.07	0.08
7 ● Electricity purchased from the grid for consumption <sup>(4)</sup>	GHG emissions from consumption of electricity purchased from the grid (location based):		
	• In energy power plants (including 3SUN Factory, mines and port terminals)	0.63	0.57
	• In power distribution substations	0.14	0.16
8 ● Technical losses from the grid	• Civil uses in the premises (computers, lighting, heating) and in the commercial offices (Market and Enel X)	0.03	0.03
	GHG emissions from energy dissipation by distribution network losses under Enel's operational control (location based)	2.97	3.26
	Emissions of CO <sub>2</sub> , CH <sub>4</sub> and N <sub>2</sub> O from the extraction and transport of fuels used in thermal power plants:		
9 ● Upstream Fuels (Category 3) <sup>(5)</sup>	• Coal	1.24	1.88
	• Gas	10.01	8.42
	• Diesel & fuel oil	0.01	0.01
10 ● Electricity purchased for sale (Category 3) <sup>(5)</sup>	Emissions for the generation of electricity purchased and sold to end customers (retail market, MtCO <sub>2eq</sub> in 2022 and 2021, respectively)	23.96	28.40
11 ● Gas sales (Category 11) <sup>(4)</sup>	Emissions from the use of gas sold to end customers (retail market)	22.25	22.90
12 ● Supply chain <sup>(5) (6) (7)</sup>	GHG emissions from the supply chain, related to the production of goods and services purchased from suppliers	12.99	14.18
13 ● Transport of other raw materials and waste (Category 4) <sup>(5) (8)</sup>	GHG emissions from road transport of other fuels, raw materials and waste	0.00	0.01

- GHG source considered in SBTi target on Scope 1 GHG emission intensity relating to power generation.
- GHG source considered in the SBTi target on the intensity of GHG Scope 1 and 3 emissions relating to Integrated Power.
- GHG source considered in the SBTi target on absolute Scope 3 GHG emissions relating to Retail Gas.
- GHG source considered in SBTi target on absolute additional GHG emissions Scope 1, 2 and 3.
- GHG source excluded from SBTi targets boundary.

- (1) Following the guidance of the GHG Protocol, CO<sub>2</sub> emissions from biomass, which amounted to 114,838 tCO<sub>2</sub> in 2022 (125,878 tCO<sub>2</sub> in 2021), were not included as they cannot be considered within Scope 1, while CH<sub>4</sub> and N<sub>2</sub>O emissions were considered.
- (2) NF<sub>3</sub> losses were 14 tCO<sub>2eq</sub> in 2021 and 4 tCO<sub>2eq</sub> in 2022.
- (3) CH<sub>4</sub> leakage in gas-fired thermal power plants was 3,255 tCO<sub>2eq</sub> in 2021 and 6,754 tCO<sub>2eq</sub> in 2022.
- (4) 2021 figure restated following the introduction of a new method for calculating GHG emissions from pumping systems.
- (5) Scope 3 categories according to the GHG Protocol.
- (6) 2021 figure restated following the implementation of a new, more precise methodology for calculating indirect emissions related to work performed in the power distribution business.
- (7) 29% of 2022 emissions contribute to the target on absolute additional GHG Scope 1, 2 and 3 emissions in 2030 and 43% in 2040 (these percentages cannot be added together).
- (8) GHG emissions from transport of other fuels, raw materials and waste on wheels are 4,032 tCO<sub>2eq</sub> in 2021 and 9,842 tCO<sub>2eq</sub> in 2022.

The calculation of Scope 1, 2 and 3 emissions covers all greenhouse gases (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>), depending on the type of emission source.

In 2022, Enel's carbon footprint was 132.9 MtCO<sub>2eq</sub> (up from 2021 by 6%), broken down as follows:

- **Scope 1:** 53.1 MtCO<sub>2eq</sub>, representing 40% of total GHG emissions (98.2% of these emissions of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O result from the combustion of fossil fuels in thermal power plants for electricity generation). Despite the positive impact of the sales of gas-fired plants in Russia and the closure of coal-fired plants in Chile, there was a 3% increase in direct emissions compared to 2021, due to an increase in coal-fired electricity generation in Europe of about 7 TWh (61.5% increase compared to 2021) as a result of the current geopolitical environment and various weather factors, including a reduction in gas availability and an increase in drought, which limited hydroelectric generation in Europe (7 TWh less compared to 2021, a 31% reduction). The percentage of emissions related to EU-ETS is 66.8% of the total Scope 1 (compared to 61.5% in 2021) and the percentage of emissions related to the green tax system in Chile (Sistema de Impuestos Verdes) accounted for 9.0%.
- **Scope 2:** 4.0 MtCO<sub>2eq</sub> accounting for 3% of the total GHG emissions. Despite the 6% reduction in scope 2 emissions from energy consumption in 2022 compared to 2021 due to a reduction of 9% of the energy consumption in 2022 (from 3.6 TWh to 3.2 TWh), there has been a 7% increase in overall Scope 2 emissions compared to 2021, due to the worsening of the emission factors of the electricity systems in some countries where Enel distributes energy, including Italy, Romania, Chile and Bra-

zil, with a negative impact on indirect emissions related to technical grid losses, which have a weight of 81% in Scope 2.

- **Scope 3:** 75.8 Mt CO<sub>2eq</sub> accounting for 57% of total GHG emissions. There has been an 8% increase over 2021 as a result of:
  - a 9% increase in indirect emissions from suppliers (from 13.0 MtCO<sub>2eq</sub> to 14.2 MtCO<sub>2eq</sub>), due to a 19% increase in the volumes (measured in euro) of products, services and works ordered, although the ratio of greenhouse gas emissions to volumes ordered improved by 8% due to the circularity approach in procurement (from 968 tCO<sub>2eq</sub>/€ to 889 tCO<sub>2eq</sub>/€);
  - a 19% increase in indirect emissions from the purchase of energy for sale to end customers (from 24.0 MtCO<sub>2eq</sub> to 28.4 MtCO<sub>2eq</sub>), mainly due to the worsening of the emission factors of the electricity systems in which Enel purchases electricity in the wholesale market;
  - a 52% increase in indirect emissions from the coal mining and transport process for thermal power plants (from 1.2 MtCO<sub>2eq</sub> to 1.9 MtCO<sub>2eq</sub>), due to the geopolitical context and the drought period in Europe. In spite of this, indirect emissions related to the process of extracting and transporting gas for thermal power plants and end customers decreased by 16% in 2022 compared to the previous year (from 10.0 MtCO<sub>2eq</sub> to 8.4 MtCO<sub>2eq</sub>).

CO<sub>2</sub> emissions from biomass combustion, not included in Scope 1, were 114,838 tCO<sub>2</sub> in 2022, down 9% from 2021.

In 2022, the trend in intensity metrics compared to 2021 was as follows:

Intensity metric	2021 (gCO <sub>2eq</sub> /kWh)	2022 (gCO <sub>2eq</sub> /kWh)	Var. %	
CO <sub>2</sub> emissions intensity relating to power generation	222	225	1.4%	<p>Metric considered for the 2020-2022 long-term incentive program. Takes into account CO<sub>2</sub> emissions relating to power generation, excluding other greenhouse gases.</p> <p>The target set in 2022 of 220 gCO<sub>2</sub>/kWh was not reached due to the following exogenous factors related to the geopolitical context:</p> <ul style="list-style-type: none"> <li>• non-authorization of the closure of the As Pontes coal-fired plant (Spain), requested in 2019 for 2021;</li> <li>• three-month delay in authorizing the closure of the Bocamina coal-fired plant (Chile).</li> </ul> <p>The sterilization of these exogenous effects leads to a result of 220 gCO<sub>2</sub>/kWh.</p>
Scope 1 GHG emissions Intensity relating to Power Generation	225	229	1.8%	<p>Metric considered in the Sustainability-Linked Financing Framework. It considers Scope 1 emissions relating to power generation (including heat), including CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O, and excluding pumped storage power generation.</p> <p>The increase compared to 2021 is mainly due to higher coal production in Europe following the drought period (particularly in Italy) and the geopolitical context.</p>
Scope 1 and 3 GHG emissions Intensity relating to Integrated Power	203	218	7.4%	<p>Metric considered in the Sustainability-Linked Financing Framework. It is calculated as the combination of the Group's direct GHG emissions (Scope 1, including CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) from power generation and the Group's indirect GHG emissions (Scope 3) from generation of electricity purchased and sold to end customers, divided by power generation (including heat and excluding pumped storage generation) and purchase of electricity.</p> <p>In addition to the exogenous factors already indicated in the previous metrics on direct emissions, the increase compared to 2021 is also due to an increase in indirect emissions relating to the purchase of energy caused by a worsening of the emission factors of the electricity systems in which Enel sells electricity to the end customer.</p>
Scope 1 GHG emissions intensity	229	233	1.7%	<p>The metric considers 100% of direct emissions (Scope 1), including those from power generation (and other emissions in plants), energy distribution, the vehicle fleet and buildings, compared to all power generation (except pumped storage generation).</p> <p>The increase is due to the exogenous factors described above.</p>

The GHG inventory statements were audited by DNV GL, one of the main certification bodies world-wide, with a reasonable level of certainty for Scope 1, Scope 2 and Scope 3 emissions, as limited to the sale of natural gas, and with a limited level of certainty for the other Scope 3 emissions included within the scope of application of the inventory. The audit was conducted according to Standard ISO 4064-3 for the compliance of greenhouse gas (GHG) inventories with the WBCSD/WRI Corporate Accounting

and Reporting Standard (GHG Protocol). Furthermore, the calculation of Scope 1, 2 and 3 emissions has been subject to reasonable assurance by the independent auditing company, KPMG SpA.

For more details concerning Enel's carbon footprint, please refer to the 2022 GHG inventory (accessible via the following link: <https://www.enel.com/content/dam/enel-com/documenti/investitori/sostenibilita/ghg-inventory-2022.pdf>).



## Financial, operational and environmental metrics

The main metrics and financial goals regarding the risks and opportunities connected to climate change, as well as

the operational metrics along the entire value chain and the environmental ones, are reported below.

### Financial metrics

	UM	2022	2021	2022-2021	%
Ordinary EBITDA for low-carbon products, services and technologies <sup>(1)</sup>	billions of euros	13.9	17.3	3.4	-19.6
	% of tot EBITDA	70.6	90.1	-19	-
Capex for low-carbon products, services and technologies <sup>(2)</sup>	billions of euros	13.3	12.3	1.05	8.5
	% of total Capex	92.1	93.9	-1.8	-
Revenues from coal plants <sup>(3)</sup>	billions of euros	6.5	1.9	4.6	-
	% of total Revenues	4.6	2.2	2.4	-
Revenues from thermal generation <sup>(3)</sup>	billions of euros	24.1	12.9	11.2	86.8
	% of total Revenues	17.2	15.1	2.1	-
Revenues from nuclear plants <sup>(3)</sup>	billions of euros	1.6	1.4	0.2	14.3
	% of total Revenues	1.1	1.6	-0.5	-
Debt ratio with sustainability criteria	%	63	55	8	-
CO <sub>2</sub> reference price	€/ton	78.2	53.2	24.9	46.8

(1) 2021 figure has been restated to integrate the changes of gas margin due to a change of the control model.

(2) 2021 figure has been restated to consider the inclusion of Latin American retail business in Enel Grids.

(3) 2021 figure has been restated to consider the classification in the count "net results of discontinued operations" concerning the results from the business activities performed in in Russia (disposed in the fourth quarter of 2022), Romania and Greece as they meet the requirements established in the international accounting principle IFRS 5 for the classification of "discontinued operations".

In 2022, Enel's ordinary EBITDA associated with low-carbon emissions services and solutions was 13.9 billion euros, down 19.6% from 2021. The Capex dedicated to low-carbon emission technologies, services and solutions has increased as compared to 2021, reaching 13.3 billion euros, equal to 92.1% of total Capex.




The percentage share of revenues from coal-fired plants increased, mainly due to the need to compensate for low hydraulicity in Italy and Spain due to adverse weather conditions that severely penalized hydroelectric generation in 2022. Specifically, in 2022, revenues related to coal-fired plants correspond to 4.6% of the Group's total revenues.

Enel's strategy of promoting a sustainable financial model has contributed to reaching 63% of debt related to the sustainability objectives.

With regard to the effects of climate change issues, the Group considers them an implicit element in the application of the methodologies and models used to make estimates in the valuation and/or measurement of certain accounting items. Furthermore, the Group has also taken into account the impacts of climate change in the significant judgments made by management. In this regard, the main items included in the Consolidated Financial Statements for the year ended December 31, 2022 affected by the use of management's estimates and judgments concern the impairment of non-financial assets, bonds related to the energy transition, including those for decommissioning and site restoration of certain power generation plants. For further details please refer to Section 5. Climate Change Disclosures in the [2022 Integrated Annual Report](#).

## Operational metrics

302-1 | EU1 | EU2 | EU3 | EU11 | EU30 |

Segment of the electricity value chain		UM	2022	2021	2022-2021	%
 GENERATION	Net installed maximum capacity <sup>(1)</sup>	GW	84.6	87.1		
	– of which renewables	%	63.3	57.5		–
	– of which thermoelectric	%	32.8	38.7		
	– of which nuclear	%	3.9	3.8		–
	Net generation <sup>(2)</sup>	TWh	227.8	207.1		
	– of which renewables	%	49.4	48.9		–
	– of which thermoelectric	%	39.0	39.6		–
	– of which nuclear	%	11.6	11.5		–
	Additional indicators					
	Average thermoelectric park efficiency (%) <sup>(3)</sup>	%	42.8	42.9	–0.1	
Total direct fuel consumption	Mtep	26.5	26.3	0.2	0.8	
 NETWORKS	Digitalization					
	End users with active smart meters <sup>(4)</sup>	no.	45,824,963	44,968,974	855,989	1.9
	Smart meters (coverage)	%	63	60	3.0	–
 RETAIL	Electrification, energy efficiency and digitalization					
	Publicly owned charging points for electric mobility <sup>(5)</sup>	.000	22.6	18.1	4.5	24.9
	Electric buses	.000	5.3	3.0	2.3	76.7
	Smart public lighting	mil	3.0	2.8	0.2	7.1
	New services					
	Demand response capacity	MW	9,004	7,713	1,291	16.7
	Storage capacity	MW	760	375	385	–

(1) Does not include managed capacity of 4.9 GW in 2022 and 3.3 GW in 2021.

(2) Does not include generation from managed capacity of 11.3 TWh in 2022 and 9.6 TWh in 2021.

(3) The value is calculated on the park's plants and is weighted on the production values.

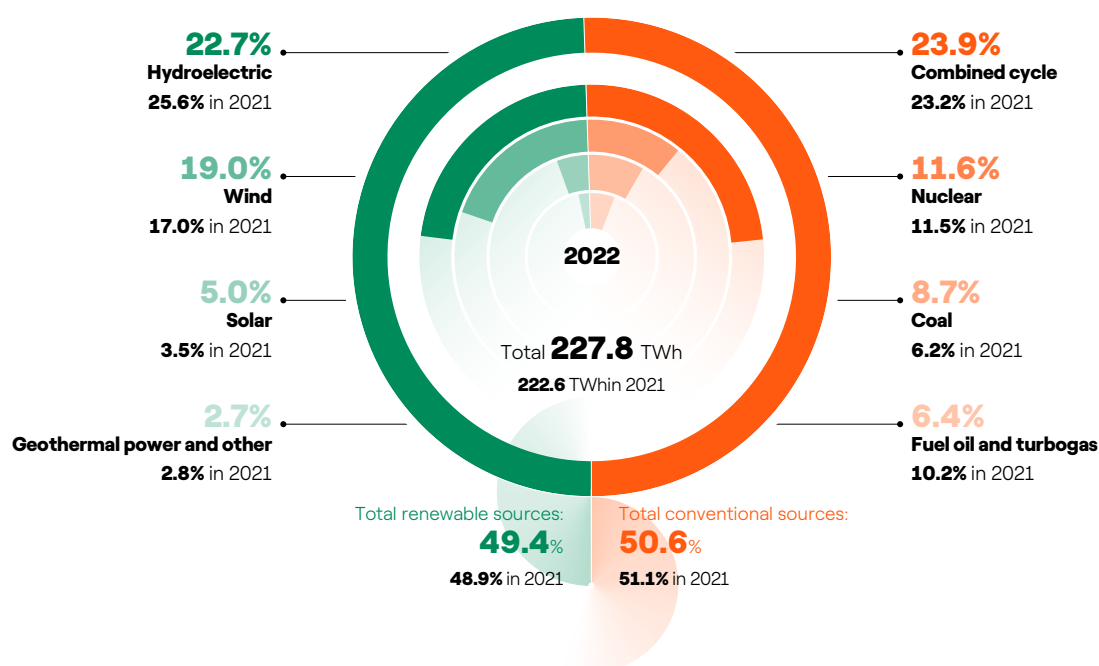
(4) The figures for 2021 have been restated. Of which second-generation smart meters 25.2 million in 2022 and 23.5 million in 2021.

(5) KPIs changed from previous year, with focus on publicly owned infrastructure.

The net electricity generated by Enel in 2022 increased by 5.2 TWh (+2.3%) compared to the value recorded in 2021, mainly due to higher generation from wind sources (+5.5 TWh) mainly in Brazil and North America, a higher contribution from coal-fired plants (+5.9 TWh) in Italy, and higher generation from combined-cycle plants (+2.7 TWh) mainly

in Spain and Chile. It should also be noted that the complete deconsolidation of the companies present in Russia took place in 2022, which led to a decrease in net power generated of 11.2 TWh for oil & gas and combined cycle sources only.

## Net electricity generation by source (2022)

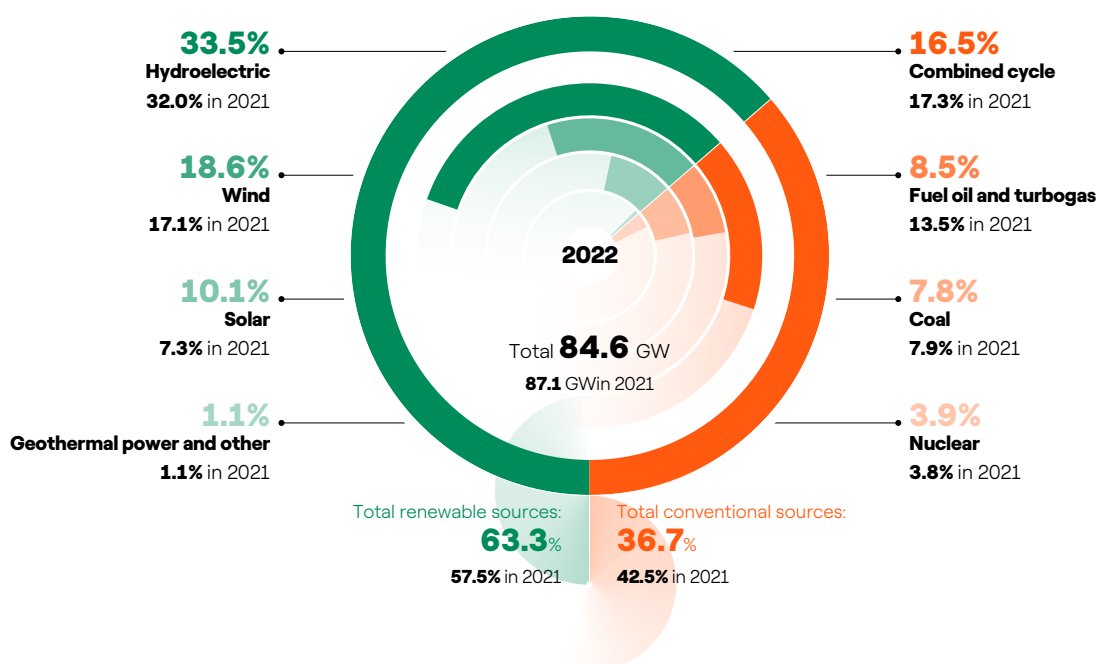


At the end of December 2022, Group's total net installed maximum capacity was 84.6 GW, down by 2.5 GW compared to 2021. In addition, Group's net renewable installed capacity reached 53.6 GW, up by 3.5 GW from 2021, and accounting for 63.3% of total net installed efficient power. During the year, 1.8 GW of new wind capacity was installed,

mainly in North America, Brazil and Spain, and 2.6 GW of new solar capacity, mainly in Chile, the United States, Spain and India.

In addition, as already mentioned for net power generated, all companies in Russia totaling 5.3 GW were deconsolidated.

## Net installed maximum capacity (2022)



In 2022, Enel maintained a key role in developing new solutions to accelerate the energy transition process through the development of 760 MW of storage capacity, increasing the current GW of demand response by 51% compared to 2021.

The digitalization of the electricity grid, which has been identified as a key enabler able to positively influence cli-

mate change through levers such as the integration of more renewable energy or an increase in energy efficiency, continued being a priority for Enel also in 2022. In particular, in 2022 the total number of end users with active smart meters grew 1.9% as compared to the previous year, reaching 45,824,963 in 2022.

## Environmental metrics

### 302-3

The following table presents the environmental metrics related to climate change, in addition to the greenhouse gas emissions previously described. Refer to the chapter on

["Conservation of natural capital"](#) of 2022 Sustainability Report.

	UM	2022	2021	2022-2021	%
Specific withdrawal of freshwater <sup>(1)</sup>	l/kWh <sub>eq</sub>	0.23	0.25	-0.02	-8.0
Withdrawal of water in water stressed areas <sup>(1) (2)</sup>	%	19.2	23.0	-3.7	-16.3
Generation with water withdrawal in water stressed areas <sup>(2)</sup>	%	13.3	14.0	-0.70	-5.0




- (1) The new target of reducing specific freshwater withdrawals, turning its attention to the most valuable and vulnerable water resource, testifies to Enel's even more explicit commitment to the protection of natural habitats and the needs of the community. In particular, the objective is in keeping with the reporting and commitment requirements introduced by the new proposed EU EFRAG ESRS-E3 Water and Marine Resources standard, and with the environmental impact (or pressure) priorities indicated for corporate analysis of nature-related risks and opportunities by the international TNFD and SBTN frameworks.
- (2) The total value of process and closed-loop cooling water withdrawals for the year 2021 was recalculated following the refinement conducted in 2022 of the way in which water withdrawn for cooling purposes at certain nuclear power plants in Spain was calculated.



## Financial and operational targets

The table below shows the main operational objectives included in the 2023-2025 Strategic Plan, which reflect Enel's role in combating climate change along the entire

electricity value chain, in addition to the GHG emission reduction targets described in the previous section.

Segment of the electricity value chain	Description of the goal	UM	2025
 GENERATION	<b>Net installed maximum capacity<sup>(1)</sup></b>	<b>GW</b>	<b>79.9</b>
	- of which renewables	%	76
	- of which thermoelectric	%	20
	- of which nuclear	%	4
	<b>Net generation<sup>(2)</sup></b>	<b>TWh</b>	<b>204</b>
	- of which renewables	%	70
	- of which thermoelectric	%	17
	- of which nuclear	%	13
 NETWORKS	<b>Digitalization</b>		
	Smart meter	mil	48.3
	Smart meters (coverage)	%	~80
 MARKET	<b>Electrification, energy efficiency and digitalization</b>		
	Publicly owned charging points for electric mobility <sup>(3)</sup>	.000	31.4
	Electric buses	.000	12.965
	Smart public lighting	mil	3.3
	<b>New services</b>		
	Demand response capacity	GW	12.4
	Storage behind the meter	MW	352

(1) Does not include managed capacity and BESS, which are around 10 GW and about 5 GW by 2025, respectively.

(2) Does not include generation from managed capacity of approximately 25 TWh in 2025.

(3) KPI changed from previous year, with focus on publicly owned infrastructure.

In addition, the following targets have been set to 2030:

- renewable capacity out of the total: ~85% (~+20% from 2022);
- gas sold: ~3 bcm (~70% from 2022);

- demand response capacity: >20 GW (>2x compared to 2022);
- digitalized network customers: 100% (+37% compared to 2022).





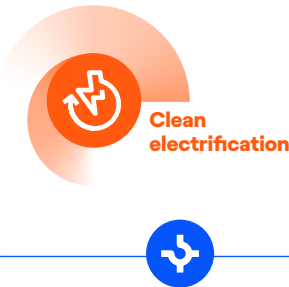
# Clean electrification

## Material topics (I level)



- Products and services for electrification and digitalization
- Customer centricity
- Infrastructure and Networks

## Plan



## SDG



Below the 2022 results related to the targets of the previous 2022–2024 Sustainability Plan, the resulting progress and the targets of the 2023–2025 Sustainability Plan, which may be redefined, added to, or surpassed with respect to the previous Plan.

SDG	Activities	2022 results	Progress	2023–2025 targets	Tag
7 13	Development of additional renewable capacity and reduction of thermal capacity <sup>(1)</sup>	<b>5.2 GW</b> of built renewable capacity <sup>(2)</sup> <b>63.3%</b> of installed renewable capacity <sup>(4)</sup> <b>-6.0 GW</b> of thermal capacity <sup>(1)</sup>	● ● ●	<b>21 GW</b> additional renewable capacity in 2023–2025 <sup>(3)</sup> <b>-13%</b> of conventional capacity in the period 2023–2025	I E
7 13	Energy production from renewable sources <sup>(5)</sup>	<b>49.4%</b>	● ● ●	<b>70%</b> in 2025	I E S T
4 6 7 8 12 13 14 15	Sustainable construction site	Promoting the adoption of the sustainable construction site model (no. sustainable construction sites/total construction sites) <b>100%</b> renewable construction sites <sup>(6)</sup> <b>100%</b> hydroelectric, geothermal and thermal sites <i>Target outdated as it is considered achieved</i>	● ● ●		I E S T
		Monitoring the efficacy of the adoption of sustainable practices (no. practices adopted/no. practices defined in the CSV Plan) <b>95%</b> renewable construction sites <sup>(6)</sup> <b>75%</b> hydroelectric, geothermal and thermal sites	● ● ●	Monitoring the efficacy of the adoption of sustainable practices (no. practices adopted/no. practices defined in the CSV Plan) <b>95%</b> renewable construction sites <sup>(6)</sup> in 2023 <b>80%</b> hydroelectric, geothermal and thermal construction sites in 2023	I E S T

(1) Includes nuclear.

(2) Includes managed capacity. The value of renewable capacity built in 2022 includes 0.4 GW of BESS.

(3) The target includes managed and BESS capacity for about 4 GW in the period 2023–2025.

(4) Consolidated perimeter. From the calculation of the percentage of renewable installed capacity for the purpose of the Sustainability-Linked Financing Framework, 531.1 MW of purchased capacity from power plants acquired by the Group was excluded in accordance with the contractual documentation of the individual instruments.

(5) Excludes generation from managed capacity, equal to 11 TWh in 2022 and 25 TWh in 2025.

(6) Except hydroelectric and geothermal.

### Goals

I Industrial   E Environmental   S Social  
G Governance   T Technological



New



Redefined



Outdated

### Progress



Not in line




In line



Achieved


N.A. = not applicable

SDG	Activities	2022 results	Progress	2023–2025 targets	Tag
<div> <div>4</div> <div>6</div> <div>7</div> <div>8</div> <div>12</div> <div>13</div> <div>14</div> <div>15</div> </div> Sustainable plant		N.A.	N.A.	<b>Sustainable Plant Index</b> – Monitoring the efficacy of sustainable practices implementation <b>6%</b> in 2023 	<div>⊕</div> <div>I</div> <div>E</div> <div>S</div> <div>T</div>
		Promoting the adoption of the sustainable plant model (sustainable plants/ total eligible plants) <b>100%</b> <i>Target outdated as it is considered achieved</i>	●●●		<div>I</div> <div>E</div> <div>S</div> <div>T</div>
		Improving the adoption of the sustainable plant model (practices implemented in the year/practices implemented in the previous year) <b>10.3%</b> <i>Target outdated as, after an initial novelty phase of the model in which it was important to maximize its adoption to enable its internalization, the model is now known and applied and the focus is on measuring and maximizing the results of applications</i>	●●●		<div>I</div> <div>E</div> <div>S</div> <div>T</div>



#### Read more

The **Sustainable Plant Index** summarizes the sustainability of a plant on the basis of environmental and social factors.

SDG	Activities	2022 results	Progress	2023-2025 targets	Tag
 	SAIDI (min)	231		~150 in 2025 <sup>(7)</sup>	
 	SAIFI (no.)	2.6		2.1 in 2025	
 	Innovation and digitalization of the distribution networks	45.8 mil end users with active smart meters		48.3 mil end users with active smart meters in 2025 	
  	New producer connections (Italy and Spain)	212 thousand new connections		748 thousand new connections in the period 2023-2025 	
		4.2 GW of power		25.3 GW of power in the period 2023-2025 	
  	Rural and suburban electrification - grid extension and microgrid solutions <sup>(8)</sup>	179 thousand connections in rural and suburban areas		499 thousand connections in rural and suburban areas in the period 2023-2025 	
		690 thousand beneficiaries in rural and suburban areas		1.9 mil beneficiaries in rural and suburban areas in the period 2023-2025 	
 	Cabling ratio (km of cable line/total km of line)	60.7%		60.8% in 2025 	
 	Network losses (Italy)	4.7%		4.7% in 2025 	
 	Network losses (Europe)	5.8%	N.A.	5.6% in 2025 	



Read more






**Rural and suburban electrification** projects adopt grid extension or microgrid solutions in rural areas. Parallel to this, we work for the process of normalizing connections in large megacities in Latin America (suburban electrification), where we support the resolution of commercial losses related to irregular connections and where we work for regulated access to electricity that ensures the necessary security conditions for everyone.

(7) The 2030 target is ~100 minutes.

(8) The 2030 target is 1.8 mil connections and 7.1 mil beneficiaries. The scope includes Argentina, Brazil, Chile, Colombia, Peru and Romania.

## Goals

## Progress

 Industrial  Environmental  Social  
 Governance  Technological



New



Redefined



Outdated



Not in line



In line



Achieved

N.A. = not applicable

SDG	Activities	2022 results	Progress	2023-2025 targets	Tag
9 11	<b>Automatic payments</b> (% payments through direct debit/ total payments)	34.7%	● ● ●	37.2% in 2025	I S T
9 11	<b>E-billing</b> (% bills issued and delivered paperless/total bills)	30.4%	● ● ●	40.0% in 2025	I S T
9 11	<b>Digital clients</b> (% customers registered via web or app/total customers)	37.0%	● ● ●	50.0% in 2025	I S T
9 11	<b>Commercial claims</b> (no./10k customers)	212	● ● ●	200 in 2023	I S T
9 10 11	<b>Inclusive activities, products and services</b> - Customer experience	Analysis of the customer experience for customers with disabilities and final qualitative assessment: <ul style="list-style-type: none"> <li>country-level analysis (Italy) of vulnerable customer categories carried out for Doga;</li> <li>analysis of the Social Inclusion Boosting Program with the Disability Inclusion Community: in Colombia on architectural lighting; in Brazil on electric buses; in Italy on Homix, on Enel X Pay, on JuicePole and on JuiceBox</li> </ul>	● ● ●	Analysis of the customer experience for customers with disabilities and final qualitative assessment	I S
9 10 11	<b>Inclusive activities, products and services</b> - Products and services	10 inclusive products and services (including standard charging points for electric vehicles also prepared for people with disabilities; "Un pannello in più con Legambiente"; Confia for energy poverty in Spain; adaptation of electric buses for people with disabilities)	● ● ●	36 inclusive products and services in the period 2023-2025	I S
9 10 11	<b>Inclusive activities, products and services</b> - Slow shopping	111 shops and/or call centers that use slow shopping methods in Italy and Chile	● ● ●	35 shops and/or call centres that use slow shopping methods in the period 2023-2025	I S
9 10 11	<b>Inclusive activities, products and services</b> - Training	238 Enel people in our shops trained to welcome customers with disabilities in Romania, Peru and Colombia	● ● ●	500 Enel people in our shops trained to welcome customers with disabilities in the period 2023-2025	I S



SDG	Activities	2022 results	Progress	2023-2025 targets	Tag
7 9 13	Real-time demand response	8.5 GW	● ● ●	12.4 GW in 2025 <sup>(9)</sup>	<div> <div> <div>I</div> <div>E</div> <div>S</div> <div>T</div> </div> <div> <div>+</div> </div> </div>
9 13	Storage behind the meter	75 MW	● ● ●	352 MW in 2025	<div> <div> <div>I</div> <div>E</div> <div>S</div> <div>T</div> </div> <div> <div>+</div> </div> </div>
9 11 13	Charging points <sup>(10)</sup>	22.6 thousand public owned charging points	● ● ●	31.4 thousand public owned charging points in 2025	<div> <div> <div>I</div> <div>E</div> <div>G</div> <div>T</div> </div> <div> <div>+</div> </div> </div>
7 9 11 13	Lighting points	3.0 mil	● ● ●	3.3 mil in 2025	<div> <div> <div>I</div> <div>E</div> <div>T</div> </div> </div>
9 11 13	Electric buses	5,321 electric buses	● ● ●	Around 13 thousand in 2025	<div> <div> <div>I</div> <div>E</div> <div>T</div> </div> <div> <div>+</div> </div> </div>
9 11 13	Digitalization of services for municipalities (YoUrban platform)	N.A.	N.A.	4,000 municipalities connected in 2025	<div> <div> <div>I</div> <div>E</div> <div>G</div> <div>T</div> </div> <div> <div>+</div> </div> </div>



## Read more

**YoUrban** is a platform for monitoring and managing the urban infrastructure ecosystem, that integrates services (including geolocation, real time monitoring) and assets such as lighting points, electric vehicle charging points, and environmental sensors. Sustainable urban development models such as CO<sub>2</sub> City Index, Circular City Index, 15Min City Index are also available on the platform.

(9) The 2030 target is >20 GW.

(10) KPI changed from previous year, with a focus on public owned infrastructure.

I Industrial	E Environmental	S Social
G Governance	T Technological	

## Goals



New



Redefined



Outdated

## Progress



Not in line



In line



Achieved

N.A. = not applicable



# Clean electrification

| 2-6 | EU3 | EU4 |



The energy sector underwent a profound revolution in 2022 that required a twofold acceleration: diversifying and ensuring security of supply at predictable prices, as well as continuing on the path taken in achieving an increasingly sustainable energy mix.

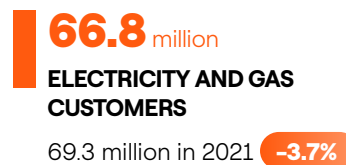
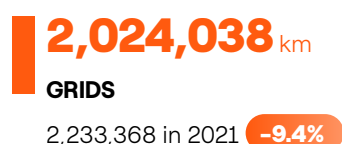
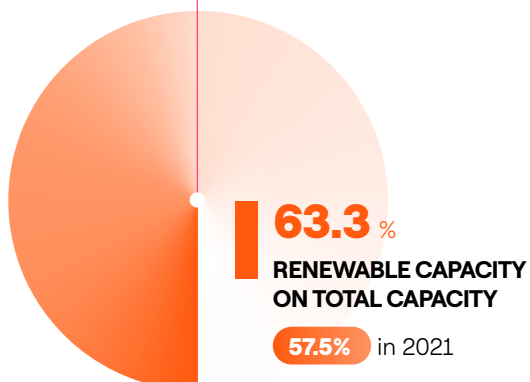
To reduce the dependence on raw materials, we are promoting greater diversification of the supply chain of key technologies for the transition, including investments to locate photovoltaic panel production in Europe, particularly with the 3SUN Gigafactory in Sicily, whose generation capacity will grow 15 times over current output, reaching 3,000 MW per year in 2024.

**Electrification is the common strategic horizon** toward the progressive decarbonization of the economy, which cannot disregard the efficiency and digitalization of infrastructure and, in particular, distribution networks. As a global player distributing to both rural areas and some of the largest megacities on the planet, we are committed to developing a unique integrated operating model to manage the transformation of the traditional distribution business model and the evolution of electricity grids into resilient, participatory and sustainable platforms.

**Electrification is also the lever** through which customers can participate first-hand in the change taking place, choosing and tapping into the benefits of sustainable solutions that are affordable, innovative, flexible and digital. The change starts

precisely with individuals and households who, with the choices they make, can help accelerate the energy transition, not only by purchasing energy generated from renewable sources rather than fossil fuels, but also by becoming “prosumers”, that is, generators of energy as well as consumers, through, for example, the new Renewable Energy Communities (RECs).

Electrification of final energy consumption is confirmed as the optimal solution to decarbonize the economy, make transportation more efficient, reduce environmental impacts and digitalize our homes and cities. It must therefore be understood as an essential tool to achieve the energy transition and shape a sustainable development model. We continue to lead the development of innovative technologies that make the use of clean electricity increasingly affordable and widespread in homes, businesses and government entities, while accelerating the digitalization of services for greater efficiency in the use of energy itself. In addition, 2022 saw the birth of the Enel X Way Business Line, fully dedicated to electric mobility and in particular the expansion of charging infrastructure for electric vehicles, with the goal of meeting the rapidly growing market, the development of advanced charging technologies and flexible solutions aimed at improving customer experience and supporting the electrification of transportation for consumers, businesses and cities.





## Commitments to electrification: Enel's Energy Compact

Enel is among the companies that participated from the beginning in the [United Nations High-Level Dialogue on Energy \(HLDE\)](#), which led to the launch of a global roadmap to set specific goals in accelerating the energy transition and ensuring access to affordable, reliable, sustainable and modern energy systems for all by 2030.

In order to monitor the overall progress of the more than 200 Energy Compacts launched to date and counting over USD 600 billion in investments, **in 2022 the UN launched the first data collection process to monitor the progress of SDG 7 commitments**, the results of which were **published in the Annual Progress Report 2022**. Commitments to date have resulted in **USD 46 billion of investment**, providing better access to electricity and clean, sustainable cooking for **6 million and 14 million people** worldwide respectively; **88 GW of renewable energy capacity** has been installed and 2,450 GWh of electricity will be saved between 2021 and 2022 through energy efficiency.

Enel's commitment includes several objectives underpinning the electrification strategy, such as increasing renewable capacity and demand response, reducing GHG emissions in line with the 1.5 °C scenario (certified by SBTi), installing new electric vehicle charging points, and committing to achieving new connections in rural and suburban areas in the countries where the Group maintains a presence. The commitments reported in the Energy Compact are in line with the Strategic and Sustainability Plans so as to ensure transparency and traceability in the Group's path to clean electrification. The [Group's commitment](#) is complemented by:

- **the Energy Compact for the electrification of Sardinia**, which aims to phase out coal, increase generation from renewable sources, and electrify final demand;
- **Enel Chile Energy Compact**, promoted in collaboration with the Universidad del Desarrollo and the Government of the Santiago Metropolitan Region, with the goal of electrifying the entire bus fleet by 2030. In addition, efforts will be made to accelerate the replacement of wood-burning stoves in residential, commercial and government buildings with electric heating systems, from the 10,000 substitutions made by Enel to date, to over 60,000 planned by 2030.





# Sardinia: the perfect island for a sustainable model

**Thanks to the many renewable resources on the island, Sardinia can act as a driving force for electrification and sustainability.**

**S**ardinia has all the characteristics to become a **green model** for the energy transition of the near future. An ambitious goal to which our Group intends to contribute, powering the entire Mediterranean island with the **abundant renewable resources** available there. Sardinia has geographical, economic and demographic characteristics that differentiate it from other Italian regions: its insularity has limited the development of **energy infrastructure**, to the extent that it has been excluded from methanization. On the other hand, natural resources such as wind, water and solar energy are present in abundance due to the advantageous location, making it possible to create plants capable of producing large amounts of energy. In line with the Enel Group's nationwide commitment, the sustainability goal can only be to reduce to zero the use of both coal and natural gas, starting with the promotion of **alternative, green solutions**. When completed, the electrification process will at the same time promote **sustainable tourism** through the spread of **environmentally friendly vehicles** by land and sea as fossil-fueled means of transportation gradually disappear. In this regard, Enel X Way has signed a memorandum of understanding with the Region of Sardinia that entails the installation of 1,200 charging points in the island's urban centers to support the energy transition.

Based on estimates of Sardinia's energy needs, it is predicted that by 2040 it will be possible to reduce the use of coal and natural gas to zero, using only renewable sources. Most of the installations will be **photovoltaic** and **wind** plants: together with the existing hydroelectric power plants and storage systems, therefore, the aim is to have an energy mix that can guarantee continuity in the availability of electricity. With the **acceleration** of enabling regulatory factors and authorization time lines, within a few years this scenario will bring concrete benefits for people's health and especially the environment, making Sardinia an **energy benchmark model** for green development, potentially replicable elsewhere. The public will also be the main players in this transaction through a model of distributed generation on the ground and also active through participation in energy communities.

Thanks to the creation of partnerships and agreements, in which the Enel Group will play an active role, the state-of-the-art facilities and innovative infrastructure will also allow for significant development of the island from an economic point of view, with the creation of new jobs and the arrival of investments.



# Renewable energies

EU1 | EU2

**112.4** TWh

**NET RENEWABLE ELECTRICITY GENERATION**

108.8 TWh in 2021 **+3.3%**

Despite the difficult geopolitical context and the energy crisis triggered by the war in Ukraine, the Group **generated** around **124 TWh<sup>(1)</sup>** of electricity from renewable sources in 2022 (119 TWh in 2021), of which more than 50% (66 TWh) from wind and solar power. We installed and commissioned **new capacity of 5,223 MW**, up from 5,120 MW in 2021, thanks to more than 80 plants divided between solar and wind power. In addition, we reached **387 MW of battery storage**, an element of flexibility that is becoming increasingly strategic in the energy transition process we are currently experiencing. In 2022, the process of shutting down coal-fired power plants

proceeded. In September, we shut down the last coal-fired unit at the Bocamina power plant, decommissioning the entire coal-fired fleet 18 years ahead of the 2040 targets set in Chile's National Decarbonization Plan. In Spain, the Teruel thermal power plant was also dismantled with the demolition of the cooling towers. For more details, please refer to the chapters "[Zero emissions ambition](#)" and "[Our commitment to a just transition: leaving no one behind](#)" in this Report.

As of the end of December 2022, **the Group's net renewable installed maximum capacity reached 53.6 GW<sup>(2)</sup>**, up by 3.5 GW from 2021, **and corresponding to 63.3% of the total net installed maximum capacity**. This achievement enabled Enel to meet the target set in all those financial instruments related to attaining a renewable installed capacity percentage in excess of or equal to 60%.<sup>(3)</sup> For further details, please refer to the chapter "[Sustainability-linked finance according to Enel](#)" in this document.

## THE SUSTAINABLE SITE AND PLANT MODEL

The Design and Site models of the sustainable plant were created to integrate sustainability into the business along the value chain (phases of Business Development, Engineering & Construction, Operation & Maintenance, Repurposing) and are based on the principles of Creating Shared Value (CSV) to forge synergies between the needs of the business and those of the region. These are constantly evolving pillars centered on best practices and procedures that aim to mitigate the impact of our plants on the local areas, increase and foster collaboration with communities and generate efficiency by promoting and applying the

principles of CSV, circular economy and innovation, based on a deep knowledge of the context in which we operate. The use of local labor for construction activities and actions taken to maximize the recycling of waste produced and reduce water consumption are examples of the application of the models. Specifically, the sustainable Design and Site pillar applies to the construction phase of a plant up to its completion, while the Sustainable plant pillar applies to the Operation & Maintenance (O&M) phase, i.e. the plant's operations and generation activities. In 2022, the sustainable Design and Site model was applied at all construction sites, and the sustainable practices under the model were adopted at 75% at the hydroelectric, geothermal and thermal sites and 95% at the remaining renewable sites.

According to studies by the IEA (International Energy Agency), the pace of growth of renewables must increase year after year. They must support the electrification of sectors such as private transport or domestic heating, which until now have been almost entirely based on fossil fuels. We have therefore set ourselves the ambitious goal of **generating 100% energy from renewable sources by 2040**.

To achieve this goal, we must also invest in the supply chain. In April 2022, Enel Green Power signed a subsidized

loan agreement with the European Union for the transformation of **3SUN into a solar panel Gigafactory** in Catania, Sicily, Italy, which will become Europe's largest factory for the production of high-performance double-sided photovoltaic modules. The Gigafactory will help raise efficiency standards in the market while improving the reliability and sustainability of the panels manufactured, and will make an important contribution to the growth and maintenance of a solar power industry in Europe.

(1) 124 TWh equals about 50% of total net production and excludes generation from managed capacity of 11 TWh in 2022.

(2) Including managed renewable capacity and BESS in 2022, 59 GW of installed capacity or 66% of total capacity was reached.

(3) From the calculation of the percentage of renewable installed capacity for the purpose of the Sustainability-Linked Financing Framework, 531.1 MW of purchased capacity from power plants acquired by the Group was excluded in accordance with the contractual documentation of the individual instruments.



## 3SUN Gigafactory: the future of energy takes shape in Catania

*A hub of technological excellence for energy self-dependence*

Our 3SUN photovoltaic module factory in Catania, established in 2010 and continuously growing, is preparing to become a true Gigafactory. By July 2024, 3SUN will see its annual generation capacity grow 15-fold, from the current 200 MW to 3 GW, becoming the largest photovoltaic panel factory in Europe. We expect an investment of around 600 million euros, of which almost 118 million euros from the EU Innovation Fund, which identified TANGO, i.e. iTaliAN Giga factOry, as one of the seven initiatives selected. The project has been included in funding requests for Italy's National Recovery and Resilience Plan and, if awarded, the total project funding could reach up to 188 million euros.

The selection process to recruit more than 500 secondary school graduates for technical and operational positions in the areas of generation, maintenance, auxiliary services, product quality and plant management has just begun. In 2022, 50 graduates were hired and the process to select another 100 is currently underway.



With these new recruits, 3SUN's team, which already includes more than 200 resources, will be significantly expanded to around 900 employees in total. Not only will the Gigafactory increase direct employment, it will also generate a total of 1,000 indirect jobs, including current ones, by 2024.



# Digitalization of grids

3-3 | EU4 | DMA EU (former EU7)

**507.7** TWh

**ELECTRICITY TRANSPORTED  
ON THE GROUP'S DISTRIBUTION GRID**

510.6 TWh in 2021 **-0.6%**

**231** min

**SAIDI**

243 min in 2021 **-5.2%**

**0.7** million beneficiaries

**NEW CONNECTIONS IN RURAL  
AND SUBURBAN AREAS**

0,8 million in 2021 **-12.5%**

## Electricity distribution grids by country and region



		High voltage	Medium voltage	Low voltage
<b>km</b>	<b>2,024,038</b>	<b>40,566</b>	<b>717,992</b>	<b>1,265,480</b>
		<b>2%</b>	<b>35%</b>	<b>63%</b>
Europe and North America		5%	27%	68%
Iberia		6%	36%	58%
Italy		– (1)	31%	69%
Latin America		4%	50%	46%

(1) In Italy there are almost 20 km of high-voltage grid.

The grid is not an infrastructure for its own sake, but enables the interconnection of the different players in the energy market. Supply electricity is reliable only if it is guaranteed by a grid that, through innovation and digitization, is capable of ensuring the completion of the energy transition through the electrification of uses.

Aware of its strategic role, we now have one of the most innovative and digitalized electricity infrastructures in the world. We also launched an action plan called **Grid Futurability®**, a comprehensive, customer-oriented industrial approach aimed at renewing, strengthening and expanding the Enel Group's grids in the coming years. Our aim is to provide a more resilient, participative and sustainable grid, one which can anticipate, through an investment roadmap, the needs of stakeholders and harness innovative technological developments to meet them.

The grid is key to achieving decarbonization targets. In 2022, we presented the **Net-Zero strategy** for grid activity to counter direct emissions inherent in the infrastructure, acting on digitization, remote operations, the use of electric vehicles for work, measures to protect biodiversity and reducing technical grid losses. In addition, we are engaging suppliers, equipment manufacturers and construction companies in our supply chain to reduce indirect emissions and implement more sustainable processes and network components, such as SF<sub>6</sub>-free switchgear, vegetable oils for transformers and environmentally friendly or standard cables for sustainable construction sites.

Over the past year, we have entirely rethought the value chain by applying the concept of **Sustainable by Design**, redesigning the production and end-of-life management processes of grid assets with the aim of decreasing raw material consumption, maximizing economic value and reducing environmental impacts, including greenhouse gas (GHG) emissions.

A **Sustainable Reference Model** tool has been developed which, integrated into our digitalized systems, makes it possible to monitor the number and type of solutions implemented at all active or opening sites and to measure their impacts, along four lines: decarbonization, social, environmental and circularity. The score associated with each solution makes it possible both to identify the most virtuous sites (*ex post* evaluation) and to carry out simulations (*ex ante* evaluation) to facilitate the choice of solutions to be implemented.

In order to make the value chain circular, we also defined **Grid Mining & Zero Waste** strategies, to review the end-of-life management processes of grid assets in a more sustainable way and identify New Life Cycle practices (recycling and reuse of materials at the end of their life). In this regard, in order to ensure complete tracking of the materials contained in grid assets, we have developed the "Digital Product Passport" in our systems, which enables us to monitor any materials considered critical, for which it might be useful to evaluate an alternative, but also to define *ex ante* the end-of-life reuse scenarios. Having an integrated and digitalized tracking system along the entire value chain is the driving force toward the ambition to open our "mine" (grid mining) to the outside world as well,

making it available to other companies or different sectors in order to involve their respective production chains and feed new markets for raw and secondary materials, promoting the development of the area and the saving of virgin materials, and creating new job opportunities related to waste material recovery initiatives while minimizing environmental impacts. More details can be found in the chapter “Circular economy” in this document.

Achieving such ambitious goals necessarily requires joint multi-stakeholder action, involving suppliers, partners, competitors, industry grids, etc. In the spirit of Open Power, we have:

- founded the **Open Power Grids Association**, which aims to share and develop grid-related technologies and methodologies with industry stakeholders in order to accelerate the adoption of safer, more efficient and sustainable solutions for faster achievement of the requirements towards the zero-emission ambition;
- launched specific challenges on the crowd sourcing platform [openinnovability.com](https://openinnovability.com), covering, among other aspects:
  - a new concept for the design of the primary and secondary substations, as well as for the smart meter installed in end user’ homes, whose development and large-scale adoption will lead to a significant reduction in environmental impacts;
  - the identification of low-emission gensets to be used for emergency management or in all cases where they are needed for the operation and maintenance of the grid;
  - alternative technologies for the construction phase of traditionally concrete assets such as 3D printing.

In addition, tests were conducted on a new design of distribution infrastructure supports using alternative mate-

rials to traditional cement with a high clinker content with a high impact in terms of avoided emissions of up to 80%. Meanwhile, by way of application of the grid mining strategy, experiments continue on the reuse of composite material from wind turbines for the production of certain grid components and on the identification of solutions for the reuse of wood waste from logging near overhead lines.

In 2021 **Gridspertise** was established, a new industrial and commercial entity that offers innovative, flexible, sustainable and integrated solutions to electricity and distribution operators (DSOs), presenting itself to the market as a reliable partner to boost the digital transformation of power grids across the industry ecosystem as part of the energy transition. The priority areas for action are:

- **meter and grid edge digitalization**, focused on increasing customer engagement and stakeholder participation through smart meters and grid edge technologies that also enable engagement in electricity prosumer markets;
- **digitalization of grid infrastructure**, aimed at increasing the intelligence and flexibility of power grids to accelerate full-scale digitalization, increasing efficiency, reliability and service quality and supporting DSOs to manage the challenges facing network operations;
- **digitalization of field operations**, to increase operational efficiency thanks to innovative solutions for planning and operational processes and, at the same time, to increase the safety of internal and external operators in the field.

In October 2022, an agreement was signed for the sale of 50% of Gridspertise Srl to the international private equity fund CVC Capital Partners Fund VIII (CVC).

## Record distributed renewable generation capacity with 5.6 GW connected to its grids in 2022

By 2022, we will have connected to our grids a record nearly 5.6 GW<sup>(1)</sup> of distributed renewable generation capacity equivalent to more than 400 thousand producers and prosumers worldwide, including more than 300 thousand in Europe and the rest in Latin America.<sup>(2)</sup>

This gives us a global cumulative capacity of 65.7 GW,<sup>(3)</sup> equivalent to approximately 1.4 million producers and prosumers. These results were achieved thanks to the increasing capacity to accommodate distributed renewable generation (hosting capacity) and the high level of digitalization of the distribution networks operated by Enel.

For further details, see section “Renewable energies” in this chapter.

(1) Including about 300 MW corresponding to Enel Goiás in Brazil, sold at the end of December 2022.

(2) Including about 35,000 producers and prosumers added by Enel Goiás in Brazil, sold at the end of December 2022.

(3) Including about 700 MW corresponding to Enel Goiás in Brazil, sold at the end of December 2022.



# Electrification of uses

3-3 | EU3 | DMA EU (former EU23)

**321.1** TWh

**ELECTRICITY SOLD**

309.4 TW in 2021 **+3.8%**

**212**

**COMPLAINTS (NO./10 THOUSAND CUSTOMERS)**

**22.6** thousand

**OWNED PUBLIC CHARGING POINTS**

18.1 thousand in 2021 **+24.9%**

**45.8** million

**END USERS WITH ACTIVE SMART METERS**

45.2 million in 2021 **+1,5%**



## Customers

		Electricity market	Gas market
Total	no.	60,225,898	6,558,997
Italy	no.	21,382,665	4,581,245
Iberia	no.	10,545,281	1,798,737
Rest of Europe and North America	no.	2,905,352	178,993
Latin America	no.	25,392,600	22

The final number of energy and gas customers was **close to 67 million** in 2022, down slightly from 2021, while energy sales amounted to 321.1 TWh in 2022 (309.4 TWh in 2021).

**760** MW

**STORAGE**

375 MW in 2021

**8.5** GW

**DEMAND RESPONSE**

7.7 GW in 2021 **+9.9%**

## Customer centricity

The leadership of a company like Enel necessarily passes through customer care and attention to quality service, aspects that refer not only to the supply of electricity and/or natural gas, but also and above all to the intangible aspects of the service perceived by the customer.

We aim to **maximize value for customers** on a daily basis:

- through **a robust business model** that focuses on the continuous improvement of efficiency, effectiveness and

resilience in process management (activation of new services, billing, payments and credit, customer focus) and digitalization.

- **making them more aware** with offers geared towards increasing awareness of their consumption, different time slots, rewards for reducing consumption compared to the past, clear and simple communication;
- **proactively managing their needs;**
- **accompanying them towards electrification.**



## Listen actively

Deeply understanding our customers and treating everyone with respect and kindness, taking their needs to heart and solving them with concrete solutions. We have consolidated activities focused on measuring and monitoring

customer satisfaction and happiness, as well as analyzing feedback to integrate the customer's point of view into the overall management of business processes.



## Make life easier

Adopt an understandable language and always keep promises, respecting your customers' time and always working efficiently.

In order to simplify the experience of our customers, in 2022 we developed a specific platform to standardize and optimize internal processes, aware that in order to be able to offer efficient solutions to our customers, we must first simplify ourselves, also by using comprehensible

language, free of technicalities. To this end, we launched the Plain Language project, aimed at simplifying the communication language used through the different channels of customer interaction. In Spain, the new global app was launched to offer a higher level of customer experience. These actions have improved the efficiency of operations with a major impact on reducing complaints and optimizing operating costs.



## Build the future

Accelerating electrification, anticipating customers' needs and offering sustainable solutions for families and businesses, accompanying them with honesty and determination to earn their trust.

Data-driven decision-making, an agile approach to design, customer centricity based on inclusiveness and accessibility, digitalization and simplification are the levers to generate value for customers and the Company.

Over the past few years, new payment methods have been introduced, digital channels have been strengthened, and customers have been provided with tools to control their consumption and improve energy efficiency, with a view to encouraging their participation in the Net-Zero transition.

Enel also focuses on the future, through open and sustainable innovation partnering with start-ups to engage customers towards a digital profile, standardize processes, personalize the service and ensure transparent and reliable information. We involve customers in the testing and co-design of new services, including through neuroscience and biofeedback tests in collaboration with universities and research centers.

We put customers at the center of the energy transition, offering a comprehensive product portfolio, commodity and beyond commodity, and a unique customer experience that ensures no one is left behind.

## Customer satisfaction

| 2-29 | 3-3 | 417-1 |

"On a scale of 0 to 10, would you recommend Enel to your family and friends?" This simple question is the basis for the Net Promoter Score (NPS), which allows us to measure customer satisfaction globally through simple and immediately understandable data. It is calculated, in a range from -100 to +100, as the percentage of "promoters" (score of 9 or 10 out of 10) minus the percentage of "detractors" (score between 0 and 6 out of 10). Customers are interviewed by e-mail twice a year to maximize responses and to monitor trends over time.

We complement NPS, monitoring transactional aspects aimed at detecting overall satisfaction during some of the most sensitive phases of the customer experience (such as activation completion, contact center interaction, bill delivery, etc.). We survey our customers by e-mail to measure their level of Customer Satisfaction (CSAT), using an international standard that is based on the question "On a scale of 1 to 5, how satisfied are you with the 'moment of truth'?"<sup>(4)</sup> The total is calculated as the average of all responses received. During 2022, CSAT survey coverage was

(4) Significant events in the relationship between customer and Company (e.g. completion of activation, interaction with the contact center, delivery of the utility bill, etc.) that determine the customer's opinion and evaluation of the service.

completed in Italy and Spain (30 “moments of truth” per Country), is ongoing in Brazil (8 “moments of truth”) and is about to be launched in 2023 in most other markets.

Thanks to the continuous feedback from the customer base, the dedicated Customer Happiness team and the constant monitoring of happiness and satisfaction val-

ues and insights – now integrated into the operational processes of Activation, Billing, Credit and Collection and Customer Care – 2022 saw **Enel achieve a solid increase in Global Net Promoter Score (weighted average of all NPS values at country level), from -2.8 in December 2021 to +5.6 in December 2022.**

## Complaints management

| 2-25 | 2-26 | 2-29 | 3-3 |

In 2022, guidelines on the complaints monitoring and classification process were implemented in all countries where we operate, in order to maximize service quality and increase customer satisfaction, in accordance with applicable laws, regulations and governance rules. Our aim is the convergence of the current processes towards a common, effective and efficient model, through continuous performance monitoring and the development of internal benchmarking, aimed at highlighting a non-conformity on an existing product/service/functionality, which cannot be

resolved immediately (First Contact Resolution) and therefore requires further work by the Complaints Back Office. In addition, we have worked to standardize the monitoring and quality control of complaints management with homogeneous operating methods to make the performance of the Group’s different countries of presence comparable, also thanks to the creation of a global platform that enables monitoring of indicators and trends while at the same time ensuring the correct classification of complaints handled.

## Focus on vulnerable groups

| 2-29 | 3-3 | DMA EU (former EU23) |

We want to remain attentive to the needs of citizens, improving and maintaining access to electricity in the most disadvantaged areas and among the poorest populations. All the countries in which the Group operates in fact provide forms of support, often linked to state initiatives, which make it easier for certain sections of the population

to pay electricity and gas bills, thus allowing equal access to energy. For further details on initiatives dedicated to vulnerable customers, please refer to the “Value for Disability” project in the [“Managing human rights”](#) chapter of this Report.

## Transparent relations

| 3-3 | 417-1 | DMA EU (former EU24) |

In line with its commitments to mitigate the effects of climate change, our Group has intensified the process of digitalizing customer relations.

During 2022, digital services were further expanded, including the promotion of digital bills and payment channels with the possibility of flexible installment plans.

The emphasis was placed on developing and marketing a digital solution with simpler and more transparent bills. In 2022, thanks to **e-billing**, 30% of bills globally was sent electronically. This not only reduces the costs of paper, printing and delivery of traditional bills, but also the CO<sub>2</sub> emissions associated with all these activities.

By leveraging state-of-the-art technology standards, telephone customer service in Chile, Colombia and Peru was standardized. Thanks to a global control center, it is possible to monitor the flow of calls and manage their routing to available operators in order to minimize waiting time for our customers. In addition, the operating methods, defined at global level, tend to the highest quality standards, standardizing the “tone of voice” and style of handling customer issues.

Thanks to a data-driven approach and continuous benchmarking of best practices, both from energy companies and other leading digital industries, the following three

“Customer Centric Behaviors” have been defined in order to offer our customers simple, innovative, sustainable, fast and effective solutions, through a clear language that is accessible to everyone:

- listen actively,
- make life easier,
- build the future.

The focus on Customer Happiness takes shape when we call into question all those emotional factors that, parallel to the more rational ones related to the choice and “confirmation” of a brand, are built on a more human interaction in relation to the brand and its advocates. We want to exceed our client’s expectations by optimally balancing the ratio of costs incurred against benefits received, thereby increasing the likelihood of a more stable and lasting relationship. Enhancing the perception of our work with an effective and efficient service leads to the building of a long-lasting relationship. Not only that: by focusing our energies on Customer Happiness we also

## Energy-saving commercial offers, products and services

### 3-3 | DMA EU (former EU24) |

As a result of rising energy prices, the topic of energy saving has become even more important in 2022, and in all countries where we operate, efforts have been stepped up to make energy efficiency solutions available that can guarantee customers savings in terms of both consumption and CO<sub>2</sub> emissions. From household appliances to smart home solutions, from home services to heating and air-conditioning systems, from solar-powered systems to charging infrastructures for electric cars, solutions have been developed to help save energy, time and money. Among the proposed solutions we find Homix, the smart home solution to manage temperature, lighting and security easily and intelligently in the home, optimizing consumption on the basis of the habits and needs of the family. Induction hobs that replace traditional gas cookers and enable the cooking of food in less time, with almost twice the energy efficiency of gas cookers, greater safety and significant CO<sub>2</sub> savings. Enel X Sun Plug&Play is the innovative flat photovoltaic system that can be installed

optimize satisfaction, provide more stability in securing the Company’s market share and give more support to pricing policies.

Enel complies with current customer privacy regulations in all the countries where it operates. We also strive to monitor third-party companies that may be in a position to use the personal data of customers. To this end, dedicated clauses are included in contracts with partners who use personal data to carry out specific activities, for example sales services or customer happiness surveys. Customer data is an expression of the individual’s personality and identity, and must therefore be treated with due caution and guarantees. Enel considers personal data to be a shared and corporate asset at the same time. For this reason, we have appointed a Data Protection Officer who aims to guarantee full respect for the privacy of all the individuals with whom we interact. For further details, see the “[Sound governance](#)” chapter of this document.

on a balcony or on the façade of a building at a window, allowing the energy generated by the sun to contribute to the home’s energy needs, saving up to 20% on energy bills. Heat pumps use thermal energy from air or water for heating and cooling and are up to four times more energy efficient than the best boilers, saving around 40% on utility bills. Another product that is of great importance for energy freedom is rooftop photovoltaics with a storage system: it harnesses solar energy to generate electricity, saving money on electricity bills through self-consumption and energy storage. In fact, the system stores in batteries the excess electricity generated by the photovoltaic system during the day, making it available during the night when the system is not generating, thus significantly reducing energy drawn from the grid and consequently costs on the bill.

In 2022, Enel X installed a total of about 73,000 Smart Home products and more than 5,000 photovoltaic products that contribute to energy savings and efficiency.

## From need to solution, customer-driven change

3-3 | DMA EU (former EU24)

Encouraging the active participation of customers in the transition, the development of new services, a better understanding of their consumption and greater control over it is the basis of our daily commitment.

We aim to develop innovative technologies that make the

use of clean electricity increasingly affordable and widespread in homes (B2C), businesses (B2B) and the public sector (B2G), while accelerating the digitalization of services for more efficient energy use.

### Businesses: B2B (Business To Business)

Our ambition is to be able to become a partner to companies and guide them towards the use of customized integrated solutions, starting from a simple consultancy to the implementation of articulated solutions such as self-generation of electricity, installation of trigeneration plants, products and services for energy efficiency and energy demand management solutions. We aim to optimize costs and consumption, to create value where it was not possible before, taking advantage of technological evolution and making businesses increasingly sustainable.

Among the most notable achievements in 2022 is the re-affirmation of our leadership in flexibility services, i.e. the service that allows companies to reduce their energy consumption temporarily or provide their own on-site generation in order to offer this flexibility to serve grid stabilization (balancing electricity supply and demand) and receive remuneration in return. In fact, we managed **8.5 GW** of capacity worldwide on behalf of our customers.

We have also installed 87.8 MW of power solutions that have enabled our customers to self-generate renewable energy.

### DISTRIBUTED GENERATION

## Enel X's largest distributed solar generation project in the world: Itaú Unibanco

Francisco Scroffa

Head of Enel X Brazil



*"Two large companies with complementary strategies have found the opportunity to work together, with an integrated strategy, despite coming from different sectors. Enel X is able to propose diversified solutions, meeting all the needs of Banco Itaú and guaranteeing savings, energy efficiency and sustainability."*

In August 2022, we signed an agreement with Itaú Unibanco, one of the largest private banks in Latin America, for the installation of **46 photovoltaic plants with a total capacity of 54.7 MWp**. It is one of Enel X's largest distributed solar power generation contracts in the world and will be used to power **1,557 branches in 14 locations in Brazil** (representing about 80% of the Brazilian bank's

branches) with renewable energy. Enel X will facilitate Itaú's energy transition in support of its commitment to become a zero-emission entity by 2050. Itaú Unibanco is present in 8 countries besides Brazil, with 90,000 employees and 60 million customers. It operates mainly in Brazil, but its international presence allows it to provide high-quality services to local and Brazilian clients abroad.



In addition, the implementation of the Utility Bill Management (UBM) platform will enable it to:

- digitalize the management of corporate payments;
- organize information on service providers' accounts;
- monitor the energy and water consumption of the 1,557 business units;
- monitor sustainability indicators.

Enel X's distributed energy system will enable Itaú to generate its own energy with significant cost savings on its bills and more efficient management of the company's accounts. In addition, the use of sustainable energy **will**

**avoid the emission of 10,000 tons per year of CO<sub>2</sub>**, thus embarking on the road to carbon neutrality by 2050.



## TELEMEDICINE

### Smart Axistance e-Well

**Alberto Piglia**

Head of e-Health Enel X



*"Enel X's mission is 'to discover, nurture, fuse and perfect cutting-edge technologies and services in order to improve and make people's lives easier'. This is why Enel X intends to meet customers' new needs related to the world of Health: to have the medical advice they need anywhere, any time and in any condition. Platforms and services, in turn, must comply with the principles of sustainability and circular economy."*

**S**mart Axistance e-Well is the innovative application that accompanies users on a path to personal well-being and aims to help improve lifestyle and monitor key health risk factors. The use of the e-Well application is extremely simple despite encompassing years of medical-scientific research and cutting-edge technology: simply download the app, fill in a questionnaire on your initial health status and perform the check-up, either at Policlinico Gemelli or completely digitally. Thus commences a year-long wellness journey.

The distinctive elements that characterize the innovativeness and sustainability of Smart Axistance e-Well can be summarized in five areas:

- **Customization.** The Smart Axistance e-Well wellness program is fully customized to suit people's needs, characteristics and lifestyles and includes a nutrition program and a physical activity program.
- **Medical partnership.** It is made possible by the combination of Enel X's technology and the medical expertise of the doctors at Policlinico Gemelli, Italy's leading hospital according to Newsweek's World's Best Hospitals 2022

ranking and an internationally renowned medical-biological research center.

- **Wellness areas.** It considers the main health risk factors, recognized by the American Heart Association, such as physical activity performed, diet followed, sleep, smoking and mood.
- **Video consultations.** In the Smart Axistance e-Well program, the relationship between doctor and user takes place via video consultations: it is therefore digital, without geographical barriers..
- **Innovative technologies.** Smart Axistance e-Well is an application developed on the basis of the most advanced technologies and integrates its functionalities with smartbands for monitoring vital parameters.



## The public sector: B2G (Business To Government)

The offerings for the public sector aim to make cities “smart” environments, accompanying them on a path of electrification and digitalization, through the integration of solutions aimed at efficiency and the improvement of services in favor of the public’s well-being and the reduction of polluting emissions.

We accompany small and large municipalities in their transition towards an innovative smart city model, providing them with a portfolio of solutions aimed at improving the integration and interconnection of their services.

For example, using state-of-the-art technology, we aim to transform street lighting into a smart, multifunctional and efficient infrastructure (sensors, cameras and electric car charging points) for the safety and convenience of the public and at all times connected with a digital platform for remote, real-time management and monitoring.

In addition, we promote solutions for the electrification of urban transport and public building efficiency that optimize the energy performance of buildings while opening up the possibility of active participation in the flexibility services already described for B2B customers.

With a view to facilitating the control and management of the solutions active in their region, we provide government authorities with a single digital access point, **Enel X YoUrban**, which allows them to monitor the status of their infrastructures, visualize performance indicators and stay connected and informed on the new technological possibilities offered by the market.

During 2022, we achieved major milestones in the efficiency of public lighting by installing more than **3 million LED lighting points** and operated more than **5,321 electric buses** worldwide.

### ELECTRIC BUSES

## The Enel X TransMilenio Project

**Lucio Rubio**

General Manager of Enel in Colombia



*“We are proud to be part of this project because, by providing the charging infrastructure for the new bus fleet, we can contribute to the development of electric mobility, the energy transition and the transformation of Bogotá into a smart and sustainable city.”*



In 2022, we completed the construction of the fifth electroterminal in Colombia, Fontibón – Escritorio, one of the largest in South America. It will serve 172 electric buses thanks to an electrical infrastructure with an installed capacity of 13.6 MW, and boasts more than 80 stations dual plug charging stations of 150 kW each provided by Enel X Way, another Group company whose mission is focused totally on electric mobility.

The project was developed within the framework of the concession contract signed with TransMilenio SA, the

public transport administration body of Bogotá’s Capital District, and is intended for the public transport operator Mueve Fontibón SAS.

It is the first large-scale electric mobility infrastructure in Colombia, contributing to the decarbonization and the technological and sustainable development of the capital Bogotá. Bogotá’s e-buses have enabled the municipal administration to reduce emissions by 600 tons of CO<sub>2</sub> per year. Six electroterminals capable of charging buses in a few hours have already been opened throughout the city in Fontibón Escritorio, Fontibón Refugio, Fontibón Aeropuerto, Suba Las Mercedes and Usme, serving 878 electric buses with 412 smart chargers. In addition to the partners already mentioned, there is the bus manufacturer, BYD.

### The Mateu Orfila Hospital

**Davide Ciciliato**

General Manager of Endesa X



*"Endesa X wants to be the energy partner of cities to help them achieve their decarbonization goals. We put all our knowledge of the energy world at their disposal to realize cleaner cities that save as much energy as possible. The Mateu Orfila Hospital is an example of this."*

**E**ndesa X built the first car park of a hospital covered by photovoltaic panels in the Balearic Islands (Spain). The project enabled the Mateu Orfila Hospital to have up to 976 kW peak power (kWp) in 100% renewable energy for its own consumption. The installation, located

in the hospital's 15,000 m<sup>2</sup> car park, will help to reduce the hospital's carbon footprint significantly, supplying 20% of the electricity consumed by the hospital and saving around €160,000 per year, according to the Balearic Islands government's Energy Transition Department.



### Residential customers: B2C (Business To Consumer)

Our goal is to simplify and improve people's lives, through integrated solutions that combine convenience and efficiency and offer greater insight into consumption and consequently greater control over it, to enable residential customers to electrify their usage and participate in the change taking place, with an awareness of how their individual choices contribute to the transition.

Our solutions therefore accompany customers along this path, guaranteeing greater independence in the supply of energy through easily accessible distributed energy products such as Enel X Sun Plug&Play rooftop and balcony photovoltaic panels. Alternatively, they can optimize their

consumption, such as through the **Homix** smart thermostat, which optimally manages home heating, memorizing the family's habits and automating it according to different needs, also managing lighting and home security in an intelligent way, thus transforming it into a true smart ecosystem that saves consumption and respects the environment.

A commitment that resulted in the sale of **73,000 Smart Home products** and over **5,000 photovoltaic products** within a consumer customer portfolio that exceeded **63 million** units globally.



### #UnPannelloInPiù: photovoltaics for installation on apartment buildings can make a difference

Stefano Ciafani

National President  
of Legambiente



**A fund-raising campaign promoted by Legambiente together with Enel X dedicated to the fight against energy poverty and the social and economic impact that solar home panels can have.**

*"With the #UnPannelloInPiù campaign that sees us alongside Enel X, we want to offer a concrete response to high utility bills and social inequalities. It is important to give the public a structural welfare solution with tools for self-generation from renewable energy that can bring lasting benefits, both from an economic and social point of view as well as from an environmental protection point of view, while also combating energy poverty that already affected more than 2.2 million households in our country before the pandemic."*



**H**ow can we fight high energy prices and reduce the cost of utility bills? One of the simplest and most practical solutions comes in the form of photovoltaic installation on apartment buildings: cheap, easy to install and activate, and able to cover the consumption of certain household appliances, such as the television, refrigerator or air conditioner, with bill savings of up to 20%, while also generating environmental benefits. In fact, this technology makes it possible to generate clean energy, contributing to combating the climate crisis and reducing atmospheric pollution: it avoids the emission into the atmosphere of 103 kg of CO<sub>2</sub> per year, equivalent to the amount of CO<sub>2</sub> absorbed by about 6 trees.

For these reasons, in June 2022 Legambiente, together with Enel X, launched the fund-raising campaign "**#UnPannelloInPiù**" with the dual objective of helping families in need and informing and raising awareness of the great potential of this type of panel. With a simple donation on the Le-

gambiente website, individuals, associations and businesses were able to contribute to the purchase of photovoltaic panels for installation on apartment buildings for families in economic and social difficulty. The crowdfunding initiative was accompanied by a touring campaign that made stops in nine Italian cities from June 8 to 27, 2022. These were Naples, Brindisi, Palermo, Rome, Cagliari, Florence, Turin, Milan, and Bologna. The event included a series of events aimed at raising awareness of all the tools that exist today to reduce utility bills, including the role of solar photovoltaics in the fight against energy poverty, as well as savings and efficiency, energy communities, social bonuses and the sharing economy. In substance we are dealing with an inexpensive, easy-to-install and easy-to-activate solution that facilitates access to solar technology by making it truly affordable for everyone. Since its launch, the campaign has raised more than 80,000 euros, which will be used to donate apartment photovoltaic systems to families in a state of energy poverty.

## Energy communities

Renewable Energy Communities (or RECs), recently introduced into our legal system, are associations of companies, businesses and members of the public who decide to join forces to equip themselves with one or more plants for the virtual and shared generation and self-consumption of electricity from renewable sources, achieving economic, environmental and social benefits.

Enel X and Enel Green Power offer stakeholders the solutions and services to bring the energy community to life and make it grow in a virtuous way: from the construction of photovoltaic plants to the creation and technical-economic management of the community itself, from monitoring the community's state of service to stimulating the electrification of consumption through efficient technologies (heat pumps, induction hobs, etc.) and digital platforms. All with a view to making every energy community a truly efficient and sustainable ecosystem.

In Italy, thanks to current legislation (still awaiting Executive Decree), it has become possible to set up a condominium

photovoltaic system and allow all condominiums to take advantage of it, thus creating an excellent opportunity to take advantage of a shared space that until now was almost unusable for the benefit of all.

The program involves the construction of a 10 kWp photovoltaic system for each condominium staircase, reaching a total installed system of 60 kWp, or generating about 70,000 kWh/year in total. A self-consumption of 62,300 kWh per year is estimated, which ensures the abatement of about 30 tons of CO<sub>2</sub> emitted. An estimated reduction of more than 60% in electricity use from the grid is expected, with clear benefits in terms of savings for apartment blocks. The project is not only limited to the generation and self-consumption of apartment block energy, but aims to offer a shared mobility and charging service. It would increase the overall consumption of the apartment building by 15-20% and the solution can also be implemented in existing, balanced situations.

### Blufi: a reality projected towards the future

Blue Green Energy. This is the name of the project joined by Blufi, a small village located 800 meters above sea level, right in the heart of the Madonie Mountains, in the province of Palermo (Italy). A small village of about a thousand inhabitants that in the springtime sees the surrounding fields transformed into a carpet of thousands of wild red tulips. This "Little Holland" has decided to accept Enel X's proposal to found the first "inter-municipal" Renewable Energy Community, which will involve five other municipalities in the Madonie: Bompietro, Castellana, Geraci, Petralia Soprana and Petralia Sottana. Specifically, the project includes the

construction of three photovoltaic plants on the roofs of municipal school buildings, with a total capacity of 64 kWp, to which others will be added as soon as possible, by government-run or private entities.

This will result in the generation of around 90,000 kWh per year of clean electricity, which will be shared with an original core of 16 members. This will bring the following benefits:

- **environmental**, reducing emissions by about 29 tons of CO<sub>2</sub> per year;
- **economic**, thanks to the provision by the Gestore dei Servizi Energetici (GSE – Energy Services Operator) of a bonus of €15,000 per year (for 20 years) to be distributed among the members of the community;
- **social**, with a concrete contribution to savings on expenditure and reducing energy poverty.





# Electric mobility to accelerate the energy transition

3-3 | DMA EU (former EU24)

We actively promote electric mobility as a key factor in reducing road transport emissions and contributing to the achievement of the European Union's energy efficiency goals.

Mobility is also a critical aspect of social inclusion and an important determinant of human well-being, especially for disadvantaged groups. Indeed, recognized as an essential service in the European pillar of social rights, transport meets a fundamental need in enabling citizens to integrate into society and the labor market.

We believe that an ecosystem of interconnected, intelligent products and services needs to be developed to

spread the world of e-mobility. Our aim is to improve, simplify and make the world of e-mobility accessible, and to do this we have developed smart charging solutions to suit every need.

Our journey in this direction started a long time ago, but in 2022, in order to cater to the rapidly growing market, we decided to create a separate Business Line, Enel X Way, fully dedicated to the expansion of infrastructure for charging electric vehicles, the development of advanced charging technologies and flexible solutions to improve the customer experience and support the electrification of transport for consumers, businesses and cities.

## New frontiers of electric mobility: e-boating in Portofino

Lorenzo Rambaldi

Head of Innovability Enel X Way



*"Through this installation we give continuity to our project of having a comprehensive infrastructure for the marine sector, both on the sea and on the lake. Equipping ourselves with these new technologies allows us to enhance the area and increasingly turn our sights toward sustainable tourism."*

Our goal is to make electric mobility affordable and increasingly efficient, including in areas such as:

- **Urban Air Mobility (UAM):** we have signed an agreement with Urban V, the company founded by Aeroporti di Roma, to develop efficient and effective charging solutions for electric vertical take-off aircraft, the air mobility of the future;
- **electric boating:** we have developed charging infrastructure for electric boats now present in Portofino and Cernobbio (Italy) and on Lake Tahoe (California).

The electric boating market is booming, driven in part by increasing customer interest in sustainable tourism that reduces air and noise pollution, among other things.

It is precisely in this context that Enel X Way's initiative to support the Ligurian municipality's "Portofino Carbon Free" project was born, thanks to which a fast charging infrastructure for electric boats located at Molo Umberto I is now operational. This initiative represents a tangible sign of Enel X Way's commitment to an increasingly sustainable future for the area.



## The transition to a decarbonized economy passes through sustainable transport for all

The full transition to e-mobility will only be possible through the widespread deployment of safe, reliable and user-friendly charging stations. This is why we have developed a wide range of public and domestic charging infrastructures, capable of charging electric vehicles anywhere at any time. We have also developed a business model that spans from the installation and management of charging points, the so-called **Charging Point Operator (CPO)**, in which we already rank among the most pervasive companies in the world, directly managing more than **22.6 thousand public charging points**, the provision of direct electric charging services to end customers (**Mobility Service Provider – MSP**), through more than 260,000 charging points, accessible through the Enel X Way APP™. Our solutions **in the public sector** are the **Enel X Way Waypole™**, for charging up to 22 kW in alternating cur-

rent, while for electric mobility on roads with a high volume of traffic, we have launched the **Enel X Way Waypump™**, which, thanks to a modular approach, can reach powers of up to 350 kW<sup>(5)</sup> in direct current, enough to charge an electric vehicle to 80% in about 15 minutes.

In the **private sector**, on the other hand, we have developed the **Enel X Way Waybox™** to meet domestic charging needs. This can detect the consumption of other household appliances connected to the home meter, so that the maximum available capacity is never exceeded. In the world of relevant business offerings, there is the Set&Charge solution, which enables the creation of shared value for our B2B customers, allowing them to turn their charging infrastructure also into a source of revenue by making it available to the public and setting their own service tariffs.



**Guillermo Fumanal Achon**

Head of Sustainability Enel X Way



### Circular by design by Enel X Way

*“Circularity is a natural feature of our design, as we know that the use of innovative and sustainable materials increases the resilience of our product supply chains, mitigates impacts on the geopolitical and social front (less need for materials, less exposure to the risk of human rights violations), and finally allows us to foreshadow ourselves as a Net-Zero company.”*

The Group's circular strategy is also applied in Enel X Way. Our main AC charging products use recycled polycarbonate as the main material (100% for Waybox and 75% for Waypole). In addition, we have optimized the use of raw materials on our Waypole™ and have reduced the overall product weight by about 32%.

Another example of a circular solution we have implemented is the recovery through remanufacturing of end-of-life components to be reused as spare parts.

(5) For vehicles with 800V batteries (under the plan only Audi, Kia, Hyundai, Genesis, Porsche, Volvo, Polestar, Stellantis, General Motors, BYD and Lotus have so far announced or launched electric cars with this feature).

## Increasingly inclusive mobility

There is no real revolution in mobility if it is not truly accessible to everyone. That is why we promote and devise solutions that solve all mobility needs, so that even people with disabilities or reduced mobility conditions can benefit freely and independently from the opportunities offered by modern e-mobility, starting with the charging infrastructure. Our charging points dedicated to electric vehi-

cles can now also be used to charge electric wheelchairs, thanks to our **Enel X Way Wayability** device, a charging cable that enables use of the same infrastructure dedicated to electric cars. In this way, can take advantage of any charging point by booking through our app in the same way as for electric cars.

## Creative common Universal Design

When it comes to designing electric car charging points, we cannot overlook motorists and passengers with reduced mobility. This is why our infrastructure has been redesigned in cooperation with ANGLAT (National Association of Transport Handicapped Drivers) on the basis of an inclusive design, called **Universal Design**, which provides parking stalls with an additional signposted maneuvering area for wheelchairs and bollards to protect the charging stations from impacts resulting from any incorrect and accidental maneuvers. In addition, the charging cable is lighter, so that it can be handled more easily by wheelchair users.



On the occasion of the International Day of Persons with Disabilities on December 3, 2022, we made the intellectual property of Universal Design accessible for free, allowing anyone to download our guidelines directly from our website.

## E-mobility Emission Saving

Over the past year, Enel X Way has adopted the calculation methodology of the “**e-mobility Emission Saving Tool 4.0**” version, the tool developed to provide evidence of the organization’s commitment to sustainable mobility through the electrification of the vehicle fleet on the road. The algorithm was certified by RINA on December 28, 2021 according to the principles set out in the UNI EN ISO 14064-2:2019 Greenhouse gases Part 2 standard. In version 4.0, the tool has added, compared to

the previous version, quantification of the environmental benefit in terms of  $CO_{2eq}$  ( $CO_2$ ,  $CH_4$  and  $N_2O$ ) savings. Version 3.0 of the tool already made it possible to determine the savings, generated by the distribution of public and private charging stations on the territory, of  $CO_2$ , equivalent trees per year, pollutants ( $NO_x$ ,  $PM_{10}$ ), noise and the associated economic quantification on health and environment. Compared to 2021, there has been an increase in the energy delivered by charging stations resulting in a significant increase in  $CO_2$  savings, due to the increased deployment of both electric vehicles and Enel X Way’s public and private charging points connected to the grid.

# Promoting access to energy and combating energy poverty

3-3 | DMA EU (former EU23)

Access to energy is a challenge and a primary need as stated by the United Nations SDG 7, which aims to ensure access to affordable, reliable, sustainable and modern energy systems for all, due to the role they play as a driving force for fighting poverty and ensuring long-term economic and sustainable growth.

In its “Energy Progress Report” 2022, the International Energy Agency (IEA) reports that, at the current rate, the world will fail to meet the targets of SDG 7 by 2030. In recent years, it reads, there has been a slowdown due to the increasing complexity of reaching remote unassisted populations and the impact of the Covid-19 pandemic. The latter, in particular, continues to hold back economic development, which is also weighed down by the energy crisis triggered by the Russia-Ukraine war.

According to the latest available data,<sup>(6)</sup> there are still 733 million people without access to electricity, a figure that, although down from 1.2 billion in 2010, should be read in conjunction with the fact that the recent slowdown in the general trend has particularly affected the most vulnerable countries and those that were already lagging behind. At Enel, we are committed to ensuring that as many people as possible have access to energy, both by using traditional means (connections to the electricity distribution grid) and by developing off-grid solutions, and this enabled us to **connect around 690,000 people in rural and suburban areas in 2022**.

In **Brazil**, 25,800 connections were made in the State of Ceará through on-grid and off-grid solutions in remote areas. The project reached 103,200 people from different isolated communities and traditional populations (indigenous or quilombos).

In **Chile**, during 2022, 1,900 new suburban connections were built in the municipalities of Lampa, Pudahuel, Colina and Maipú. Enel Distribución, in alliance with Fundación Techo and Litro de Luz, installed solar lights and a Wi-Fi point in the “El Esfuerzo 2” camp in the municipality of Cerrillos, as well as offering workshops and training on renewable energies, entrepreneurship and digital literacy, thus attempting to promote social and economic development in the camp. Enel Grids is constantly committed to promoting and implementing training activities related to energy efficiency, electrical risk prevention for communities and climate change workshops, as well as carrying out initiatives to improve local employability such as the development of sustainable lighting in col-

laboration with the Litro de Luz foundation, initiatives that focus on the installation of technical tools that enable the autonomy required to ensure the long-term sustainability of the project. The monitoring process in each field is accompanied by a context analysis to measure the project's impact on the sustainability of electrification, as well as to establish a socio-energy analysis of the communities.

In the recent past, following the widespread **increase in the prices of raw materials** on international markets, there has been an increase in consumers who **find it difficult to manage the energy expense**, especially families with low incomes.

The main responsibility for guaranteeing safe and economic access to basic energy services obviously lies with governments, but the electric sector is also called on to provide a tangible contribution by promoting fair and sustainable social-economic development.

In all the countries where we operate we, together with governments and local institutions, have always been at the forefront of the **fight against energy poverty** and the campaign to facilitate access to energy for customers in vulnerable conditions, through specific initiatives to support the deployment of energy efficiency and responsible consumption solutions, the modernization of infrastructure and the growth of renewable energy sources, in line with our sustainable business model and our commitment to an **just transition**.

In this respect, our approach has two lines of action:

## Pro-active actions aimed at anticipating critical situations through:

- new offers that restructure the prices and reward reduced consumption;
- support for vulnerable customers in accessing the benefits offered to them;
- initiatives to disseminate practical tips for reducing consumption, etc.

## Reactive actions when critical situations arise with *ad hoc* interventions:

- suspension/deferral of payments;
- access to tax bonuses or credits for customers in economic difficulties or affected by natural disasters.

**In 2022, in developing countries alone, more than 182 energy access projects were developed that reached around**

(6) 2020.

### **1.9 million beneficiaries and roughly 134 related partnerships were in place.**

Some examples of projects developed on an international level are provided below:

#### **Training program on access to energy and social services (Spain).**

This initiative is based on training courses on issues such as energy saving and efficiency measures, optimization of the electricity bill, the new Social Bonus and protection against having electricity cut off if the bills are overdue, and is directed towards NGOs and social services so they are able to improve their consultancy and their efforts for supporting families living in situations of vulnerability. In 2022 more than 106,000 beneficiaries were involved in the project, which was developed together with the trainers at Endesa Energía and with the participation of approximately 100 institutions (NGOs). The purpose of this initiative is to demonstrate the Group's commitment to vulnerable groups and to contribute to the fight against energy poverty, improving the relationships with stakeholders, from local institutions, to municipalities and Non-Governmental Organizations. Involving the NGOs and social services in the task of observing and fighting fuel poverty increases their knowledge in order to help vulnerable families and as a result minimize the barriers to access to energy.

**Enel Shares Citizenship Goiás (Brazil).** In 2022, more than 13,471 beneficiaries were involved in the project that stages workshops and home visits to socially vulnerable families, disseminating information on how to reduce consumption, in line with other social projects carried out by the Company. The initiative promotes the inclusion of families in public social assistance policies, such as the low-income social tariff, which provides a discount of up to 65% on electricity bills.

#### **We are committed to promoting access to energy in developing countries**

not only by supplying electricity, but also clean, innovative technologies to the population in order to generate energy that has a reduced impact on the environment. Approximately 1,364 MW of energy from renewable sources was commissioned in Latin America in 2022, increasing the total renewable capacity to approximately 20,808 MW. In Africa, Enel Green Power is currently the main private operator in the renewable sector in terms of installed capacity (more than 1,500 MW in operation and 598 MW under construction), with a presence in different countries, including South Africa, Zambia and Morocco. In Asia, the Group is present in India through its subsidiary Enel Green Power India, one of the country's main renewable energy companies, which owns and manages 340 MW of wind capacity, producing approximately 620 GWh a year in Gujarat and Maharashtra.

## **PERU – Enlightening my community**

This is a program that provides clean and efficient energy to the most vulnerable rural communities close to our sites which currently lack electricity, aiming to contribute to their development and to the improvement of their living conditions by opening up a range of opportunities in relation to education, business development, connectivity, recreation inside and outside the home,

and security, thus generating inclusive and sustainable growth. The communities we target are located in areas that are not part of the districts in our concession area, so they cannot be served as customers. Since 2021, we have installed renewable hybrid systems at 6 locations in 3 regions of the country, with a total installed power of 30,130 MW, benefiting more than 3,500 people, as well as educational centers, sports grounds, public lighting, and municipal premises, thus avoiding the emission of 52.34 tons of CO<sub>2</sub> per year.



## Our governance for promoting access to energy

Our commitment to guaranteeing access to energy is also confirmed in our 2023-2025 Strategic Plan through the definition of specific objectives, including an increase in renewable sources, the development of sustainable and circular products and services, engaging local communities through a model for creating shared value (please see the chapter, "[Engaging communities](#)"). The Strategic Plan, the Sustainability Plan that describes in detail the goals and commitments from an ESG point of view, including access to energy and the corresponding financial and non-financial reporting are analyzed and monitored by the Board of Directors, by means of the Corporate Governance and Sustainability Committee and the Control and Risk Committee (see the [Corporate Governance report](#), available at [www.enel.com](http://www.enel.com)).

Top management is committed on a daily basis to realizing these strategic objectives by contributing towards supporting the global challenge of guaranteeing access to energy. To support Top Management, each Country is responsible for managing relationships with institutional bodies, regulatory authorities on a national, regional and local level, and associations for promoting the development of solutions for access to energy according to different needs. The Innovability® Function, both on a holding level as well as a Business Line/Country level, also promotes the dissemination of a shared value model. It supports innovative solutions that can promote access to energy in remote areas with limited access to electricity.





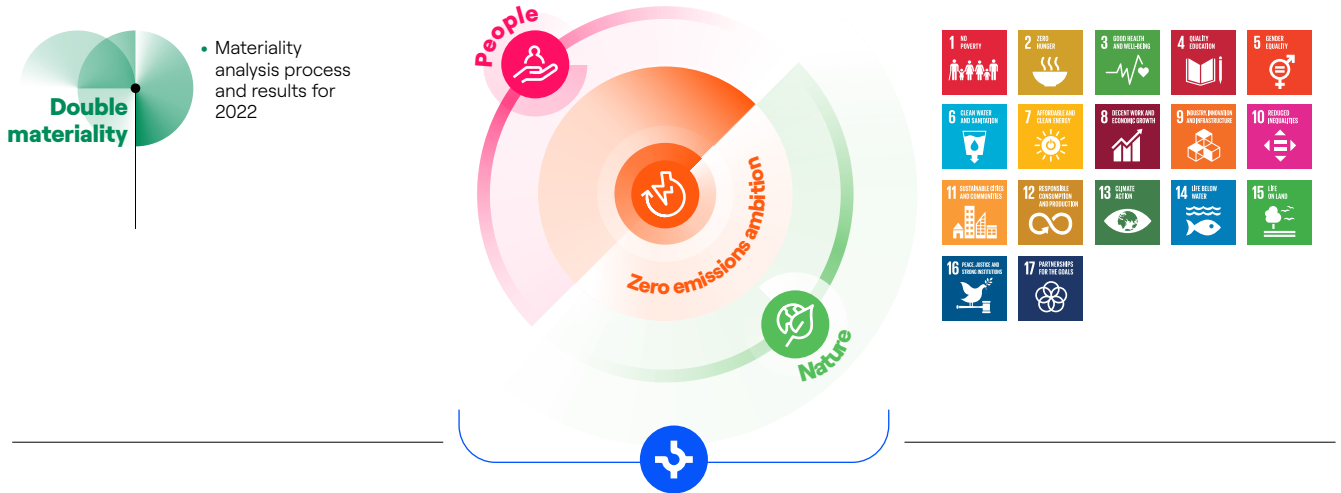
# Our commitment to a just transition: leaving no one behind



## Material topics

## Strategy

## SDG



Please refer to the following chapters of the Sustainability Report:

1. Zero emissions ambition
2. Empowering Enel people
3. Sustainable supply chain
4. Engaging communities
5. Clean electrification

As early as the signing of the Paris Agreement on Climate Change, the connection between climate change and the impacts of the measures taken in response to it were acknowledged by signatory countries in its preamble.

By acknowledging that climate change is a common concern of humankind, signatories were requested, when taking action to address it, to respect, promote and consider their respective obligations on human rights, the right to health, the rights of local communities, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity.

A just transition is a key tool to ensure that the road to a climate-neutral economy is equitable and does not leave anyone behind.

Just transition plans also show the way on how to best address social, economic and environmental challenges, with a specific focus on:

- **workers** directly affected by the transition, who need to be supported through requalification and/or by a facilitated access to job opportunities in new sectors;
- **people and society** at large, with a particular focus on the most vulnerable, who need facilitated access to new

services, like energy efficiency for buildings, measures to fight energy poverty, and to clean and affordable energy;

- **business** active in high-emitting industries or sectors who will need to be supported through actions easing the switch to green technologies and leading to an economy based on climate-resilient jobs and investments, also by spurring the setting up of new companies and investing in research and innovation;
- **States** and regions heavily dependent on fossil fuels and on high-emitting industries.

Business plays a central role in economy decarbonization since much of the CO<sub>2</sub> emissions causing climate change comes from business-driven economic activity. It acts as an enabler of innovation and solutions to prevent, mitigate and adapt to climate change and its adverse impacts on nature and people.

The role of the **energy sector** in transitioning away from a fossil-fuel based economy is crucial. Producers will need to scale up their contribution in terms of development of green technologies, grid infrastructure will need to be strengthened and digitalized to enable electrification and an efficient use of energy, and consumers will have to



change their behaviors, playing an active role in electrification of uses and contributing to optimization of energy utilization.

**Innovation** and **circular economy** will be vital to limit the use of newly extracted material thus reducing pressure on the supply side and mitigating human rights risks.

Finally, **inclusive approaches** will be key to manage the im-

pacts of the major changes green technologies will bring and make sure that the transitions will benefit the broader society, without leaving anyone behind.

A well-managed transition may help addressing the human and economic impacts of a changing climate and also foster growth, generate net new jobs and reduce inequality.

## Our strategy and our commitment for a just transition



**Ernesto Ciorra**

Chief Innovability® Officer

“ Respecting Human Rights is a fundamental element to empower sustainable progress.

We promote the growth of a **constructive dialogue** that can really help – in an effective way – **with tackling the challenges brought by the social impacts of decarbonization strategies in line with the Paris Agreement, and we have committed to a just transition that does not leave anyone behind.**

**Continuous innovation and embedding of circularity principles are also cornerstones for building a competitive, inclusive and sustainable business model.** Indeed, a sustainable business conduct based on international reference standards **is key to unlock multiple competitive advantages, such as increasing talent attraction & retention, strengthening corporate resilience, meeting customers & civil society expectations, improving access to stock & capital markets, shaping regulation & promoting system advocacy.** ”

Every day we work for an inclusive transition by leveraging engagement of our stakeholders (Enel people, suppliers and financial and commercial partners, communities in the areas of influence of our operations, our customers, the financial community) since we are aware that we belong to the territory and we are an essential element in the lives of people, business and society at large.

Our contribution to an affordable, secure and sustainable energy system goes through accelerating **decarbonization of our energy production mix**, in line with the Paris Agreement targets, thanks to the development of **renewable capacity**, coupled with energy storage, and the pro-

gressive phase-out of thermal generation sources. At the same time, we are strengthening the role of **distribution networks**, which in the future, due to the combination of greater use of electricity and greater diffusion of green technologies, will have to be increasingly reliable and digitalized in order to act as inclusive platforms for all our **customers** with whom our challenge will be to facilitate their switch to electricity for all uses and to new highly-digital services.

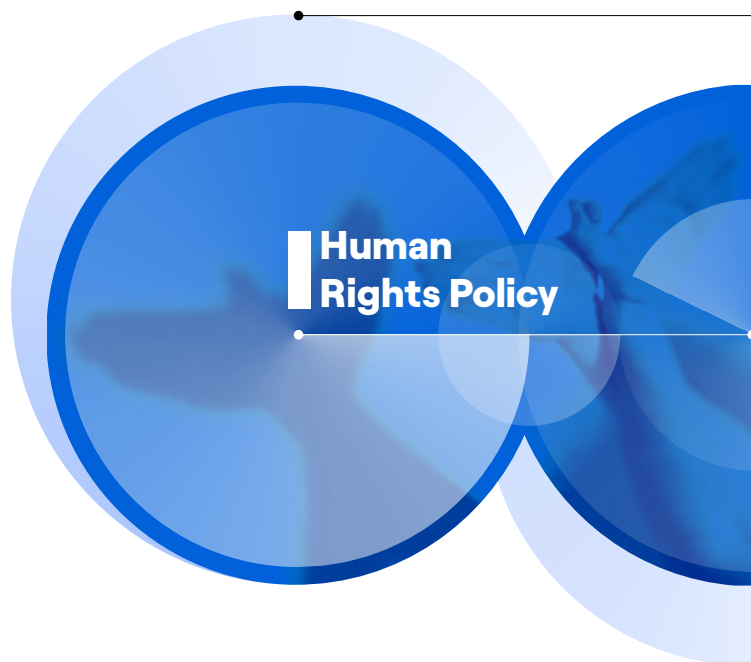
All of this while leveraging **innovation** and **circular economy** which act as accelerators of this path since they reduce pressure on materials and technologies critical to the achievement of our goals as well as making it possible for

business models to evolve in an even more sustainable direction.

Further information is available at [“Our strategy for sustainable progress”](#).

We fully support the principles of a just transition, as outlined in the **International Labour Organization (ILO) Just**

**Transition Guidelines, so that no one is left behind, and we are aware of the social impact of our decarbonization strategy**, which is **in line with the Paris Agreement**, and that we manage by taking into account our overall commitment in terms of respecting human rights throughout the value chain, as also set out in our Human Rights Policy which states that:



“ A fair and inclusive transition does not leave anyone behind and takes into account the needs of all the stakeholders, and, specifically, the most vulnerable ones.

To this end we:

- proactively consider the needs and priorities of people and wider society because this leads to process and product innovation which is key for a competitive, inclusive and sustainable business model, including the adoption of circularity principles, protection of natural capital and of biodiversity;
- promote the involvement of the main external and internal stakeholders to enhance awareness and develop a constructive dialogue that can provide a valuable contribution to the creation of solutions that mitigate climate change. ”

(Enel's commitment to respecting human rights)

At the heart of our strategy is our contribution to building a fairer and more inclusive society across the whole value chain, since we believe that our integrated business model coupled with a sustainable business conduct enables contribution to the 2030 Agenda.

In 2019, we signed the **United Nations Pledge Letter on business commitment to a just transition and green, decent jobs** and we have committed to:

- [promoting multi-stakeholder engagement and social dialogue with institutions, workers' and their representatives](#), respecting workers' rights, encouraging social protection (including pensions and health care), and providing wage guarantees, in line with the core and occupational health and safety standards of the International Labor Organization (ILO);
- [working with existing and new suppliers that respect these standards](#), supporting them to increase their resilience in a transitioning economy, while advocating and acting for diversification of the supply chain of technologies critical to net zero achievement;
- [contributing to the social and economic development](#)

[of local communities](#), particularly so in the case of those most exposed to the transition out from fossil fuels and into green technologies;

- [supporting customers in their electrification journey](#) while at the same time allowing for an affordable, [secure and green access to energy](#).

During the United Nations Framework Convention on Climate Change – COP27, we signed jointly with other 270 corporates and civil society leaders, a declaration reciting **“We stand ready to deliver a just transition and an equitable and inclusive future for all. We want to work with governments in building an enduring legacy based on our collective efforts to secure 1,5 °C”**.

We have therefore defined specific plans and lines of work for a just transition, also at country level, consistently with the Group's strategy to decarbonize its generation capacity, with the objectives of the Paris Agreement, with the principles of the ILO's Just Transition Guidelines and the UN pledge, as well as with the public commitments outlined in our human rights policy.



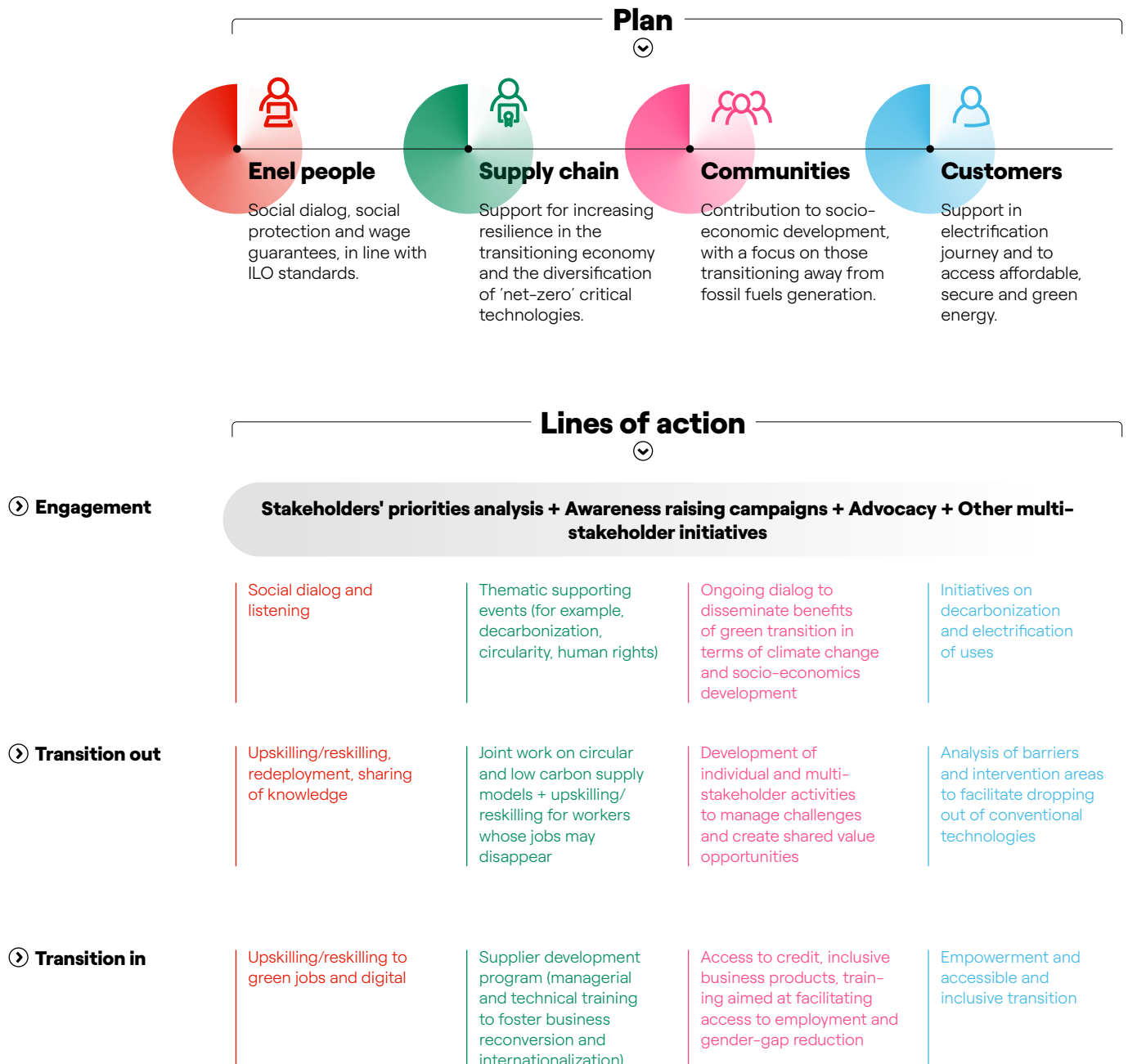
The plan hinges on three pillars:

- **involving** internal and external stakeholders to increase their awareness about a just transition and foster a constructive dialogue that can contribute valuably;
- **transition out** of high carbon activities, supporting the vocational requalification of direct and indirect workers, developing socio-economic plans for affected commu-

nities and helping customers to quit conventional technologies;

- **transition into** green technologies, facilitating access to new job opportunities for direct and indirect workers, and the development of inclusive and accessible solutions for communities and customers.

## Our plan and our lines of work for a just transition



# Stakeholders' engagement

We promote a broad engagement of stakeholders, both internal and external, in line with our Open Power approach, aimed at enhancing their awareness and developing a constructive dialogue that can contribute valuably to

a just transition. Such activities may be overarching, take the form of advocacy or of participation to initiatives promoting a fair and inclusive transition, as well as being tailored to specific stakeholders categories.

## Analysis of stakeholders' priorities

Routinary and direct involvement of all our stakeholders through a structured process of 'materiality' analysis is one of the pillars of the definition of Enel's strategy. This allows to identify material topics, i.e., topics that represent the most significant impacts of the organization on the

economy, environment, and people, including impacts on human rights.

For more details, please refer to "[Materiality analysis process and results for 2022](#)".

## Awareness raising campaigns

Awareness raising campaigns are a focal element to empower our stakeholders in the transition to net zero. Our activities to this end are tailored to:

- people working in the organization, to support their commitment and sense of purpose as well as nurturing a culture of inclusion;
- suppliers, to support their path of change and growth since the transformation of the energy sector coupled

with the push on digital requires a different approach to executing works or providing goods and services;

- communities in our area of influence, with whom we have a structured approach to set up a broad, inclusive and ongoing dialogue and identify shared solutions;
- customers, whose active participation to the transition needs to be fostered and supported.

## Advocacy

Promoting a just transition at all institutional levels is fundamental since there is a need to agree on what public policies need to be in place to ensure achievement of decarbonization objectives.

Both our direct and indirect advocacy activities are conducted in line with the objectives of the Paris Agreement and with our decarbonization roadmap. Specifically, we involve institutional stakeholders, trade associations, non-governmental organizations, and academia, in order to promote our vision on climate and low-carbon policies, to contribute to the evolution of the regulatory framework towards ambitious climate goals and to promote an economy in which carbon pricing drives long-term investments. To this end, we interact directly with policy makers, contribute to the positioning of trade associations, and involve a broader set of stakeholders to build consensus and support for specific policy proposals.

For full details on our direct and indirect advocacy activities, please refer to "[Advocacy about climate change policies](#)".

- *Joint statement on just energy transition*

In November 2021, the European social partners – Eurelectric, IndustriALL and EPSU – signed a joint state-

ment on just energy transition, based on the principles defined in the ILO Just Transition Guidelines.

Through such statement they have fully subscribed to the objectives of the European Green Deal while acknowledging the need for a more consistent effort by the EU to define a European strategy for the electricity sector and the transition of its workforce as well as the establishment of a coherent regulatory framework.

Recommended actions include:

- requiring countries to implement inclusive governance and participatory mechanisms, social dialogue and full transparency of transition planning;
- setting a European framework on the anticipation and management of change;
- offering employees lifelong learning to maintain a qualified workforce since the 'twin transition' (decarbonization and digitalization) prompts development of new business models thus spurring continuous changes in terms of job profiles needed.

Commitments include:

- promoting social dialogue and collective bargaining, at all levels;
- supporting the anticipation of skills and the need to provide workers with the opportunity to update their skills

- supporting and promoting reskilling and upskilling through continuous professional development and life-long learning.

- *European Works Council*

We maintain a high-profile social dialogue also through the European Works Council, last renewed in July 2016, a body introduced by European Directive 94/45/EC representing the European employees of a company. Through it, workers are informed and consulted by management on the progress of the business.

In March 2022, a plenary meeting was held and attended by several representatives of Enel's management, sharing the Group's positioning on the transition and the various initiatives in place in the company to ensure a fair process and a workforce increasingly prepared for change. For further details, please refer to "[Industrial relations](#)" in "Empowering Enel people".

- *United Nations Framework Convention on Climate Change – COP27*

The Sharm El Sheikh [Implementation Plan](#) includes a clear reference to just transition resolving to implement ambitious, just, equitable and inclusive transitions to lower emission and climate-resilient development in line with

the Paris Agreement. It affirms that sustainable and just solutions to the climate crisis must be founded on meaningful and effective social dialogue and participation of all stakeholders and notes that the global transition to low emissions provides opportunities and challenges for sustainable economic development and poverty eradication. It also emphasizes that a just and equitable transition encompasses pathways that include energy, socio-economic, workforce and other dimensions.

A work program, including a yearly ministerial meeting, was also decided to discuss about the necessary steps to achieve the Paris Agreement objectives.

- *Electric mobility*

We actively promote e-mobility as a key factor in reducing road transport emissions and contributing to the European Union's energy efficiency targets.

Mobility is a critical aspect of social inclusion and an important contributor to human well-being, especially for vulnerable groups.

Transport, recognized as an essential service in the European pillar of social rights, meets a fundamental need in enabling citizens to integrate into society and the labor market.

## Other multi-stakeholder initiatives

- *[Just Transition Think Lab](#)*

Among the main initiatives promoted by the Global Compact, the Think Lab, developed in collaboration with the International Labor Organization (ILO) and the International Trade Union Confederation (ITUC) brings together global leading companies on the topic, clarifying the strategic importance for the business to support and engage in a fair transition that leaves no one behind, examining challenges, opportunities and encouraging the sharing of best practices and joint policy-advocacy actions.

In 2022 we contributed to the development of the following business briefs:

1. [Introduction to Just Transition](#) – outlining the behaviors and priority actions for companies to undertake a right transition.
2. [Just Transition for Climate Adaptation](#) – exploring how mitigation and adaptation actions implemented by companies to address the risks and impacts of climate change must consider a fair and equitable approach from a social standpoint.
3. [Financing a Just Transition](#) – focused on the role of finance in promoting a fair transition. The report also includes two Enel case studies: SDG-Linked Bonds and Futur-E.

- *[Business Commission to Tackle Inequality \(BCTI\)](#)*

Promoted by the World Business Council for Sustainable Development (WBCSD), it brings together business leaders and key stakeholders with the aim of building a new common narrative on the role of companies in the fight against inequalities, raising the issue of inequality in business agendas and strategies.

We are part of both the Commissioners' group and of the following working groups: 1. Respect for human rights; 2. Access to essential products and services; 3. Diversity, equity and inclusion 4. Preparing people for the future of work. We also contributed to the launch of the introductory report "[Tackling inequality: The need and opportunity for business action](#)" and we are cooperating for the launch of the initiative Flagship Report, expected in late 2023.

- *[CSR Europe Leaders Hub for an Inclusive Green Deal](#)*

Selected group of CSR Europe members who have worked on identifying the actions and tools needed by companies to facilitate a fair transition in the context of the green and digital transformations. We have been involved both in the Steering Committee and in working groups on workforce, communities and consumers. A [Roadmap for a Just Transition](#) was presented during the European SDG Summit, with the aim of providing companies with a strategic direction to contribute substantially to a just transition.

The document contains three Enel case studies: Value 4 Disability, Soft Leadership and Re-generation. In the first months of 2023, a second document was also launched, the 'European Business Toolbox for Just Transition' which provides additional tools for integrating just transition into business strategies.

- *Solar stewardship initiative*

It is an initiative launched by the member-led association Solar Power Europe with the aim to ensure that solar products imported to our continent are not associated to human rights violations, as well as being aimed at enhancing the level of transparency, including a broader approach to sustainability, and therefore addressing the requirements that might be included in the upcoming European Union legislation.

- *Global Alliance for Sustainable Energy*

An independent global alliance, open to all actors recognizing the urgency of tackling the climate emergency according to 'just transition' principles and the need to promote and embed sustainability and social responsibility in the renewable energy industry.

The Alliance's initial efforts will focus on four key themes: net-zero & CO<sub>2</sub> footprint; circular design & economy; human rights; and water footprint. In addition to representatives of industry, industry associations, academia, the Global Alliance for Sustainable Energy<sup>(1)</sup> involves civil society and especially young people to accelerate the energy transition. An energy transition that is just and leaves no one behind.

## Tailored engagement activities

### Enel people | Playing a leading role in the transition

Listening and actively engaging the people working in Enel are core elements to foster their commitment and action on the strategy the Group is pursuing. Hereafter, the most relevant activities:

- *Enel Digital Days*

The format runs on a proprietary digital platform that includes live streaming and on-demand content, designed according to accessibility and inclusivity standards (voice over and sub-titles in the languages spoken in the organization<sup>(2)</sup>).

2022 edition: the narration hinged on the decade of electrification and the central role played by customers to achieve the transition, with focus areas on decarbonization and renewables, digitalization and data-driven, role of the distribution grids, energy communities. Contents are still available on-demand and the campaign achieved 36,000 unique users and 300,000 content views.

- *Strategic alignment tracking*

In 2021, we also launched a data-driven program to measure, on a rolling basis, how much the people working in our organization feel empowered to navigate through the transition, across strategic levers such as electrification of uses, acceleration of the decarbonization path, customer centricity and the new way of working.

Main objectives of the program are:

- keep track of the sentiment of our people about the company;
- understand their level of knowledge and engagement with respect to the key strategic pillars, as well as to specific projects developed to:
  - spread Enel's clean electrification pathway;
  - spread key notions around health, safety and well-being, diversity and inclusion, job opportunities, learning and development, listening and feedback, among others;
  - stimulate them to become 'enablers', like contributing to the SDGs, customer centricity, digitalization and data-driven culture, cybersecurity and data protection, technological innovation and circular economy;
- identify the communication channels that facilitate understanding of a topic;
- develop internal communication action/remediation plans on the topics/programs least understood;
- track results and effectiveness of actions implemented over time.

Overall population breaks down in 4 clusters, each representative of the composition of the full workforce by **gender, age, role, and seniority**, the survey is carried out 4 times a year (4 waves), and results are on an aggregate basis as well as per country. After each wave, results are analyzed jointly with countries/business lines/staff functions so as to define an immediate action plan, if necessary.

(1) Industrial members: 3M, Acciona, Adani renewables., EDP, Eletrobras, Enel Green Power, Goldwind, Iberdrola, JA Solar, Nordex, NTPC, Prysmian, Risen Energy, Trina Solar. Advisory members: European Space Agency, Global Solar Council, Global Wind Energy Council, Politecnico di Milano, Politecnico di Torino, Student Energy and Youth Climate Leaders. Supporting members: IRENA coalition for action

(2) 6 for the 2022 campaign and 5 for the 2022-2023 campaign as a result of the Group's exit from Russia.

In 2022, redemption was equal to 33.4%, higher than similar preceding surveys. Among the internal communication channels, the company intranet turns out to be the most effective means of communication.

In terms of reputation, perception is positive and generally higher than the average of other companies belonging to heterogeneous sectors (for example, telecommunications, financial) and with a perimeter comparable to the one of the Group (multinational companies).

Positive aspects concern the care given to the people working in the organization, who are rewarded equitably, the responsible and transparent conduct in communication and relations with the stakeholders, protection of environment and commitment to generate both environmental and social positive impacts. Among the aspects to work on further, the ability to offer increasingly accessible products and services. In addition, people working with us identify with the "Open Power for a Brighter Future" purpose, feel involved in the strategy, and actively promote it, both internally and externally, and would recommend Enel as a workplace.

## Suppliers | Thematic events

Suppliers are our partners in the sustainable growth path. We promote a cooperative joint effort to maximize the economic, productive, social and environmental advantages of the transition. We are committed to creating sustainable processes, both innovative and circular, that allow to better quantify, and then mitigate, total impacts they generate. We have in place thematic events concerning decarbonization, adopting circular business models, respecting human rights with the aim of sharing best practices and multi-stakeholder approaches in line with the international reference standards for a sustainable conduct.

## Communities | Ongoing dialogue

We collaborate with communities with the intent of identifying how we can work together for their socio-economic development, including fostering access to energy, fighting energy poverty, supporting quality education. Activities include spreading the notion that a transition to green technologies to fight climate change is not just beneficial to the environment and the preservation of the related human rights but that it brings socio-economic development. Indeed, the creation of new jobs is estimated to outweigh the loss of fossil-fuel related ones,<sup>(3)</sup> and may represent a further tool to contribute to improving gender balance in the working environment as well as contributing to an improved quality of life.

(3) IEA, 2022 World Energy Outlook.

## Customers | Communication campaigns and international initiatives

### • Social media and website

We develop initiatives to raise public awareness on decarbonization and electrification of uses.

Worth mentioning:

- [#WattAChange](#), a campaign to highlight the importance of green technologies in the European energy context,
- the Enel website section dedicated to the strategic role of electricity in driving decarbonization and also enhanced through the social channels of the Enel Group (<https://www.enel.com/company/our-commitment/electricity-role-europe-decarbonization>).

### • Power2People

Power2People is a Eurelectric initiative aimed at fostering customers' engagement in actively taking part in the energy transition and how different actors in the new energy ecosystem can support them on this journey. We take part into this initiative as chair of the customers and new services working group.

Examples of facts-based actions to empower customers to utilize digital green technologies are:

- the publicly available study on the critical role heat-pumps play. On average, European households save 39% on their bills when switching from fossil fuel powered heating systems to electric [heat pumps](#). In addition, they provide an up to 400% efficiency gain over comparable gas boilers when installed in properly insulated homes and the flexibility of the technology allows for their use in a variety of household settings, including in multifamily homes, or as part of district heating and cooling systems;
- the publicly available study on [smart thermostats](#), a relatively easy to use and implement technology which helps households and enterprises of all sizes improve their [energy efficiency](#) and optimize consumption without reducing user comfort and providing flexibility to the power system by adjusting consumption during peak periods. They can also provide consumers with an average of 10-15% of energy savings when connected to climate control devices like electric heat pumps or air conditioning units.

### • 15 Pledges to customers

15 Pledges to customers was launched in March 2020 by Eurelectric and co-signed by more than 90 European electricity retailers, supported by their National Associations, who have committed to accompany cit-



izens in the energy transition with the broad aim to ensure a future European electricity system that is sustainable, reliable and inclusive. By signing the pledge electricity suppliers commit to developing a range of solutions to make sure that everyone can benefit from [carbon neutral electric solutions](#) and to facilitate the adoption of [electro-mobility](#), [energy efficiency services](#) and renewable generation. The scope of the initiative also included understanding the key barriers prevent-

ing consumers from engaging in the energy transition by identifying common trends and local differences across nine countries (Ireland, Norway, Netherlands, Italy, Spain, Portugal, Germany, Czech Republic and Poland) involved in the joint collaboration effort with Eurelectric and Accenture through their national associations representing the electricity industry. For further details, please refer to “[Customers | Empowering the transition](#)”, in the “Transition in” section of this chapter.

## Transition out

Enel has defined a clear decarbonization roadmap of its energy mix, planning to complete the closure of all coal-fired power plants by 2027 and to exit both gas-fired electricity generation and gas sales to final customers by 2040.

Such roadmap consists of four main actions:

- promote electrification solutions powered by renewable sources;
- complete fossil fuels phase-out;
- accelerate the development of renewable sources;
- digitalize and expand distribution networks.

For further details, please refer to “Our strategy for sustainable progress”.

The framework developed to achieve these objectives takes into account the needs of the people who work with us, the unions, our communities, our suppliers and our customers and applies to all thermoelectric generation plants impacted by the phaseout of fossil fuels, articulating in the adoption of inclusive practices through initiatives in which individual conditions, economic and social development and the general welfare of broader society are closely connected.

In 2015, we have launched the ‘**Futur-e**’ initiative in Italy that included thermal power plants no longer competitive on the market for a total capacity of 13 GW. The aim was to give new life to the sites that hosted the plants. Subsequently, we expanded the geographic footprint extending to Iberia and South America and leading to a portfolio of about 5 times higher than the initial one (c. 80 sites).

Besides our direct involvement for other uses but always connected to the world of energy, we have expanded repurposing opportunities by integrating new business projects with complementary sustainable investments that meet the needs of the communities where the fa-

cilities are located. Specifically:

- in Italy, with energy requalification projects in line with the transition objectives, the National Integrated Energy and Climate Plan (Piano Nazionale Integrato Energia e Clima - PNIEC) and the European Fit for 55 and Repower EU objectives;
- in the Iberian Peninsula with the progressive transition of coal-fired plants, like Teruel in Andorra, Compostilla in León (closed in June 2020), Carboneras in Almería Litoral (closed in December 2021) and As Pontes in Galicia; for the latter we have developed a plan of entailing approximately 2.7 billion euros of investment and the creation of more than 1,300 jobs (details of the plan are available at the following link <https://www.endesa.com/en/press/press-room/news/energy-transition/development-plan-as-pontes-thermal-power-plant-closure>);
- in South America, where we have disconnected two coal plants, Tarapacá that was closed on 31 December 2019 and [Bocamina](#) (group I in 2021 and group II in 2022). We have thus become the first electricity company in Chile to no longer use coal for its generation activities, 18 years ahead of the original goal of 2040 set by the Chilean National Decarbonisation Plan of 2019.

Consistently with our commitment to a fair and inclusive transition, the plan for exiting thermal generation entails :

- Enel people | maintaining and developing skills and know-how transfer
  - agreed redeployment based on individual characteristics either in the same Business Line, on the renewable side, or in other Business Lines, in order to enhance human capital and know-how. Agreed redeployment (which also involves workers’ representative bodies) is accompanied by reskilling and upskilling plans for strengthening existing skills or developing new skills needed in the new role. Redeployment does

not affect negatively role and contract type.

In the case of Chile, for example, out of the 50 people working in the Tarapacá power plant 26 have been re-deployed in other thermal generation units, 9 people in renewable generation, 3 in other areas of the company, while 12 opted for a voluntary exit accompanied by an economic, training and insurance package. For further details, please refer to the Bocamina [dedicated box](#);

- voluntary access to early retirement for those who are eligible. In the 2020–2022, period we have provisioned more than 1.5 billion euros dedicated to managing Enel people affected by the energy transition strategy.
- Site repurposing/regeneration<sup>(4)</sup>
  - replacement of thermal production plants with renewable or hybrid plants, i.e. a combination of green technologies like, for example, renewables, storage, hydrogen;
  - land reclamation and maximization of the reuse of abandoned structures, such as roads, infrastructure, high-voltage connections, buildings, etc. in line with our circular economy principles;
  - engagement of impacted communities and devel-

opment of multi-stakeholder projects to foster the creation of shared value throughout the project, from preliminary talks to the choice of the redevelopment project to pursue. The plan developed for the closure of the **Bocamina** plant contains at least two examples of this approach: for the site hosting the second unit, closed in September 2022, we drew up a project to transform the discharge of ash produced by combustion, amounting to 10 hectares, in a native forest. In addition, we signed a 'just transition' agreement with the municipality of Coronel that will allow the local government to invest in strengthening health services and education, in addition to the building of a new school and a new park (for further details, please refer to the [dedicated box](#));

- third-party projects not in energy field that meet the needs of the communities in which the facilities are located. An example is the transformation of the site where the [Porto Tolle](#) plant operated to achieve environmental requalification and sustainable tourism thanks to a project of Human Company, a Florence-based group which is also Italy's leading open air tourism specialist.

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(4) For further details, please refer to "Clean electrification" dashboard and to the "Sustainable Repurposing Model" box of "Conservation of natural capital" chapter.

## TRANSITION OUT: Montalto di Castro (Italy)

### The first museum of the energy transition is being built in Montalto di Castro

**C**ulture, innovation and the energy transition: three fundamental aspects of Italy come together in the new energy exhibition center that will be built in our “Alessandro Volta” power plant in Montalto di Castro, in the province of Viterbo.

The site once hosting the plant will become an “integrated and multifunctional energy hub” thanks to the involvement of the community in the area of influence and in cooperation with the ACPV ARCHITECTS Antonio Citterio Patricia Viel studio.

As a matter of fact, the main objective of the project is to repurpose the site by developing the TECCC, the Centre for Culture and Knowledge of the Energy Transition, an Energy Transition museum that will also host facilities dedicated to training, awareness-raising and energy thematic events.

Furthermore, existing infrastructure will be expanded and integrated with new renewable capacity and storage, in line with our sustainability objectives, and this will contribute positively in terms of enhancement of the territory and livelihood of the local community. Third party entrepreneurial initiatives are also planned in line with our circularity strategy. Specifically, a portion of the land has been rented out to a local company for the building of a solar tracker factory, producing the devices that allow photovoltaic panels to follow sunlight during the day in order to maximize electricity production. The building of the factory will have positive outcomes for local employment and communities including, but not limited to, offering job opportunities to all site workers. In addition, spaces are dedicated to the study of further sustainable solutions, such as an innovative hydroponic greenhouse project .





## TRANSITION OUT: As Pontes (Spain)

### The socio-economic development plan concerning As Pontes phase-out testifies our commitment to a just transition and the creation of value in the area of influence of the plant

**T**he As Pontes plant is located in the north of the A Coruña province, in the municipality of As Pontes de García Rodríguez. It has been in operation since 1976 and it is the largest thermal plant in Spain.

We have submitted to the Ministry of Ecological Transition as well as to the Regional Government of Galicia and the Council of As Pontes, a [plan](#) mainly including:

- the dismantling of the coal plant (approximately 4 years) that will include training for the over 130 employed to such purpose, giving priority to local manpower and people who already worked in the plant;
- the development of a 1.3 GW wind farm that will generate up to 2,300 jobs during construction and additional 274 direct jobs during the 25 years of estimated useful life;
- the repurposing of the territory for new industrial uses including a smart tyre factory, that will create 750 direct jobs and will act as an economic vector for the terminal of the nearby port of Ferrol;
- a biological plant for the recovery, development and production of natural fibre from recycled paper and cardboard, that will generate 150 direct and 400 indirect jobs;
- the supply of electricity to Alcoa at a competitive price that would enable the latter to resume aluminum production after the downturn caused by the increase in energy prices;
- a new logistics role for the outer port of Ferrol that will compensate the traffic decline connected to the shut-down of the plant by becoming a multi-client bulk terminal (transport and storage of bulk cargoes: grain, minerals, etc.);
- green hydrogen generation plants, with the building of an electrolyser for up to 100 MW powered by the wind farm that will be built;
- the development of a strategic wind maintenance logistics centre to support 120 Endesa's wind farms in Spain, that will entail the generation of 57 direct jobs;
- training for local manpower, workers in auxiliary companies and to support women employment.



## TRANSITION OUT: Teruel (Spain)

**After 40 years of operations, Teruel's coal plant cooling towers have been demolished. The site will host photovoltaics and wind installations. An additional example of sustainable decarbonization and decommissioning**

**D**evelopment of a hybrid energy hub, with photovoltaic and wind plants, storage and a green hydrogen installation: these are some of the projects included in the energy transition tender. A substantial change that will bring new jobs and will support requalification for the very people working in the plant thanks to job rotation. Hereby a few data:

- energy transition tender: right to develop 953 MW, with the option to get to up to 1,200 MW;
- building of 5 solar plants and 5 wind ones in a hybrid setup jointly with a storage system that will enable full exploitation of the renewable production;
- more than 1,200 millions of euro to be invested;
- industrial development coupled with a social plan entailing the generation of more that 3,500 jobs during con-

struction, with 300 direct permanent jobs at regime;

- training to upskill people in the area of influence in order for them to be able to work in the renewable energy sector and to open access to work to local unemployed people.

In addition to the plan connected to the energy transition tender, Teruel will also host a photovoltaic plant called SEDEIS V, for an installed capacity of circa 50 MW and an investment of approximately 40 million euros. The project will generate more than 280 jobs during construction (started in July 2022) and 8 permanent jobs for the operation and maintenance of the plant that will have an average life of 30 years.





## TRANSITION OUT: Bocamina (Chile)

**Ours is a daily commitment to an inclusive transition unfolding through engagement with our stakeholders since we are aware that we belong to the territory and we are an essential element in the lives of people, businesses, and society at large**

**O**n September 30, 2022, the town of Coronel witnessed a historic event. With the final disconnection of Bocamina II, Enel became the first company in Chile to close all of its coal-powered plants. The milestone occurred in an area historically associated with the coal industry, but that today aspires to transition to a more sustainable and inclusive development.

Bocamina contributed to Chile's national development and energy security and its shut-down has occurred at the end of a just transition plan launched two years before and aimed at maximizing value for Enel's people, suppliers and local communities.

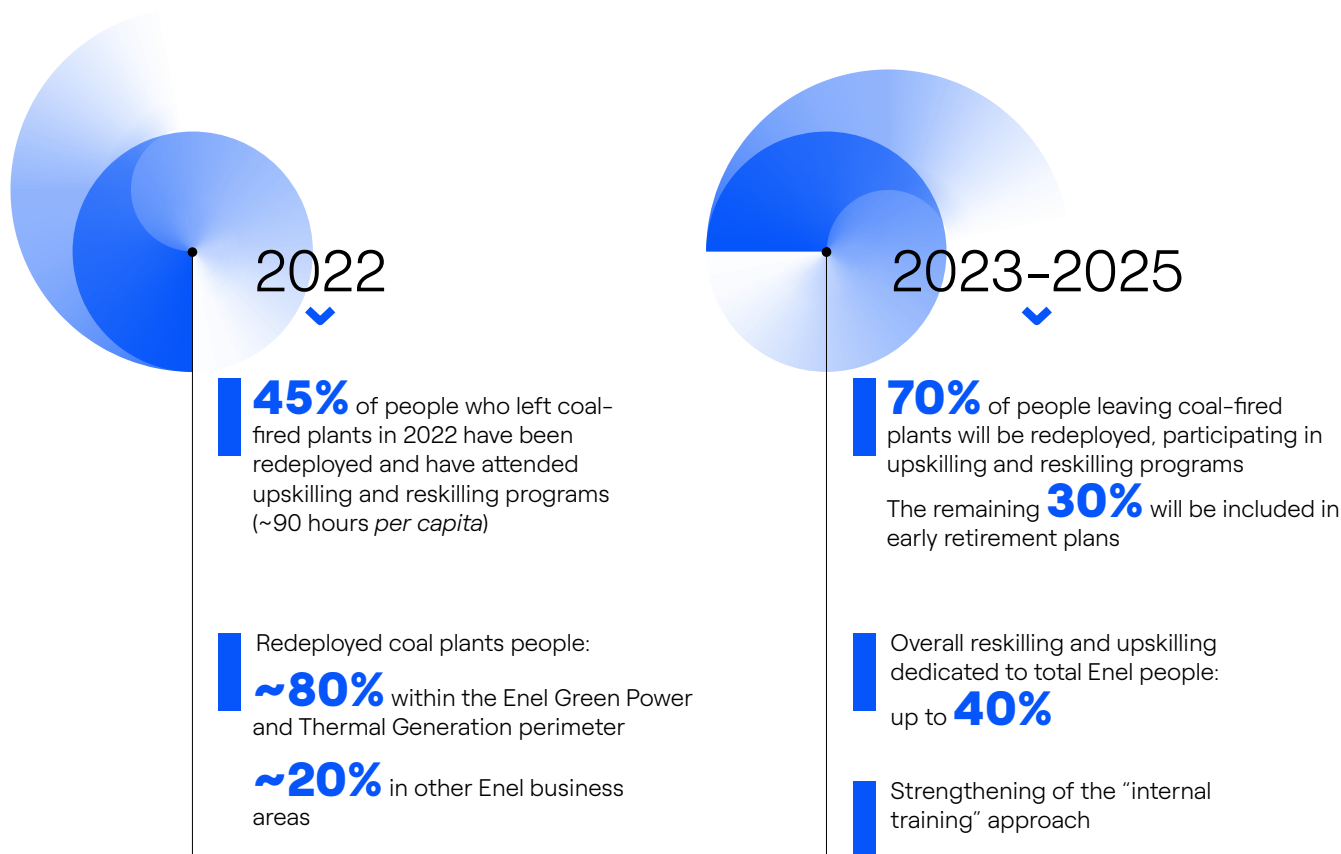
The story of Michael Navarro is a good example. The shut-down of the plant has turned into an opportunity since it has offered him new options in the renewables field and, specifically, in the maintenance of the solar power plants of

Enel in Chile. He has also gone from working 12-hour shift to a hybrid working framework. Now he works eight days a month at Enel Chile headquarters in Santiago or on-site the power plants in Antofagasta and Atacama. The rest of the month, he works remotely from his home so he can stay close to his family .

The people involved by the shut-down of the two units of the plant are 90: more than 60% has been redeployed in other areas of the company, like engineering and construction, renewables, health, safety, environment and quality whereas about 30% has enjoyed early retirement or voluntary redundancy, and about 7% has continued working for the Operations & Maintenance unit managing the plant.

In addition, the main contractors providing services to the Bocamina plant have been included in the eligibility programs for commercial retraining and professional skills.





## Transition in

The ‘green transition’ is the combination between technological innovation and actions aimed at a sustainable economic growth that fosters the transition from a system based on polluting energy sources to a virtuous model centered on green sources and social development at the same time.

This transition couples with a digital one, which initially started for operating efficiency reasons and then transformed into a driving force for innovating traditional business models.

Similarly to ‘transition out’, however, the path to a ‘green’ and digital future must also be led in an inclusive way to enable all stakeholders to seize its opportunities and manage the risks involved. Like actions to promote requalification, vocational training, and self-learning, in the case of direct and indirect workers, support for business diversification and increased resilience for supply chain companies, as well as generation of value for communities, through access to local job opportunities, and facilitating access to products and services for customers.

## Enel people | Lifelong learning

The rapid and continuous evolution of the business and the support to a fair transition strategy towards low carbon technologies and services entail the need for new technical and professional profiles and the awareness that some jobs will disappear. This context prompts for an ongoing training activity accompanying people throughout their personal and professional life in a sort of “circular path”, starting from school up to when the working activity ends and returning consolidated knowledge to new generations and to the ecosystem will be key.

**Empowerment** becomes therefore crucial to evolve culturally, because it allows to fully involve people, motivating them to express their potential, while at the same time providing them with opportunities for personal and professional development, and contributing to create conditions of well-being, motivation, responsibility and participation that will enable the achievement of strategic objectives. Among the initiatives implemented:

- retraining and professional updating, up/reskilling, self-learning and knowledge transfer. Our business lines

Schools & Academies have organized existing skills improvement programs to allow participants to access more advanced career paths (upskilling) and to learn new skills (reskilling) to hold different positions and roles, also through the enhancement of soft and transversal skills. Such programs have been realized also in collaboration with university and academic partners;

- support for the dissemination of the digital culture and the utilization of digital media;
- promotion of women's presence in STEM (Science, Technology, Engineering, Mathematics) classes and jobs. We collaborate with schools, universities, and institutions to overcome gender stereotypes and spread the importance of an increasingly integrated technical-scientific culture and humanistic dimension. These STEM awareness and orientation initiatives involved nearly 10,000 high school students in 2022 (over 30,000 students in the last 6 years);
- career counseling: conversations on specific topics to increase awareness of third- and fourth-year high-school students when choosing what to study and which job to look for, together with shadowing meetings, i.e., working days spent alongside a professional to begin to understand how the working environment works and

what is the language used, and the opportunities offered by STEM courses. For more details please refer to the chapter "Empowering Enel people".

## Enel people

**96%** of population involved in training

**> 3.1** million hours of training (**>47 average hours per capita**), of which over **42%** dedicated to upskilling and reskilling

**430** thousand hours of training dedicated to **digital skills (14%** of the overall training hours)

## Suppliers | Supporting change

Suppliers are an essential partner in the journey to decarbonization.

In this sense, the actions we have in place aim, on the one hand, at supporting their increased resilience and, on the other, to minimize pressure on critical materials and components through continued technology innovation and recycling.

That is why we work jointly with them to develop new performance metrics and to promote co-innovation projects to support decarbonization and circular economy approaches, that will all have positive impacts on their production processes and on the purchasing methods.

Among such initiatives:

- we set increasingly challenging emission targets in tender processes that also factor in the contribution of innovation. These targets are shared with our suppliers and are in line with a 1.5° roadmap;
- we promote a circular supply approach through the adoption of various initiatives and mechanisms that allow us to quantify, certify and communicate objectively the environmental impacts generated throughout the

life cycle of the supplies (for core categories<sup>(5)</sup> we require the Environmental Product Declaration<sup>(6)</sup> – EPD)

- we require information about the country of origin and the quantities of each material composing the product, including recycled and recyclable material. This allows us to reward suppliers based on their recycling capabilities thus stimulating a circular culture and meeting the increasing demand for supply chain transparency and traceability aimed at minimizing potential ESG impacts of some products production processes in terms of human rights violations, bribery, water use, air pollution, CO<sub>2</sub> emissions and loss of biodiversity.

We have also worked on several initiatives to walk the talk in terms of supporting business reconversion and diversification:

- Supplier Development Program, initially launched in Italy (where it is currently open to over 6,000 suppliers) and being extended to other countries of presence, which places a specific focus on SMEs operating in strategic sectors that will benefit from our direct support for an easier access to services such as liquidi-

(5) Core categories are the ones strategic for the business, and include wind turbines, smart meters, photovoltaics, transformers, street lighting, smart home solutions, storage systems.

(6) Document describing the environmental impacts related to the production of a specific quantity of product or service: for example energy consumption and raw materials, waste production, emissions into the atmosphere and discharges into water bodies.

ty sources, management and technical training programs to encourage their business requalification to serve the energy transition, advice on sustainability, circular economy, strategy, M&A and internationalization, access to catalogues of means of transport and work machines, certificates;

- “Sportello imprese” (business counter), which consists in meeting periodically with companies belonging to the traditional energy production sector to support their growth and requalification in areas such as renewables or new services related to energy efficiency;
- courses focusing on the reskilling/ upskilling of workers connected to jobs that risk disappearing, on fostering entrepreneurship and strengthening the Italian productive and economic fabric, such as:
  - Digital Management Program: an initiative aimed at stimulating and encouraging businesses digital development. Our Digital Innovation Hub of Lazio has collaborated to developing a project of consolidation and growth of managerial skills of leading companies in the region. The training, that took place in 2022, was held after an initial stage of assessment instrumental to raise awareness about digital skills and improving them. The project has then given rise to the Digital Management Program which, in 2022, involved 20 companies of the local territory for a total of 24 hours of training provided by Luiss Business School;
  - courses for photovoltaic panel installers: during 2022, we launched the initiative also in Brindisi. It aims at requalifying local suppliers training them so that they can work in solar photovoltaic plants building sites. This activity builds on what was done in 2021 for Civitavecchia and Montalto di Castro suppliers involved in the Alto Lazio energy transition and that have decided to requalify their business in order to be able to work in the renewables field;

- “Energie per Crescere” (Energy for Growth), a program launched at the end of 2021 with the aim of training about 8,200 new technicians, including 5,500 by 2023, creating highly requested professional profiles in the electricity sector (cable pullers, cable splicers, substations assemblers, live-line workers) to be hired by Enel grids partner companies; the remaining 2,700 technicians will be trained and hired by 2025 and the training will focus on renewable profiles for partner companies (electrical specialists, junior site managers, civil-mechanical specialists). During 2022, some 2,100 new technicians were trained and recruited from grids suppliers;
- “Energie per la Scuola”, a program for final year students attending technical and vocational schools with the aim of training them for the ‘most wanted’ roles in the electricity sector so that, after graduation, they can be hired by Enel’s suppliers. The first edition of the program (school year 2020/2021) involved 11 schools, 8 suppliers of e-distribuzione and a total of some 100 students who were all hired by Enel’s suppliers at the end of the training. The second edition, aimed at 2022/2023 school year students, is currently underway and it involves over 60 schools and some 500 students.

For full details, please refer to [“Sustainable supply chain”](#).

Moreover, also in 2022 we have promoted employment stability in Italy thanks to the application of the so-called “social clause” in our purchasing procedures. Such clause mandates a supplier taking over another in the provision of the same service to ensure continuation of the employment of the persons employed by the former supplier. This allowed 3,700 people to keep their job.

Our efforts also go in the direction of supporting a greater diversification of the supply chain of key technologies for the transition, like for solar PV.

This is the case of [3SUN](#), our PV modules producing factory in Catania, Sicily which is a European leader in the manufacturing of innovative bifacial cells and panels.

The planned capacity expansion (from the current 200 MW to roughly 3,000 MW per year by 2024) will involve an investment of around 600 million euros and the creation of direct and indirect jobs.

For further details, please refer to [“Clean electrification”](#).

## Suppliers

**8,200** people involved in training aimed at new technical profiles to be hired in supply chain companies

**5,500** people for grids, of which 2,100 have been already trained and employed (full achievement by 2023)

**2,700** people for renewables (full achievement by 2025)

## Communities | Creating shared value

Our commitment to support communities goes through initiatives that promote inclusion (with particular attention to people in conditions of physical, social and economic vulnerability) both in terms of access to local working opportunities and to facilitating access to products and services.

These initiatives, as specified in the chapter [“Engaging communities”](#), are the result of solid and lasting relationships that include a broad, inclusive and continuous dialogue based on clearly defined phases of “Stakeholder engagement” in line with international reference standards.

We have, for example, put in place many projects focusing on digitalization to support connectivity in rural areas, computer literacy, as well as to encourage the participation of women in STEM subjects. These include the following:

- Lethbridge College (Alberta, Canada) – partnership for wind engineers

Support to the training program for wind turbine engineers and involvement of students belonging to the Piikani Nation community (indigenous population of the Alberta region, Canada).

The partnership creates opportunities for STEM education and access to the world of work for indigenous and other students living in the areas of influence of several of our wind farms in the southern part of the province.

- Ruta Pehuenche (Maule Region, Chile) – program for the growth of local small entrepreneurs

Engagement with the local community of the area of influence where the construction of the Los Cóndores hydroelectric plant is underway has generated educational and working opportunities, with the birth of a micro-entrepreneurial fabric led by women.

The project was born with the twofold objective of promoting the economic growth of the whole community, through training courses, and improving living conditions, thanks to the use of environmentally friendly technologies for water supply, for the cultivation of food, for the construction of housing, for access to energy and for sanitary facilities. In the four years since the start, more than 80 participants attended the courses, including 70 women.

- È viva la scuola, Helpcode (Italy)

In partnership with Helpcode, the project aims at supporting educational institutions in their activities, by integrating training contents and strengthening curricular teaching, with the additional aim of increasing the awareness of children on issues of topical importance for Enel such as the energy transition, digitalization and human rights. The project also provides specific training for teachers.

For more details, please refer to [“Sustainability projects and initiatives”](#) in the chapter [“Engaging communities”](#).



## Communities

**2,300** socio-economic development projects

**3.7 million people<sup>(1)</sup>** having benefited from inclusive and equitable quality education (SDG 4)

**4.9 million people<sup>(2)</sup>** eligible for sustained, inclusive and sustainable economic growth (SDG 8)

(1) 2015–2022 cumulated data of total SDG 4 beneficiaries.  
(2) 2015–2022 cumulated data of total SDG 8 beneficiaries.

## Customers | Empowering the transition

Energy and digital technologies are key enablers for empowering consumers through new services, better insights and more control.

The first stone that must be laid is a smart meter. This is a piece of technology that allows customers to access their own consumption data more easily, increasing awareness of their energy use habits and encouraging behaviors that are more efficient and sustainable.

It also enables personalized electricity rates that are better suited to different consumer habits, with dynamic and highly flexible pricing.

Recently improved technology also makes it possible to integrate energy consumption monitoring with smart home management systems for electrical appliances, boilers, air conditioners and lights. Finally, it facilitates real time monitoring of self-produced energy from users' own distributed generation systems, like photovoltaics and or batteries.

The second step is putting the increasing number of connected home devices (home appliances, mobile technology, heat pumps and EVs) to the best to manage energy use. Energy suppliers and service providers can help consumers use the power of new technology by designing easy-to-use services and offers that reduce complexity and costs while increasing control and gaining new revenues (sale of the excess self-produced electricity or of unutilized available power capacity) and keeping technology innovation and evolution always in the radar to always provide the most effective and relevant solutions.

Affordability of green technologies whether EVs, solar PVs, batteries or heat pumps is a relevant barrier, especially for low-income and vulnerable customers who are already affected by a low spending capacity for primary energy uses and who might be the ones to benefit the most from adopting them.

The enormous amount of data created by the growing role of connected devices offers a great opportunity to engage customers in the transition with tailored solutions but data security and privacy shall be preserved and transparency about how data is being used and shared must also be ensured with simple terms and conditions

For further details, please refer to "[Clean electrification](#)" and "[Managing human rights](#)" chapters.

## Customers

Sold

**>70,000** smart home products

**>5,000** photovoltaic products

**approx 90 MW** of capacity through solutions for renewable energy self-production

# Empowering Enel people

## Material topics (I level)



• People management, development and motivation

## Plan



## SDG



Below the 2022 results related to the targets of the previous 2022-2024 Sustainability Plan, the resulting progress and the targets of the 2023-2025 Sustainability Plan, which may be redefined, added to, or surpassed with respect to the previous Plan.

SDG	Activities	2022 results	Progress	2023-2025 targets	Tag
5	<b>Women</b> in selection processes (%) <sup>(1)</sup>	<b>52.2%</b>	●●●	<b>50.0%</b>	S
5	<b>Women</b> managers <sup>(2)</sup> and middle managers (%)	<b>24.9%</b> managers <b>32.6%</b> middle managers <b>31.8%</b> managers and middle managers	●●●	<b>26.9%</b> managers <sup>(3)</sup> <b>34.1%</b> middle managers <sup>(4)</sup> <b>33.4%</b> managers and middle managers <sup>(5)</sup>	S
5	<b>Women</b> in managerial Succession Plans (%)	<b>46.1%</b>	●●●	<b>46.0%</b>	S
5	<b>Women</b> in Top Manager Succession Plans (%)	<b>50.0%</b>	●●●	<b>45.0%</b>	S
5 8	Female students involved in <b>STEM</b> career guidance initiatives	<b>9,887</b> female students involved	●●●	<b>19,200</b> female students involved in the period 2023-2025	S
8	<b>Climate survey</b> - Open Listening (%)	<b>100%</b> people involved <sup>(6)</sup> <b>75.6%</b> participants	●●●	<b>100%</b> people involved <sup>(6)</sup> <b>80%</b> participants	S
8	<b>Open Feedback Evaluation</b> - Performance appraisal (%)	<b>100%</b> people involved <sup>(6)</sup> <b>99%</b> appraised	●●●	<b>100%</b> people involved <sup>(6)</sup> <b>99%</b> appraised	S

- (1) Selection processes involving blue-collar workers or similar technical roles as well as related to the USA and Canada perimeter are not included, due to local regulations that do not permit gender tracking during the recruitment phase.  
 (2) Including female Top Managers.  
 (3) The target for 2030 is 32.1%.  
 (4) The target for 2030 is 38.1%.  
 (5) The target for 2030 is 37.5%.  
 (6) Eligible and reachable persons: those who have a permanent contract and have been in place and active for at least 3 months during the year.

Goals			Progress		
I Industrial	E Environmental	S Social	+	↻	↻
G Governance	T Technological		New	Redefined	Outdated
			●●●	●●●	●●●
			Not in line	In line	Achieved
			N.A. = not applicable		

SDG	Activities	2022 results	Progress	2023-2025 targets	Tag
<b>4</b> <b>8</b>	Average training hours “ <b>Cultural Evolution</b> ” <i>per capita</i>	<b>47.4</b> hours	● ● ●	<b>46.5</b> hours	<b>S</b>
<b>4</b>	<b>Digital skills</b> – Promote training on digital skills among all Enel people	<b>14%</b> of training hours dedicated to develop digital skills	● ● ●	<b>20%</b> of training hours dedicated to develop digital skills	<b>S</b> <b>T</b>
<b>4</b> <b>8</b>	<b>Reskilling and upskilling</b> – Promote reskilling and upskilling programs for Enel people	<b>42%</b> of training hours conducted on upskilling and reskilling	● ● ●	<b>40%</b> of training hours conducted on upskilling and reskilling	<b>S</b> <b>T</b>
<b>4</b> <b>8</b>	Development of a new culture of “ <b>Human sustainability</b> ” among our people	<b>12%</b> of training hours dedicated to develop human skills	● ● ●	<b>10%</b> of training hours dedicated to develop human skills	<b>S</b>
<b>4</b> <b>17</b>	<b>Scholarships</b> available for Enel people	<b>151</b> scholarships	● ● ●	<b>390</b> scholarships in the period 2023-2025	<b>S</b>
<b>8</b> <b>10</b>	<b>Disability inclusion</b> 	<p>Adopting a systemic approach to disability inclusion: </p> <ul style="list-style-type: none"> <li>within the scope of the launch of a structured process to analyze the needs of Enel people with disabilities globally, the Enel WIN – Work INclusion questionnaire was revised;</li> <li>several initiatives are underway to ensure physical and relational accessibility in Spain and Chile and to promote digital accessibility in Colombia, with the aim of spreading awareness of the importance of accessibility and its benefits for inclusiveness;</li> <li>in order to support the inclusion and contribution of people with disabilities there is the global “Empower disability” program enriched with global and local initiatives, designed to improve the overall journey (with a focus on attraction, inclusion and onboarding, care and development) of people with disabilities at Enel</li> </ul> <p><i>The target is considered outdated as it has been replaced by a quantitative one</i></p>	● ● ●	<p>Promote the inclusion of people with disabilities at all stages of business travel: implementing inclusive work travel services (adoption of Global Inclusive Travel: assistance, accompaniment, inclusive and accessible travel services) </p> <p><b>80%</b> of Enel people covered with at least one Global Inclusive Travel service in 2025<sup>(7)</sup></p>	<b>S</b>

**Read more**

The **Value for Disability project** brings together most of the actions regarding disability developed for colleagues in Enel's main countries of presence, as well as for customers and for the community.

For additional details on the project, please refer to the chapter “Managing human rights”.

(7) 47% of Enel people were covered with at least one Global Inclusive Travel service in 2022.

SDG	Activities	2022 results	Progress	2023–2025 targets	Tag
5 8 10	Promoting an <b>inclusive culture</b> free of prejudice and harassment	In the main Countries where we are present, specific initiatives have been developed with the aim of spreading a prejudice-free culture and raising awareness about harassment in the workplace. Specifically: <ul style="list-style-type: none"> <li>• bias training course completed by about 33% of Enel people</li> <li>• harassment training course completed by about 32% of Enel people</li> </ul>	●●●	<ul style="list-style-type: none"> <li>• Promotion of a bias and harassment free inclusion culture</li> </ul>	S
5 8 10	Promotion of a multicultural workplace inclusion culture	The topic of intercultural inclusion was promoted in <b>7 countries</b> , where awareness-raising and training initiatives were organized on different aspects related to the theme of cultural diversity (ethnicity, nationality, etc.).	●●●	<b>11 countries</b> with active intercultural workplace inclusion culture initiatives	S
8 10	Diversity and inclusion culture	N.A.	N.A.	<ul style="list-style-type: none"> <li>• Assessment of awareness on D&amp;I topics and perceived inclusion of people in the organizational context</li> <li>• Defining a baseline for improving the D&amp;I strategy</li> </ul>	S
8	Enel people in <b>remote working</b>	<b>Over 36,000</b> eligible employees	●●●	Monitoring eligible employees	S
8	Overall <b>Global Wellbeing Index</b>	<b>60.0%</b>	N.A.	<b>61.0%</b>	S

### Read more

Among the main **initiatives to increase the inclusion of different ethnicities** and raise awareness of diversity, there are workshops, training programs and communication campaigns designed to foster a multicultural working environment.

### Read more

By means of an annual survey, the overall **Global Wellbeing Index** records the percentage of Enel people who are quite or very much satisfied with their general well-being (personal and working life). Due to its extensive meaning, it encompasses all factors that can influence general well-being, including both exogenous factors (such as pandemics, socio-economic issues, politics, climate, etc.) and endogenous ones, on which Enel is committed to intervene with its Wellbeing and Welfare actions.

### Goals

I Industrial   E Environmental   S Social  
G Governance   T Technological



New



Redefined



Outdated

### Progress



Not in line



In line



Achieved

N.A. = not applicable

SDG	Activities	2022 results	Progress	2023-2025 targets	Tag
8	Asset protection	Risk Assessment Methodology for asset protection and resilience adopted in <b>100%</b> of countries	● ● ●	Performing Risk Assessment in <b>100%</b> of the countries where the Group operates	S
8	Physical protection of people abroad <sup>(8)</sup>	Completion of the design of an online course on travel safety to be included in eDucation catalog	● ● ●	Expansion of the catalog content with at least <b>3 training courses</b> for Enel people by 2025	S

(8) This refers to services to mitigate the risk of assault and kidnapping for colleagues working in countries with very high levels of crime.



# Empowering Enel people



| 2-7 | 2-24 | 3-3 | 401-1 | 404-1 | 405-1 | 405-2 |



The profound social, economic and cultural transformations that are characterizing the current era, from the transition to a decarbonized economy to the processes of digitalization and technological innovation, also profoundly affect the workplace. Companies must therefore be able to transform themselves to adapt to operating in scenarios of high uncertainty, volatility and complexity. Acting in an inclusive manner, placing the person in his or her social and working dimensions at the center, thus becomes indispensable to cope with this epic transformation.

**We are more than 65,000 people in Enel, belonging to 86 nationalities and speaking 24 languages.**

The success of our strategy rests precisely on our people and on a model, in place since 2015, of shared values and behavior: the “**Open Power** model” (see “[Enel is Open Power](#)”).

We are committed to promoting and enhancing **knowledge, relations** and **influence** between different cultures, as well as **respect for human rights**.

Valuing diversity and individual talents is a fundamental prerequisite for creating an inclusive corporate culture in which everyone can recognize themselves, regardless of race, ethnicity, religion, gender, age, sexual orientation and ability.

We have strengthened our **people empowerment** processes to support the cultural evolution of our people, focusing on their **well-being, motivation, sense of responsibility** and **active participation**.

These dimensions are closely interrelated, intertwining and mutually reinforcing, enabling the full expression of each individual's potential, with a positive impact on the sense of belonging to the corporate community, fostering involvement, attractiveness and loyalty of people, and on the achievement of the Group's sustainable results.

To ensure that our people are ready to support the Group as it transitions, embracing change and adapting quickly, we promote a **continuous learning** experience that accompanies them throughout their personal and professional life cycles.

The People and Organization Function defines organizational models and the multiannual people management plan in line with the Group's strategy. The people selection, management and development processes are governed by specific policies and procedures that apply to the global and local levels, with specific sections on the Company intranet. In order to be able to customize the offer of empowerment, facilitate all phases of personnel management (recruiting, development, training, talent management) and thus set up a decision-making process supported by objective data, the Function has equipped itself with an analysis tool, “People Analytics” which, based on quantitative metrics and related statistics and operating through platforms, allows for a real-time assessment of the different demographic clusters, and therefore also generational clusters, relevant for the Company.



**65,124**

**ENEL PEOPLE**

66,279 in 2021 **-1.7%**

**6,412**

**NEW RECRUITS**

5,401 in 2021 **+18.6%**

**23.4 %**

**WOMEN IN THE WORKFORCE**

22.5% in 2021 **+0.9%**

**24.9 %**

**WOMEN MANAGERS**

(including Top Managers)

23.6% in 2021 **+1.3%**

**47.4** Average hours

**TRAINING PER EMPLOYEE**

44.5 average hours in 2021 **+6.3%**

## The Statuto della Persona (Charter of the Person), a cultural transformation

"A new working ecosystem where people are at the center with their well-being, participation and dignity". This is the core of the **Charter of the Person**, signed in Italy on March 29, 2022 by Enel and the trade unions FILCTEM, FLAEl and UILTEC and rapidly disseminated throughout the countries and regions where the Group operates.

It is an innovative protocol that inaugurates a model of labor relations based on the involvement of the individual and the Company, valuing the person in a harmonious relationship with the surrounding world.

Putting the human being at the center, taking care of his or her needs in order to enhance their uniqueness, at all stages of life: from schooling to the transmission of knowledge to future generations.

A new model, conceived in the age of uncertainty par excellence, due to the Covid-19 pandemic that has in fact transformed relations in the workplace, thus also becoming an extraordinary opportunity for change, crowning a cultural journey that had already begun some time ago at Enel. In energy, digital and cultural transition processes, the person becomes the success factor, the true competitive advantage. In order to cope with the rapid changes taking place, an inclusive path is needed, all the more so in the workplace. With this in mind, the Charter of the Person aims to value the human being by making him or her the protagonist of an ecosystem in which Company and union organizations work together to create a healthy, safe, stimulating and participative working environment. An environment in which well-being, productivity, continuous learning and safety can reinforce each other, contributing to the fullest realization

of the individual.

There are three areas:

- **well-being, participation and productivity**, to promote the protection of dignity at work, inclusiveness, absence of prejudice, work-life balance and attention to the human element;
- **knowledge and continuous learning**, a life-long learning model, with professional training and refresher courses, women's empowerment to encourage the choice of scientific subjects (STEM), the offer of apprenticeships and openness to external training contributions, including the planning of specific moments to be dedicated exclusively to self-training;
- **safety culture and behavior**, especially in the workplace, with the provision of *ex ante* and *ex post* analysis of injury-risk, the identification of the most innovative technologies for accident prevention, the empowerment of workers and the strengthening of the safety culture through the involvement of the supplier network.

The Charter of the Person represents a turning point towards a virtuous mechanism of caring for relational space in the workplace, where dignity and well-being are indispensable elements. The path to sustainability undoubtedly passes through changing the production model, but also through rethinking interpersonal dynamics, ones that are more open and receptive to others. For Enel, people have always been at the forefront. This document aims not only to improve the conditions of Enel's people, but also looks outwards, to the entire ecosystem of suppliers and contractors that work with the Group, and opens a channel for dialogue with other companies to design an increasingly sustainable workplace together.



## Multi-stakeholder initiatives

In 2022, we participated in numerous initiatives and multi-stakeholder dialogues focused on social sustainability, with special reference to Enel people. Specifically:

### CSR Europe

**On the topic of just transition** in the context of the green and digital transformation, in which we participated in the group on “workforce”, as well as those on “community” and “consumers”.

We also actively participated in the **workshops** organized with the aim of stimulating companies to effectively develop a people-centered approach and corporate inclusion (“How companies can include care for people and well-being in the green, digital and post-pandemic transitions in their workspace”), which led to the launch at the European SDG Summit of the “Building Inclusive Workplaces” blueprint, to which we contributed the “Gentle Leadership” case study.

Finally, we took part in the **Upskill 4 Future project**, focused on the employability of vulnerable workers through the promotion of upskilling and reskilling practices, contributing to the publication of the “Upskilling & Reskilling Report”, in which Enel’s pilot project on e-distribuzione People Business Partners (PBPs) is featured.

### World Business Council for Sustainable Development

We participated in the “Healthy People Healthy Business” project, among others, which explored the role of businesses in developing and promoting solutions to global health challenges by supporting disease prevention and health promotion. The main outcome of the project was the flagship report “Healthy People, Healthy Business: How business can contribute to global health” launched during the Annual Meeting of the Planetary Health Alliance. Included in the report is our people case study entitled “Supporting healthier lifestyles of employees through innovative telemedicine”.

For further details on initiatives related to social issues, please refer to the chapter [“Our commitment to a just transition: leaving no one behind”](#).



# Attracting new talent

3-3 | 404-1 | 404-2 | 404-3 | DMA EU (former EU14)

The 2022 global recruitment plan focused on tapping key roles to manage the challenge to the energy transition, capable of supporting the three main business drivers—renewables, electrification of consumption, and digitalization of networks, and interpreting both new consumer needs and the dynamics of business developments to ensure increasingly sustainable energy use. There was a special focus was on STEM (Science, Technology, Engineering, Mathematics) and the search for more inclusive ways of attracting talent.

More than **6,400** people<sup>(1)</sup> joined the Group in 2022, enhancing an ongoing commitment to relations with universities and to holding **Recruiting Days** globally, as a model of candidate engagement in relation to the various positions to be filled.

To support the selection process, we have defined several initiatives, digital and otherwise, aimed at building a corporate identity that is attractive to potential candidates and includes the transmission of our values.

Among the main initiatives are:

- the launch of the **Talent Engagement Program**, a selection process targeting talents from the most prestigious international universities aimed at ensuring a transversal development and growth path within the different areas of the Company;
- the **"A day as a colleague"** campaign, aimed at fostering full external knowledge of the Company's different professions, through the amplification on social channels of "a typical day as a colleague" with its operational activities, relations with co-workers, the story of its shared passions and how these often dovetail into everyday work;
- specific **advertising campaigns targeted** at increasing the visibility of job offers, especially with a view to gender equality and full inclusiveness, launched during 2022 to support specific recruiting needs and which saw a positive engagement rate;
- a complete restyling of the **"Careers" section of the enel.com website**, aimed at improving candidate engagement thanks to an optimized user experience and access to content providing a complete overview of the Company and a more user-friendly consultation of the various vacancies in the Group;

- a new system (Avature) launched in November 2022 for the global collection and management of all internal and external applications, central to a data-driven strategy of the selection process.

In addition, all our brand pages were integrated into the Enel Group's, in order to optimize its positioning on the main external talent attraction platforms, such as LinkedIn, Indeed and Glassdoor, and to ensure an integrated strategy for all candidates.

In 2022, the **New Onboarding Global Platform** was launched, a unique, comprehensive and inclusive platform for new hires around the world, with the objective of making all cultural and organizational content accessible to them for their full inclusion in the Company.

In order to ensure the direct, open and transparent involvement of every person in the Group in the selection and development processes, the **"Referral Program"** for the search of talent through two pathways was also active in 2022:

- **external:** everyone in Enel can provide support to identify people in the "outside world" who might become new colleagues;
- **internal:** once a year, it is possible to recommend a colleague for advancement in their professional development.

Over 14,000 reports were made during 2022.

Finally, mobility at work was enhanced again in 2022, enabling people to open up to new professional challenges, facilitating the diversification of competencies, and creating increasingly horizontal profiles. In order to promote people centricity, increasing attention has been paid to the **e-profile** tool as an opportunity to enhance a person's hard and soft skills, aspirations and motivations for change. In 2022, the internal **job posting** tool was also opened to the Group's new management positions in order to promote full global participation of the entire corporate population.

(1) Fixed-term contracts are used to a limited extent, to cope with peaks in activity or to temporarily replace workers on prolonged leave (e.g., maternity/parental leave, etc.) and provide for salaries equal to those of permanent workers.



# Continuous learning to encourage our people to participate in cultural evolution

The participation of people in the cultural and systemic transition associated with the decarbonization of the economy and digitalization, which requires new skills, professionalism, and flexibility of adaptation, necessitates the provision of a continuous learning experience that accompanies them throughout their personal and professional life cycle on a “**circular path**”, beginning with the school phase that precedes their entry into the workforce. In a self-sustaining virtuous loop, the final phase of their working life will be dominated by the “restitution” of accumulated knowledge to future generations and to the ecosystem. “**Knowledge and lifelong learning**” is also one of the pillars on which the Charter of the Person is based.

Moreover, valuing individual talent also means caring for the well-being of the individual through the creation of an inclusive and **prejudice-free** environment, in a **non-judgmental** context, where everyone can feel fully embraced in their uniqueness and encouraged to express themselves, without any distinction of race, ethnicity, religion, gender, age, sexual orientation and ability.

It is in this context that the following activities took place in 2022:

- “**Soft Leadership Global Program**”, a course targeted at all Enel people with the intention of raising awareness and stimulating the adoption of behaviors and practices consistent with the “gentle leadership” model at all levels of the organization. It is a program of cultural orientation towards a leadership model increasingly focused on dialogue and the exchange of ideas, inspired by trust, and focused on the enhancement of talents and the expression of autonomy, rather than on control and scrutiny. The program is co-designed with the targets, who become the protagonists of the dissemination phase. Fifteen global events were organized, some of them directed to the population of People Business Partners (PBPs), internal figures dedicated to listening to and dialoguing with people, capable of capturing individual aspirations and integrating them with the needs of the organization. These were part of the Cultural Innovation Journey dedicated to them, whereby frameworks and gentle leadership guidelines were shared for subsequent outreach to the people they manage. In addition, PBPs were involved in the identification of about 600 **Kindness Ambassadors**, belonging to all Business Lines and Countries, with the aim of driving a concrete cultural evolution by disseminating and promoting the key behaviors and values of soft leadership throughout the organization;

- an innovative and deeply absorbing training course with **the application of neuroscience aimed at Top Managers**, which also included an in-depth look at the biases related to managerial skills and female leadership;
- **Job Shadowing, Mentoring and Coaching**, for raising awareness and expressing talents. The courses conducted enabled people to increase their network of relationships, exchange ideas and points of view and fostered self-learning, inter-culturalism and the sharing of experiences and skills. In particular, **Mentoring**, which is based on the sharing of soft skills and the generosity of mentors who provide less experienced colleagues with a role model, stories of successes and failures, saw the involvement of around 670 people globally in 2022;
- the adoption of the “**Learning Time**” provided for in the “**Charter of the Person**”, which will allow our people to set aside moments for training only, in which they can devote themselves to skills development, personal growth or participation in community empowerment initiatives;
- training initiatives involving Enel people in the role of “**Internal Trainers**” and which in the last year saw more than 500,000 hours delivered with an average of about 8 hours per person;
- the global “**Train the Trainers**” project, which aims to identify new trainers and strengthen their role within our corporate culture, making it global and sustainable over time, enhancing talent and increasing the effectiveness of training. In 2022, four training sessions involving about 100 in-house Italian trainers were organized, and new sessions will be delivered in Italy and globally in 2023.

Another strategic pillar for Enel, also present in the Charter of the Person, concerns “**retraining and professional updating, up/reskilling, self-learning and knowledge transfer**”. In order to support the green and digital transition, enhance innovation, economic growth, promote economic and social inclusion and ensure quality employment, the various Schools & Academies have disseminated programs for upgrading existing skills to access more advanced career paths (**upskilling**) and learning new skills (**reskilling**), also enhancing transversal and soft skills. These pathways were also implemented in collaboration with university and academic partners.

During 2022, the cost dedicated to training was approximately 30 million euros, with an average cost per employee of 455 euros; **training involved 96% of the population with more than 3.1 million hours dedicated to cultural**

**evolution** (up from around 2.9 million hours in the previous year), amounting to more than 47 average hours per capita (over 44 average hours per capita in 2021). Of these, hours dedicated to up/reskilling amounted to more than 1.3 million, or about 42% of the total, while those dedicated to human skills amounted to about 380,000, or 12%.

In 2022, the process of evolution towards a new training model led to the adoption of a more flexible, high-frequency and continuous type of delivery, in different the-

matic areas, based on **micro-learning**, which made it possible to provide more courses and thus involve more people. On the other hand, this strategy led to a decrease in the number of total training hours in some areas, due to the short duration of the courses and the already high general level of specialization, such as in the case of digital skills, for which 430,000 hours were provided (14% of the total training hours), which is lower than the targets planned for 2022 (20%).

## Digital skills for the new generations and to promote multiculturalism and inclusion

### Learning through play: the CODY PROJECT

There is no sustainable development without quality education that is inclusive and equitable in ensuring continuous learning. Sustainable development today is inseparable from digital transformation, and it is within this framework that the subject of technology also becomes an educational tool at the service of training and promotes learning that is customized to contexts and needs, starting with young students.

The Enel Cody Robot Adventure initiative, in partnership with the multi-channel community-driven developer platform Codemotion, was created precisely to help prepare students for future challenges as key players in the digital transformation. Enel Cody Robot Adventure is in fact an online educational game made of challenges that, through gamification, accompanies children and young people to learn coding, logic concepts, computational thinking, sequencing and problem solving in a simple and interactive way. The logic behind the Enel Cody Robot Adventure is that of visual coding through the block programming system: each participant can intuitively solve the challenges set, learning while having fun. The aim is therefore to get children and young people interested in some digital skills that are essential for their future, such as robotics and programming, stimulating curiosity and creativity, while discovering the main aspects of the Company's strategy and values.

### POWERCODERS PROJECT

For us, diversity is a value and an accelerator of knowledge sharing and intermingling of experience. It is an indispensable factor of human enrichment, before that of professional enrichment, that training triggers to accompany the energy and digital transformation process and to provide a concrete opportunity for employment for the most vulnerable.

It was with this conviction, as part of the ongoing commitment to initiatives that enhance multiculturalism and digital skills, which are indispensable for the future of innovation in our ecosystem and fundamental for the realization of industrial goals and sustainable progress, that the partnership with Powercoders Italia was launched.

In 2022, Enel became part of the Powercoders Italia project, a computer programming (coding) academy for refugees. It thus became part of a network that already included Reale Foundation, Fondazione Italiana Accenture, in collaboration with UNHCR – UN Refugee Agency in Italy, which offers three-month intensive courses and placement in companies operating in the IT sector, with six-month paid internships. As of 2022, Powercoders has extended participation in training to the so-called NEETs (Not in Education, Employment or Training).

Underlying the project is the desire to promote cultural diversity and meet the labor market's need for digital profiles with knowledge of programming languages. Bringing together people from different backgrounds and cultures, with different aptitudes and experiences, triggers creativity and innovation through an intensive and specialized training model that enables those with basic coding skills to obtain a diploma certifying that they are prepared for the workplace. This project, which



dovetails neatly into the broader ongoing transition and digitalization process, promotes the value of cultural diversity and equal opportunities, encourages the expression of uniqueness in teamwork and the employment of vulnerable people, and at the same time meets the need to bridge the “digital shortage”.

The training course, which ended in December and was supported and underwritten by Enel, resulted in 25 students of different nationalities (i.e., Afghanistan, Sierra Leone, Nigeria, Syria, Ukraine, Liberia, Cameroon, India, Eritrea, Ethiopia, Bhutan and Italy) aged between 21 and 40, being awarded diplomas.

Obtaining the qualification allowed the new graduates to enter the selection circuit of companies interested in digital profiles and to take advantage of job opportunities that Enel also offered.

The collaboration undertaken represents a model of social innovation aimed at creating shared value through the inclusion of the most vulnerable segments of the workforce, in the conviction that it is increasingly important to help them build the necessary digital skills to seize the opportunities present in the labor market and ensure an increasingly inclusive and sustainable socio-economic development that is enriched by the contribution and qualities of everyone.

## Valuing and enhancing our people

2022 saw the widespread dissemination of the new “Gentle Leadership Model”, which is based on the importance of combining well-being and motivation to generate sustainable results over time. In this context is included the quantitative and qualitative **performance appraisal** process for 2022, which involved, as always, the people of the Group at different levels, in a process of constant exchange and comparison that shifts the focus toward the organizational network as a model of growth and self-empowerment, as opposed to a hierarchical model.

The global evaluation model is the **Open Feedback Evaluation (OFE)**, which encourages constant listening and exchange of feedback on skills acted upon and results achieved, all aimed at enhancing everyone’s talent to build a constructive, transparent and no-stone-unturned exchange between people, networks and managers, in full compliance with the Code of Ethics.

The program, which has involved 100% of the Group’s eligible people,<sup>(2)</sup> comprises three interdependent dimensions, with three discussion meetings between managers and employees over the course of the year:

- **“Talent”**, consisting of highlighting one’s individual skills based on **the 15 Soft Skills Model** and linked to the **4**

**Open Power values** of Trust, Responsibility, Innovation and Proactivity;

- **“Generosity”**, intended as the propensity to enter into relationships with others, dedicating time to acknowledging talent and getting involved in turn, requesting feedback proactively, thus generating a mechanism of individual and collective growth;
- **“Action”**, i.e. the ability, as assessed by managers vis-à-vis their staff, to achieve professional goals based on objectives assigned by the manager or proactively self-proposed by the staff themselves.

With a view to increasingly enhancing the value of the individual, 2022 saw the transition from the system based on assessment for access to managerial positions to the development of an empowerment path that supports people in becoming aware of their talents, skills, aptitudes, orientations and aspirations, supporting them in the most complex organizational roles. In this context, new selection criteria were introduced in the annual succession plan for management positions, aimed at including and enhancing diversity. In particular, the age limit for access to the succession plan has been removed, and a criterion was introduced to ensure a fair representation of women among the successors, and the inclusion of white collar was encouraged.

(2) Eligible and reachable: those who have a permanent contract and were employed and active in the relevant evaluation period during the three periods of 2022.

# Listening and dialogue

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Enel has always been keen to promote initiatives aimed at listening to Group employees. At the end of 2022, a new wave of Open Listening was launched, a global listening channel aimed at surveying the corporate climate periodically throughout the year. 75.6% of the Group's employees responded to the 2022 survey, providing useful insights into their mood, well-being and job satisfaction through constant listening on issues relevant to the Group (including work-life balance, networking, training, diversity and inclusion), with an overall job satisfaction (engagement) rate of 89.6% of those involved.

Constant listening aims to put people at the center of the Group's strategy, which increasingly uses analytics to respond to different needs with targeted action plans.

Other listening initiatives were carried out in relation to well-being and disability (see section "The value of uniqueness and care" of this chapter).

Another essential element in listening to and engaging our people are the **People Business Partners**, figures dedicated to listening and dialogue with people, able to grasp individual aspirations and integrate them with the organization's needs.

Finally, Enel considers **internal communication** a mainstay in the creation of corporate culture, people growth and the growth of the organization, stimulating and promoting the exchange of information, know-how and experience. Internal communications are also the main vector to disseminate the Enel strategy and the objectives identified for the near future. In this regard, the periodic "Strategic alignment tracking" survey, an additional listening tool used to monitor employee sentiment and understand their level of knowledge with regard to specific projects targeted at them, showed that, among the internal projects aimed at developing and improving employee well-being and quality of work, employees give the highest priority to the following:

- People caring and well-being;
- Job opportunity;
- Innovation and personal entrepreneurship.

With regard to Enel's projects and initiatives that contribute to the improvement of the communities in which the Company is present, the following are those considered by employees to be the most important to pursue:

- Customer centricity;
- Contributing to the SDGs;
- Technological innovation.

## The value of uniqueness and care

3-3 | 405-1

At Enel, **inclusion, well-being, participation and value creation** are closely linked, as also indicated in the Charter of the Person (see the box in this chapter). In fact, inclusion means enhancing and expressing the unique mix of talents, skills, aptitudes, visible and invisible aspects of each of our people, so as to ensure well-being and motivation, bringing out the unexpressed potential within the organization and thus contributing to growth. This is possible through actions that spread the **culture of inclusiveness** at all levels of the organization and act on the **enhancement** of individual specificities, the uniqueness of the person and **care** in life situations that impact on work by creating **awareness, relationships and participation**.

### The steps of inclusion in Enel

The steps leading to the current state begin in 2013 with the publication of the **Policy on Human Rights**, followed in 2015 by Enel's adherence to the seven Women's Empowerment Principles (WEP) promoted by UN Women and UN Global Compact and UN Women and the simultaneous publication of the **Diversity and Inclusion (D&I) Policy**. This policy makes explicit the principles of non-discrimination, equal opportunities, dignity, work-life balance and inclusion of every person, beyond all forms of diversity. 2019 also saw the addition of the **Workplace Harassment Policy**, which introduced the themes of respect, integrity and individual dignity in the workplace in the prevention of all types of harassment, principles that were the basis of the **Statement against Harassment** in the workplace, published on Enel's website<sup>(3)</sup> in 2020. In 2021,

(3) <https://www.enel.com/content/dam/enel-com/documenti/investitori/sostenibilita/enel-statement-against-harassment.pdf>.



the Global **Digital Accessibility** Policy was issued to ensure equal access to digital information and systems.

Governance on the issues of uniqueness and people care is entrusted to a dedicated unit at Holding level, namely, **People Care and Diversity Management**, which has the task of defining and implementing initiatives at global level, ensuring the coordination and monitoring of local events and the sharing of best practices. At the local level there are also specific "Equal Opportunity Committees" in Italy and Spain, in which the social partners also participate, which contribute to the identification of needs and the proposal of solutions on inclusion issues, while in Colombia, Peru, and Mexico there are specific Diversity & Inclusion Committees that direct and monitor activities on D&I issues.

The growing focus on these issues is also evidenced by the activation of alliances and collaborations with the external ecosystem of associations and networks, which are committed to supporting companies and institutions. In many countries, there are active partnerships with international organizations that operate in different countries and regions or are in the process of internationalization.

In 2022, Enel actively participated in the D&I round tables of the **Business Commission to Tackle Inequality** coordinated by the **World Business Council for Sustainable Development (WBCSD)** and the **Business for Inclusive Growth**, the partnership between OECD and the coalition of CEOs of companies united by their commitment to tackle inequality of income and opportunity.

On cross-cutting issues, for example, Italy and Brazil are part of the UN Global Compact Network, Italy is associated with Fondazione Sodalitas and is a signatory of the EU Diversity Charter, while Brazil collaborates on equity and human rights with the Ethos Institute.

On gender issues, Brazil, Costa Rica and Colombia are signatories of the WEP (Women Empowerment Principles), Colombia is certified Equipares, the USA and Canada are active in the Target Gender Equality Network and the Women's Energy Network, while Italy has participated in the Target Gender Equality Accelerator round tables.

In terms of LGBTQ+ rights, Chile and Mexico are associated with Pride Connection and Italy with Parks Liberi e Uguali, the USA and Canada are affiliated with the Human Rights Campaign, while to promote the attraction of young talent Guatemala is associated with the South American Employees for Youth network.

Enel also supports the internationalization of local associations and networks: in Italy, for example, it participates in inter-company working groups to expand the scope of action of Valore D, of which it is a founding member, and of the Elis Consortium, which supports the Italian national education system in the training of young people with specific attention to girls and their access to STEM professions.

Networks and/or communities within the Group (Employee Resource Groups – ERG) on various topics related to inclusion and diversity are growing:

- **inclusion:** the "Comunidad de inclusión" in Spain;
- **gender:** "Yin Yang" in Mexico, "Women in Leadership" in Chile, "Women in Energy" in Peru, "Her Community" in Greece, "The Ladies' Room" for the Enel X European countries, "Women EmPower" in the United States and Canada, "gender community" in Brazil, "Power Her" in Spain; "WIL – Women innovation lab" in Chile;
- **disability:** the global "Disability community network" dedicated to the focal points for disability, the "Comunidad de inclusión" in Spain, the "Disability community" in Italy, the "Anne Sullivan" in Mexico and the "People with Disability community" in Brazil;
- **ethnicity & cultural diversity:** "Ethnicity Community" in Brazil, "Chontalli" and "Expat network" in Mexico, "Cultural Power" in the United States and Canada;
- **LGBTQ+:** "Just Be" in Mexico, "Un equipo con orgullo" in Chile, "LGBTQ+ community" in Spain, "Pride in Power" in the United States and Canada, "LGBTQ+ community" in Brazil;
- **age:** "Beyond Generations" in Mexico, "Generations community" in Brazil;
- **care:** "Parenting" in Mexico;
- **veterans:** "Proud To Serve" in the United States and Canada;
- **well-being:** "Empowerment and Balance" in the United States and Canada.

## An evidence-based inclusive culture

Spreading the culture of inclusion at Enel also means measuring and setting precise targets. That is why an essential part of our work is dedicated to turning phenomena into numbers and driving change from an analysis thereof. In 2022, the People Care and D&I dashboard was implemented, allowing stakeholders to gain visibility into outcomes and trends to guide strategies.

It represents an approach to the individual that is embodied in the definition of a specific diversity policy regarding the composition of the Board of Directors<sup>(4)</sup> and specific objectives and actions published in the Plan and in the Sustainability Report, approved by the corporate bodies.

Specifically:

- carry out an assessment of the general level of inclusion;
- balance the percentage of women in selection processes;
- increase the representation of women managers and middle managers and that of women in management succession plans;
- increase the number of female students involved in STEM awareness initiatives;

(4) In 2018, the Board adopted a specific "Diversity Policy of the Board of Directors of Enel SpA", <https://www.enel.com/content/dam/enel-com/documenti/investitori/governance/statuto-regolamenti-politiche/en/diversity-policy-of-the-board-of-directors.pdf>.



- promote projects for the inclusion of Enel people with disabilities at all stages of the employee journey;
- promote the dissemination of a bias-free culture, inter-culturally sensitive initiatives and flexible forms of working arrangements.

The proven commitment and transparency to gender inclusion has been confirmed by Enel's presence in major ESG rankings, ratings, and indices (see the chapter "[We empower sustainable progress](#)"):

- inclusion for the fourth time of the Group and its subsidiaries Endesa and Enel Chile in **Bloomberg's Gender Equality Index**, which recognized in particular innovative practices in terms of gender diversity, conciliation and harassment prevention;
- confirmed for the fourth consecutive year as being among the top 100 companies, and first Italian company, of **Equileap's Gender Equality Global Report & Ranking** for promoting gender diversity, well-being, work-life integration and ensuring a working environment that respects human rights and is free from harassment;
- confirmed in the **Refinitiv Diversity and Inclusion Index**, ranked first in the industry grouping "Electric Utilities and Independent Power Producers" and 30th in the top 100 for initiatives in terms of gender diversity, disability and work-life balance.

At national level, Spain was awarded the "Distintivo de Igualdad" en la Empresa by the Ministry of Equal Opportunities, the "Distintivo de Igualdad" award by the "Club de Excelencia en Sostenibilidad" and received the Pioneras IT award by the College of Telecommunications Engineers for STEM promotion initiatives. In addition, Mexico once again received the Distintivo "Éntrale" for initiatives implemented for the inclusion of people with disabilities; Enel North America for the second time, and the Enel Group for the first time, were also included in the Disability Equality Index.

## Uniqueness that makes the difference

At Enel, the evolution of the culture of inclusion has been supported over the years by intensive communications and awareness-raising at every level and in every organizational context.

Each year, a specific theme has been developed that has inspired both the campaigns and the numerous events held. In 2022, the concept of the uniqueness of the individual in its relational and organizational dimensions was explored with the global event **YOU uniqueness makes the difference**. The dissemination of awareness-raising campaigns on the issues of bias and harassment also continued with the de-

livery of the two global courses:

- **Beyond Bias**, an educational initiative that promotes awareness of the main prejudices we may encounter in the working environment, through ironic and surreal sketches that indicate possible avenues of escape to avoid falling into the trap. As of 2022, the course is assigned to the entire Company population and has seen the involvement of more than 33% of assignees and about 26% of managers and top managers;
- **Harassment in the Workplace** explores, in fictional form, four realistic cases of harassment related to age, disability, LGBTQ+ and sexual discrimination, in various types of conduct (visual, verbal, disparaging). The course illustrates Enel's Global Harassment Policy by providing hints for recognizing cases of harassment and indicating preventive behavior. As of 2022 it is delivered to the entire corporate population<sup>(5)</sup> and has seen the involvement of more than 32% of the assignees.

On the other hand, at Country level, there are several initiatives for the prevention of harassment, such as Chile's "#RespetarEsEnergía" campaign.

## The power of intergenerationality

The dimension of intergenerationality is an increasingly central and relevant issue for companies and institutions, and the exchange of skills and experience is indeed a key element for value creation.

This is why the **global People EngAger project** was conceived. It introduces a resource recognized and certified by the Company with the aim of supporting the evolution process in the organization both in the phase of new hires and in the internal mobility between functions, business areas and countries where the Group maintains a presence. This resource enables intergenerational exchange by stimulating dialogue on values, experiences and skills, ensuring the ability to navigate the complexity of the context independently and acquire rapidly the knowledge associated with the role. Several initiatives have been developed on the subject in different countries:

- **Italy**: led the webinar "Generations Included" which explores the diversity of each generation and its biases, with the aim of creating cross-generational collaboration networks;
- **Spain**: continues with the "Nuestros mayores valores" initiative to recognize the talent of more experienced colleagues;
- **Chile**: launched communication campaigns for the International Youth Day and International Day of Older Persons with the aim of generating intrinsic motivation based on sharing between seniors and juniors;
- **Mexico**: organized a training webinar on personal finance for millennials;

(5) Except for the USA and Canada where courses required by local regulations are provided.

- **Peru:** with the “Diversidades” initiative, it created specific workshops with the aim of promoting multi-generational talent within the organization;
- **Brazil:** implemented initiatives to strengthen integration without age discrimination, through activities such as the “Mi experiencia Enel” meeting for young professionals;
- **US:** “Diversity, Sensitivity & Inclusion in the Workplace” course was launched in 2022 with a focus on age discrimination as well as gender, disability and LGBTQ+;
- **Colombia:** conducted training sessions for trainees and apprentices on personal skills and branding held by colleagues and launched the “Potential Talent” project, which promotes customized development paths for young talents.

## LGBTQ+ uniqueness

LGBTQ+ issues are receiving increasing attention internationally, and many Group countries have promoted measures, awareness-raising and training initiatives, and communication campaigns to reflect on inclusive language, shed light on stereotypes and explore specific aspects of people's lives.

Among the specific measures, in addition to the parental leave, already recognized, in 2022 **Italy** extended to same-sex couples in civil marriages the system of protections and facilities for parental and care purposes (parental leave for childcare, leave and absences recognized for parents with severely disabled children and in the event of death or serious infirmity of the child), while in **Peru** the extension of health insurance coverage to same-sex cohabiting couples is active. In **Italy** and **Chile**, the “Guidelines on Gender Transition for Inclusion” of colleagues in transition have also been adopted.

Various initiatives have been organized to promote the creation of a safe and inclusive working environment and to support colleagues in their role as parents, also in collaboration with external associations and networks that promote the enhancement of talent regardless of identity, gender expression and sexual orientation (Parks Liberi e Uguali in Italy, the REDI network in Spain, Pride Connection in Colombia, Chile and Mexico). In **Argentina**, webinars were organized on gender prejudice. **Italy** offered meetings targeted at all colleagues and one entitled “Do I tell my parents or not?”, aimed at parents with homosexual, bisexual and transgender children. The **USA and Canada** spread awareness on LGBTQ+ history and equal rights. **Brazil** has launched a number of communication campaigns and webinars to disseminate and raise awareness of the issue. **Chile** has launched an initiative aimed at the internal LGBTQ+ group and a communication campaign to raise awareness of the use of inclusive language through the #mipronombre initiative, which calls for respect for gender identities and the promotion of recognition for all, also setting up sharing spaces where sexual diversity can be openly discussed and ideas exchanged. **Mexico**

participated in the “Pride Race”. **Colombia** was awarded the Friendly Biz Corporate seal and produced a podcast on human rights and sexual diversity. **Costa Rica** and **Peru** respectively offered in-depth discussions on sexuality and a training program divided into 4 meetings to explore different topics related to the LGBTQ+ world.

## Cultures in dialogue

With 86 nationalities and 24 languages, Enel considers **cultural and ethnic diversity** to be an extraordinary asset and is committed to promoting and enhancing knowledge, relationship and intermingling among different cultures.

In order to carry out a comprehensive **mapping** of ethnic and cultural diversity, please note that in most of the countries where we are present there are legal and privacy protection constraints that do not allow its collection, while in Argentina, Costa Rica, Guatemala, Panama, Mexico, Peru, South Africa, Canada, Brazil and the United States it is only possible to request such information on a voluntary basis.

**Specific initiatives** in favor of intercultural diversity in its various forms have been launched in many countries:

- **Italy:** the intercultural awareness webinar “Different from whom?” was organized and the project Powercoders was launched (see dedicated box);
- **Brazil:** with the “Inclusive Estagio” project, more than 30% of internship positions were filled by black candidates and days against racial discrimination were celebrated;
- **Chile:** organized webinars on native cultures, dedicated an initiative for expat colleagues and celebrated Migrants’ Day;
- **Colombia and Central America** (Panama, Costa Rica and Guatemala): a memo was issued to promote the cultural and linguistic integration of colleagues from the four countries;
- **Peru:** webinars, a podcast and a challenge on intercultural diversity were realized;
- **Mexico:** produced a guide on the country, its traditions and culture for the integration of new colleagues from other countries;
- **North America:** implemented awareness-raising initiatives during Black History Month and through the “Cultural Power” ERG.

At a global level, a **mentor** is provided to foster the integration of expatriate colleagues in the destination countries. In addition, to train interpersonal sensitivity and communication and reduce the risk of misunderstandings in multicultural contexts, the **global online course WIRED – Connecting Intercultural Skills** is freely available for all colleagues on e-education. The course allows for reflection on the biases and coaching skills that foster intercultural inclusion and, in a specific section, offer monographic guides that explore the specificities of different cultural contexts.

# Taking action to close the gender gap

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Enel's efforts to close the gender gap and ensure pay equity continue with tangible results through actions and initiatives that influence all phases of women's journey in the organization: from representation at entry level to empowerment and development in positions of responsibility, paying attention to various relevant moments in life, such as becoming parents and personal or family care.

## Gender gap: the action plan including direct and indirect measures

**44.4 %**  
women on the BoD

**15 %**  
women in executive positions

**23.4 %**  
women in the workforce

**46.1 %**  
female successors

**24.9 %**  
women managers

**52.2 %**  
women in selection pools

## GENDER GAP: the action plan, direct and indirect measures

The action plan consists of **measures that directly and indirectly affect** equal pay, given the fact that the gradual increase in female representation at different organizational levels is a prerequisite for natural generational exchange and thus for achieving parity in remuneration over time.

**Enel guarantees equal pay for equal tasks and seniority for all new managers through internal development.**

- The Board of Directors (BoD) of Enel SpA consists of **44.4%** women.
- At the end of 2022, women accounted for **23.4%** of the Group's entire workforce, up from 22.5% in 2021.
- In 2022, **24.9%** of managers were women<sup>(6)</sup> (23.6% in 2021) and held **15%** of executive positions (CEO-1) (3 out of 20), while **32.6%** of middle managers were female (31.4% in 2021).



- By 2022, the presence of **women in management succession plans** was steadily increasing: 46.1% female successors in management plans and 50% in top management plans.
- In the past year, the percentage of **women in the Group working in STEM roles** reached **21%** compared to **18%** in 2021.
- Selection processes are closely monitored to ensure a fair balance of the two genders in the candidate pools, with a rising trend in the last five years (52.2% in 2022 compared to 39.0% in 2018).<sup>(7)</sup>

(6) Women working in managerial roles (managers and middle managers) in revenue-generating business areas account for 28.3% of the total number of people in these areas, up from 23.3% in the 2021 Report.

(7) Selection processes involving blue-collar workers and similar technical roles are not included (as of 2021), nor is the US and Canadian perimeter, due to local anti-discrimination legislation that does not allow gender monitoring at the recruiting stage.

**The Long-Term-Incentive Plan 2022** supports these trends by confirming a performance target, with an increased weight from 5% to 10% of the total, represented by the “percentage of women in top management succession plans” at the end of 2024 with the aim of giving continuity to a policy of preparing a suitable audience for managerial appointments in the near future. The processes for managing succession plans and salary reviews are governed by specific policies, and constant monitoring of remuneration for all positions is carried out. A **dedicated budget** has been allocated beginning 2019 to ensure equal pay for equal work, in cases where a mismatch is found.

For the purpose of monitoring equal pay, an overall maintenance of the **Equal Remuneration Ratio (ERR) of 81%** was noted. The calculation of the ERR, based on the aggregate average of women’s wages over the average

of men’s wages, is influenced by the steadily increasing trend over the years in the number of women, whose shorter tenures, given their seniority in the position, go to affect the average gender remuneration in the short and medium term.

To confirm its commitment to these issues, since 2021 Enel has been participating in the “**Equal by 30**” campaign promoted by Clean Energy Ministerial (CEM), the initiative whereby various public and private sector organizations have committed to promoting gender equality in terms of pay, leadership and opportunities in the clean energy sector by 2030. Three specific commitments have been made to raising the awareness of an increasing number of girls towards STEM disciplines and professions, fair representation of women in selection shortlists, and growth in the number of women in managerial positions.



As far as the **parental dimension** globally there is the “Parental Program”, which aims to promote organizational and personal awareness of the culture of parenting and to reconcile personal and professional needs related to this phase of life, which is crucial for both parental roles. The program is based on the values of trust, care and engagement, and provides for a structured process of interviews between the new parent, the manager and the People Business Partner, before and after maternity and paternity leave. The program is supported by a single information point that offers all the information, services and training initiatives relevant in facilitating a return to the Company, in supporting work-life balance, and in promoting the motivation and organization of activities. In the various coun-

tries where the Group is present, this program is complemented by further local initiatives to support parenthood.

Commitment to the promotion of women’s presence has been growing over the years to supporting initiatives that promote the presence of women in study and professional pathways in **STEM** fields, in conjunction with schools, universities and institutions, to overcome gender stereotypes and disseminate the importance of the technical and scientific culture, increasingly integrated with the humanistic dimension. These STEM awareness and orientation initiatives involved **almost 10,000** female high school students in 2022 and **more than 30,000** female students in the last six years.<sup>(8)</sup>

(8) From 2022, the figure includes initiatives involving only primary and secondary schools.



## Back to school: Enel's first global STEM and empowerment initiative

2022 saw the launch of **Back to school**, a global initiative involving no less than **12 countries** (Spain, Italy, Greece, South Africa, India and then Colombia, Chile, Peru, Brazil, Argentina, Romania, USA and Canada) and **more than 4,000 students**, almost 76% of them girls.

Simplicity, scalability and experiential learning are the hallmarks that have made this initiative a success story featuring 68 female STEM professionals who have returned to schools – in some cases to the very schools from which they graduated – to talk about their experiences.

Back to school brings together two mutually enriching worlds. Young people in search of prospects and the awareness that will allow them to choose the educational path to forge the future they desire, and female managers whose generosity and empathy point to “new scenarios”, overcoming the “walls” of stereotypes and prejudices that unfortunately still limit women’s access to technical and scientific faculties.

Through Back to school, students in their third and fourth year of high school have had and will have the opportunity to access career counselling, have conversations on specific topics to make their study and professional choices more informed, and have shadowing meetings, i.e. days spent working alongside a professional to begin to understand the mechanisms, the language of the workplace and the opportunities offered by STEM fields of study.

In Italy, the Back to school program also included the launch of a contest that saw a number of female students awarded financial contributions to cover university fees

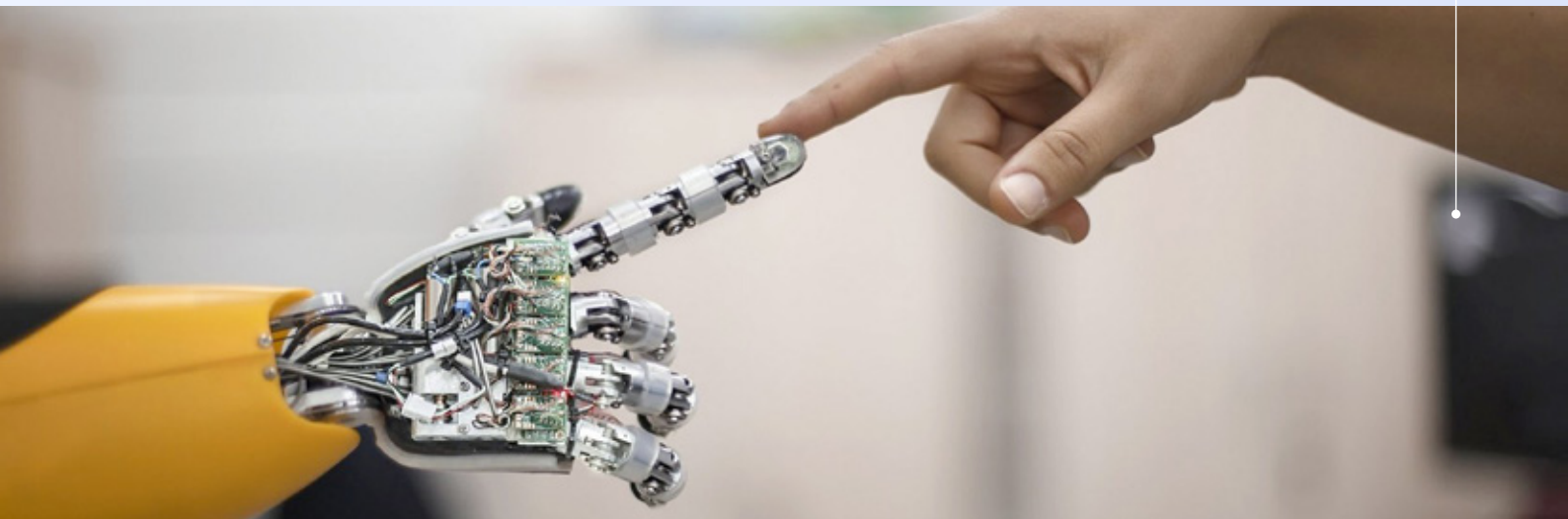
for enrolling in a STEM faculty.

- “The empathetic relationship is the key to the success of the project because, on the one hand, it strengthens the girls’ desire to emulate and, on the other, it increases the passion and generosity of the female colleagues who tell of their experience”, says **Silvana Ceravolo**, head of Rewarding and Mobility, who is behind the project.
- “Having an outlook on the future and work can help to overcome one’s limitations and not be afraid to embark on technical paths”. Gaia, Italy.
- “During the presentation I was very impressed. It was very different from what my classmates and I were used to, a new method of teaching”. Aggeletou, Greece.
- “I want to become an engineer and this experience has offered me insights for my professional growth”. Mapanzule, South Africa.

It was an important and generative experience for our colleagues as well. We gathered feedback and impressions from some of them:

- “It was generative to share my knowledge and the knowledge that there are no limits”, says Alisha, wind and solar plant manager.
- “Typical female skills are also needed in technical fields”. Daniela, head of Spare Parts Optimization.
- “It was nice to interact with the students and tell them that there is no such thing as male or female work”, are the words of Sonia, plant supervisor.

Finally, the contribution of a manager, **Aurora Viola**, head of Market Italy and mother of a STEM girl: “The future is called STEM, as all professions will need these skills and women cannot miss this opportunity. I tell girls not to imitate others in order to be accepted, not to be afraid of making mistakes and feel guilty about it, but always to try again. Back to school is an opportunity to break down the many stereotypes still present”.





There are also numerous STEM initiatives implemented locally in the various countries where the Group is present. In particular, in Italy with the “STEM Lab”, online introduction courses in coding have been activated for all children and young children of employees (aged 8 to 10) to support digital literacy (see the “[Powercoders Project](#)” box). In Colombia and Central America, we highlight the “Panel de mujeres Enel sin fronteras” project, in which female colleagues share the challenges, opportunities and perspectives for women working in technical contexts. In Romania, with “Empower girls”, workshops were initiated with upper secondary school students to inspire and orient them towards STEM studies. In Spain, the “Ella te cuenta” initiative continues, through webinars conducted by students who have been awarded scholarships from the “FEU Institute of Technology”, to stress the importance of technical skills to meet major global challenges, and the “Code” training project for the children of colleagues has been activated. “Students job shadowing” in Brazil is an important opportunity for young female students to experience the workplace, supported by an Enel professional.

Numerous initiatives have been implemented to develop **women’s empowerment** within the organization, ranging from cultural change, managerial development and mentoring, coaching and shadowing programs to training, upskilling and reskilling.

Based on the experience of the “**Empowering Conversations**”, i.e. the dialogues of six female managers on the im-

portance of leadership inspired by female role models, as many video clips were produced, translated into the main languages and made available on the e-learning platform for all colleagues.

Through the **Gender Equality and Women Empowerment (G.E.W.E.) program**, a global observatory of country-led initiatives on the subject has been set up. There are more than 200 initiatives covering all stages of women’s careers within the organization as well as those aimed at attracting female talent from outside.

Some initiatives have been recognized as good practices and a program has been launched to extend them to different countries:

- “Getting to know each other”, mentoring and shadowing meetings between managers and young women aimed at fostering their visibility in the organization;
- “WomENergy – Feminine Synergy”, a networking event between Business Lines involving female managers and female colleagues with the aim of expanding their professional network and encouraging the increase of women in succession plans;
- “Gender awareness”, an initiative launched in Brazil and aimed at People Business Partners to disseminate a gender equality culture at all levels of the organization;
- “WoMen in”, an initiative launched in Mexico involving focus groups composed of representative samples of the corporate population to identify actions to implement and support gender equality.

## The value of disability

Enel is committed to ensuring the full inclusion of every person, in line with the approach indicated by the relevant UN Convention and with the Enel Valuability© model, according to which inclusion generates innovation and increases the possibility of attracting and valuing people by innovating processes and products.

Globally, there are **2,129 colleagues with disabilities**, more than 70% of whom are in Italy.

Enel provides tools, services, working methods and initiatives to create an inclusive working and relational context for all, which allows work activities to be carried out in full autonomy, regardless of any disability. In particular, there is a **focal point** for Enel people with disabilities in all countries and 2022 saw the launch of new global initiatives, including:

- activation of **Inclusive Travel** services to ensure accommodation and travel experience for colleagues with disabilities;
- launch of the **Inclusive Internship** project with the activation of internships in Italy;



- participation in the **Generation Valuable<sup>(9)</sup>** project promoted by the Valuable500 network with the aim of spreading the culture of inclusion and empowerment of people with disabilities through mentoring meetings between talented colleagues and managers;
- design of an awareness-raising initiative to spread knowledge of the application principles of **Design for All** to business processes and contexts to train an inclusive mindset throughout the corporate population and the global dissemination of guidelines to ensure the adoption of accessibility principles for the realization of e-learning content.

























































Since 2020, most of the disability initiatives have been merged into the **Value for Disability** project, which is described in detail in the chapter "[Managing human rights](#)".

## Remote working and well-being

In 2022, more than 36,000 people worked in hybrid modes, alternating between remote working and in-person activities. A transformation of the way we work already started in 2016 and has now extended on a global scale thanks to the Group's impressive technological evolution. In March 2022 in Italy, the **New Way of Working** (NWOW)

agreement was signed with national trade unions, regulating the new remote working arrangements, canceling and replacing previous agreements and becoming fully operational from October 2022. The new agreement introduces a highly innovative system with extensive flexibility measures, providing for the alternation of on-site working days for so-called "high-synergy" activities with remote working days for which a ceiling of 60% of monthly days is set aside for remote activities. There is also the possibility of requesting additional days for special situations (disabled, caregivers, parents of small children, etc.), i.e. a maximum of 40% for activities that can be partially remote, as well as organizational measures to guarantee and protect the well-being of workers and an easier work-life balance, the right to switch off, the provision of mobile connectivity for all remote workers, and the recognition of meal vouchers for remote working days. Consistent with the principles outlined in the Italian agreement on the new work model, trade union and/or individual agreements were also signed in the other main countries in which the Group is present to make hybrid work a global reality.

To date there are many flexibility measures active in different countries, as shown in the following table:

	ITALY	SPAIN	ROMANIA	NORTH AMERICA	LATIN AMERICA <sup>(1)</sup>	AFRICA, ASIA, OCEANIA	EUROPE AND EURO MEDITERRANEAN AFFAIRS
Part time 							
Smart working 							
Telework 							
Seasonal schedule 							
Time bank 							
Flexible time 							
Short week 							

(1) Argentina (smart working); Brazil (smart working, time bank, flexible time); Chile (smart working, flexible time); Colombia (smart working, time bank, flexible time, short week); Peru (smart working, flexible time, seasonal schedule, short week); Costa Rica, Panama, Guatemala (smart working, flexible time, short week, telework).

(9) <https://www.thevaluable500.com/update/generation-valuable>.

## The global well-being framework

In 2021, together with our people (in co-creation mode), a global well-being framework was defined, based on eight pillars that affect overall satisfaction with the centrality of people in mind, specifically considering the needs that have emerged:

- **psychological well-being**, more broadly “feeling comfortable in one’s own skin”, involving the management of perceived stress and individual skills of stress coping;
- **work-life harmony**, balance between working and family life, involving the management of working time and disconnection, taking due account of the person’s family commitments (children, caring for elderly and/or disabled relatives);
- **physical well-being**, intended as inspiration to take care of one’s own physical health;
- **social well-being**, intended as a sense of connection and belonging to the communities in which the person participates socially;
- **economic well-being**, intended as a sense of satisfaction with the family’s economic situation;
- **sense of protection**, intended as a sense of security perceived by the person with respect to the occurrence of unpleasant events;
- **ethical well-being**, intended as satisfaction with the value, meaning and purpose of the person’s life;
- **cultural well-being**, intended as “feeling encouraged to grow and learn new things”.

During 2021, the **first global well-being survey** was conducted with the aim of measuring the level of corporate well-being, defining the most important initiatives for people, and consolidating its global model, using a metric common to the different countries in

which Enel operates, but also capable of capturing cross-cultural differences. Through the involvement of an international, heterogeneous and multicultural team, the results enabled the definition of the most important actions to be taken.

Survey 2022 saw an expanded survey on the topic of motivation declined on four factors: purpose, mastery, relationship, and autonomy.

At the end of 2022, Enel also included the public target linked to the general well-being index for the years 2023–2025 among the targets of the Sustainability Plan. This index measures the percentage of respondents fairly or very satisfied with their overall well-being (both personal and work life) and stands at 60% in the past year.

With the purpose of increasing people’s well-being, the Global Wellness Program was launched, targeted at all Enel people and designed with an experience that combines physical and digital (specific “Me-Wellbeing” section on the Company’s “ME” portal). The program content will be expanded continuously to keep people engaged. The first release covered psychological well-being and relational and emotional intelligence, allowing people to use the following tools on a voluntary basis: anonymous self-assessment tests on their emotional, physical and social state; tools to plan meetings with colleagues aimed at improving relational well-being; a well-being advisor who allows people to exchange tips on behaviors that impact well-being; webinars on focusing skills, stress management and the importance of social relationships. To stimulate adoption of the program and a culture inspired by self-awareness of one’s own level of well-being, a reward scheme has been associated for those who use the program tools on a regular basis, enabling them to have more time for themselves (well-being days) or, alternatively, pathways aimed at further increasing their level of well-being.

In order to spread the culture of well-being and offer support to colleagues with a view to work-life harmony, 2022 also saw the birth of the global bimonthly Well-being newsletter and the introduction of a new guidance resource: the Well-being Ambassador. Training of the first Italian ambassadors was completed and was commenced for the other countries.

In general, at Enel well-being is expressed in its various meanings with initiatives that also aim to increase awareness of the importance of a correct diet, through workshops and nutritional consultations, without neglecting the area of physical well-being understood as motor activity. In Italy, for example, yoga and pilates classes held on-site have been replaced and flanked by online courses and customized subscriptions with Gympass, available in several countries.



# Caring for all

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We promote the value of care in all situations, including contingencies, in which a person may find themselves during their working life, and we have defined benefits and services that support work-life integration. A few examples of initiatives in the different countries where the Group maintains a presence are provided below.

## Caring for people

**“MaCro@Work Caring Program”.** The MaCro@Work Caring Program is a global initiative launched in Italy and aimed at Enel people suffering from a chronic disease. The first step was the training and creation of the network of Heart Managers, People & Business Partners who voluntarily volunteered to support “vulnerable” colleagues by providing active listening and help in seeking the most appropriate solution to create an inclusive environment for the colleague and the entire work context of reference. During 2022, the project was extended to Spain, Argentina, Brazil, Mexico and Central America, and Romania, and in early 2023 it will be made operational with the creation of about 50 more Heart Managers globally. The project received the DNA – Difference iN Addition Award in Italy, which recognizes concrete good practices of inclusion in corporate contexts.

**HeLP Me:** a solidarity project that has made it possible to create the first corporate network in Italy based on volunteering that connects colleagues in a situation of need, momentary or permanent, with those willing to offer their time and lend a hand.

On the subject of **psychological well-being**, support services were reinforced during the Covid-19 pandemic and thereafter. In particular, assistance is provided in Brazil, Italy, Spain, Peru, Romania, the USA and Canada, Colombia, Costa Rica, Guatemala, Panama, India, South Africa and Argentina, covering more than 95% of Enel’s people.

There are also several initiatives implemented on the topic of **vulnerability**.

In Greece, in November 2022, Enel Green Power won the Gold Award on the “Break the Stigma” dimension for its initiatives to promote an open and inclusive culture of psychological well-being free of prejudice and stereotypes. Supporting took the form of workshops, specific training such as mindfulness, and *ad hoc* sessions to promote a holistic approach to well-being.

## Caring for families

In most countries active services and support are provided, including financially, for childcare and focused on motherhood, such as breast-feeding rooms at our major sites.

In **Italy**, the “Master Care” plan dedicated to caregivers in the Company is active, and there is an online family counseling service at subsidized costs, “New Parents New Energy” parenting training sessions, and the MAAM-CHILD Platform that stimulates active reflection on the life parenting experience in order to capitalize on it in the work context. There were also workshops for employees’ children on coding and STEM subjects. Family services such as financial support (school book bonus, contributions for kindergarten, school and university, scholarships and conventions with schools) and “time-saving” services are also available, such as babysitting, care for the elderly and home support. Since 2022, a care manager service has also been active in Italy, which consists of a specialized operator who accompanies the employee caregiver in dealing with a situation of need, offering support in the choice of assistance and care services best suited to his/her requirements. Numerous initiatives have been introduced, in collaboration with the mobility manager network, to encourage sustainable travel, including bike sharing, by Enel people, including specific agreements for public transport subscriptions. Finally, all mothers and fathers of children attending primary school are granted entry permits for their children’s first day of school.

Also available is the MyWelfare platform, where it is possible to convert the performance bonus into specific welfare goods and services by taking advantage of a tax and economic benefits with a 15% premium offered entirely by Enel. In 2022, to support households in coping with increasing economic hardship, utility costs could also be reimbursed through MyWelfare.

**Spain** has a dedicated channel on the Company intranet, offering a wide variety of products and services at competitive prices, offers for leisure, training, but also the opportunity to make donations for the improvement of the living conditions of those most in need. An app can also be downloaded to access various services such as private car sharing, car cleaning and repairs, a dietician and a travel agency. Plus, at the Madrid site, a “To-Do room” is available, offering services to save time that are open all day long (for example, laundry, dyeing, computer repairs, etc.), to improve work-life balance.

In **Colombia**, an à la carte platform is available that offers numerous types of benefits that can be redeemed in real time according to work-life balance needs, interests or



current moment in life. During 2022, the organization's benefit model saw the "My emotional care" section for psychological and physical well-being growth.

In **Greece**, we won the Bronz Award in 2022 for the Parents' school program, which aims to improve the work-life balance of parents with measures including psychological support and specialized training.

## Caring in the organization

In 2021, an analysis was carried out to harmonize the minimum duration of maternity leave within the Group. From 2022, Japan, Taiwan, Germany and Panama will therefore add to the leave required by law to reach a minimum threshold of 80 working days, as is already the case under European legislation, as required by European regulations.<sup>(10)</sup> As in 2021 in terms of maternity leave, a similar analysis will be carried out in 2023 regarding paternity leave.

In line with the care approach and to support the parental experience, Enel offers measures in addition to the provisions of local legislation in terms of additional days of leave as well as pay, with potential benefits in the areas of work-life balance and caring for families.

With regard to **maternity leave**, in more than half of the Group's major countries (Argentina, Spain, Mexico, Colombia, Guatemala, Costa Rica, New Zealand, Australia, Brazil, Germany, Japan, Panama and Taiwan), Enel guarantees an increase in the number of days of leave compared to what is provided by local legislation. Specifically, for Japan, Taiwan, Germany and Panama, Enel has supplemented the statutory leave duration to reach the minimum threshold of 80 working days, as required under European regulations. In addition, in Peru Enel offers one year of remote work in addition to that provided for under local legislation, while Argentina, Australia, Brazil and Colombia offer a substantial number of additional days. In terms of salary, where the total remuneration is not guaranteed by local laws, Enel intervenes by bridging the gap to reach 100% coverage. In particular, this occurs in Italy, Romania, North America, Panama, Guatemala, South Korea, and Greece, while in all other Group countries, remuneration is already 100% guaranteed according to legal requirements. Specifically, in Italy Enel guarantees 100% coverage compared to the 80% required by law for the five months of

compulsory leave. The average number of days of fully paid maternity leave in total for countries that account for over 80% of the global total workforce (Italy, Brazil, Spain, Argentina and Romania) is 26.8 weeks, with the minimum offered in Spain (17 weeks).

Also with regard to **paternity leave**, in some countries Enel intervenes with additional measures both in terms of the number of additional days of leave (Argentina, Spain, Mexico, Colombia, Guatemala, Costa Rica, Panama, United Kingdom, Ireland, Chile, Peru, New Zealand, India, Australia, Greece) and in terms of wages (in Mexico and Greece, Enel covers any pay gaps guaranteeing 100% pay, and in all other Group countries, remuneration is already 100% guaranteed according to legislative requirements). In particular, in Italy since 2021, the law requires 10 days of paternity leave to be paid at 100% of wages, even in the event of adoption. The average number of days of fully paid paternity leave in countries that account for over 80% of the global total workforce (Italy, Brazil, Spain, Argentina and Romania) is 3.7 weeks, with the minimum offered in Brazil (1 week).

In terms of **parental leave**, the measures on offer vary greatly from one country to another. Italy provides parental leave of 10 months, shared between the mother and father, in a child's first 12 years. If the father takes at least 3 months, the total leave rises to 11 months. The collective agreement pays a salary of 45% for the first month and 40% for the second and third months, compared to the 30% required by law for the first 6 months.

In 2021 in Italy, parental leave was extended to same-sex couples in civil partnerships who care for children, and in Peru health insurance coverage was extended to same-sex couples living together for a minimum of two years.

In Italy, it is also possible to **take leave for very serious family circumstances**, and to offer holidays or rest periods from a solidarity point of view (solidarity holidays) to colleagues in the same company, to help children or adolescents, parents, spouses, civil partners or common-law spouses who need constant care or in the event of very serious family or personal circumstances. As well as holidays donated by colleagues, Enel provides the same number of days of paid leave. In Spain, it is also possible to take advantage of daily flexibility adapted to the temporary needs of the worker, in the form of a temporary change in working arrangements, reductions in working hours and leave for family care.

(10) See Council Directive 2010/18/EU of March 8, 2010: <https://eur-lex.europa.eu/legal-content/IT/TXT/?qid=1414661428912&uri=CELEX:32010L0018>.



## Supplementary healthcare assistance and pension

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The majority of countries where the Group maintains a presence offer supplementary health insurance policies at advantageous conditions with respect to the alternatives available on the market. In many cases, the Company provides benefits related to prevention and periodical check-ups (see the chapter "Occupational health and safety").

For all Italian employees and their dependent family members, in agreement with the trade unions, Enel set up the Supplementary Healthcare Provision for Enel Group Employees (FISDE) in 1997. The Provision disburses repayments and redemptions for healthcare expenses, promotes initiatives for the disabled and individuals subject to socially challenging situations (drug addiction, alcoholism, learning difficulties, psychosocial disorders) and sets up preventive medicine programs. Also in 2022, members were able to

take advantage of symposia with the Italian National Council of Psychologists (CNOP) and Italian Psychoanalytic Society (SPI) for psychological support services.

In line with the FISDE solidarity principle, former Enel employees can also continue to benefit from the services offered by the Provision by continuing to pay the membership fees.

Staff support measures also include the option of accessing fixed-contribution and other pension plans, such as membership of mandatory or optional schemes and the award of various types of individual benefits in services associated with post-employment benefits provision.

**As at December 31, 2022, 81% of employees were covered by the Enel Group pension plan.** The largest pension funds are in Italy (Fopen and Fondenel), Spain and Brazil.

## The level of coverage of non-salary benefits<sup>(11)</sup>

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The analysis concerned the entire Group workforce, showing a high percentage in terms of access to the main benefits.

The main support initiatives and the extent of their coverage of the Enel workforce are set out below.

Non-salary benefits 100% Enel countries	2022	2021	2022 vs 2021
Covid-19 insurance	99%	100%	-1%
Life insurance	89%	88%	1%
Medical insurance	94%	93%	1%
Pension Fund Membership	81%	81%	-
Additional parental measures (maternity, paternity and parental leave)	94%	94%	-
Meal allowances	89%	86%	3%
Child support initiatives	84%	84%	-
Loans	90%	90%	-
Leisure and cultural initiatives	87%	91%	-4%

(11) Non-salary benefits are the series of goods and services provided by the Company in addition to monetary pay.

# Industrial relations

| 2-30 | 3-3 | 402-1 |

Enel complies with **the labor law in force** in the various countries in which it operates, with the fundamental principles of the **United Nations Universal Declaration of Human Rights** and with the **conventions of the International Labor Organization (ILO) concerning workers' rights** (freedom of association and collective bargaining, consultation, right to strike, etc.), systematically promoting **discussion between employer and worker organizations** and seeking a **broad level of agreement and sharing** of corporate strategies by employees.

Industrial relations activities on the Group level continue to be conducted in accordance with the model laid down in the **Global Framework Agreement (GFA)** signed by Enel in Rome in 2013 with the Italian Federations in the sector, and the global unions IndustriALL and Public Services International, and which is still recognized as a benchmark best practice for European and non-European multinationals. The agreement is based on international human rights and business principles and is inspired by the best and most advanced transnational industrial relation systems of the reference multinational groups and institutions on the international level, including the ILO. One of the particularly significant principles of the GFA is one on remuneration, whereby the minimum payment made to Group employees cannot be lower than the level established by the collective bargaining agreements and legislative and regulatory texts in the various countries in question, in line with the provisions of the ILO conventions.

On the subject of remuneration, in accordance with the relevant ILO Convention Enel is committed to respecting the principle of decent work in all countries where it operates. In addition, it continues its commitment to bridging the gender gap, promoting initiatives to reduce it, where it exists, and thus to ensure equal pay for equal work as well as transparency. The principle of equal pay is also indicated by the Group's Policy on Human Rights, which stipulates that all those who work along the entire value chain are entitled to remuneration in line with the principle of fair compensation for work, of equal pay between male and female labor for work of equal value, and of minimum wages not less than those established by collective agreements and current legislative and regulatory treatments of reference in force in different countries, as established by ILO conventions. In addition, it is also expressly provided in the Code of Ethics that upon the establishment of the employment relationship, each employee will receive accurate information relating to characteristics of the role and duties to be performed, and to regulatory and remuneration elements according to the principles set out above. This information is presented to the employee in such a way that acceptance of their position is based on an effective

understanding and awareness not only of their duties, but also and above all of their rights (enshrined in the aforementioned collective agreements). As well as serving as the basis of the regularity of contracts, this approach enables us to operate fairly at all levels of the Company and in all the Countries and Regions which Enel is present.

In Enel **there are no limits to freedom of association**. As indicated by the GFA and the Policy on Human Rights, Enel recognizes the right of its employees to form or take part in labor organizations aimed at protecting their interests. In particular, employees may be represented, in the various generation units, by trade union organizations and other forms of representation elected in compliance with the legislation and practices in force in the countries concerned. Enel complies with the principle of **trade union independence** and does not interfere in any way with the organization of representation, allowing workers' representatives access to the workplaces in order to communicate with their members, in compliance with the law and the industrial relations systems in force in each country.

Enel therefore recognizes as interlocutors the trade unions that represent workers in the Company, in compliance with the provisions of national legislation, and adheres to strict neutrality regarding the choice of workers whether or not to join a trade union organization and/or the choice of the union by which to be represented. In the event of a discrepancy between local and international standards, the Group strives to apply the provisions that best protect workers' rights. Finally, Enel provides adequate information to its employees and to the trade union organizations that represent them, in order to facilitate collective bargaining, and provides its people with a full range of information, including via the Company intranet, concerning collective labor agreements and trade union agreements, in accordance with current legislation.

As also illustrated in the Policy on Human Rights, **collective bargaining agreements** are acknowledged as the main tool to determine the contractual conditions of its employees and to regulate relations between senior management and trade unions. **In 2022, the percentage of employees covered by collective bargaining agreements was about 91% (90% in 2021).**

At European level, the **Agreement on the Enel European Works Council** of 2016, extended in 2022, is confirmed as one of the most advanced agreements in the EU electricity sector for its focus on bilateral issues such as occupational health and safety, training and diversity.

Enel and the domestic and European federations (IndustriALL Europe and the European Public Services Union) have transferred their consolidated experience of social dialogue to the **Sectoral Social Dialogue Committee of the**

**electricity sector**, established at the EU Commission – DG Employment – regarding the employment impacts of the energy transition and digitalization in the coming years in all European and global electricity companies.

In the various countries in which it maintains a presence, Enel is committed to managing the transition by entering into robust dialogue with the trade unions, translating in practice the principles of the **just transition** for everyone, including local communities and contractors, the people most directly involved in the process of change (see also the chapter “[Our commitment to a just transition: leaving no one behind](#)”).

First with the Italian trade unions and then with those of other countries where the Group is present, Enel has also signed an agreement, the **Charter of the Person**, to protect individuals in their work, personal and social spheres. The document not only outlines new guidelines in industrial relations, but more generally reaffirms the centrality of people, starting with their well-being and motivation, guaranteeing quality training in terms of self-learning and high safety standards, rooted in the responsible approach of all ([see the dedicated box at the beginning of this chapter](#)).

In the event of **organizational changes**, timely disclosure to trade union representatives is required, as indicated in the table below.

Country	Minimum Period	Legal Provisions/Collective Agreements
<a href="#">Argentina</a>	In view of the general provisions of the law and, in analogy, a minimum period of 48 hours will be taken into account for the purpose of notifying any amendment of the essential conditions of the employment contract	There are no legal requirements or provisions in collective agreements
<a href="#">Brazil</a>	It is convention and practice to provide “timely” information	There are no legal requirements or provisions in collective agreements
<a href="#">Chile</a>	Neither the law nor collective bargaining provide for a minimum notice period in the event of organizational changes	
<a href="#">Colombia</a>	Neither the law nor collective bargaining provide for a minimum notice period in the event of organizational changes	
<a href="#">Italy</a>	25 days. The Company informs the trade unions with a specific document of its intention to transfer a part of the Company. In addition, our Industrial Relations system (Art. 9) provides for the prior involvement of trade unions on the main organizational changes in order to share the objectives and manage their implementation	Legal provisions (Art. 47, Law no. 428/90 and Art. 9 of the collective bargaining agreement, referring to Law no. 428/90)
<a href="#">Peru</a>	Neither the law nor collective bargaining provide for a minimum notice period in the event of organizational changes	
<a href="#">Romania</a>	Obligation to inform and consult workers’ representatives on the Company’s development and to inform them periodically about the Company’s economic situation. Disclosure to and consultation with employee representatives regarding the recent and likely development of the Company’s business and economic situation. Information and consultation of workers’ representatives on decisions that may entail significant changes in work organization, contractual relations or labor relations, including but not limited to transfers within the Company, acquisitions, mergers, collective redundancies, closure of production units, etc.	Legal provisions and collective agreements
<a href="#">Spain and Portugal</a>	30 days	Provided for in the Collective Agreement and the Framework Guarantee Agreement of Endesa SA and its subsidiaries in Spain





# Sustainable supply chain

## Material topics (I level)

## Plan

## SDG



• Sustainable supply chain



Below the 2022 results related to the targets of the previous 2022–2024 Sustainability Plan, the resulting progress and the targets of the 2023–2025 Sustainability Plan, which may be redefined, added to, or surpassed with respect to the previous Plan.

SDG	Activities	2022 results	Progress	2023–2025 targets	Tag
8 12	Qualified suppliers assessed for health and safety aspects for all product groups <sup>(1)</sup> (% qualified suppliers)	99%	●●●	100%	S
12 13	Qualified suppliers assessed for environmental aspects for all product groups <sup>(1)</sup> (% qualified suppliers)	99%	●●●	100%	E S
12 16	Qualified suppliers assessed for human right or business ethics aspects for all product groups <sup>(1)</sup> (% qualified suppliers)	99%	●●●	100%	S G
12	Value of coverage of tenders with “sustainability Ks” (% of tenders with “sustainability Ks”/ total tenders)	96%	●●●	>90% in 2025	⌛ S
12 13	Supplies’ value covered by Carbon Footprint (CFP) certification	62%	●●●	75% in 2025	E S
12 13	Supplies’ value covered by CFP certification or CFP estimation from international databases <sup>(2)</sup>	100% <i>Target outdated as 100% coverage was achieved</i>	●●●		E S
12	Value of tenders coverage with mandatory sustainability requirements <sup>(3)</sup>	37%	●●●	50% in 2025	⌛ E S
12 13	Supplies’ tenders value covered by ranking/target based on carbon footprint values	68%	N.A.	>70% in 2025	⊕ E S

- (1) The percentage is calculated considering the total number of suppliers with valid qualification at the end of the year and does not include large players and subsidiaries of related industry groups. Rounded values.  
 (2) CFP estimation from international database based on LCA (Life Cycle Assessment) methodology.  
 (3) In addition to the basic contractual clauses regarding health and safety, environment and human rights.

### Goals

### Progress

I Industrial E Environmental S Social  
G Governance T Technological



New



Redefined



Outdated



Not in line



In line



Achieved

N.A. = not applicable





# Sustainable supply chain



## Suppliers

| 2-6 | 3-3 | 204-1 | 308-1 | 407-1 | 408-1 | 409-1 | 414-1 |

The transformation of the energy system, alongside the digital revolution, entails changing and evolving the way works are performed and how goods and services are supplied. It also means suppliers are essential partners to achieve sustainable progress across our operating footprint. Suppliers are our partners in the journey to sustainable growth. We work with them to maximize the economic, productive, social and environmental benefits of the transition. We strive to create sustainable, innovative, and circular processes that also enable us to better quantify, and thus mitigate, the total impacts they generate, aware of the need to minimize pressure on critical materials and components through technological innovation

and continuous recycling and to support our partners' resilience and repurposing. All of this underpinned by loyalty, transparency and collaboration. We ask in addition to guaranteeing the necessary quality standard. The latter include working conditions, health and safety, adequate hours worked, rejection of forced or child labor, respect for personal dignity, nondiscrimination and inclusion of diversity, freedom of association and collective bargaining, and respect for privacy by design and by default. All of the above, within a clear code of conduct framework that includes, to name a few, our Human Rights Policy, Code of Ethics, Zero Tolerance of Corruption Plan and our global compliance programs.

**99%**

**SUPPLIERS QUALIFIED ON HEALTH AND SAFETY ASPECTS, ENVIRONMENTAL AND HUMAN RIGHTS**

99% in 2021

**96%**

**RATIO OF TENDERS INCLUDING SUSTAINABILITY "KS"**

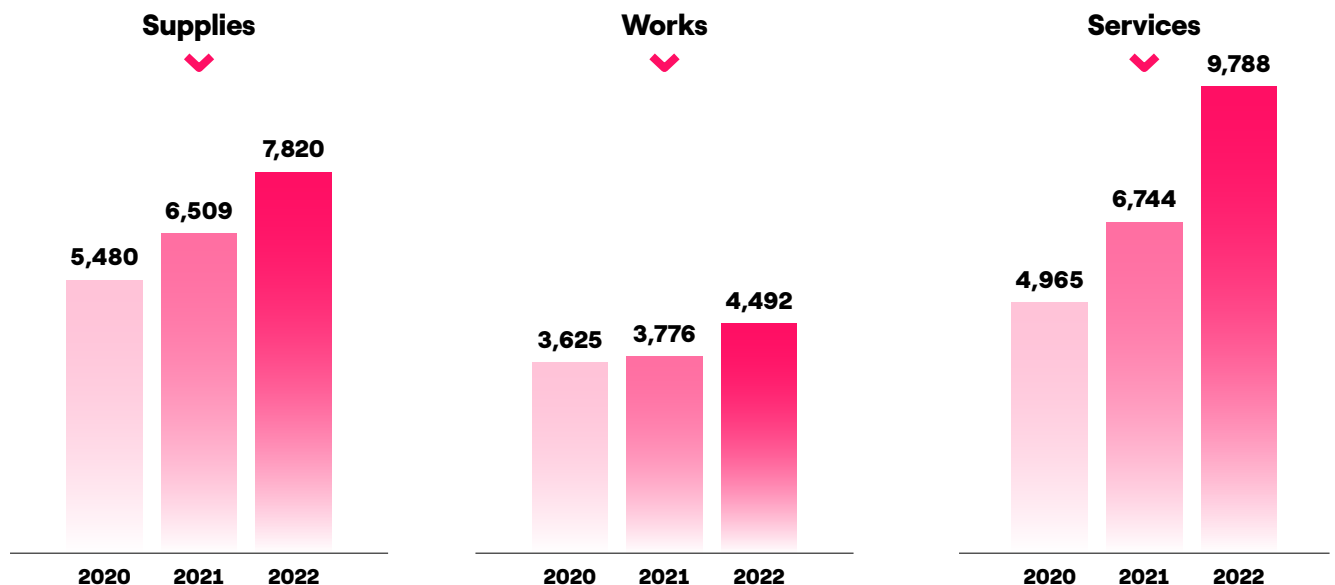
83% in 2021 **+13%**

**9,427**

**TOTAL QUALIFIED SUPPLIERS WITH A CONTRACT STILL ACTIVE AT THE END OF 2022**

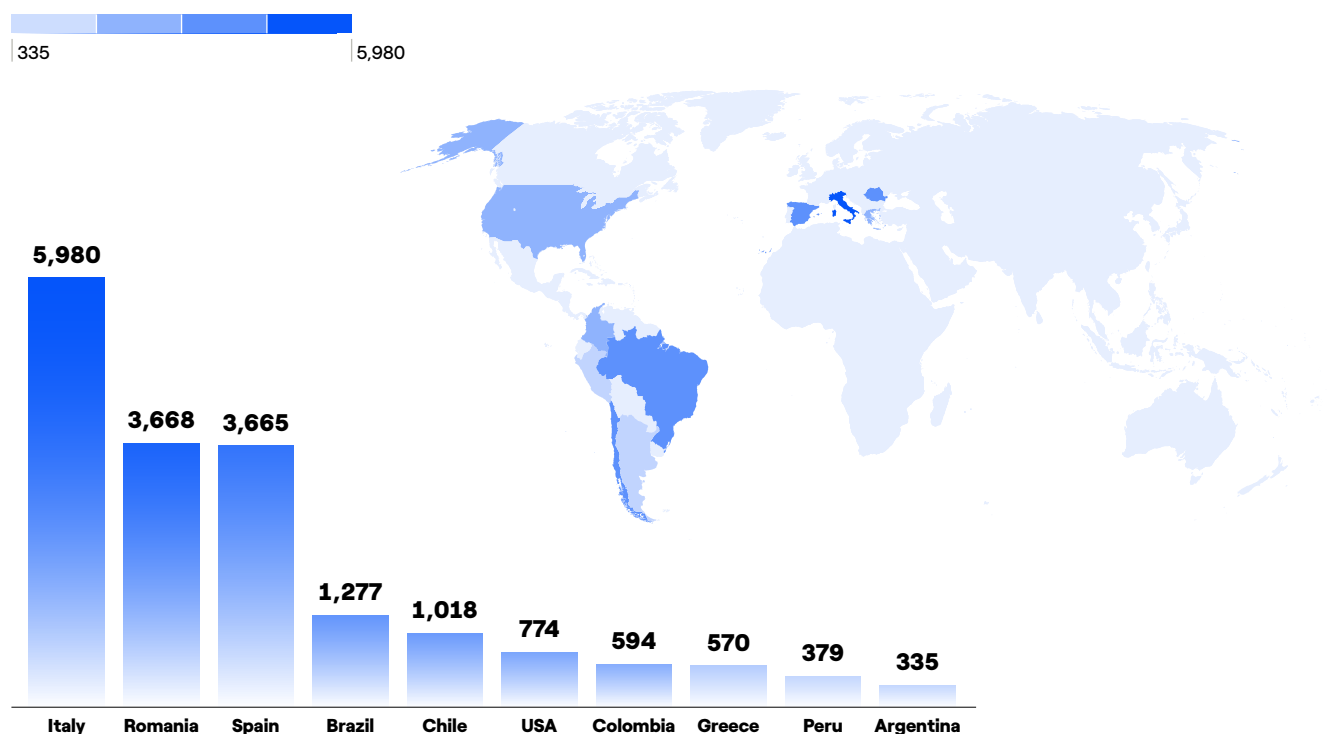
6,717 in 2021 **+40.3%**

Purchases and tenders for goods and services Supplies, works and services contracts (mil euros)



## Top 10 Enel sourcing locations

no. of suppliers



The graph shows the countries where suppliers with active contracts are located.

In 2022, the total for works, services and supply amounts to over 22 billion euros, of which more than a third is in Italy, followed by Romania and Spain.

Together with our suppliers, we work to define new metrics and promote co-innovation projects in the perspective of a decarbonization and circular economy pathway, with positive impacts on both power generation processes and purchasing methods (for example, the collaboration with the startup Alesea, [see the chapter "Innovation"](#)). Specifically:

- promote a circular procurement approach through the adoption of many initiatives and mechanisms, including the obligation for suppliers belonging to core categories<sup>(1)</sup> to provide and to issue an Environmental Product Declaration (EPD), aiming at quantifying, certifying and communicating the environmental impacts generated along the entire life cycle suppliers' processes. Certified data allow us to measure emissions along the entire supply chain, promoting in this way the Group's decarbonization pathway;

- as part of our tendering process, we set increasingly challenging CO<sub>2</sub> reduction targets on core supply categories,<sup>(1)</sup> which also take into account the contributions of innovation. These targets are shared with our suppliers and are in line with a 1.5 °C path);
- for strategic product groups, suppliers are required to provide information on the amount of each raw material. This information allows us to reward suppliers based on their capability to make use of recycled materials as inputs in their production processes, thus stimulating a circular culture and reducing pressure on transition-critical materials;
- we work together with suppliers to define criteria, technical requirements and solutions to further strengthen circularity and sustainability in the early stages of the value chain. The purpose of this approach is to maximize the overall value of the product: on the one hand, by making use of recycled material along the supply chain and, on the other, by reducing the "Global Warming Potential" and thus CO<sub>2</sub> emissions.

(1) Core categories are those that are strategic for the business including wind turbines, smart meters, photovoltaics, transformers, street lighting, smart home solutions and storage systems.

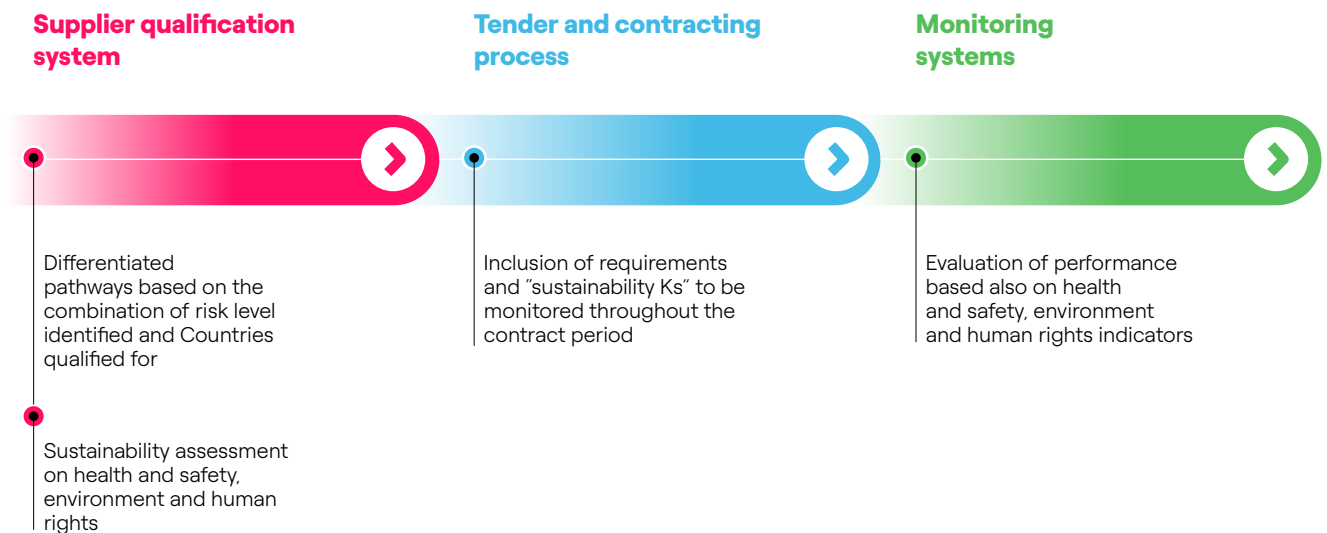


# Supplier management and assessment processes

3-3

In addition to ensuring the necessary quality standards, supplier performance must go hand in hand with a commitment to adopt best practices according to the highest

sustainability standards. Therefore, partner selection and contract execution are subject to analysis and monitoring activities throughout the entire procurement process:



## Supplier qualification system

Each potential supplier, taking into account their business, can undertake a qualification pathway for one or more product groups (PG) and select the countries in which to supply goods and services. Suppliers are only acknowledged as suitable if they meet all the specific requirements for each PG selected.

All product groups are analyzed at a global level and with the support of the different areas involved in the field, to set the requirements in question. In particular, the analysis involves:

- mapping of the activities included in each PG;
- choice of the qualification pathway depending on supplier type (there are *ad hoc* processes for start-ups, sector leaders and industrial groups);
- allocation of a risk level for each key issue (health and safety, environment, reputation, etc.);
- categorization into PGs based on the risk detected.

With specific reference to **sustainability aspects**, the questionnaires require information on:

- **health and safety**, via the "Safety Self-Assessment" and its straightforward indication to our suppliers of the fundamental requirements on which to work and grow together;

- **environment**: with a scale of 1 to 3 (1=worst; 3=best, respectively), environmental criteria are evaluated, which are different depending on the relevant PG and its associated level of risk.

With regard to health, safety and environmental aspects, for the highest risk PGs, an on-site audit at supplier's premises/sites is always required.

Before proceeding with qualification, two further assessments are carried out, regardless the related product group level of risk. Specifically:

- a **reputational assessment** of the potential supplier through national and international data providers. In addition to compliance with the relevant laws and regulations, suppliers are required to adhere to the principles to which we have committed ourselves with our Policy on Human Rights, Code of Ethics, Zero Tolerance of Corruption Plan and global compliance programs, with specific reference to the absence of conflict of interest (including potential) and, depending on the specific risk classes, the submission of specific certifications/self-declarations;
- a **human rights assessment**, particularly with regard to labor practices (such as rejection of forced or child labor, respect for diversity and non-discrimination, freedom of



association and collective bargaining, fair and favorable working conditions, including hours worked and adequate wages, protection of workers' privacy, and supply chain verification) and relations with communities (local, indigenous and tribal peoples) and society, through the administration of a dedicated questionnaire.

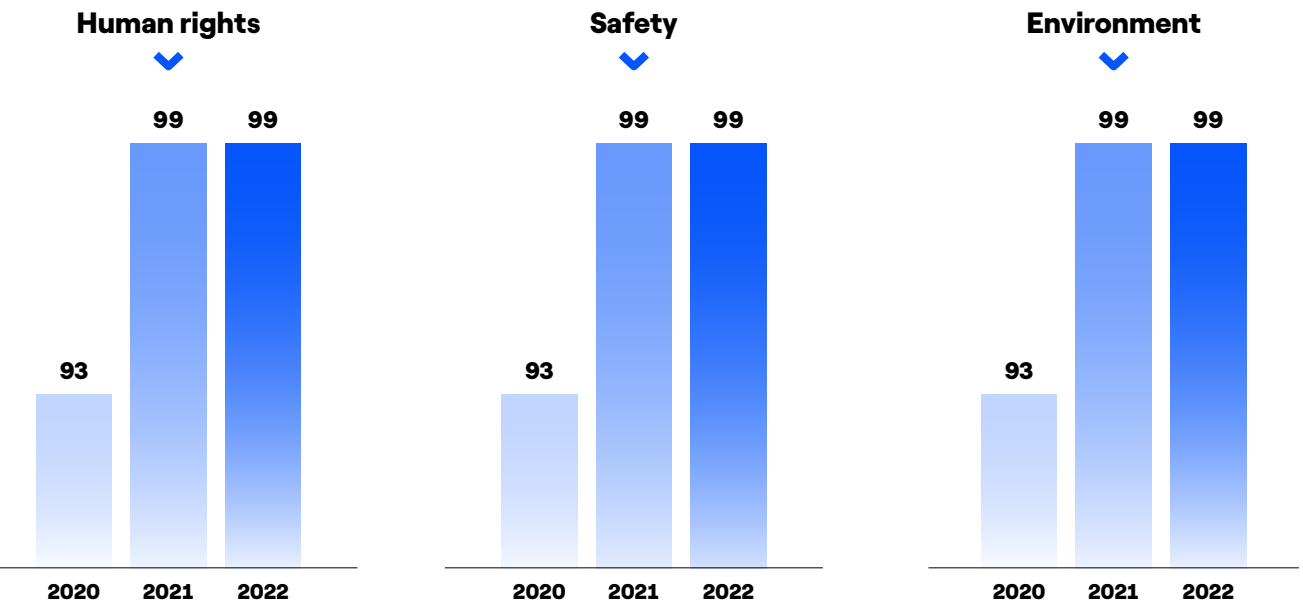
If the outcome of these analyses and assessments is positive, individual suppliers can qualify and be added to the Supplier Register (or remain on it if previously qualified) and then be invited to participate in the Group's procurement procedures. If the outcome is negative, the supplier will not be able to participate in the Group's tenders but may submit a new request for qualification at a later date.

Compliance with the requirements must be assured for the entire duration of the qualification and, as such, those already included in the Enel Register of Qualified Suppliers are constantly monitored, partly by reference to external databases, for events that may affect their company and its main representatives.

**As of December 31, 2022, 99% of all qualified suppliers were assessed according to social, environmental and safety criteria. The total number of qualified suppliers with a contract still active at the end of 2022 was about 9,400 (about 46% of active suppliers as of December 31), while the total number of active qualified companies was about 31,400.**

The following table shows the trend in the qualified suppliers' percentage for the three aspects analyzed by process.

% of qualified suppliers according to social, environmental and safety aspects at December 31



## Tender and contracting processes

Consistent with our commitment to introduce sustainability aspects into the tendering processes, we adopted a structured process governed by a specific procedure to define “sustainability Ks”, which can be used in the tendering stage by the various purchasing and monitoring units throughout the entire life of the contract.

The process includes two “Libraries”, in which all “sustainability requirements and Ks” are catalogued, grouped into the macro-categories of certification, environmental and circularity aspects, such as waste management and carbon footprint assessments according to UNI EN ISO 14067:2018, and social aspects, such as training and employment of people from local communities and actions to respect gender diversity.

These are periodically updated within a cross-functional working group dedicated to sustainability and circularity issues, taking into account market maturity and new corporate strategies.

We include specific clauses in all contracts for works, services and supplies, which are updated periodically to take account of the various regulatory changes and align ourselves with international best practices.

The general terms and conditions refer to the current regulations on remuneration, contributions, insurance and tax, with reference to all workers employed for any reason in the execution of the contract by the supplier. In addition, the principles set forth in the ILO Conventions and legal obligations regarding child and women's labor, equal treatment, prohibition of discrimination, abuse and harassment, freedom of trade unions, association and representation, rejection of forced labor, safety and environmental protection, and sanitary conditions are explicitly recalled. In the event of conflict between the latter and the ILO Conventions, the more restrictive standards will prevail. The clauses also require suppliers to undertake to prevent all forms of corruption (Art. 29.1.3 and Art. 29.1.4 of the General Terms and Conditions).

In addition to the legal provisions, the contractual conditions require that our suppliers:

- recognize the “ten principles” of the United Nations Global Compact and declare that they manage their business activities and operations in order to meet these fundamental responsibilities in the fields of human rights, labor, the environment and the fight against corruption (Art. 28 of the General Terms and Conditions);
- acknowledge the commitments we have made in the principles listed in the documents below and refer to them in the execution of the contract: The Policy on Human Rights, which also includes a principle relating to respect for biodiversity; the Code of Ethics; Zero Tolerance of Corruption Plan; and the global models for the prevention of criminal risks (Art. 29.1.1 of the General

Terms and Conditions);

- adopt suitable conduct to avoid the emergence of conflicts of interest throughout the entire term of the contract and undertake to notify us promptly in writing if any such circumstances arise (Art. 29.2 of the General Terms and Conditions).

We reserve the right to carry out any control and monitoring activity to check compliance with the obligations set out above by both the supplier and any of its subcontractors, and to terminate the contract immediately if any breach is ascertained.

## Monitoring systems

The goal is to take any corrective actions if the suppliers on the Register do not fulfill any requirement anymore during the execution of the contract.

In particular, the following monitoring strands are provided for all suppliers on the Register, regardless of whether they have an active contract or not:

- **reputational monitoring:** based on the monitoring of open sources and carried out continuously (24/7). The objective is to identify potential reputational risks arising from a counterparty's involvement in criminal proceedings, with a particular focus on environmental crimes and human rights violations in business practice. This monitoring also collects reports made through the whistleblowing channel, which is made available to all stakeholders and can be accessed locally in different languages;
- **document monitoring:** this action aims to verify legal documents (e.g. criminal records) and their validity. The documents monitored take into account the legal specificities of each individual country in which we are present;
- **Contractor Safety Assessment:** additional verification carried out both during the qualification phase and during the execution of the contract for PGs with a medium/high level of health, safety and environmental risk. The objective is to identify HSE improvement areas that are conducive to obtaining and retaining the qualification. A total of 1,120 assessments were conducted during 2022.

For suppliers on the Register who have an active contract, the following monitoring strands are provided in addition to the systems already described:

- health, safety and environmental monitoring of field performance (during contract performance): the performance of our suppliers is assessed and monitored through field inspections that identify existing non-conformities and potential hazards with respect to contractual commitments, technical standards and authoriza-

tion and legislative requirements. The primary objective of the inspections is to prevent accidents, injuries, illnesses and events that may affect the environment.

During field inspections, specific checklists are used to facilitate the homogeneous aggregation of non-conformity data for subsequent corrective action. This data is not only analyzed by the contract manager to take corrective action, but also feeds into the Supplier Performance Management (SPM) process to allow analysis and prevention and correction initiatives on a larger scale (see the section "Supplier Performance Management");

- **Supplier Performance Management (SPM):** monitoring based on objective and systematic collection of data and information related to the performance of the technical service under the contract (see the section "Supplier Performance Management").

The evaluation of the data coming from the different monitoring strands is the responsibility of specific committees, composed of representatives from both the procurement area and the Business Lines. Specifically:

- the **Qualification Commission**, present in all major countries, is in charge of accepting/rejecting qualification requests, assessing possible suspensions and examining proposals for changes to the technical qualification requirements and to the PG tree put forward by the Business Lines. In 2022, the total number of times these committees met was 346;
- the **Integrity Committee**, composed of representatives from Global Procurement, the Legal Function, the Security Function, and the Technical Functions of the Business Lines, meets whenever a critical issue emerges that may have negative repercussions on the honorability of the supplier under consideration, to analyze it and to assess the application of specific actions or penalties with regard to supplier companies. During 2022, this committee met 39 times;
- the **Evaluation Group** is convened by the Health Safety Environment and Quality Function of the Holding Company and is responsible for analyzing the data coming from HSE monitoring and for evaluating possible consequence management measures. In addition to representatives of the competent HSEQ Functions of the Business Lines, representatives of the Global Procurement, the Legal Function, and the Technical Functions of the Business Lines are also on this committee. During 2022, this committee met 40 times.

## Supplier Performance Management

Among the monitoring systems that are carried out during contract execution is the Supplier Performance Management (SPM). The goal, with a view to collaboration with our suppliers, is not only to take any corrective actions during the execution of the contract, but also to encourage a pathway of improvement made possible by actions that reward best practices.

The process is based on the objective and systematic disclosure of data and information on the execution of the contracted work. This data is used to develop specific indicators, also called categories (Quality, Punctuality, Health and Safety, Environment, Human Rights & Fairness, Innovation & Collaboration), which are combined to form a weighted average and produce the **Supplier Performance Index (SPI)**. The categories and SPI can be used as assessment elements for participation in tenders and for maintenance of the contractual relationship.

Monitoring activities related to the Supplier Performance Management are conducted by the various Business Lines with the support of the relevant health, safety and environment units, where applicable, and the Supplier Qualification and Performance Management unit. In addition, all Enel people who interact with suppliers have the opportunity to express their own assessment using the dedicated Track & Rate app.

In the event of poor performance, we take specific actions that can be reflected in:

- qualification (e.g. updating the duration of qualification, increasing or decreasing the overall economic potential, meaning bands of tender amounts within which suppliers can enter, suspension of qualification, etc.);
- the contract (for example, further investigations, improvement action plan, termination, reduction or increase in volumes, etc.). In the event that issues are found with the conduct of a supplier, an action plan may be drawn up jointly, the execution of which is subjected to our constant monitoring.

The SPM process monitored 701 PGs and 7,666 suppliers last year (compared to 698 PGs and around 6,782 suppliers in 2021).

## Suppliers

**9,922**  
Tier 1 suppliers

**60%** of Tier 1 suppliers are deemed relevant ("critical suppliers") in relation to their strategic importance related to the Company's business unique purchase volumes, and other factors that could have economic, social and environmental impacts

**5,950**  
Tier 1 suppliers assessed during 2022 (includes assessments made during qualification, tendering and contract award phases)

**27%**  
assessed Tier 1 suppliers that have been assigned improvement actions

**100%**  
of assessed suppliers presented improvement action plans and improved their ESG performance as a consequence

## Training and information

Over the past few years, we have organized several thematic events concerning decarbonization, adopting circular business models, respecting human rights and supply chain mapping (collection of information aimed at creating a global map of the supply network), with the aim of sharing best practices and multistakeholder approaches in line with

the international reference standards for a sustainable conduct. Still on the subject of protection and awareness-raising, many initiatives were undertaken to involve suppliers in health and safety aspects.

In addition, articles are published periodically on the Enel Global Procurement website that highlight the commitment made by the Group to these topics (<https://globalprocurement.enel.com>).



## Creation of sustainable value: Supplier Development Program

We have launched several initiatives to increase the resilience of the supply chain and to make Supplier Centricity more and more concrete and tangible.

One example is the Supplier Development Program, initially launched in Italy (where it is currently open to more than 6,000 suppliers) and being extended to other countries of presence, to support the growth path of companies in the supply chain and, at the same time, contribute to the achievement of the Group's strategic objectives. The Program is aimed at companies, based or with branches in Italy, that are qualified or at an advanced stage of qualification in our Supplier Register and have a production value up to 250 million euros. We pay particular attention to small and medium enterprises operating in strategic sectors that will benefit from our direct support to provide access to certain services.

By entering into agreements with the main players, we guarantee more favorable conditions than the market average and we contribute with partial coverage of the services offered as part of the program. These range from financial

instruments that can facilitate access to liquidity, to managerial and technical training programs that promote the conversion of the business towards the energy transition, from consulting services on sustainability, circular economy, strategy, M&A and internationalization, to access to catalogs of means of transport and working machines, all the way to services to obtain certifications. Particular attention is paid to initiatives to support the conversion and diversification of businesses, such as the "Companies Counter", consisting of periodic meetings with individual traditional generation companies to support them in their processes of growth and redevelopment towards expansion in areas such as renewables or new services related to energy efficiency.

The development that Enel intends to promote takes the form of:

- increased awareness about sustainability and digitalization matters;
- differentiation of the business and consequent reduction in supplier dependence on Enel;
- increased financial strength;
- internationalization, which helps grow our business outside of Italy and Europe.

At the end of 2021, the program "**Energie per Crescere**" (Energies to Grow) was launched, with the aim of training about 8,200 new technicians, including 5,500 by 2023, belonging to grids suppliers, creating highly requested professional profiles in the sector (for example, cable pullers, cable splicers, substation assemblers, live-line workers); the remaining 2,700 technicians will be trained and hired by 2025 and the training will be devoted to Enel Green Power suppliers so as to integrate professional profiles in the renewable sector (for example, electrical specialist, junior site manager, civil-mechanical specialist). Energie per Crescere sees the collaboration of several actors: ELIS, a non-profit organization that provides vocational training, the major employment agencies in Italy, Accredia-certified training institutes at which the candidates, once selected, attend the planned 200 hour courses and, finally, Enel's contracting companies that hire the participants throughout the country at the end of the training course.

During 2022, some 2,100 new technicians were trained and recruited from grids suppliers.

A new phase of program development is planned for 2023, with the involvement of the Enel X contractor network aimed at strengthening profiles in energy efficiency and photovoltaics.





## ENERGIE PER LA SCUOLA: a bridge between companies and training for the energy transition

**Giuseppe Macri**

Quality and Sustainability  
Referent – Supplier Development  
and Operational Excellence  
Procurement Italy. Head of Energy  
for Schools, Enel



*With Energie per la Scuola we involve students, schools, training organizations and our supplier companies on a path of growth, through a qualified and certified pathway gives many young people the opportunity to make the big leap into the workplace and that will contribute, in a broader way, to accelerating the energy transition.*

**A**t the beginning of 2022, the Energie per la Scuola program was launched programme for final year students attending technical and vocational schools, with the aim of training them for the 'most wanted' roles in the electricity sector so that, after graduation, they can be hired by Enel's suppliers. The training course covers the profiles most in demand in the electrical sector. The aim is to create a bridge between education and the professional sphere, encouraging the students to acquire the skills needed to embrace the new professions of the energy transition, and facilitating their access into the workplace with the Group's suppliers immediately after graduation, also through greater knowledge of the industrial realities in the industry.

The initiative entails the signing of agreements between companies and schools, based on the PCTO (Percorsi per le Competenze Trasversali e l'Orientamento – Pathways for Transversal Skills and Orientation) model defined in the Guidelines drawn up by the Ministry of Education, University and Research.

The training includes a basic course lasting 120 hours and a further specialized course lasting 40 hours and geared towards the profiles 'most wanted' in the e-distribuzione sector. Training is provided by certified training institutions in partnership with schools.

The first edition of the program (school year 2020/2021) involved 11 schools, 8 suppliers of e-distribution and a total of some 100 students who were all hired by Enel's suppliers at the end of the training. The second edition, aimed at 2022/2023 school year students, is currently underway and it involves over 60 schools and some 500 students.

Theory and practice will go hand in hand with an innovative and engaging teaching approach that will allow the students to consolidate the knowledge acquired in the classroom with experience in the field, through a series of highly specialized courses, a real springboard towards new professional opportunities.

# Fuel procurement

| 2-6 | 3-3 | 301-1 |

Suppliers of solid and liquid fuel are selected through the “Know Your Customer” process that, for each counterpart, evaluates the reputational and economic-financial aspects and their satisfaction of the appropriate technical and commercial requirements. Checks also ensure that suppliers are not on specific United Nations, European Union and OFAC “Black Lists”.

These lists identify individuals or organizations associated with terrorist associations, organizations under EU financial sanctions, and so-called Specially Designated Nationals (SDNs) who are subject to US sanctions on terrorism or drug trafficking charges, among others.

To assess the sustainability aspects of coal sources, an internal process has been established to ensure that Group

requirements for occupational safety, environment and human rights have been satisfied.

Purchase contracts entered into with each supplier are subject to the Group principles embedded in the Human Rights Policy, the Code of Ethics and the Zero Tolerance of Corruption Plan, with which suppliers must be aligned with. We reserve the right to terminate contracts in case of severe breach of those principles.

Lastly, to mitigate the risks arising from the maritime shipment of fuel, we have adopted a tool to vet and select the carriers used. Vetting is a recognized industry standard for oil transportation. Enel, together with an increasing number of operators, is also applying this methodology for dry bulk transports.

	UM	2022	2021	2020	2022-2021	%	Perimeter
<b>Resources used in the production process</b>							
Fuel consumption for thermoelectric production from non-renewable sources							
<b>from non-renewable sources</b>							
Coal	(,000 t)	8,522	5,958	5,893	2,564	43.0	Enel
Lignite	(,000 t)	-	-	105	-	-	Enel
Fuel oil	(,000 t)	889	863	975	26	3.0	Enel
Natural gas	(Mm³)	13,214	15,682	13,075	-2,468	-15.7	Enel
Gas oil	(,000 t)	1,262	1,033	906	229	22.2	Enel
<b>from renewable resources</b>							
Biomass and waste for thermoelectric production	(,000 t)	65	71	89	-6	-8.5	Enel
Biogas	(Mm³)	1.2	0.7	0.1	0.5	71.4	Enel
Geothermal steam used for electricity production	(,000 t)	49,947	350,160	350,090	-300,213	-85.7	Enel

Together with major European electric utilities, we are actively engaged in Bettercoal – a global initiative to promote the continuous improvement of corporate responsibility in the international coal industry. Bettercoal has released a code of conduct based on existing and agreed standards of social responsibility in the mining sector. The Code provides detailed guidelines to mining companies in the definition of their social, environment and ethical policies. The Bettercoal Code establishes members' expectations regarding suppliers' practices related to four main categories: management systems; commitment to ethics and transparency; human and labor rights; and environmental performance, while promoting ongoing improvement. In 2021, a new version of the Code was finalized to align it with the latest best practices in sustainability, thereby contributing to achievement of the applicable Sustainable Development Goals. In addition, the new version of the Bettercoal Code ensures the integration of the mine closure and rehabilitation processes, embedding environmental, social, economic and governance aspects into operations from the earliest stages of mine development. Mining companies adhering, signing a letter of commitment, start a virtuous path by accepting on-site checks,

carried out by independent third parties, to verify that the Code's principles have been applied, and agreeing an ongoing improvement plan to overcome any shortfalls. In addition to Bettercoal's growing presence in several forums in the area of coal and supply chain sustainability, the initiative has become an example of collaboration together with different stakeholders, aimed at improving socially responsible practices within the supply chain. During 2022, as members of Bettercoal within the working group dedicated to Colombia, we participated in the delegation that travelled to Colombia, for the first time since 2018, with the aim of further improving our understanding of the critical issues surrounding coal mining in the country, allowing us to foster better stakeholder relations with all involved in this complex environment, including companies, the government, international NGOs and local communities. During the visit, several meetings were organized with over 60 stakeholders, including business associations, communities and local governments.

In addition, a new working group specifically dedicated to South Africa was established in 2022 due to changing international scenarios. For further information, please refer to the website [www.bettercoal.org](http://www.bettercoal.org).



# Engaging communities

## Material topics (I level)



- Engaging the local and global communities

## Plan



## SDG



Below the 2022 results related to the targets of the previous 2022–2024 Sustainability Plan, the resulting progress and the targets of the 2023–2025 Sustainability Plan, which may be redefined, added to, or surpassed with respect to the previous Plan.

SDG	Activities	2022 results	Progress	2023–2025 targets	Tag
<b>4</b> <b>17</b>	Inclusive and equitable quality education	<b>3.7 mil</b> beneficiaries (2015–2022)	●●●	<b>5.0 mil</b> beneficiaries in 2030 <sup>(1)</sup>	<b>S</b> <b>G</b>
<b>7</b> <b>17</b>	Affordable, reliable, sustainable and modern energy	<b>15.6 mil</b> beneficiaries (2015–2022)	●●●	<b>20.0 mil</b> beneficiaries in 2030 <sup>(1)</sup>	<b>S</b> <b>G</b>
<b>8</b> <b>17</b>	Sustained, inclusive and sustainable economic growth	<b>4.9 mil</b> beneficiaries (2015–2022)	●●●	<b>8.0 mil</b> beneficiaries in 2030 <sup>(1)</sup>	<b>S</b> <b>G</b>
<b>17</b>	Strengthening and promoting operational partnerships	<b>1,215</b> partnerships launched	●●●	Strengthening and promoting operational partnerships	<b>S</b> <b>G</b>
<b>1</b> <b>2</b> <b>3</b> <b>5</b> <b>10</b> <b>17</b>	Development of new projects to benefit the communities where Enel operates for the creation of shared value (CSV)	<b>2,325</b> projects <i>The target is considered outdated in order to adopt an approach related to impact assessment, on which we are focusing</i>	●●●		<b>S</b> <b>G</b>
<b>9</b>	Dissemination of the CSV model in operating assets	<b>1,527</b> total CSV applications <sup>(2)</sup> <i>The target is considered outdated in order to adopt an approach related to impact assessment, on which we are focusing</i>	●●●		<b>S</b> <b>I</b>

(1) Cumulative figures since 2015.

(2) For more details on CSV applications, please refer to the note in the chapter “Engaging communities”.

## Goals

**I** Industrial **E** Environmental **S** Social  
**G** Governance **T** Technological



New



Redefined



Outdated

## Progress



Not in line



In line



Achieved

N.A. = not applicable





# Engaging communities



| 2-24 | 2-29 | 3-3 | 411-1 | 413-1 |

Establishing solid and lasting community relations in the local areas where we operate is a fundamental pillar of our strategy, based on a model of business development and management in continuous interaction with the communities themselves in order to create long-term and constant shared value, in full respect of human rights and without leaving anyone behind.

As part of the **transition** process towards a **decarbonized economy** as a driver of growth and modernization for communities, we promote economic development, **welfare, quality of life** and **equality**.

This approach has led us to innovate the way we run our business (introducing, for example, sustainable site and facility management models; see section "Renewable energies" in the chapter "Clean electrification") as well as the processes of developing energy products and services in an inclusive direction. An approach that also counts on the activation of **virtuous ecosystems**, such as the **Open Innovability®** platform, based on openness and sharing, as an indispensable element to facilitate and promote the identification of innovative social ideas and solutions (for further information see the chapter "Innovation").



**2,325**

**SUSTAINABILITY PROJECTS**

2,410 projects in 2021

**-3.5%**

Over **6.3 mil**

**BENEFICIARIES**

Over 7.5 mil beneficiaries in 2021

**-16%**

**1,527**

**APPLICATIONS OF THE CSV MODEL<sup>(1)</sup>**

1,478 applications in 2021

**+3.3%**

**1,215**

**PARTNERSHIP**

581 in 2021

**+109.1%**

Managing community relations and other stakeholders is an enabling factor for all sustainability activities, which rely on specific operational levers:

- **Sustainability by design:** in order to integrate a long-term sustainability approach into the business, it is necessary, as far as possible, to anticipate and address all sustainability issues at the design stage of Company activities;
- **Ad hoc interventions:** activities that occur after the start of the business project, in response to events or needs that arise during the construction of the assets, the performance of daily activities, the operation of plants or the interaction with stakeholders;
- **Crisis management:** sustainability interventions may need to be implemented in relation to sudden and unforeseen occurrences and serious damage such as critical events relating to Group assets, projects or products and resulting from natural disasters or social/community unrest. These situations will be handled with dedicated and targeted initiatives.

In 2022 our contribution to the social and economic development and growth of the territories resulted in more than **2,300 sustainability projects** in the various countries where we are present, involving more than **6.3 million beneficiaries<sup>(2)</sup>** in line with the sustainable development goals (SDGs).

These projects range from infrastructure development to education and vocational training programs, projects to support cultural and economic activities, promotion of access to energy, **rural and suburban electrification**, and **promotion of social inclusion for the most vulnerable groups of the population** (physically, socially and economically).

Among the initiatives to support socio-economic development are:

- the promotion of **inclusive business models**, such as the development of e-commerce platforms to foster access to credit and the development of the local economy, to support the less privileged segments of the population;
- combating **energy poverty through energy awareness initiatives**;
- **digitalization** to support connectivity in rural areas and computer literacy;
- projects aimed at fostering the **participation of women in STEM** subjects, for the development of local economies.

In realizing our commitment to communities, we are not alone: we have more than **1,200 active partnerships** internationally with non-profit organizations, social enterprises, start-ups and institutions rooted in the local areas with valuable local expertise, because we believe in the value of a **multi-stakeholder approach**.

(1) An application is interpreted as the use of at least one CSV instrument in relation to an asset, in any phase of the chain of value and in any Business Line. The CSV applications in the BD phase include applications regarding BD opportunities (also at the beginning phases) and business projects output from the pipeline. They can also relate to assets in O&M in the case of modernizing projects or decommissioning activities. The CSV applications in the E&C phase can refer to assets passed to the O&M phase at the end of the year. The number of CSV applications in Infrastructure & Networks (I&N) may refer to the concession area, but also areas identified by municipalities and substations. The value includes companies consolidated using the equity method and companies for which the Build, Sell and Operate (BSO) mechanism has been applied.

(2) Beneficiaries are the people in whose favor the project was carried out. Enel considers only the beneficiaries for the current year. The number of beneficiaries considers the activities and projects carried out in all the areas in which the Group operates. Solely within the NFS perimeter (excluding companies consolidated using the equity method, foundations, Group non-profit organizations and companies to which the Build, Sell and Operate, or BSO mechanism has been applied), the number of beneficiaries in 2022 is 0.6 million for SDG 4, 2.3 million for SDG 7 and 1.2 million for SDG 8.

# Our model for creating shared value with communities

Establishing strong and lasting community relations, including local communities and indigenous and tribal peoples, requires a broad, inclusive and continuous dialogue based on well-defined stages of stakeholder engagement, in line with relevant international standards (such as the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises), aiming therefore to:

1. incorporate responsible Company conduct into policies and management systems;
2. prevent or mitigate impacts;
3. monitor the implementation of improvement plans and results;
4. communicate how impacts are managed.

Indeed, when conducted as early as possible in the planning phase, stakeholder engagement enables us to identify the requirements of the populations within our sphere of influence and generate the most comprehensive possible mapping of the potential consequences our activity may have on them. The process aims to:

- identify stakeholders within the sphere of influence of our business;
- verify that the stakeholders identified ensure representation of all groups affected by the development of our activities in our sphere of influence;
- analyze the type of relationship that can be created between us and the mapped stakeholders in order to avoid potential conflicts of interest;
- provide common guidelines for those responsible for managing stakeholder consultation processes to achieve and implement a robust engagement procedure, seeking to prevent any potential situation that might undermine stakeholder expectations;
- develop an understanding of our sphere of influence by conducting context analyses containing a wide range of socio-economic and environmental data;
- guarantee that consultation satisfies specific conditions of quality, such as being free, preventive, inclusive, adapted to the local context, bidirectional and well documented, in line with international reference standards;
- share all the information about the project that is relevant for the concerned stakeholders in order to promote transparent and collaborative relationships.

- involve independent third parties in negotiation processes because of their expertise in the area and as a “bona fide witness”, if applicable;
- facilitate and support engaging local communities in project monitoring through local training, sharing transparent information on project phases and the methodology for defining target areas;
- provide an access channel, characterized according to the context, for any reports from people who need to contact us, based on tools and means available at the site, such as local teams or specific people, toll-free numbers, the internet, or, in the case of isolated rural communities, even local leaders willing to collect all possible complaints periodically.

The functioning of the model is governed by organizational documents that define roles and responsibilities in the various stages of its implementation. Examples are the Policy “CSV Process definition and management” and the Operational Instruction “Project Portfolio Management System”, including the management of the digitalized platform dedicated to project reporting.

The definition and dissemination of guidelines for implementing the sustainability model, the assessment of the sustainability projects, the management of the projects on a Group level and the dissemination of best practices in the countries we operate in are guaranteed by the Holding’s Innovability® organizational structure and by the relative sustainability structures in the various countries of operation and Business Lines. Each country and each Business Line adapts the procedures for the global policy and the procedures for application of the model on a local level, based on the specific aspects of business and the context.


In response to the growing challenges posed by the new social and economic context and the increasingly central role assumed by sustainability in every phase of business, we are reviewing our models to ensure their scalability and increase their impact. We are also accelerating the adoption of an approach focused on assessing the impacts of our sustainability projects by setting increasingly specific targets.

# The value created for the communities

## The contribution to sustainable development goals

The sustainability of our strategy is also confirmed by the progress achieved in terms of the Group's contribution to achieving the United Nations sustainable development goals (SDG), with particular reference to projects targeted at:

- ensure inclusive and equitable quality education (SDG 4), which has benefited **3.7 million people**;<sup>(3)</sup>
- ensuring access to affordable, reliable, sustainable and modern energy (SDG 7) which has affected **15.6 million people to date**;<sup>(4)</sup>
- promoting sustained, lasting, inclusive and sustainable economic growth (SDG 8) with **4.9 million beneficiaries**.<sup>(5)</sup>

Activities >	Target > 2015-2030	Results > 2015-2022	Status >	SDG																
Quality education	5 million beneficiaries <sup>(1)</sup>	<div>3.7 mil</div> <table><tr><td>2015</td><td>2016</td><td>2017</td><td>2018</td><td>2019</td><td>2020</td><td>2021</td><td>2022</td></tr><tr><td>0.1 mil</td><td>0.2 mil</td><td>0.3 mil</td><td>0.4 mil</td><td>0.3 mil</td><td>1.0 mil</td><td>0.7 mil</td><td>0.7 mil</td></tr></table>	2015	2016	2017	2018	2019	2020	2021	2022	0.1 mil	0.2 mil	0.3 mil	0.4 mil	0.3 mil	1.0 mil	0.7 mil	0.7 mil	IN LINE	
2015	2016	2017	2018	2019	2020	2021	2022													
0.1 mil	0.2 mil	0.3 mil	0.4 mil	0.3 mil	1.0 mil	0.7 mil	0.7 mil													
Affordable and clean energy	20 million beneficiaries <sup>(1)</sup>	<div>15.6 mil</div> <table><tr><td>2015</td><td>2016</td><td>2017</td><td>2018</td><td>2019</td><td>2020</td><td>2021</td><td>2022</td></tr><tr><td>1.5 mil</td><td>1.3 mil</td><td>1.3 mil</td><td>2.2 mil</td><td>1.6 mil</td><td>1.9 mil</td><td>3.5 mil</td><td>2.3 mil</td></tr></table>	2015	2016	2017	2018	2019	2020	2021	2022	1.5 mil	1.3 mil	1.3 mil	2.2 mil	1.6 mil	1.9 mil	3.5 mil	2.3 mil	IN LINE	
2015	2016	2017	2018	2019	2020	2021	2022													
1.5 mil	1.3 mil	1.3 mil	2.2 mil	1.6 mil	1.9 mil	3.5 mil	2.3 mil													
Decent work and economic growth	8 million beneficiaries <sup>(1)</sup>	<div>4.9 mil</div> <table><tr><td>2015</td><td>2016</td><td>2017</td><td>2018</td><td>2019</td><td>2020</td><td>2021</td><td>2022</td></tr><tr><td>0.4 mil</td><td>0.7 mil</td><td>0.4 mil</td><td>0.3 mil</td><td>0.3 mil</td><td>0.9 mil</td><td>0.7 mil</td><td>1.2 mil</td></tr></table>	2015	2016	2017	2018	2019	2020	2021	2022	0.4 mil	0.7 mil	0.4 mil	0.3 mil	0.3 mil	0.9 mil	0.7 mil	1.2 mil	IN LINE	
2015	2016	2017	2018	2019	2020	2021	2022													
0.4 mil	0.7 mil	0.4 mil	0.3 mil	0.3 mil	0.9 mil	0.7 mil	1.2 mil													

(1) Beneficiaries are the people in whose favor the project was carried out. Enel considers only the direct beneficiaries for the current year. The number of beneficiaries considers the activities and projects carried out in all the areas in which the Group operates.

(3) Cumulative data from 2015-2022 on the total number of beneficiaries of SDG 4 to date.

(4) Cumulative data from 2015-2022 on the total number of beneficiaries of SDG 7 to date.

(5) Cumulative data from 2015-2022 on the total number of beneficiaries of SDG 8 to date.

# Measure the value of our commitment for communities

3-3 | 203-1 |

We make a substantive contribution to the development and social and economic growth of the territories and communities where we operate with varying types of intervention, ranging from the expansion of infrastructure to education and training programs, from initiatives targeting social inclusion initiatives to projects supporting local cultural life.

To measure our action, we adopted the LBG (London Benchmarking Group) method, which makes it possible to clearly determine and classify the Company's contribution toward the development of the communities where it is present and compare it with other companies.

In particular, according to the LBG standard, the expense for the contributions to the communities can be divided as follows:

- donations: *pro bono* contributions and without obligations for the beneficiaries, except that they have to use the donation for charitable purposes and for non-profit associations. For Enel, this item includes all the monetary and "in kind" charitable donations, including those for philanthropic and solidarity activities;

- investments in the community: medium/long-term involvement in community support projects, also in partnership with local organizations, aimed at addressing significant problems both for the territory as well as for the Company. This category includes, for example, projects related to a wider strategy to the benefit of the community, such as "Access to electricity", or specific initiatives dedicated to the communities near the power plants (please refer to the chapters "[Clean electrification](#)" and "[Managing human rights](#)");
- commercial initiatives with a social impact: contributes to activities connected to the core business, in which the Company promotes its own brand and its own corporate identity. Examples of these initiatives are the marketing campaigns that also provide benefits for the community, or that include contributions for charitable purposes.

In 2022, Enel's total contribution to the communities in which it operates was **about 120 million euro**<sup>(6)</sup> (+31.6% compared to 2021), registering in particular an increase in investments in communities compared to last year.

## 2022 initiatives in favor of communities by purpose (%)

Donations	12.1%
Community investments	64.4%
Commercial initiatives with a social impact	23.5%

## 2022 initiatives in favor of communities by type (%)

Cash contribution	86.2%
Employee volunteerism	0.6%
Donations in kind (goods/services/projects)	6.2%
Management overheads	7.0%

(6) The largest increase over last year was in community investments (up by more than €21 million), particularly in Brazil, Chile and Colombia. Expenditure on donations increased slightly compared to 2021 (increase of about €5 million), particularly in Brazil and Chile, as did commercial initiatives (increase of €3 million), particularly in Italy and Iberia due to the prolonged effect of the post-pandemic recovery.



## Sustainability projects and initiatives

In the communities in which we operate, we implement projects that, in line with the Sustainable Development Goals, contribute to the development and social and economic growth of local communities by promoting infrastructure development, education and vocational training,

cultural and economic activities, energy access, **rural and suburban electrification**, the fight against energy poverty, and **social inclusion for the most vulnerable population groups**.

### ACCESS TO ELECTRICITY

#### Energy to grow – PERU

**T**he main objective of the project, activated in 2021, is to accelerate the electrification of new human settlements located in the most disadvantaged areas within our concession area in Peru.

It is a collaborative project in which we try to work together with municipalities, the population and non-governmental organizations (NGOs). With this project we help families in the communities to improve their living conditions, in terms of health and education, and we also give them the opportunity to open new businesses, thus contributing to their economic development.

We have managed to reach 20,000 electrified lots by 2022, which will improve the quality of life for 80,000 people.



#### Energy security in critical areas – CHILE

**T**he project, born in 2018 from an agreement signed between Enel Distribución Chile and Fundación Techo Chile, aims to promote sustainable and secure access to energy for families in the municipality of Lampa, in fields located in the concession area.

During 2022, 1,900 new suburban connections were built in the municipalities of Lampa, Pudahuel, Colina and Maipú.

In alliance with Fundación Techo and Litro de Luz, solar lights and a WiFi point were installed in the “El Esfuerzo 2” field in the municipality of Cerrillos, as well as offering workshops and training on unconventional renewable energies, entrepreneurship workshops and digital literacy, thus creating a space to promote social development in the camp.

Finally, Enel Grids organized educational events related to energy efficiency, electrical risk prevention and climate change, as well as initiatives to improve local employability, such as the development of sustainable lighting in collaboration with the Litro de Luz Foundation.

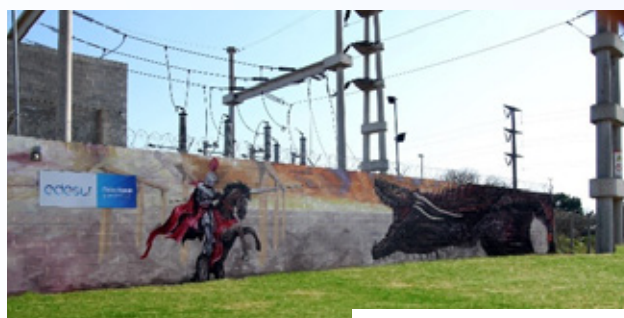


## Leadership network in Florencio Varela – ARGENTINA

**D**uring 2022, we set up a community leadership network in the San Jorge – Villa Argentina neighborhood in the municipality of Florencio Varela in Buenos Aires, in order to strengthen the relationship with neighborhood leaders and formal and informal organizations representing community interests. In this area, the public's concerns regarding the public electricity service and other issues impacting the community environment are addressed..

Through this network we accompany the energy service normalization process for 675 new customers, raising awareness, advising and resolving specific claims. During the process, together with neighborhood leaders, we identified specific needs such as:

- computer equipment: 15 PCs were donated to the Centre for Labor Training (CFL);
- workshops on sustainable energy use: 2 face-to-face workshops of a theoretical-practical nature were held to raise awareness of responsible and efficient consumption;
- installation of photovoltaic lights with LED technology self-made by residents of the neighborhood;
- energy transition workshop for students, with theoretical and practical content on technologies associated with the energy transition.





## SOCIAL AND ECONOMIC GROWTH

### Hortas em Rede (Orti in rete – BRASILE)

**T**he Hortas em Rede project, developed by Enel São Paulo, uses the tracks underneath the distributor's transmission lines to create vegetable gardens in peripheral areas with a high population concentration in the capital's metropolitan region, demonstrating how a sustainable infrastructure can be integrated into the territory by responding to the needs of communities.

The project comprises three vegetable gardens in the São Mateus neighborhood and offers the communities in the surrounding area opportunities for employment, vocational training and income generation through the sale of produce grown by the farmers. The most significant innovation of the project is the shift from a value destruction scenario to a shared value creation scenario. Another innovative aspect relates to social inclusion: women and the elderly are in fact the main beneficiaries of the production and marketing of the garden products.

The project also contributes to the enhancement of the landscape and to creating the conditions for the residents of these areas to become actors and protagonists of a real social transformation. Between 2021 and 2022, 80 farmers and 1,332 people indirectly benefited from Hortas em Rede, generating over about 150,000 euros<sup>(1)</sup> in income.

(1) Value determined using the exchange rate as at December 31.



### Ruta Pehuenche: a program for the development of small local business people – CHILE

**I**n Chile, where the Los Cóndores hydroelectric plant in the Maule region is under construction, encounters with the local community have generated training and employment opportunities, with the emergence of a women-led micro-entrepreneurial fabric.

The local development program Ruta Pehuenche was created here, and its name was taken from the international corridor that extends to Argentina and is full of exceptional natural attractions.

The project was created with the dual goals of promoting the economic growth of the entire community through training courses and improving living conditions through the use of environmentally friendly technologies for water

supply, food, housing, energy and the resolution of sanitation issues.

To date, four years after the project's inception, more than 80 people (including 70 women) have participated in vocational workshops held in the Chilean localities of La Mina, Paso Nevado, Armerillo and Las Garzas, for a total of 130 hours of training. This initiative has led to the creation of small commercial businesses – linked to the tourism flow in the area – that produce items made of wood and jewelry made with stones and ceramic. In addition to improving the ability of families to generate income, the project represents a channel for promoting and strengthening the role of women in the local social fabric



## Energy Collection (Costurando Sonhos) – BRAZIL

**T**he aim of the project, established in 2017, is to provide financial autonomy to women in Paraisópolis, São Paulo's second largest community.

The initiative started as a training course, a way to help women in situations of extreme social vulnerability, often victims of domestic violence. Through the program, women who previously had no income are now finding their economic independence, thanks to the skills acquired through training courses in cutting and sewing, which have taught them a trade from which they can earn their own income..



The project extends not only to São Paulo, where it originated, but also to the state of Ceará and Rio de Janeiro, and has enabled a number of women to receive training from the Enel Shares Entrepreneurship program during its five years of operation. The income generated from the sale of the garments is entirely donated to the women in the production groups to which they belong.

In 2021 and 2022, a total of 342 people benefited from the project, generating an income of almost 16,000 euros.<sup>(1)</sup>

(1) Value determined using the exchange rate as at December 31.





## EDUCATION

### Educating with Energy Enel CEO – CHILE

The project, which started in 2022, is based on a training course comprising, on the one hand, theoretical modules at a professional technical institute and at a training platform on electrical risk prevention, and on the other hand, a practical phase at the training sites of the Operational Excellence Centre (CEO). This phase is carried out by the Enel Grids contractors' operational teams, which ensures that the field work carried out by the students meets the highest quality and safety standards, and is conducted by technical area representatives in cooperation with the contractors, who carry out daily maintenance functions on the networks in the concession area in the metropolitan region. The project was realized through an alliance and public-private partnership between the vocational technical institutes, Chile DUAL, SOFOFA (which contributed as a sponsor) and 10 contracting companies, which in a coordinated manner provided venues for vocational intern-



ships for students from the Lampa and Recoleta districts. The objective of this training is to qualify people as much as possible to strengthen the electricity sector, considering customer safety as a priority focus in a participative and inclusive strategy.



### Lethbridge College Wind Engineering Partnership – USA

In Alberta, where we operate four wind farms, we have been pursuing since 2020 a multi-year partnership with Lethbridge College to support the Wind Turbine Technician Training (WTT) program and empower the students of the Piikani Nation.

The partnership creates opportunities for STEM education and workforce development for indigenous and other students living in the areas around several of the Group's wind plants in the southern part of the province.

The project includes "experiential learning days" for Piikani Nation students and the opportunity to visit Lethbridge College and get more information about both the WTT program and other university programs and services. We are also funding awards under the WTT program to support Piikani Nation students, indigenous and non-indigenous, who graduate.

The involvement of these young people will include: safety training in the college's wind turbine shop; a climbing experience in a wind turbine nacelle; a visit to the top of a wind turbine using virtual reality (VR) technology; the construction of miniature wind turbines, tested in the college's wind tunnel; and the development of a virtual reality tour of the college's nacelle, through the donation of two VR visors.





## “È viva la scuola lab”, Helpcode – ITALY

The project, now in its second year in 2022-2023 and realized in partnership with Helpcode, aims to support schools in their educational activities, through an integrative training proposal and the enhancement of curricular teaching, also with the objective of increasing students' awareness of the Group's main commitments, such as energy transition, digitalization and human rights.

The project is structured by developing three modular macro-activities: 120 workshops for classes, specific training for teachers and 10 “Energy for the Future” activities. Workshop activities were, where possible, conducted in the presence of Helpcode educators with the contribution of our volunteers. The paths aim to guarantee the children's right to global citizenship education and sustainable development through exploration, interaction and play, including the use of digital platforms and educational software.

The workshops that remain active for this new release are:

- CODE AND CHANGE YOUR WORLD!, dedicated to coding and digital literacy;
- THE ALGORITHM OF RIGHTS, dedicated to rights and active participation.

New in this edition is the “Energies for the Future” workshop path, which was realized using products powered by renewable sources and recycled materials, and providing specific training reserved for a local association to ensure the continuation of the project independently thanks to the skills acquired.

In 2022, the project involved about 150 children.



## SOCIAL AND ECONOMIC GROWTH

### Bet on water in La Guajira – COLOMBIA

In 2022, Enel Colombia built the Amalipa micro aqueduct, which provides 600,000 liters of drinking water per month to more than 2,450 Wayuu indigenous people from 22 communities in Maicao and Uribia.

This work is in addition to the Wimpeshi micro-water pipeline, inaugurated in February 2021, which consists of two reservoirs and 13 tanks that provide 2,000 liters of water per week to rural communities scattered across middle and upper Guajira. The project currently benefits almost 3,000 indigenous Wayuu people.

As of 2022, we have been awarded the role of partner for the construction of a new micro water pipeline in the Jai-paichon and Urraichipa territories in the municipality of Maicao, which will provide drinking water to more than 4,000 people in 39 Wayuu communities.

In addition, we commissioned the drinking water treatment system in the community of Media Luna Jawuaou in Uribia, benefiting 2,318 people.

Finally, four tanks were built and handed over to the municipality of Maicao; these were developed together with the ACDI/VOCA Foundation for Latin America, the Ministry of Housing and the Colombian National Army. Almost 560 people from the communities of Chuluita, San Luis, Sabana Larga and Corralito benefited. These four *jagüeyes* are in addition to the 10 we have delivered since 2020.



## Sustainability Wonders – Enhancement and awareness for sustainable energy

**Sustainability Wonders** is the platform of the Global Business Line Enel Green Power and Thermal Generation that, since 2021, collects, enhances and shares the best sustainability challenges.

During 2022, the program saw the launch of three contests dedicated to three different issues, in which all Enel people, in all countries, participated by submitting their sustainability project on each theme.

The first of the three contests was dedicated to SDG 8 and supporting local entrepreneurship through initiatives that generate a positive and sustainable economic impact on the communities in which we operate. The winning project, which is Italian, provides vocational training courses on energy transition for the staff of companies in the Civitavecchia area, where the Torrevaldaliga Nord power plant is located.

The second contest, focused on SDG 15 and dedicated to the conservation of biodiversity, featured Brazil's initiatives on food and water security, agricultural production, sustainable fishing and mining that contribute to the fight against global warming. The project has restored more than 610 hectares with the planting of local flora. A total of more than 1,200 animal species – 26 of which are threatened and 80 endemic – were recorded in the areas covered by the various projects.

Finally, the last contest launched in 2022 focused on SDG 3, and gathered initiatives aimed at the psychophysical well-being of the individual. In this latter contest, the winning project, which originated in Italy but has become global, is "Enel CReW, Cycling Running & Walking", which encourages virtuous mobility behavior and is currently active in 18 countries, with 145 clubs and almost 3,000 participating colleagues who have so far covered a total of more than 2 million kilometers, avoiding the emission of more than 350 million tons of CO<sub>2</sub> into the atmosphere.

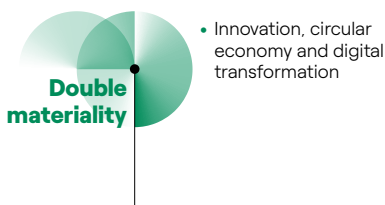


**Margherita Moscatelli**

Head of Engagement and Performance  
EGP&TGx Sustainability

*"The Sustainability Wonders program was born from the desire to select the best sustainability projects implemented in the vicinity of our generation plants, in order to highlight and champion them, through an innovative and participatory process that involves and engages colleagues from all Countries"*

## Material topics (I level)



## Plan



## SDG



Below the 2022 results related to the targets of the previous 2022–2024 Sustainability Plan, the resulting progress and the targets of the 2023–2025 Sustainability Plan, which may be redefined, added to, or surpassed with respect to the previous Plan.

SDG	Activities	2022 results	Progress	2023–2025 targets	Tag
9 17	<ul style="list-style-type: none"> <li>Further enhance the reach of our innovation ecosystem, to find the best solutions on a global scale</li> <li>Generate value by solving the ever-increasing needs of the Business Lines, by enabling open innovation tools (collaboration with startups, crowdsourcing, partners, universities, intelligence, technological communities, solution design activities)</li> </ul>	<b>194</b> Proof of Concept launched 		Launch of <b>445</b> Proof of Concept to test innovative solutions in the period 2023–2025	I S G T
		<b>60</b> solutions adopted in the business		Scale-up of <b>126</b> solutions to accelerate the implementation of the Strategic Plan in the period 2023–2025	I S G T



### Read more

**Proof of Concept** are small-scale tests of a potential innovative solution, useful for assessing its feasibility and large-scale implementation.

## Goals

I Industrial    E Environmental    S Social  
G Governance    T Technological



New



Redefined



Outdated

## Progress



Not in line



In line



Achieved

N.A. = not applicable

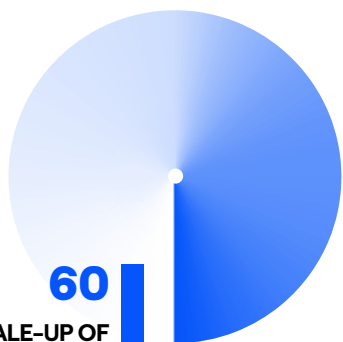




# Innovation







## 60 SCALE-UP OF SOLUTIONS ADOPTED IN THE BUSINESS

46 solutions  
in 2021

**+30.4%**

194

## PROOF OF CONCEPT

168 in 2021

**+15.5%**

10

## INNOVATION HUBS

10 in 2021

43

## COLLABORATIONS FOR INNOVATION

41 collaborations  
in 2021

**+4.9%**

119

## COLLABORATIONS ACTIVATED WITH STARTUPS

100 collaborations  
in 2021

**+19.0%**

# Innovation

## DMA EU (former EU8)

In a world in which companies continue to change workflows and are becoming increasingly digital, we are concentrating on new technologies and are continuing to work toward giving life to sustainable progress.

In order to encourage new uses of power and new ways of managing it and making it accessible to increasing numbers of people in a sustainable way, we have made innovation a key component of our strategy. It is a pathway that involves traditional businesses and the development of new models and technologies, which leverage on cutting-edge innovation, passion and ideas that emerge not only from within, but also from outside the Company. Enel's Open Power model considers innovation as one of the four values that inspire our day-to-day actions, together with trust, responsibility and proactiveness.

We support innovation to be certain that the best and most creative ideas help improve the lives of people. By just rethinking the way in which we innovate we can truly revolutionize the industry and develop technologies and solutions that can shake up old markets and create other completely new ones.

Since 2021, the **culture of innovation** was combined with an **"agile" approach**, with the objective of providing the business with 360° support, from the initial idea of a project to its adoption phase, through the use of creativity, lateral thinking and agile techniques.

Innovation and agile transformation have in fact a great potential for synergy as they are essential factors behind the creation of a competitive advantage and for the optimization of costs over time.

## Enel's Open Innovability® for changing the future of energy

The new model (Open Innovation + sustainability) is based on the crowdsourcing activities of the best talents, ideas and technologies to make them grow, transforming them into new business models. In this way, we are connecting all Company areas with startups, industrial partners, small and medium-sized enterprises (SME), research centers, universities and entrepreneurs, through the [openinnovability.com](https://openinnovability.com) platform, to face new challenges, in consideration of the drivers of the Group's Strategic Plan and the sustainable development goals (SDG) of the United

Nations 2030 Agenda.

Since 2017 we have launched the [openinnovability.com](https://openinnovability.com) platform, with more than 13,000 evaluated opportunities, more than 210 challenges, 34 of which only in 2022. Over the past year, the challenges for which the most solutions were proposed concern: innovative ways for improving the albedo in solar generation plants, sustainable approaches for reusing cement, a new design for primary and secondary substations. Those who propose solutions for solving the challenges can win monetary awards and start collaborations with the Group.

We can count on a global network of **Innovation Hubs and Labs** (10 Hubs, three of which are also Labs, and three Labs dedicated to startups) that collaborated with the local ecosystems to expand our vision, promoting open innovation and sustainability.

The **Hubs**, which are located in the most relevant innovation ecosystems for the Group (Catania, Pisa, Milan, Silicon Valley, Boston, San Paolo, Madrid, Barcelona, Santiago de Chile and Tel Aviv), handle a network of relations with all players involved in innovation activities and are the main source of scouting for startups and SMEs, with the objective of responding to the innovation needs of the Business Lines. The scouting activity also focuses on promoting the adoption of solutions that can maximize our sustainable profile, such as promoting circularity, guaranteeing inclusiveness and attempting to face social problems.

The **Labs** make it possible for startups to work alongside the technicians and experts of our Business Lines in order to develop and test solutions in the most fertile environment possible. In addition to the laboratories in Milan, Pisa, Catania, San Paolo and Be'er Sheva, in September 2022 we inaugurated the new **AI & Robotics Lab in Tel Aviv**, which is specialized in developing artificial intelligence (AI) and robotics for renewable energies and energy networks. This is the fourth innovative initiative launched by the Group in Israel and is managed by Enel Green Power and Enel Grids (the Group Business Lines dedicated to the generation and distribution of clean energy).

Open Innovation also means creating **partnerships** with key players. We are currently committed to 43 collaborations for innovation that cover the areas that are the most strategic for the Group and that concentrate on relevant topics, such as the new sustainable materials for Enel assets (Novamont),

innovative technologies for improving the generation and storage of renewables (BASF), the promotion of space applications in the energy sector (ESA and Thales Alenia Space) and the codevelopment of innovative digital solutions (Cisco and Microsoft).

We have created specific **interfunctional work groups (Innovation Communities)** in order to face topics relevant for the business and new technologies and create value in an innovative manner. The active communities concern the following topics: blockchains, drones, energy storage, the metaverse, robotics, sensors and quantum computing. There are also work groups dedicated to so-called wearables, additive manufacturing, data monetization, AI and machine learning, materials and hydrogen. The Communities continuously monitor potential technological improvements and share new useful business models, added value services or use cases for types of technologies that could be adopted in various Group areas.

We constantly promote and spread the culture, knowledge and behaviors of Open Innovation in the countries in which we operate, favoring an approach called "learning by doing", which allows people to think and act in a different way and disseminate methodologies and tools for strengthening the generation of ideas and supporting their development. There are many tools and initiatives for innovation that are useful for the dissemination of the Open Innovation culture. In addition to the recurring newsletters, surveys and webinars, periodic meetings are held with all Business Lines on many levels, not just managerial, but also with the non-hierarchical communities. We make the necessary resources available for promoting a culture of knowledge and its value on all levels, increasing awareness among people also thanks to training courses, events and meetings.

## ISO 56002 standard "Innovation management – Innovation management system – Guidance"

Innovation management is a strategic topic for organizations and companies, and the ability to manage innovation as a system and organize all the phases of the innovation process represents a critical success factor.

In August 2022, we were among the first companies in the world to voluntarily adopt the **ISO 56002 standard** for innovation management. This standard is part of a wider series of ISO 56000 standards and covers all aspects of innovation management: from the creation of an idea to its development on a global scale. By adopting this standard, organizations can consolidate their governance, increasing the effectiveness of innovation and therefore business opportunities, which in turn creates the conditions for a wide-spread innovation culture that stimulates the creativity of employees and stakeholders, and promotes the emergence of new

valuable proposals, in line with market developments.

The standard is based on eight pillars: coherence with the Innovability® vision (innovation for the Company and a more sustainable world); generation of value through innovative ideas; future-oriented leadership and challenges to the *status quo*; innovation culture as a strategic asset; innovation development based on customer requirements; management of uncertainty and risk mitigation; proactiveness and resilience; systemic approach for a solid performance appraisal.

Furthermore, in 2022 we signed an **agreement with UNI** (Italian Standardization Body) to draw up a public document known as "Reference practices", which has the purpose of making Enel a reference on a national level in Italy in the area of innovation governance.

# How ideas are transformed into business solutions, creating shared value

Here are some examples of Innovability® projects (see also chapters: [“Clean electrification”](#), [“Circular economy”](#), [“Conservation of natural capital”](#)):



## Green hydrogen

**NextHy:** a global initiative designed to stimulate the growth of the entire green hydrogen ecosystem. Its center is the Hydrogen Industrial Lab in Sicily, an industrial technological validation platform that will be built between Carlentini and Sortino, where new technologies will be developed for accelerating the reduction of the cost of green hydrogen and the decarbonization of the so-called “difficult to abate” sectors.

NextHy is one of the Italian projects that benefited from the IPCEI Hy2Tech loan, the 4.5 billion euro fund made available by the European Union for the development of initiatives of strategic interest centered on hydrogen. The NextHy project also includes NextHy Booster, an acceleration program promoted by Enel Green Power that has the objective of supporting the most promising startups to scale their technology and their business to green hydrogen, creating a long-term partnership with Enel and connecting to the global network of green hydrogen.



## Smart City

**YoUrban** (Italy), a single point of access for using all Enel X solutions activated in the urban perimeter, from the digital management of public lighting system faults to the innovative City Analytics solution for optimal urban planning. In 2022, new functions were developed that provide a complete overview of communities and areas of improvement in terms of services for citizens, CO<sub>2</sub> and the degree of circularity.



## Customer centricity

**Customer recognition through biometric factors** (Spain), such as, for example, vocal recognition, to guarantee safe and inclusive access to our services as an element for the authentication of customers at call centers, which improves the personalization of the service, emotional involvement and accelerating the resolution of customer requirements.

Pilot project for the **application of advanced artificial intelligence models** to improve the operation of contact centers (Italy, Romania, USA, Spain). These models personify the needs and language of our customers, generating concepts/phrases in hundreds of transcripts thanks to the pre-trained model. This is useful for testing the qualitative level of our operators, preparing ourselves, in the future, for new evolutionary sales scenarios, automatic training and proactive support.

Use of **neurosciences** to obtain more in-depth information about the efforts customers make to understand the commercial communications and to simplify relationships, thanks to the interpretation of spontaneous physiological input (Italy).



## Robots and safety

**Innovative robots** for inspections of submarine cables (Italy), operations at a height (Italy and Brazil) and for cutting vegetation (Brazil), to allow safe and remotely controlled/automatic interaction with network components for operating and maintenance activities, and to cut vegetation near the network.

**New sustainable helmets** (Italy and Romania), that can house intelligent glasses for hands-free operation and other accessories to improve safety. They are more ergonomic and made with recycled material.



### Weather predictions, variability of natural resources and system operation

In Italy, development of four parallel projects, selected thanks to the tender launched together with ESA (European Space Agency), that are concentrated on the **development of algorithms for estimating the equivalent of snow water and the content of water in the alpine snowpack via satellite**, to be validated with *in situ* measures. To best manage the production of water in our power plants, it is in fact necessary to know not only the amount of rain, but also the volume of water contained in the snowpack (Snow Water Equivalent), which is an important temporary reserve of winter precipitation. Therefore, by improving the prediction of precipitation and the resulting prediction of hydroelectric generation through the combination of satellite data, weather prediction models and *in situ* data, it is possible to manage the risks related to the variability in natural resources and optimize market strategies.

The photovoltaic plant in El Paso, Colombia: the objective of the project is to automate the acquisition process of the cloud coverage above the plant and provide intraday and intrahour predictions of radiation, using satellite images and sky-cams in machine learning algorithms. The need results from the intrinsic characteristics of the area, as the El Paso photovoltaic plant is located in an equatorial area where it is very difficult to evaluate the actual amount of clouds in the sky with normal weather prediction services.



### Use of water and biodiversity

Collaboration with **Reiwa Engine** (Italy) for the **automatic cleaning of photovoltaic panels without the use of water**.

In the wind park of Gibson Bay, in South Africa, an **innovative system for preventing the impact of bats and birds with wind generators** was successfully tested by means of installing an acoustic deterrent device developed by the US startup **NRG Systems**, which made it possible to reduce the risk of mortality for local bats by 80%.

New solutions based on remote image detection systems (such as satellites and LiDAR) and artificial intelligence, are able to identify the **presence of archaeological finds and vegetable species before opening the job sites**, in order to protect biodiversity.



# The innovation of the electricity grid to mitigate the environmental impact and improve its resilience

**Lourdes García Duarte**

Head of Sustainable Network  
Design and Resilience-Innovation  
Enel Grids



*"Enel Grids is taking another significant step toward the decarbonization of electricity grids, thanks to the pilot installation of cutting-edge sustainable poles. An innovative combination of pine or fir materials and with an external layer made of 66% recycled polyethylene. The new poles make it possible to save up to 130 kg of CO<sub>2eq</sub> as compared to similar standard poles made of concrete and without the toxic materials used in the old products. This is an important result for making our networks increasingly Net-Zero."*

**E**nel's Net-Zero strategy for the electricity grid sector is concentrated on reducing the CO<sub>2</sub> emissions from activities, reducing network losses and adopting circular, low-emission materials and components. An interesting direction of innovation of Enel Grids is in fact that of Sustainable Design and Resilience, targeted toward mitigating the environmental impact and improving the resilience of the network with new technologies and sustainable materials, in order to rethink the systems and components.

The pilot project of the sustainable pole was field tested in this sector. The solution was also tested by some Northern European DSOs. This is a new support for low and medium voltage. It is made of wood obtained from certified sustainable forests in order to reduce the carbon footprint of the electricity grid. The main structure is made with certified wood, whereas the external layer is comprised of 66% recycled polyethylene. The poles, thanks to the innovative combination of two materials, make it possible to save up to 130 kg of CO<sub>2eq</sub> with the same dimensions of standard cement poles.

The utilized wood comes from certified sustainable forests where there is the obligation to guarantee and not alter the continuous growth of the forest, whereas the external layer of polyethylene seals the wood, protecting it from atmospheric agents, improving its fire resistance and preserving fauna from the electrical risk. The absence of impregnating material, which was used for the old wooden supports, represents an additional result in terms of sustainability, in line with the new directives issued by the European Commission.

The pilot project successfully tested mechanical resistance and resistance to aging, and was able to evaluate the operational installation and maintenance activities.

For in-depth information about the Group's activities concerning network infrastructures, see the chapters "[Clean electrification](#)" and "[Circular economy](#)".



# Focusing on hydroelectric flexibility to accelerate transition and promote national energy autonomy

**Vincenzo Ricchiuto**

Short term management  
Italy, GECM



*"The role of hydroelectrics, a clean source par excellence, in the electrical system is becoming more important as an enabling technology for transition thanks to modernization and flexibilization projects developed in full compliance with the environment and local communities. This result was made possible by an intense and lengthy synergy with Generation, Innovation and the Territory."*

**T**he challenge we are facing is to explore capacities that are not yet expressed in terms of flexibility of use of the existing renewable fleet with innovative modernization, efficiency improvement and management interventions. With experimental modeling and the implementation of new operating schemes, which keep up with the continuous regulatory changes, we are aiming to test and highlight the pivotal role that the hydroelectric fleet can take on during the energy mix evolution process thanks to its extreme versatility and wide-spread presence all over the territory.

In 2022, the first phase was completed with a 5-year time schedule of initiatives that basically involved the most of the Italian programmable hydroelectric fleet with a specific investment plan. For some it was an extension of potential in terms of regulation and flexibility of use, whereas for others it was a true start in a new activity; the purpose of it all is to guarantee also with hydroelectric a continuous service for the electricity grid oriented toward balancing the intermittence generated by NPRS (non-programmable renewable source) thereby favoring the safe penetration of new capacity.

In particular, in Italy, the increase in terms of MW enabled for the secondary regulation service was more than 550 MW approx., equal to 11% approx. of the total currently enabled for all technologies in Italy. Furthermore, approx. 50 plants, for a total of 650 MW approx. have been enabled for the market of services also through aggregations and innovative modeling.

As is known, 2022 was a year with strong geopolitical tensions, but also a record shortage in the hydroelectric resource, causing considerable increases in production costs and unexpected reductions in availability of some thermoelectric plants.

In this context, the plants involved in the efficiency improvement and flexibilization program have provided a considerable contribution with regard to the safe management of the electricity grid and the containment of system charges, especially during the most critical periods.

# Sustainable innovation and intellectual property

In the Open Innovability® ecosystem, Intellectual Property (IP) plays a key role in protecting and enhancing the value of the innovative solutions created and developed in-house or in collaboration with third parties.

IP is a key component to regulate and foster the sharing of ideas, technologies and knowledge between Enel peo-

ple, startups, universities, research centers, suppliers, and consultants.

As at December 31, 2022, the IP portfolio, which ensures protection from a geographical point of view on all the markets in which the Group is present, contains:

**883**

**patents for industrial invention**, belonging to 163 technology families; of these, 711 have been granted and 172 are pending

**23**

**utility models**

**194**

**designs registered**

**Trade secrets**

of a technical and commercial nature that are constantly coded and kept in line with the requirements of the internal Trade Secrets Management organizational procedure

**2,027**

**trademarks**, of which 1,642 have already been registered, and 385 are pending

As part of the activities aimed at protecting and developing the portfolio of trademarks owned by the Group, notably, in the year of Enel's 60th anniversary, in addition to the registration of the "**Enel 60 years**" mark, the procedure for registering the Enel brand in the Special Register of Historic Trademarks of National Interest was initiated. This important recognition is awarded, following the submission of a special application, to trademarks that have been registered for at least fifty years, or for which there is proof of their continuous use for at least fifty years, and that are used to market products or services made in a national production company of excellence with long-term links to Italy.

Other notable achievements include the registration of trademarks that identify models operating in the field of sustainability, such as:

- i. **Valuability®** of the model, copyrighted by Enel SpA, aimed at fostering the inclusion at work and active participation of colleagues with disabilities;
- ii. **CirculAbility®** of the model – also copyrighted by Enel SpA – for measuring circularity.

Enel has consolidated its processes for managing the generation and use of intellectual property rights in the **Intellectual Property Management and Trade Secrets Management organizational procedures**. Both of these view human capital as an essential element in the creation of IP and aim to incentivize employee participation in the inventive process, empowering them on the strategic importance of all findings.

Through the **IP Reward Program**, prizes and awards, including monetary ones, are paid to Enel inventors of solutions protected (or in the process of being protected) by patent, design, copyright or trade secret. As part of the IP Reward program, the first edition of the **Enel Intellectual Property Awards** were held on November 29, 2022, where the inventions protected by intellectual property and deemed most strategically relevant to the Group were honored. These initiatives, together with regular internal communication and awareness-raising activities, have also contributed to an increase in the number of inventions proposed by employees through the company IP portal.

During 2022, intellectual property codification and protection activities continued in all the Global Business Lines. In particular:

- **Enel X Global Retail** focused its activity on strategic platforms, codifying copyrights on the Big Data Platform, the strategic data container for all Enel X business units, and X Customer, the global Enel X customer management system.

With regard to the circular economy, the circularity schemes in Enel X, together with their scores and operating mechanisms, have been protected under copyright law.

In the field of telemedicine, a multiple design mark was registered in the European Union on the graphical user interfaces of the "Smart Axistance eWell" app, which offers users a complete wellness package.

- In **Enel Green Power and Thermal Generation**, the following notable developments were achieved during the year:

- in the photovoltaic sector, (i) a patent application for an industrial invention and a design patent on a solution that automates the process of installing photovoltaic panels in the field, reducing installation time and costs and increasing operator safety; (ii) a patent application in co-ownership with the Commissariat à l'Énergie Atomique et aux Énergies Alternatives (CEA) on a system to optimize the automatic removal and insertion of the wafer bar holder of the storage tray used to process wafers in chemical hoods. In addition, the generation and protection, mainly in the form of trade secrets, of the technological know-how required for the Gigafactory project continues at the 3SUN factory.

CEA-INES is one of Europe's leading photovoltaic research institutes. A collaborative research agreement was negotiated and signed with the institute for the development of the two-terminal Perovskite-silicon tandem technology, with the aim of producing high-efficiency devices that can be industrialized on the lines of the Gigafactory in Catania. The management of the IP rights arising from the collaboration was a crucial factor in the negotiation of this agreement, which is based on the strong technological background of the two partners;

- in the field of hydroelectric generation, a utility model patent application for a robotic solution that facilitates plant inspections by enabling access to all places that are difficult for personnel to reach, such as hydroelectric coils 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 of grids and grid events (ODIN project) and the other in the field of safety devices for workers working at height. Other noteworthy events included: (i) the registration of the design of the new sustainable road cabin, which will be developed using recycled materials to reduce environmental impact, and (ii) the filing of a utility model patent application in the field of safety, consisting of a method for delimiting road construction sites.

Also during the year, Gridspertise consolidated its IP portfolio by filing a patent application for the Quantum Edge – QEd® device, which, by exploiting edge computing to digitize the physical components of secondary substations, reduces installation, training, operation and maintenance costs and increases network reliability.

Enel Grids concluded two major licensing agreements with Gridspertise in 2022 for the commercialization of some of its key digital assets, including the Grid Blue Sky solutions. These agreements constitute a milestone

in the valorization of Enel Grids' intellectual property through an out-licensing strategy. Gridspertise will participate within the framework of these agreements as a commercial and technical partner, offering customized versions of licensed digital solutions to meet the specific needs of third-party DSOs.

In May 2022, Enel Grids founded the "Open Power Grids" association, for the first time making its historical wealth of expertise and experience on distribution networks accessible free of charge to member operators outside the Enel Group. The objective of Open Power Grids is to create a collaborative ecosystem to foster innovation, aggregating experiences, ideas, technologies and resources to make electricity grids more resilient, sustainable and participative, also based on a market-driven standardization process. In this way, the initiative can help improve the effectiveness and measurability of the concrete actions taken by Enel to achieve the Net-Zero ambition. The proposed approach is to provide open access, within the association, to the existing functional specifications (of electricity grid components and devices and network design solutions) on which Enel Grids holds copyright and, based on these, to develop new ones, in a logic of co-design, maximizing the aspects of sustainability, standardization and innovation.

- **Enel X Way** protected the JuiceBox DC and JuiceBox 4.0 smart home charging devices respectively through: (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 work on electric vehicle charging stations also extended to the registration of the JuiceMedia 2.0 and JuiceMod product designs in the European Union and the United States.

In the field of electric car charging points, Enel X Way pursued the goal of inclusiveness by designing infrastructures that take into account the needs of motorists with reduced mobility. In fact, in collaboration with ANGLAT, the national trade association that protects the rights to mobility of people with disabilities, and following the criteria of Universal Design, Enel X Way has created an additional maneuvering area marked on the ground by zebra stripes and featuring bollards to protect the infrastructure from possible impacts. With the intention of promoting the project and facilitating its usability by as many users as possible, Enel X Way enhanced the intellectual property of the designs through the open property model with author protection through Creative Commons. Specifically, Creative Commons Attribution-Non Commercial licenses were applied, which allow third parties to download and use the designs free of charge.

- **Enel Global Services** filed a patent application in Italy for an industrial invention on the innovation management method, also protected as the word mark Enel OOPS...! Innovation®. This method is based on perfecting industrial processes using the tools of Open Innovability®.

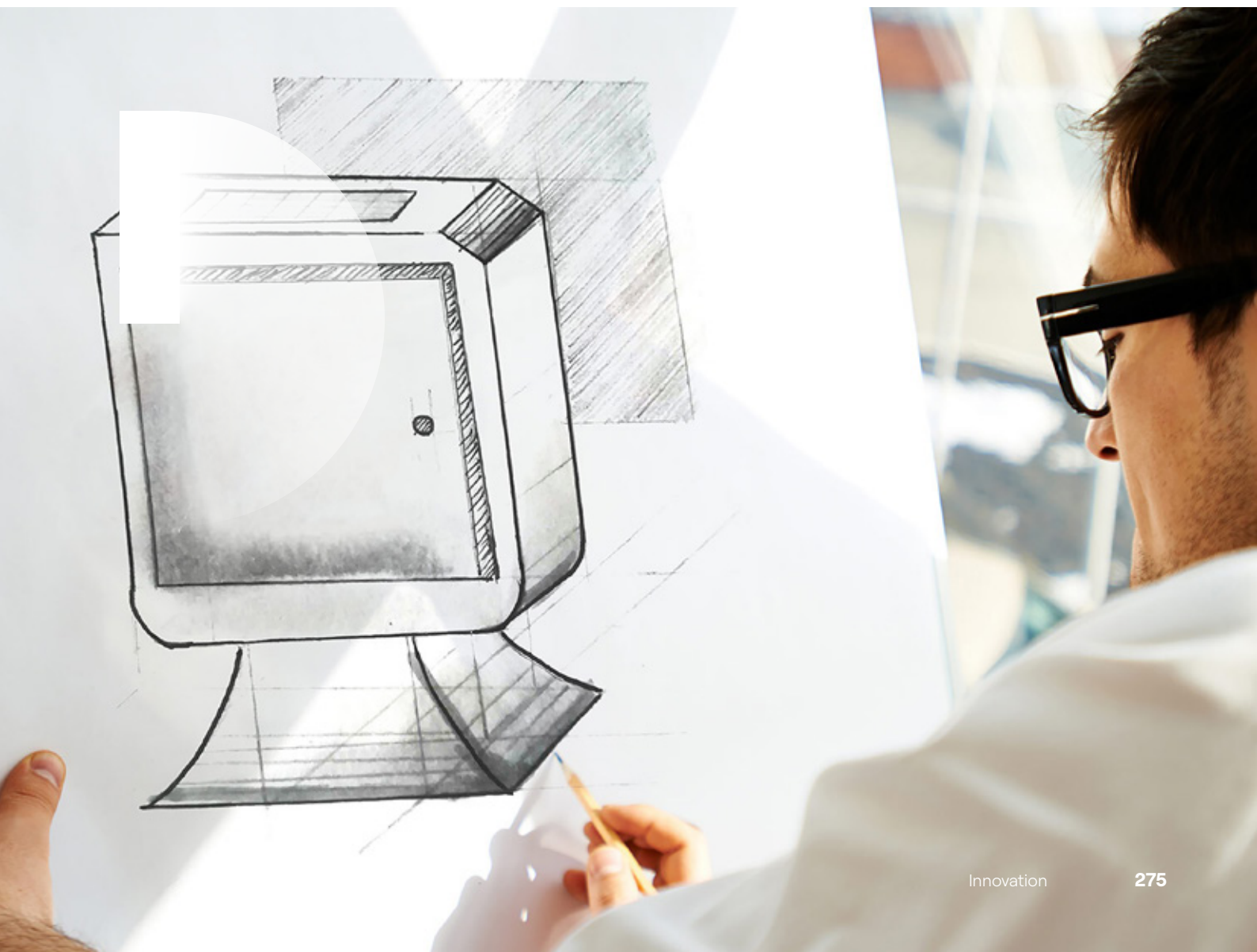
Enel SpA also filed a patent application in Italy for a **method of evaluating managerial positions**, based on a model capable of acquiring and processing personnel management parameters using a proprietary algorithm, thus providing a meaningful index that meets the needs of the People and Organization Function.

More generally, the Group continues to invest resources in the development of IP-intensive solutions, mainly in the forms of authorship protection and trade secrecy on databases and algorithms for forecasting the electricity and gas markets, advanced quantitative models that use,

among other things, scenario data to assess the impact of climate change on specific assets/production activities. The most notable investments in this area include development models that aim to: (i) characterize an asset's ability to "withstand" the possible effects of climate change; (ii) quantify the likelihood of an event or combination of climate events damaging the asset; and (iii) provide an index of the asset's "weakness" with a specific technical approach to prioritize actions/fields for improvement.

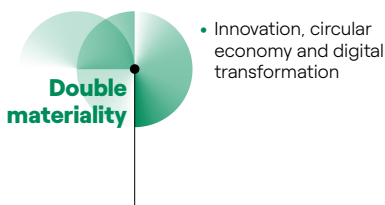
Finally, during the year, the Group consolidated its **internal non-financial intellectual property reporting process based on an internal proprietary methodology capable of codifying, protecting and valuing corporate intangibles**.

This methodology aims to provide a qualitative assessment of the intellectual property and an indication of the investment that would be required to replicate the set of intangibles subject to codification.



# Digitalization

## Material topics (I level)



## Plan



## SDG



Below the 2022 results related to the targets of the previous 2022–2024 Sustainability Plan, the resulting progress and the targets of the 2023–2025 Sustainability Plan, which may be redefined, added to, or surpassed with respect to the previous Plan.

SDG	Activities	2022 results	Progress	2023–2025 targets	Tag
4 9 11	Disseminating the IT security culture and changing people's behaviour in order to reduce risks	19 cyber security knowledge-sharing events executed	● ● ●	15 cyber security knowledge-sharing events executed each year	S T
9 11	Information security verification activities (Ethical Hacking, Vulnerability Assessment, etc.) Q	1,587 verification activities carried out	● ● ●	1,400 verification activities each year ↻	T
9 11	Execution of cyber exercises involving plants/industrial sites	50 cyber exercises carried out	● ● ●	186 cyber exercises in the period 2023–2025 ↻	S T

### Read more

**Cyber exercises** are drills aimed at simulating a cyber security incident, carried out with the objective of training the reaction capacity of the involved subjects and testing the processes and technologies in the field. The exercises are conducted by Enel's Cyber Emergency Readiness Team (CERT) and involve both technical and business reference structures. The simulation performed generates awareness and addresses possible needs for improvement of technical or organizational aspects.

I Industrial E Environmental S Social  
G Governance T Technological

### Goals



New



Redefined



Outdated

### Progress



Not in line



In line



Achieved

N.A. = not applicable



SDG	Activities	2022 results	Progress	2023-2025 targets	Tag
<div>12</div> <div>13</div>	Activities to reduce CO <sub>2</sub> emissions	-54.8 mil printed pages (vs 2019)	●●●	-17 mil printed pages in 2025 (vs. 2019)	<div>E</div> <div>S</div> <div>T</div>
		7.3 mil hours of downtime outside normal working hours	●●●	Activities to reduce PC, laptop and monitor downtime	<div>E</div> <div>S</div> <div>T</div>
		7.3 mil meetings held via video communication services	●●●	Extended use of video communication systems	<div>E</div> <div>S</div> <div>T</div>
<div>9</div> <div>12</div> <div>🔍</div>	Reuse and exchange of information in the e-API Digital Ecosystem	63 new e-API interconnections	●●●	100 new e-API interconnections in the period 2023-2025	<div>🔄</div> <div>S</div> <div>T</div>



## Read more

The **e-API Digital Ecosystem** is the digital environment through which all the companies of Enel Group can easily, quickly and automatically share information normally confined within specific vertical applications ("silos" of information). Thanks to the enabling technology of the API (Application Programming Interface), Enel's data flows and functionalities are treated as "data-as-a-product", fostering sustainability through a real reuse and exchange of information and a reduction of time and resources needed.

# Digitalization



1,587

ASSURANCE  
CHECKS (ETHICAL  
HACKING,  
VULNERABILITY  
ASSESSMENT)

1,580 in 2021

+0.4%

6

SIMULATED  
PHISHING  
CAMPAIGNS

4 campaigns  
in 2021

+50%

19

EVENTS  
TO RAISE  
AWARENESS  
OF CYBER  
SECURITY

18 events  
in 2021

+5.6%

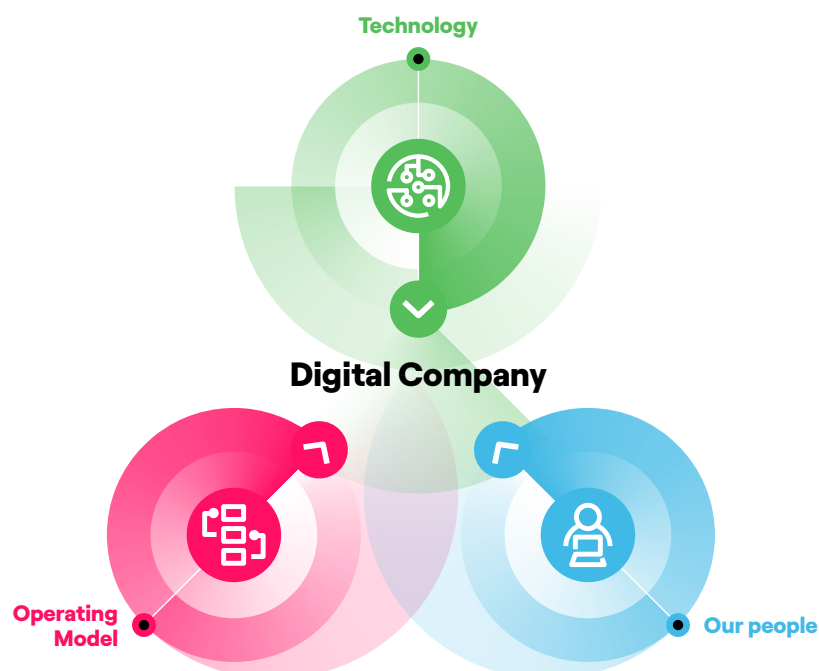
Technology is essential in order to innovate, guide and enable the creation of sustainable development models.

Indeed, digital technologies, both established and cutting-edge, contribute significantly to improving energy efficiency, decarbonization, and the development of automated business and production processes, thus promoting the circular economy and new business models. Through such platforms, increasing levels of scalability and efficiency can be achieved, reducing marginal costs.

Specifically:

- our **global digital platforms** promote the growth of renewable energy by providing common interfaces and smart solutions, thanks to technologies such as Digital Twin and Artificial Intelligence, which improve business development, engineering and construction, operation and maintenance;

- improving service quality, efficiency and the resilience of our grid infrastructure is driven by a single digital platform, **Grid Blue Sky**, which standardizes and optimizes the engineering, operation and maintenance phases and places the customer at the heart of every activity;
- our global customer base is managed by the **Customer Operations** platform, which renders the customer support, service activation, payment and billing processes smart, replicable and automated. We also leverage Enel X's digital platforms to globally offer innovative products and services for the B2C, B2B and B2G segments;
- the working life of all our people is increasingly supported by digital, allowing them to focus on higher value-added activities and ensuring their security.



# Sustainable digitalization and digital for sustainability

In our digital transformation, we aim to use digital solutions as tools for the development of a sustainable future, and to develop them on the basis of sustainability criteria.

The main actions taken in 2022 concerned:

- decarbonization and reduction of emissions linked to digital solutions;
- circularity of the digital devices and materials comprising the digital assets of the Group;
- promotion of social inclusion through the development of assistive technologies and solutions that ensure accessibility and generate value by meeting local needs;
- promotion of best environmental performance and adoption of human rights principles with the suppliers of digital products and solutions. For more information, see the chapters on “Managing human rights” and “Sustainable supply chain”.

Several challenges have been launched on the openinnovation.com platform with a view to incorporating environmental considerations in their resolution (see chapter on “Innovation”).

Furthermore, in line with the 2030 decarbonization targets, a number of criteria based on Global Warming Potential were included in tenders for digital professional services in 2022, which allow participants with lower greenhouse gas emissions in terms of CO<sub>2eq</sub> to gain a higher technical score.

In 2022, we drafted and published our **Digital Sustainability Policy**, which establishes the sustainability orientation of the Group’s initiatives and considers digital to be a key factor. With this Policy, we are committed to ensuring that the Company’s digital solutions comply with sustainability criteria, as well as promoting the sustainable use of technology in all business processes, at all stages of the initiatives and in the different countries of the Group.

We also launched a project in 2022 to create a **corporate framework in which to assess and mitigate the ethical risk related to the use of artificial intelligence** and ensure its safe and efficient use, in line with legislative changes at European level.

## PLATFORMS: ensuring a rapid and effective response to continuous change

**Roberto Bianchessi**

Head of Platformization Services –  
Global Digital Solutions



### The new Company strategy that transforms complexities into opportunities

*“Platforms play a key role in the Company in that they build trust for all our colleagues. They make it possible to share knowledge, enabling new operational and business models.”*

**T**he digital platforms are one of the pillars of Enel’s strategy, since they are, together with the ecosystems, tools based on maximum information sharing and mutual trust.

Being platform-oriented allows us to create a competitive advantage as digital platforms enable new operational and business models (e.g., sharing economy).

The Enel Digital Platform is the final step in realizing Enel’s full digital potential: it allows easy access to all Company databases, breaking down silos and information barriers, and fostering collaboration and digital sustainability.

The reuse of data and conscious software development have a direct impact on the reduction of carbon emissions.

This Enel Platform will be an ecosystem of technologies, methodologies, services and skills deeply embedded in the corporate culture. The goal is to foster participative and strongly data-driven digital development ecosystems, based on an agile approach to operations and the use of cloud technology.

For this reason, in 2022 Enel decided to launch the Platform School initiative to spread the potential of Platformization among all Enel people through a “train the trainer” educational model: in-house trainers, skilled in sharing strategic concepts, guide the transmission of knowledge through video and bitesize information materials.

## Key drivers of the digital transformation

### Cloud computing

The cloud represents a fundamental strategic enabler which allows us to use IT resources (both in terms of infrastructure and applications) and which, by making full use of the access possibilities provided by the network, allows to reduce waste tied to the consumption of unused resources. The migration of applications to the cloud made it possible to significantly reduce the demand for energy and consequently the consumption of resources. From 2019 to date, while data storage and processing capacity have increased considerably, there has been a 52% reduction in CO<sub>2</sub> emissions.

### Unified Communications and Collaboration (UCC)

Services such as instant messaging (chat), IP telephony, audio and video conferencing take full advantage of the sharing model which, through the internet, allows content to be shared and enjoyed from personal computers, smartphones or tablets, thereby reducing the need to travel and, in turn, lowering carbon dioxide emissions.

### Data sharing and Enel Application Programming Interface (e-API)

The e-API ecosystem is the digital environment where all Group companies can share quickly and in real time – through standard interfaces and data paths – information that would normally remain confined to specific vertical applications (information silos). This ecosystem has helped speed up the adoption of digital solutions, reduce data redundancies within the Group and, more generally, reduce

the amount of time and resources spent on exchanging information flows. A total of 63 new e-API interconnections were implemented in 2022.

### Machine learning and predictive maintenance

We adopt machine learning technologies to conduct predictive analysis in relation to the maintenance of electricity distribution networks and generation plants, identifying possible errors in advance and acting before faults occur on the main components. Reducing the risk of malfunctions has a significant impact not only in economic terms, but also in relation to the environment and personal safety. Therefore, using these technologies improves the quality of service provided, making it more sustainable over time, while ensuring an optimized use of internal resources and inspections focusing on the equipment most exposed to the risk of failure.

### Circularity of digital devices

The decommissioning of Company equipment generates waste, the disposal of which merits special attention. For this reason, the circular management of digital assets in the Group's various countries is achieved by safeguarding both the extension of the devices' service life, by selling them to employees or third parties (13,427 devices sold in 2022), and disposing of these devices in line with recycling principles, amounting to a total of 33 tons of equipment in 2022; devices categorized as electronic waste are disposed of at certain suppliers, who will then recycle the devices themselves.

## Digital Carbon Footprint

In 2022, we launched several initiatives to monitor and reduce digital-related emissions, mainly aimed at optimizing and consolidating the use of cloud infrastructure, promoting circular and sustainable management of digital assets, and encouraging the conscious and responsible development and use of software and hardware.

In this context, we developed a Digital Carbon Footprint Framework, which confirmed that with a 200% increase in the computational capacity of our systems and a 107% increase in data storage capacity, we were able to achieve a 26% reduction in CO<sub>2</sub> emissions from digital sources between 2018 and 2022.



## Digital for people

### “Digital Sustainability” school

In 2022, we made available to our people a training course on “Digital Sustainability”, consisting of 10 videos, to better understand how digital technology guides us towards achieving the UN 2030 Agenda’s Sustainable Development Goals. This training course, delivered in collaboration with the Digital Sustainability Foundation, also aims to raise awareness of behaviors related to the use of digital technologies, enabling us to understand the contribution we can make in our daily lives to sustainability. The videos are now available in five languages and have over 50 thousand views among Enel people around the world.

### Accessibility and inclusiveness in digital systems

The use of data and platform logic, coupled with the accessibility and inclusiveness of digital systems, allows access to new joint business models and the offer of new services and products, including to vulnerable customers.

The accessibility of digital solutions must be provided for at the design stage, which is why the Digital Accessibility organizational unit was created in 2022 in order to act as a point of contact for the Group and support the management of related initiatives and the development of digital products and services that are easy to use and compliant with the relevant regulations and standards.

### A new life for our PCs

The initiative to donate personal computers that have reached the end of their service life has been implemented with the aim of creating a positive social impact on public and private entities, which carry out various kinds of activities of social relevance and/or which pursue public benefit purposes. By giving PCs a new life, for the second year we are reinforcing our commitment to supporting communities in the countries where we operate, by promoting digital inclusion and enhancing the circular economy of digital devices, thereby extending the equipment’s service life through reuse. 213 devices were donated in 2022.



#### Video communication<sup>(1)</sup>

More than **7.3 million** meetings

More than **639.3 thousand tons** of CO<sub>2</sub> avoided



#### Printing service<sup>(2)</sup>

**81 million** pages printed

**5.8 tons** of CO<sub>2</sub> produced

The printing service, based on new generation printer models set up for a more eco-sustainable use, continues to be in operation at all Group offices. Together with a more rational use of prints and digitalization, the service

has made it possible to reduce paper consumption over the years and, in turn, reduce the impact on the environment.

(1) More than 7.3 million meetings in 2021, almost 5.1 million in 2020 and 244 thousand in 2019, respectively avoiding contributing 5875 thousand metric tons of CO<sub>2</sub> in 2021, 444.7 thousand in 2020 and 242.1 thousand in 2019.  
(2) 83 million pages printed in 2021, 88 million in 2020 and 136 million in 2019, which respectively produced 6.5, 8.4 and 12.5 tons of CO<sub>2</sub>.



## PC Power Management – Italy<sup>(3)</sup>

**7.3 million** hours of use

**48.8 tons** of CO<sub>2</sub> produced

In 2022, we continued to monitor electricity consumption outside normal working hours<sup>(4)</sup> of the IT worksta-

tions (desktops, laptops, monitors) of our people working in Italy. This was measured thanks to a Microsoft function (System Center Configuration Manager) on the workstations, which can identify when a workstation is on and not being used. Following the analysis, specific awareness-raising initiatives were defined, aimed at reducing electricity consumption. Also this year, there has been a decrease in the hours of inactivity. This is thanks to both our awareness-raising activities on energy efficiency and to the new IT tools made available to our people during the Covid-19 pandemic, which enabled a reduction in emissions. The greater use of mobile devices has in fact made it possible to reduce the number of fixed devices in the Group's offices and, in turn, cut down the amount of time that devices are on outside working hours.



(3) 12 million hours of use in 2021, 18 million in 2020 and 32 million in 2019, which respectively produced 77.4, 159.6 and 321.1 tons of CO<sub>2</sub>.

(4) Monday-Friday (from 7pm to 7am); Saturday and Sunday. Monitoring is not carried out on servers and personal computers which, by their nature, must be operational at all times. Specifically, the indicator represents the amount of CO<sub>2</sub> associated with the electricity consumption of desktop computers, laptops and monitors, calculated after applying the average CO<sub>2</sub> emission value per unit of electricity generated (gCO<sub>2</sub>/kWh) in relation to the mix of sources present in Italy.

# Towards cyber-safe electrification

In the era of digital transformation, **cyber security** is taking on a key role in ensuring business operations.

Typical cyber-attack types have changed radically in recent years: the number has grown exponentially, as has their level of sophistication and impact, making it increasingly challenging to identify the source in a timely manner. Sector studies confirm that the perception of cyber risk is continuously growing. As compared to previous years, the causes for increased cyberattacks also include geopolitical tensions. In fact the conflict between Russia and Ukraine has increased attention about this issue. In particular, all state security agencies have warned public and private institutions about potential IT threats against critical infrastructures.

In 2022, many of the world's major attacks were carried out by leveraging the supply chain and through compromised third parties, which allowed attackers to target the primary target's customers, partners, and suppliers. This caused a sharp rise in the number of victims and attacks went increasingly undetected (the so-called "scale effect"). It is also interesting to observe that the majority of the attacks in the energy sector include ransomware, an increasingly used method that causes the exfiltration (unauthorized copy, transfer or recovery) of the victim's data and its encryption, which gives the people responsible for the attack an additional lever for receiving payment of ransom.

It is also seen how the vulnerabilities detected in commonly used software products are continuously increasing and how they are taken advantage of with greater speed by cyber criminals. In particular, the zero-day type vulnerabilities represent a large risk because they are discovered before software developers become aware of them and before they can release a patch.

In a similar context of cyberwarfare, the only possible defense is given by processes and technologies, which have been developed and evolved over time to mitigate the IT risk. On top of constantly applying the cyber security strategy, we have set out special measures, also in order to reinforce the "cyber security posture",<sup>(5)</sup> aware of the fact that overall, cyber risks can become a risk of ecosystemic proportions within the broader context of the complex and interconnected electricity industry. For example, a large-scale blackout in this scenario would have socio-economic ramifications throughout the population, companies and key institutions.

The key elements are therefore sharing and cooperation on cyber security issues with participation among

all stakeholders including companies, legal institutions, supervisory bodies, suppliers, customers, and employees.

## Policies and management models

In line with the needs of the energy industrial sector and with the Open Power strategic approach that characterizes it, we have adopted a systemic vision of cyber security issues, as well as a global strategy of analysis, prevention and management of cyber security events. The cyber security path to support the Group's digital transformation is based on creating, enhancing and adopting a security governance model, infrastructure and services in order to make full use of opportunities – including with the help of cutting-edge technologies – to boost the cyber resilience of our infrastructure and applications.

Since September 2016, the **Cyber Security** unit has been operating within Global Digital Solutions Function, reporting directly to the Chief Information Officer (CIO) who works under the Group Chief Information Security Officer (CISO). The unit is committed to ensuring the governance, direction and control of cyber security issues, establishing strategy, policies and guidelines in compliance with national and international regulations, engineering support for the protection of the Group's environments, monitoring of the risk posture through checks based on processes and technology, as well as monitoring and implementing compliance requirements tied to cyber security regulations, and adopting technical solutions and procedures to mitigate any weaknesses detected. The unit works synergically with the Business Lines and with the technical units responsible for systems design and management, thanks to the Cyber Security Risk Managers and Cyber Security Response Managers. CISO and the Cyber Security Risk Managers also make up the Cyber Security Operating Committee, which aims to evaluate cyber risks across the business and determine the risk acceptance criteria based on the Group's risk posture. The Cyber Security Committee, chaired by the Group's CEO and made up of his/her front lines, approves the cyber security strategy and periodically checks its progress. As determined at the meeting of April 2021, the Committee meets every six months. Two meetings were held in 2022 (May and October).

In 2022, the Control and Risk Committee held 3 meetings with the objective of addressing in more depth the aspects related to organizational procedures (on a technical and governance level), the crisis management process,

(5) "Cyber Security Posture" refers to the state of society's adoption of cyber security principles.

the CERT operating model and the relative processes that characterize them.

All areas actively participate in implementing the cyber security strategy by way of an integrated operating plan in line with the Group's objectives. Moreover, cyber security strategy and initiatives are a key focus area for the principal executive and control bodies (e.g. Board of Directors, Supervisory Bodies, etc.) for all the legal entities and Countries where the Group is present.

Moreover, the Group policy adopted in 2017 (the “**Cyber Security Framework**”) addresses the principles and operational processes that support a global strategy of risk analysis, prevention and management.

This Framework, based on a ‘systemic’ vision applies across the more traditional Information Technology (IT) sector, as well as to Operational Technology (OT) environments tied to the industrial world and the Internet of Things (IoT). In applying this Framework, the Cyber Security Risk Management method was established in 2017. The method is applicable to all IT, OT and IoT environments and includes all of the phases required to carry out a risk analysis and define the related mitigation plan, in line with the stated cyber security goals. To balance the advantages obtained by the operation and use of IT/OT/IoT systems with the risk that can potentially derive from them, well-informed, risk-based decisions are of fundamental importance.

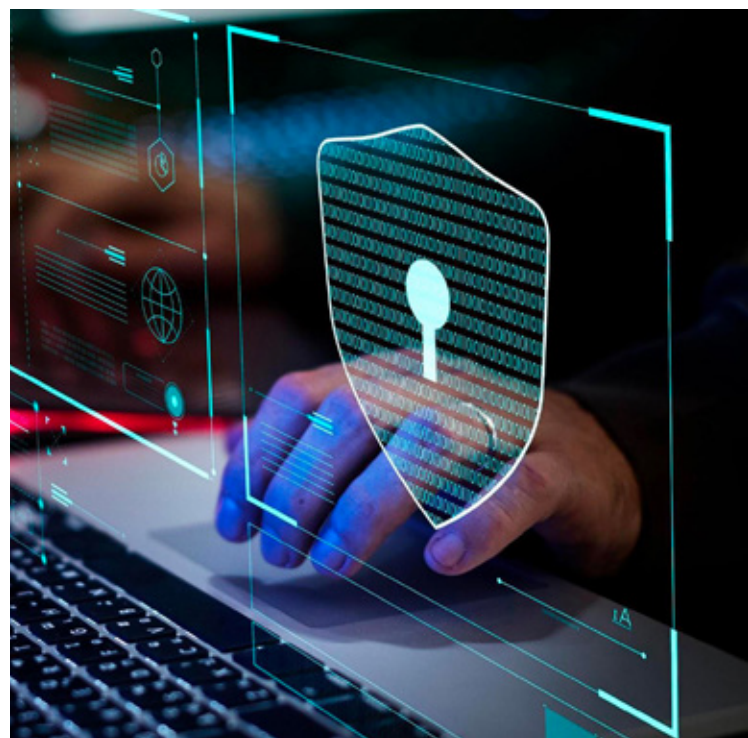
Enel has also created a “**Cyber Emergency Readiness Team**” (CERT) to ensure proactive management and responses to cyber incidents, while also encouraging collaboration and exchanges of information within a network of accredited international partners. Having entered into an agreement with the US national CERT, there are now 9 accreditations with: Romania, Italy, Chile, Argentina, Peru, Colombia, Brazil, Spain, and the US. Enel's CERT is also part of Trusted Introducer – a service that includes 464 CERTs in 72 countries. In September 2018 Enel also joined FIRST (Forum of Incident Response and Security Teams), which is the largest and most widespread community in the sector, with 602 members spread across 99 countries. Furthermore, in 2022 the CERT operating model was strengthened with the creation of an internal team of security analysts. The new operating model has exceeded the previous one, implementing the internalization of the incident monitoring and management activities and therefore, strengthening the activities 24x7.

## Definition of the IT security strategy

The cyber security strategy covers setting objectives and priorities to direct and coordinate investment initiatives for the Group as a whole, and to ensure adherence to cyber security policies, setting targets, management reporting, and constant monitoring of ongoing security activities.

This process is guided by CISO and uses close integration and synergy with the various business areas, which communicate their needs, analyze opportunities, manage any criticalities, and make proposals for initiatives.

Devising strategies is an iterative activity based on sharing and consolidation of the Group's risk posture target. The various actors involved analyze the options and potential initiatives within their respective business areas in order to assess the feasibility, guarantee consensus, and the necessary funds. The Cyber Security unit guides the process and, together with the other key players, gradually consolidates aspects such as future scenario, objectives, and possible strategic initiatives in a cyber security strategy proposal document, with a high-level budget estimate and prioritization.





## Cyber security incident management

The multiplicity and complexity of the areas in which we operate (data, industry, and people) and of the technological components (e.g. business critical systems such as SCADA – Supervisory Control and Data Acquisition, smart grids and smart meters) increasingly integrated in the Group's digital life, have made it necessary to configure a structured cyber security system. This leads to the need for a cyber defense model based on a systemic vision that integrates the IT sector (starting from the cloud down to the data center and mobile phone), the OT (everything concerning industrial sector, such as generation plant remote control) and the IoT (extension of communication and artificial intelligence to the world of things).

Through the monitoring systems, CERT collects 3 billion events every day relating to the company's assets from 7 thousand data sources, correlates them through automatic analysis, and produces a hundred "incidents" on average. The incidents are classified based on the Enel Cyber Impact Matrix (on a scale of 0 to 4), making use of the best events correlation capabilities thanks to the adoption of highly advanced services.

The vast majority of "incidents" are classified as **0/1**; these have no significant impact on Group systems and are automatically or semi-automatically intercepted and/or managed by the existing company defenses; this way they are able to prevent and/or mitigate the impact of potential cyber-attacks.

Incidents classified as **2/3/4** have a potential impact on the Group and are managed by CERT analysts, involving any affected stakeholders. Thanks to the protection services, every day, in 2022 **CERT intercepted on average 1.2 million**

**at risk e-mails, 57 viruses, 172 web portal attacks, and 1.3 million connections to harmful websites every day.**

In 2022 Enel CERT responded to: **175 cyber security incidents with impact level 2; 16 incidents with impact level 3; and 0 incidents with the highest impact level of 4.**

In the cases detected, to ensure an efficient and rapid response and minimize the impact on people, services and assets, all the relevant management procedures have been put in place.

Specifically, when a cyber security incident translates into a potential data breach, the necessary actions are taken immediately, in line with the Enel Group "**Personal Data Breach Management**" policy. Should a crisis situation arise that threatens the Enel Group's business continuity, assets, reputation and/or profitability, the appropriate actions are taken immediately, in line with the specific Group policy on "Critical events management".

Moreover, the "**IT Service Continuity Management**" policy formalizes a process to bring the risk affecting the availability of IT infrastructure down to an acceptable level, support business continuity requirements, and restore IT services based on the results deriving from a Business Impact Analysis when a severe interruption occurs, including when caused by an accident.

EDR (Endpoint Detection and Response) technology blocks violations by using innovative features and advanced paradigms not only to identify viruses and malware on endpoints, but also to detect suspicious sequences of technical events that could prove to be part of an attempted attack.

Detailed below is the number of cyber security events recorded in 2022.

	2022
Total number of cyber security breaches or other cyber security incidents <sup>(1)</sup>	0
Total amount of fines/sanctions paid related to cyber security breaches or other cyber security incidents	0
Total number of customers and employees impacted by data breaches affecting the Group	0
Total number of data breaches <sup>(2)</sup>	0

(1) The value reported for the KPI "Total number of cyber security breaches or other cyber security incidents" refers to Level 4 incidents.

(2) The KPI "Total number of data breaches" refers to the number of events that occurred as a result of a cyber security incident (i.e. the number reported does not include any disclosures occurring as a result of non-digital incidents).

Furthermore, in order to boost our capacity to prevent, react to and manage incidents, some **cyber exercises** simulating a real attack were carried out, involving staff working in the production environments. At the end of each exercise, reports were produced containing details of the actions taken during the simulation, to assess – with a view to

continuous improvement – the quality and completeness of the materials provided to help with decision-making, the execution times for each phase, and how well the procedures had been followed. In 2022, in particular, 50 cyber exercises were carried out in industrial environments in 11 Countries where the Group is present.



## Main projects and initiatives

All cyber security projects, programs, and initiatives are designed to avoid, mitigate or remediate cyber security

risks for the entire Group. As a result, all activities are managed with a risk-based approach following the security by design principle to ensure a continuous due diligence process that also includes self-assurance activities.

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## CERT – RISK MONITORING EXTENSION

**“CERT – Risk Monitoring extension”.** CERT uses emergency technologies such as SOAR (Security Orchestration, Automation and Response) and machine learning to support Big Data, which make it possible to automate and streamline incident management activities and make use of improved visibility of cyber threats, increasing efficiency in managing new ones and the related investigations. In particular, thanks to the SOAR system, through the definition of operating flows it is possible to automate repetitive tasks, whereas through machine learning, a branch of ar-

tificial intelligence, it is possible to learn or improve detection capacities based on available data.

These technologies make it possible to consistently accelerate, enrich and trace the necessary activities during the analysis and management phase of an incident, providing considerable support to the analyst who can therefore parallelize and concentrate on more complex tasks that require human intervention.

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## MULTI-FACTOR AUTHENTICATION (MFA)

**“Multi Factor Authentication (MFA)”** is a cloud solution used to enforce the identification method for users during the authentication procedure. Adopting MFA enables a person accessing a system to identify himself/herself through a second authentication factor via SMS or an app installed on his/her smartphone. The MFA solution is in

line with the regulatory framework and is strongly recommended to counter emerging threats of theft of credentials, including those using social engineering techniques (e.g., phishing or potential user behavior not in line with policy). The adoption of the solution is operational for all users.

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## ASSURANCE CHECKS

**Assurance checks (Ethical Hacking, Vulnerability Assessment).** These activities are carried out on an ongoing basis both using automated tools and manually, to assess and quantify any weaknesses in IT, OT and IoT environments (applications, systems, IoT devices, architectures and/or in-

frastructures). 1,587 checks were performed in 2022. Following these checks, we can identify the best measures to eliminate or mitigate the detected vulnerabilities or threats and, in turn, any associated harmful exploits.

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## DMARC “E-MAIL FRAUD DEFENSE”

**DMARC “E-mail Fraud Defense”.** This solution completes the application map covering threats of spam, phishing and fraud attempts. Thanks to this, all of Enel’s e-mail domains are configured to permit blocking e-mails with an

incorrect sender address that exploits the Group brand. Deployment took place across the entire perimeter, thereby providing complete coverage of the domains.

## Collaborations with external bodies and agencies

In line with the Open Power approach, we believe that networking with external entities and organizations is a key element in the cyber security strategy, to share best practices and operational models, develop and strengthen information sharing channels, and help establish standards and regulations. In 2022, we provided feedback in public consultations to help draw up cyber security regulations, including by drafting legislations, promoting a harmonization of the current regulatory landscape in this area, and implementing a risk-based approach and the principle of security by design. Collaborations carried out also aim to construct more homogeneous structures for defining the taxonomy of security incidents, more organic criteria for their classification, as well as more harmonious notification procedures in European contexts. These collaborations are also guided by a complex regulatory landscape in the cyber security area, both in terms of an increase in standards produced as well as in terms of complexity, mainly due to the new regulations that are added every year, in addition to the heterogeneity of requirements and the methods of adoption.

In this sense, the process aimed at regulatory compliance can have a strong impact both on company processes as well as on the technological infrastructure, requiring a major effort in terms of management and monitoring.

Moreover, taking into account the context of regulatory compliance, **no cases of non-compliance with standards or cyber security regulations were detected in 2022.**

In recent years, a solid network has been established and developed by interacting with key stakeholders in the energy sector such as ANEEL (Agência Nacional de Energia Elétrica) and ONS (Operador Nacional do Sistema Elétrico) in Brazil and CNO (Consejo Nacional de Operación) in Colombia. We took part, for example, in the Confindustria Digitale team, which aims to help develop the Italian digital ecosystem, we participated in the working groups of the World Economic Forum, and contributed in recent years to the publication of several reports including "Cyber Resilience in the Electricity Ecosystem: Securing the Value Chain" and "Cyber Resilience in the Electricity Industry: Analysis and Recommendations on Regulatory Practices for the Public and Private Sectors".

Furthermore, Enel X, Gridspertise and Enel Grids have reached an important goal in the area of IT security by obtaining **ISO 27001 certification**. This important result certifies some processes that have an IT security management system – policies, procedures and guidelines for providing customers with trusted products and services.

## Training and information

The "**Cyber Security Awareness Program**" has become a constant and ongoing initiative at Group level; it used to disseminate our cyber security culture and raise awareness of threats and attacks that exploit the human vector. This program contributes in fact to digitalization, because it creates a culture of IT security, changes the behavior of people in order to reduce the cyber risk, develops technical IT security skills and makes people the first line of company defense. It also uses various communication channels and dissemination tools, including both communication campaigns as well as dedicated training initiatives for clusters of people. Specifically, 19 knowledge sharing events were held in 2022 on a Global level on the issues of cyber security and various initiatives were held also on a local level. For example, within the scope of these initiatives, Policy no. 1097 "Rules of Behavior for Digital People" was integrated with a quick guide, available in all the main languages adopted in the Group (5 different languages) targeted towards facilitating a quick consultation of topics for directing the correct use of digital resources. Bulletins and news were also created and disseminated through the company intranet and documents were made available to stay always up to date on these issues. All of this was made possible also thanks to the awareness platform "TheRedPill", the Group platform through which training content and modules are delivered in order to strengthen the IT security culture, allowing the continuous improvement of training initiatives and the performance of simulated phishing campaigns. Its objective is to raise awareness of the main cyber security issues, address any upskilling and reskilling needs and teach how to defend against possible attacks. Four global simulated phishing campaigns, a knowledge assessment and an awareness campaign were launched in 2021 – the year the platform was updated. During 2022, additional initiatives were launched on a global level, such as the dissemination of the "Antiphishing Kit" module, or the launch of the "People Cyber Empowerment Journey", or the program that aims to make Enel people the first line of IT defense. Furthermore, 6 simulated phishing campaigns, 3 awareness campaigns related to digital identity protection, data and device protection, and 19 events targeted to disseminating the culture of IT security were designed and launched (so-called "knowledge sharing").

In addition to the dissemination and communication initiatives, during 2022 the simulated phishing campaigns targeted toward the entire Enel population continued, in order to train employees to recognize malicious e-mails. Following the results obtained by the phishing campaigns, specific initiatives were created to increase employee sensitivity and awareness (for example, specific infographics, instructions and guidelines were shared with those who were not able to recognize a phishing e-mail).

The **Open Tech Journey** project also continued to provide access to training courses focused on technological topics, promoting internal skills to spread awareness of strategic topics and manage upskilling and reskilling needs. This was the background to the creation of the **Cyber School**, which delivered seven courses on the main cyber security topics. All the courses were engineered and made available to the entire Enel population in e-learning mode, in order to reach multi-specialistic skills in the various companies of the Group.

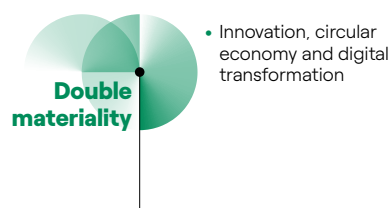


# Circular economy

## Material topics (I level)

## Plan

## SDG



Below the 2022 results related to the targets of the previous 2022–2024 Sustainability Plan, the resulting progress and the targets of the 2023–2025 Sustainability Plan, which may be redefined, added to, or surpassed with respect to the previous Plan.

Circularity along the entire value chain

SDG	Activities	2022 results	Progress	2023–2025 targets	Tag
8 12 13	Circularity improvement Q	56%	● ● ●	78% in 2025 92% in 2030	I E
8 12 13	Economic CirculAbility (EBITDA/ resource consumption) Q	N.A.	N.A.	x1.5 in 2025 compared to the baseline year 2020 x2 in 2030 compared to the baseline year 2020	+ I E
7 9 12 13	Valorization of obsolete spare parts, equipment and scrap coming from the demolition of thermal power plants and promoting the adoption of circular business models Q	22 million euros of revenues generated by Reselling and Recycling activities	● ● ●	53 million euros of revenues generated from Reselling and Recycling activities in 2024 <sup>(1)</sup>	I E

## Read more

**The Circularity improvement KPI** measures the reduction in the consumption of fuel and materials of the Group's power fleet throughout their life cycle, compared to 2015.

**The "Economic CirculAbility" KPI** considers the Group's overall EBITDA (euros) and compares it with the amount of resources consumed, both fuel and raw materials, by the different business activities (tons).

The target on the **Valorization of obsolete of spare parts, equipment and scrap coming from the demolition of thermal power plants** involves the adoption of several initiatives, including the **Spare parts and equipment New Life** project, which aims to give new life to components in the warehouses, equipment of decommissioned coal-fired power plants and obsolete materials from all the other thermal power plants, allowing environmental and economic benefits.

(1) Reselling and Recycling activities carried out on the basis of the progress of demolition work and scrap market value.

## Goals

## Progress

I Industrial E Environmental S Social  
G Governance T Technological



New



Redefined



Outdated



Not in line



In line



Achieved

N.A. = not applicable



SDG	Activities	2022 results	Progress	2023-2025 targets	Tag
12	Definition and application of suitable industrial and financial circularity metrics to support and enhance circular economy activities, engaging the respective business areas	A new KPI Economic CirculAbility® has been developed, measuring circularity at Group level by comparing the value generated (€ EBITDA) against the consumption of resources (tons) needed to generate it  <i>The target is considered outdated as it has been achieved</i>	● ● ●		I E
12	Strategic circular economy projects to reduce raw materials consumption	<b>13</b> projects Among the main initiatives underway: <ul style="list-style-type: none"> <li>• new technologies for storage (e.g. gravitational storage)</li> <li>• new materials for wind power generation (e.g. wood-based materials for towers)</li> <li>• Wind New Life for wind turbine blades</li> <li>• battery lifetime extension</li> <li>• circular meter scale-up</li> </ul> <i>The target is considered outdated on the basis of a new methodological approach<sup>(2)</sup></i>	● ● ●		I E
12 17	Strengthening of partnerships and collaborations with cities and other public entities (e.g. regions, metropolitan areas, etc.) on circular economy	<b>15</b> cities/public entities involved in partnerships and collaborations in Argentina, Chile, Italy, Spain, North America and Peru  <i>The target is considered outdated on the basis of a new methodological approach<sup>(2)</sup></i>	● ● ●		E G
12	Engagement of external actors to promote the dissemination and knowledge of the circular economy through physical/virtual events on the topic, training activities and best practice sharing	<b>2,000</b> external participants engaged through webinars, workshops and other events on circular economy  <i>The target is considered outdated on the basis of a new methodological approach<sup>(2)</sup></i>	● ● ●		I E S

(2) In our path to measure circularity at the aggregate Group level, the focus will be on measuring and identifying the overall impacts of circular activities with respect to reducing resource consumption, with KPIs such as Economic CirculAbility.



# Circular economy





## Circular economy

3-3 | 301-2 |

For Enel, the circular economy is a strategic lever to support the decarbonization strategy and the path towards a fair and inclusive transition, with the aim of progressively applying it to the entire business model in order to make it increasingly sustainable, resilient and competitive.

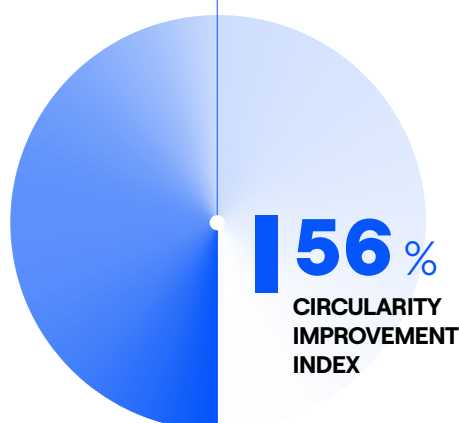
The achievement of increasingly ambitious decarbonization targets in fact requires a profound transformation of the energy system, while at the same time entailing a growing need for raw materials with partly different requirements to those of the pre-existing energy system: to achieve the IEA's Net-Zero Emission (NZE) scenario, it is estimated that minerals will be extracted up to six times more by 2050 than today.

In our energy transition process, we have from the outset adopted an integrated approach that includes, on the one hand, the development of energy generation from renewable sources, and the consequent abandonment of fossil fuels, and on the other hand, the adoption of a circular approach in the management of assets for

the generation and distribution of electricity, both those at the end of their life and those in operation, thus embarking on a path to reduce the emissions associated with both power generation from fossil fuels and the use of non-renewable materials.

It is a circular model that allows us to limit our dependence on raw materials as much as possible, while ensuring the following types of competitiveness and sustainability:

- environmental, by reducing the consumption of new resources and waste produced at the end of the cycle;
- social, thanks to the rethinking of the business model, based on the leveraging of products and services and as such more tied to specific and local skills and professional resources and less tied to automation;
- economic, thanks to the progressive reduction of procurement costs and the definition of new product-as-a-service models, thus reducing procurement risks and related uncertainties related to supply chains and external shocks.



## Rethinking the raw materials cycle for a fair transition

In 2020, Enel launched a working group involving all areas of the Company to develop and update the raw materials strategy, with particular reference to so-called critical raw materials,<sup>(1)</sup> identify priority areas on which to act and implement solutions to manage the associated impacts and risks. In particular, the Working Group focuses on specific focuses, starting with the identification of raw material requirements for the Group's various activities, the identification of environmental and social impacts along the entire value chain, with particular reference to respect for human rights, the assessment of geopolitical risks (with potential disruptions to supply chains) and economic risks. The goal is the identification of priority areas of intervention in order to evaluate new solutions to mitigate risks and

impacts related to materials and related technologies that use them, as well as the definition of specific targets for each raw materials supply chain and related action plan, leveraging the innovation ecosystem (co-innovation with suppliers, start-ups, etc.), prioritization ranking of raw materials and *ad hoc* plans for the most relevant ones, geopolitical, commodities, environmental and social risk reduction strategies on new technologies and business models. All these focus areas are carried out by comparing and examining the best practices of each industrial sector, monitoring and analyzing the market trends associated with raw materials for key technological sectors (wind, solar, batteries, networks, etc.) and by collaborating regularly with all relevant stakeholders.

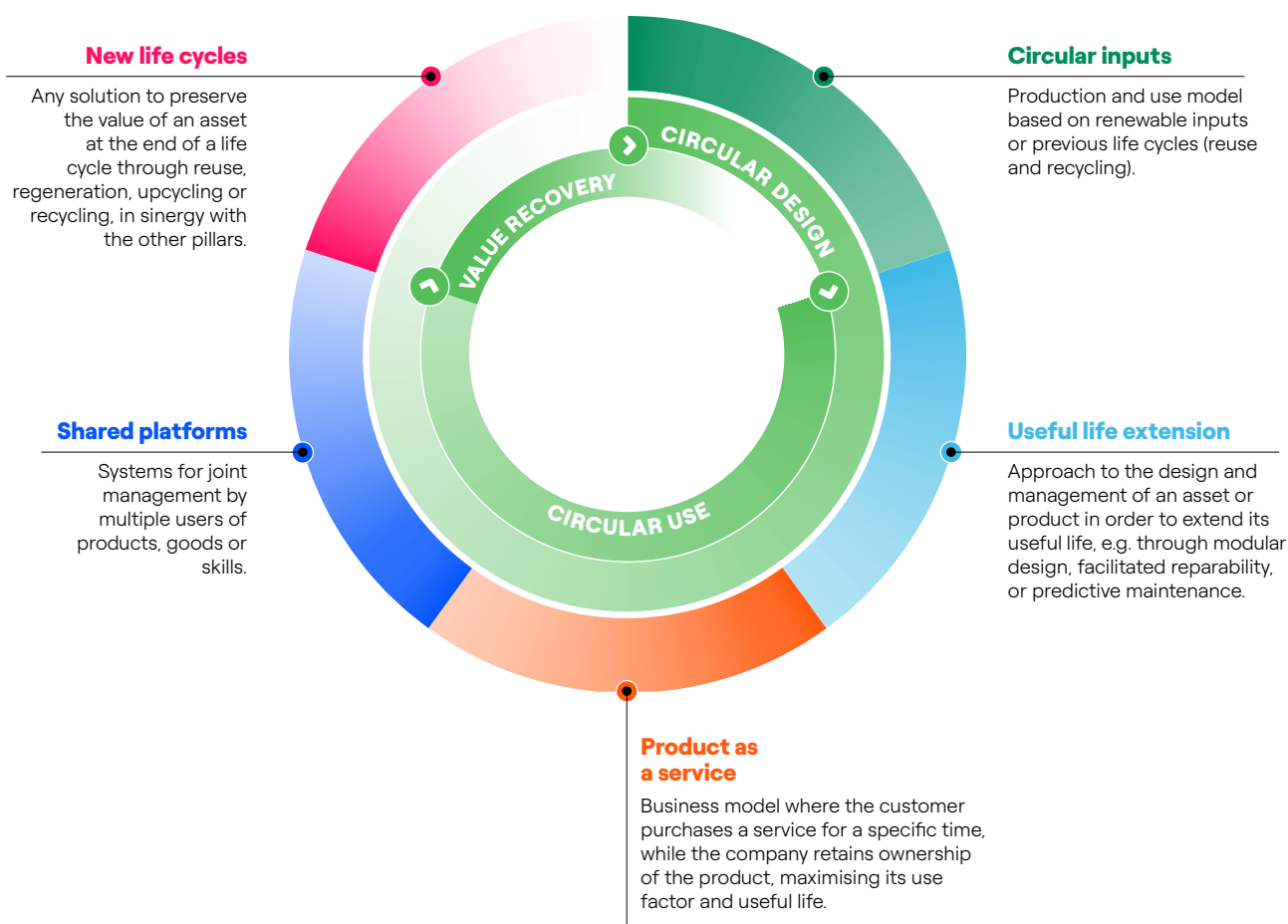
## Enel's circular approach

The Group's circular vision is based on five pillars, which define the reference business models for the entire life-cycle of our assets and materials, and which act through three main levers: **circular design**, starting with the choice of input materials and design oriented towards life extension, up to the maximization of the use factor of the asset

and its value at the end of its life; **how the asset is used** (circular use), which includes life extension, the use of sharing platforms, the product as a service; and **closing cycles** (value recovery), through remanufacturing and recycling and reuse of recovered materials as a new circular input.



(1) For example, according to the list in the "European Critical Raw Materials Act" 2023, raw materials such as lithium and phosphorus.



The implementation of the Group's circular approach is based on the following main aspects:

- design and non-waste management: choices made at the design stage strongly influence subsequent stages by enabling efficient management of the asset during its useful life and maximizing its recoverable value at the end of its life;
- application in the core business: for change to be meaningful, it must *first* take place in the core businesses in order to make the Company circular;
- economic sustainability: for solutions to be developed on an industrial scale, they must also be economically competitive;
- measurement: only a quantitative approach linked to physical and economic indicators and challenging targets makes it possible to measure the effectiveness of the actions implemented and to guide business choices;
- collaboration: in order to implement a circular solution, collaboration both within one's own sector, with suppliers, customers and all players in the value chain, and with other sectors, as well as collaboration with the innovation ecosystem (start-ups, universities, etc.) and institutions, is crucial;
- innovation: innovation plays a fundamental role, not only technological innovation, but also innovation in business models, regulations, and modes of collaboration, for the realization of a new economic model. Innovative materials, artificial intelligence to enable predictive maintenance and the use of additive manufacturing to repair plant components are some of the technologies we are using to make our assets more circular. Start-ups, with their contribution of innovation and technology, play an indispensable driving role in the circular model ([see the chapter "Innovation"](#)).

## Main circularity projects

We are developing several projects mainly related to new assets (wind, solar, BESS, and grid development) and up-coming products/services for end customers, with the aim of reducing the consumption of raw materials, especially critical ones.

The initiatives focus on three of the five pillars of the model:

- **Circular design – use of circular inputs**

Several solutions to reduce raw material consumption use circular inputs i.e., from previous life cycles (use of recycled plastic for smart meters and charging infrastructure for electric vehicles or recycled aluminum for street lighting systems) or by identifying new solutions that use alternative and more sustainable materials (wooden towers for wind turbines, innovative wind blades made of fabric, or hybrid towers in which the base and first sections are replaced by a concrete pedestal that will be made directly on site, significantly reducing the use of steel). Another project in this sense is the partnership with Vulcan Energy to develop projects for geothermal lithium extraction.

- **Circular use – useful life extension**






Reducing the need for new assets also reduces the associated material requirements. Among the various initiatives implemented are the application of machine learning techniques for predictive maintenance in pow-

er generation and distribution plants or advanced repair technologies such as additive manufacturing.

- **Value recovery – identification of new life cycles**

When an asset reaches the end of its useful life, the objective is to identify new life cycles through solutions that maximize the amount of recoverable materials in order to reinsert them into the production cycle. All the Group's different Business Lines are actively involved in major asset recycling projects: from PV with the Photorama project, which aims to recycle 95% of materials, to sale for scrap metal recovery, to the recycling of power line poles, reusing the recovered material for new poles, to the construction in Spain of a battery recycling plant with a target capacity of 8.000 tons/year, up to a circular management of the Group's decommissioned IT assets by giving them to employees, selling them to third parties or donating them for social purposes (see the chapter "Digitalization"). In addition, we are evaluating new models for the enhancement of secondary raw materials: for example, in Spain we are testing collaboration with plants authorized to process and recover scrap metal, in order to obtain secondary raw materials to be fed into new production cycles.

Here are some examples of projects implemented:

	 Storage	 Wind	 Solar	 Grid	 Customer solutions	Cross	
CIRCULAR DESIGN	Circular inputs	Geothermal lithium (Vulcan Energy)	Wind tower with wooden materials (3SUN)	Solar panels with recycled plastic	Circular Smart Meter with recycled plastic	Recycled plastic for EV charging stations	Materials passport
		BESS – New technologies for storage Thermal Energy Storage	Textile materials for wind turbine blades	Cell with copper replacing the silver (3SUN)		Recycled aluminum for public lighting systems	Sustainability K for procurement
		New storage technologies for storage: gravitational storage	Hybrid wind towers		Redesign of grid asset		
CIRCULAR USE	Useful life extension	2 <sup>nd</sup> life Battery Melilla (Spain)					Predictive maintenance
		Project PIONEER (Italy)					Repair through additive manufacturing
		Predicting failures software (IPCEI)					
VALUE RECOVERY	New life cycles	EV batteries recycling	Wind turbine blades recycling (Wind New Life)	Solar panel recycling (Photorama)	Grid mining		Sale of natural gas
							New models for the enhancement of secondary raw materials from scrap metal



Enel's Circular Procurement strategy aims to improve the circularity of purchased products and services through the definition of metrics (such as the EPD system, Environmental Product Declaration) to assess the whole-life environmental impacts related to the material and energy flows of the strategic product categories purchased, co-innovation with suppliers, and the use of tender requirements and rewarding factors to incentivize suppliers to offer in-

creasingly circular products. In addition, the Enel Group is developing tools and strategies to improve the tracking of materials along the value chain and to push suppliers to make efficient use of materials by focusing on recycling and recovery at the end of life and to increase transparency. See the chapter "Sustainable supply chain" for more details.

## Technological innovation in solar panel production (3SUN)

The new HJT (Hetero Junction Technology) solar module that will be produced in 2024 in the 3SUN Gigafactory in Catania, Italy, is a latest-generation double-sided photovoltaic module that guarantees less degradation of photovoltaic modules and extends their service life to more than 30 years. Due to its high efficiency (around 24%) resulting from the possibility of using larger and thinner wafers, it will already use a reduced amount of silicon for peak power. In addition, as a further evolution, a new HJT Tandem panel is being developed that will significantly exceed the state of the art in photovoltaic cells in terms of efficiency, reaching more than 30%; this will increase the efficiency of a conventional module by 15-20% and allow more energy to be generated, with the same number of modules installed, thus requiring less material such as polysilicon. In addition, technologies are being developed to introduce recycled materials into the production process (such as replacing panel glass with recycled plastic) and the possibility of replacing the silver (a material with a high environmental impact used in the metallization process of the cell) with copper is being evaluated.



**Andrea Tecci**

Ecosystem and Circular Economy CC - EGP&TGx

*"At 3SUN we are working to increasingly improve the circularity of the PV module and minimize the consumption of raw materials, working on its entire life cycle: using circular materials, improving its productivity, extending its service life and finally maximizing the quantity of material that can be recovered at the end of its service life. The aim of all of this is to make this technology increasingly sustainable and competitive."*

## BESS – New technologies for storage



Again with the aim of promoting the development of new, more sustainable materials and processes, a first innovative commercial alternative to chemical storage based on gravity technology will be installed. The plant will be commissioned in the United States in 2024. Specifically, the storage system will use excess electricity from the grid to move large blocks of cement material.

Another alternative solution that Enel installed in Italy at the end of 2022 is **Thermal Energy Storage (TES)** based on solid material and using rocks with high thermal capacity to retain thermal energy from the process fluid. Using common fragmented rocks, the TES system has the capacity to store up to 24 MWh of clean heat at a temperature of around 500 °C for at least 5 hours.

All materials used (rocks, pipes and casings) are to be considered environmentally sustainable as there are no chemical compounds or critical or flammable materials.



## Redesign of grid asset



Several initiatives are underway within Enel Grids, which also leverage an innovation ecosystem to improve the circularity of different assets through design and the use of new materials.

The search for solutions with a lower environmental impact for distribution poles has also led Enel Grids to explore alternative materials to conventional ones; in addition to the use of recycled aggregates for the manufacture of new poles, an analysis is underway for the use of wood poles free of toxic impregnating agents with a design oriented towards total recyclability at the end of their life. Alternative solutions to conventional construction methods are also being tested, with 3D printing and for pile foundations, in order to reduce installation times and material consumption (see the chapter “Innovation”).

Also thanks to the Open Innovability® platform, challenges

were launched in 2022 to gather a new concept for the design of primary and secondary substations to promote their harmonious landscaping, the adoption of circular solutions in terms of both the materials used and the sharing of space with the community.

### Circular Smart Meter – Closed loop recycling

From 2020, production of the new Circular Smart Meter began through a circular model and a pathway to redesign the value chain of the electronic meter, using material from discarded meters to make the new ones. About 2 million circular meters were produced in 2022. 48% by weight of the new meters are reclaimed materials: end-of-life recyclability (plastic, steel and other metals) is estimated at 79% by weight. Over its lifetime (15 years), each circular smart meter saves 7 kg of CO<sub>2</sub> and 1.1 kg of virgin material.

## Circular EV charging stations



We have been working for several years on the products in the Enel X Way portfolio by revising their design to improve their circularity. In fact, our main AC (alternating current) charging products use recycled polycarbonate as their main structural material (100% for JuiceBoxes and 75% for JuicePoles). For the JuicePole, AC public charging stations

installed in 2022 alone amounted to 3,000 new points. The use of materials was also optimized, reducing the overall weight of the product by around 32%. Another example of a circular solution we have implemented is the recovery through remanufacturing of end-of-life components to be reused as spare parts.

Enel is developing several solutions to extend the life of batteries, including the development by Enel X Enel X in the framework of an IPCEI project for artificial intelligence tools for predicting failures, anomalies and for modelling the degradation of lithium-ion batteries in order to extend their life and increase their reliability, optimizing operating and maintenance activity (project completion expected by 2023). A further strategy to extend the life of batter-

ies from the automotive sector is to reuse them “second life” solutions such as stationary storage systems.. Enel has developed a first solution of this type in Melilla (4 MW/1.7 MWh storage plant), realized through the reuse of about 90 batteries, and is completing another one with a nominal capacity of 2.5/10 MWh as part of the PIONEER (airPort sustainability secONd lifE battEry stoRage) project with Aeroporti di Roma.

## “Wind New Life” project



The project proposes to develop a circular value chain to manage the end-of-life of wind turbine blades, through the development of two plants in Italy and Spain that will provide for the collection of the blades, their processing for production of second raw material and the reuse of the same for the production of high value-added components (building materials, sanitary and furnishing products, flooring, cabinets and electrical conduits). The Spanish plant, operational from 2025, will handle around 8,000 tons of material per year. In Italy, the aim is to manage around 3,000 of them by the second half of 2025.



## Grid Mining



With the aim of maximizing the contribution to decarbonization along the entire value chain, a **Grid Mining & Zero Waste** model has also been defined, which, by considering grid assets as a mine to be drawn from at the end of life, allows the recovery and market leveraging of precious metals and other materials and devices from obsolete distribution infrastructures. In this regard, to ensure a complete tracking of the materials contained in the network assets from the input phase of the value chain, we have developed and digitalized in our systems the “Digital Product Passport” (DPP) that allows us to have a clear and detailed picture of the different types and quantities of materials in use. The DPP allows not only for monitoring any materials considered critical, for which it might be useful to evaluate an alternative, but also for defining *ex ante* end-of-life reuse assumptions. In this regard, the End of Life Dashboard was developed as part of the Grid Mining strategy. Starting with reverse logistics information on the type and number of decommissioned grid assets, in close connection with the DPP, it gives us information on the decommissioned materials, their quantity and type, and the possible CO<sub>2</sub> savings related to their reuse as “second raw mate-

rial”. Having an integrated and digitalized tracking system along the entire value chain is the driving force toward the ambition to open our “mine” to the outside world as well, making it available to other companies or different sectors in order to involve their respective production chains and feed new markets for raw and secondary materials, promoting the development of the area and the saving of virgin materials, and creating new job opportunities related to waste material recovery initiatives while minimizing environmental impacts.

### The recycling of photovoltaic panels (PV Recycling)

As far as the end-of-life recovery of photovoltaic panels is concerned, Enel is collaborating in the Photorama project (European Horizon 2020 program), which aims to automate the process of dismantling solar panels and to identify a handling process suitable for the recovery of valuable materials (purity greater than 99.9%), reaching a recycling rate of 95%. This solution will improve the recovery process in terms of both recoverable quantity and quality of the recovered material.



# Circular cities and territories

Cities generate around 70% of global CO<sub>2</sub> emissions, accounting for over 60% of resource use and produce 50% of global waste. Numbers are destined to grow, according to city population estimates. It is also necessary to maximize the effectiveness of interventions in the main areas of urban life, prioritizing each sector: renewable energy,

pedestrianization, public and private electrification and promotion of flexible working models. For construction, the focus is on the development of fuel-efficient solutions and the use of materials that emit less CO<sub>2</sub>. Enel has contributed to the development of this theme at the level of both vision and definition<sup>(2)</sup> and business solutions.

## Declaration of the Circular Cities of Latin America and the Caribbean

In October 2021, the “Declaration of Circular Cities of Latin America and the Caribbean” was launched at the Italy-Latin America and Caribbean Conference, during the event organized by Enel on Circular Cities. The initiative, realized by CEPAL (Economic Commission for Latin America and the Caribbean) and IILA (International Italo-Latin American Organization) with the aim of accelerating the development of the topic in Latin America through the definition

of a common vision, clear objectives and the sharing of best practices, aims to stimulate the adhesion of cities that desire to accelerate the transition towards a circular and more sustainable urban model. At present, the Declaration has already been signed by 8 cities on the Latin American continent (including Buenos Aires, Bogotá, Mexico City, Lima, Santiago) enhancing the centrality of the circular approach in local development policies.

## Sustainable infrastructure

In the grids sector, Enel has adopted a “Sustainable by design” model: designing an asset with sustainable materials, minimizing emissions and consumption during construction, and favoring life extension, without excluding

recovery at the end of life. The José Granda Primary Cabin in Lima, Peru, is one of the first construction sites where the “Sustainable by Design” approach was adopted. For its implementation, several circular solutions were adopted to minimize waste and maximize material recovery: 930m<sup>3</sup> of soil was reused and 520m<sup>3</sup> of demolition residues recycled.

## “Eco Enel – Brasile”

The Eco Enel project, launched in 2007, favors discounts on the electricity bill for customers who sort their waste and send it to specific collection and recycling points. The initiative was started in the State of Ceará and later extended to the States of Rio de Janeiro, Goiás and São Paulo. In 2015, it was included in the United Nations Development program (UNDP) report “Inclusive Markets in Brazil: Challenges and Opportunities of the Business Ecosystem” as one of the country’s 19 best practices. To date, the program has collected over 70,000 tons of waste and benefited around 300,000 customers annually.



(2) Enel has published four papers on the topic of circular cities, helping to develop the concept and addressing issues such as strategy development, reference models and governance. Below is the link to the latest edition: [https://www.enel.com/content/dam/enel-com/documenti/media/circular-cities\\_october2021.pdf](https://www.enel.com/content/dam/enel-com/documenti/media/circular-cities_october2021.pdf).



## PPE recycling

The first phase of a project to provide a more circular end-of-life for the Personal Protective Equipment of our

colleagues started in Italy in 2022. The material collected will be used for the manufacture of sound-absorbing panels and anti-trauma floors for use in our Operational Training Centers, but also in city playgrounds.

## Governance, metrics and targets of the circular economy

To ensure the implementation of the strategy and the organic nature of the circular transition, specific units have been created in Enel to support the Group's circular economy model. In particular, these areas are present in both the different Business Lines and in the different countries and regions, under the coordination of a Holding unit, so as to ensure a coordinated approach to strategies, share knowledge and experience, and foster the integration of circular economy principles into daily choices and activities. In particular, the Business Lines are redesigning or developing business models with a circular approach, while the units at country level are providing support locally to create new business opportunities and related sustainability initiatives in collaboration with the local ecosystem. Over the past year, the circular economy has been integrated with that of sustainability initiatives in order to ensure its strong synergy social issues as well as

to use the circular economy not only as a business theme but also as a model for fostering local development. In conjunction with the launch of its Circular Economy activities in 2015, Enel placed strong emphasis on **measuring circularity**. In the early stages, and in the absence of international reference methodologies covering the entire value chain, the Company developed its own circularity measurement model, the **CirculAbility Model®**. Based on the five pillars of the circular economy, this model represents the Group's vision on the subject matter, as it considers materials and energy in an integrated manner throughout all phases of the life of the asset. From this model, which represents the Group's conceptual framework, various indicators and applications have subsequently been developed in the various divisions, starting with supplier management and concluding with end customers.

## Measuring the circularity of products for our customers

At Enel X, two different tools for measuring the circularity of customers have been developed to support them on a path to improvement: the Circular Economy Product Score, to measure the circularity of products in the portfolio, and the Circular Economy Report, to measure the circularity of customer products or sites at corporate level. The metrics adopted were reviewed and improved with the support of various partners such as ICMQ and CESI to develop certification schemes subject to accreditation by Accredia:

**Circular Certification™ – Corporate** (accredited in 2022): consists of the analysis of the qualitative level of maturity and diffusion of circular economy principles in the corporate sphere, along the entire value chain, e.g. by assessing the circularity of various elements, such

as production inputs, design, procurement, corporate approach to the circular economy, etc.

**Circular Certification™ – Product** (under accreditation): developed by Enel X and ICMQ SpA to measure the level of product circularity.<sup>(3)</sup> It is based on the quantification of the circularity of material and energy contributions to the manufacture of products.

**Circular Certification™ – Energy Site** (accredited in 2022): consists of a quantitative analysis applied to a specific customer site (such as offices, warehouse, etc.) analyzing electrical and thermal energy sources, in terms of consumption and generation, energy use efficiency, energy management practices, etc.

To maximize the spread of these certifications, in December 2021 Enel X founded the CircularEvolution association with ICMQ and CESI, with the aim of supporting the most virtuous organizations in implementing circular models.

(3) The scheme refers to the International Standards ISO 14040 and ISO 14044 that describe how to apply life cycle analysis to products and services (Life Cycle Assessment or LCA).

Enel has always been among the pioneering companies when it comes to identifying and adopting quantitative indicators at the Group level, indicators that can clearly represent the transition process towards circularity in terms of decoupling its business activities and related resource consumption. On Capital Markets Day in 2020, Enel made public for the first time a KPI related to its electricity gen-

eration activities that measures the consumption of raw materials throughout the life of power plants, in relation to the energy generated. With respect to this KPI, Enel is committed to a significant reduction in resource consumption with the goal of improving its circularity by 92% by 2030 compared to 2015.

## Enel – first Company in the world to launch a circularity index with the aim of doubling it by 2030

We have developed a new indicator, the “Economic CirculAbility®”, which takes the Group’s overall EBITDA (in euros) and compares it with the amount of resources

consumed, both fuel and raw materials, throughout the value chain by the different business activities (expressed in tons). Enel presented this new KPI as part of the World Economic Forum 2023 in Davos, while committing to doubling this index by 2030 compared to 2020, thus halving the amount of resources consumed compared to EBITDA generated. Enel thus becomes the first Company in the world to adopt such a circularity indicator, and to set itself such an ambitious goal.

## The ecosystem of circularity: the development of a “circular” culture and new ways of collaboration

As part of our focus on the circular economy, in addition to business-related activities, we also focused on dissemination and knowledge, organizing specific webinars (5 in all) on the circular economy in 2022, each focusing on a different aspect such as the energy transition, new technologies and decarbonization, social impacts, biodiversity and communication. The sessions were attended by institutions and organizations strongly committed to the circular economy and there were over 1,500 internal and external participants.

The full development of a circular business also requires a rethinking of the ways in which it relates to the outside world, with a reassessment of the usual negotiation and contractual models and some of the individuals typical of a legal system hitherto dependent on an economically linear world. With the aim of identifying regulatory or negotiated barriers to the circularity of the Group’s activities, in 2021, and in conjunction with the legal and regulatory functions, a careful analysis of regulations and contracts was undertaken to identify innovative contractual solutions and standards to support circular business models and possibly

formulate regulatory proposals in different countries that could promote the development of the circular economy. The redesign of the economic model requires broad and deep change and continuous engagement with stakeholders, through the creation of an extended ecosystem (suppliers, customers, institutions, etc.) that is not limited to one’s own specific sector, but progressively includes counterparts from new sectors and areas with which synergies can be developed.

Also crucial is the development and sharing of knowledge and experience through as wide a network as possible, since the circular economy is a fundamentally new topic with vast unexplored potential.

To this end, Enel is part of a number of networks to which it actively contributes, including the European Raw Material Alliance (ERMA), the European Battery Alliance, the Global Battery Alliance, the Global Alliance for Sustainable Energy, Open Power Grids, the Capital Equipment Coalition, the Alliance for the Circular Economy and the Coalición de Economía Circular de América Latina y el Caribe.

## Alliance for the Circular Economy

The Alliance for the Circular Economy is the joint initiative of 12 Italian companies who aim to promote circularity in business strategies. The Alliance was established in 2017 with the signing of the Manifesto by “Made in Italy” companies, leaders in various manufacturing sectors. The Alliance intends to spearhead an overall evolution of the manufacturing context in a circular perspective that enhances the peculiarities of products “Made in Italy”, focusing on innovation, favoring the sharing of experiences and best practices and promoting a constant comparison with the entire ecosystem of stakeholders. The companies participating in the Alliance are interpreters of a transformative economy, of an innovative way of rethinking the entire production cycle, the use of resources and business models. The following are members of the Alliance: A2A, Aquafil, Cassa Depositi e Prestiti, CIRFOOD, Costa Crociere, Enel, Gruppo Hera, Intesa Sanpaolo, Gruppo Ferrovie dello Stato, Gruppo

Maire Tecnimont, Salvatore Ferragamo and Touring Club. During 2022, the Alliance published two guidelines documents on circular declarations and disclosures and on circular procurement. The first document developed a vademecum for the implementation of communication policies that adhere to the principles shared by the companies in the Alliance. The document includes a common definition of circular economy and a set of key principles that companies must consider when making circular statements and disclosures. The second document includes a set of criteria and tools aimed at including circularity criteria in procurement processes, a theoretical and organizational framework for implementing circular procurement processes, and a common questionnaire for supplier engagement. The incorporation of these principles and criteria into the activities of the Alliance companies is intended to lead to a more coherent implementation of the circular economy concept in the Italian business context, and may also set an example for small and medium-sized companies that wish to adopt them.

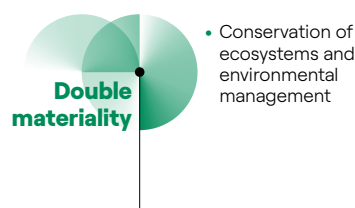


# Conservation of natural capital

## Material topics (I level)

## Plan

## SDG



Below the 2022 results related to the targets of the previous 2022–2024 Sustainability Plan, the resulting progress and the targets of the 2023–2025 Sustainability Plan, which may be redefined, added to, or surpassed with respect to the previous Plan.

SDG	Activities	2022 results	Progress	2023–2025 targets	Tag
12	Reduction of specific SO <sub>2</sub> emissions <sup>(1)</sup>	-78% vs 2017	●●●	<ul style="list-style-type: none"> <li>-81% in 2025 compared to 2017</li> <li>-85% in 2030 compared to 2017</li> </ul>	E
12	Reduction of specific NO <sub>x</sub> emissions <sup>(1)</sup>	-47% vs 2017	●●●	<ul style="list-style-type: none"> <li>-47% in 2025 compared to 2017</li> <li>-70% in 2030 compared to 2017</li> </ul>	E
12	Reduction of specific dust emissions <sup>(1)</sup>	-54% vs 2017	●●●	<ul style="list-style-type: none"> <li>-54% in 2025 compared to 2017</li> <li>-60% in 2030 compared to 2017</li> </ul>	E
6 12	Reduction of specific freshwater withdrawal <sup>(1)</sup>	-49% vs 2017	N.A.	<ul style="list-style-type: none"> <li>-56% in 2025 compared to 2017</li> <li>-65% in 2030 compared to 2017</li> </ul>	E
6 12	Reduction of specific water requirement	-47% vs 2017 <i>Target outdated as a new target on specific freshwater withdrawal has been defined</i>	●●●		
12	Reduction of waste products <sup>(1)</sup>	-49% vs 2017	●●●	-55% in 2030 compared to 2017	E
12	Overcompliance on waste management and end-of-life	N.A.	N.A.	Promoting and disseminating good practices on waste management and end-of-life	E
12	"ZERO Plastic" project – Reduction of single-use plastics at Enel Group sites	Reducing single-use plastics (office scope), compared to the new structure imposed by the pandemic, in the main countries of operation <ul style="list-style-type: none"> <li>Enel sites in Italy<sup>(2)</sup>: -85%</li> <li>Enel sites in Spain: -85%</li> </ul>	●●●	Reduction of single-use plastics (office scope), compared to new structure imposed by the pandemic <ul style="list-style-type: none"> <li>Enel sites in Italy<sup>(2)</sup>: -85% in 2025</li> <li>Enel sites in Spain: -85% in 2025</li> </ul>	E

(1) The values of the 2022 results, targets and 2017 baseline have been recalculated net of assets disposed as at December 31, 2022.

(2) Compared to the volume of single-use plastics used in 2018. Reduction calculated based on office occupancy and pandemic contingencies. Does not include offices with fewer than 20 employees.

### Goals

### Progress

I Industrial   E Environmental   S Social  
 G Governance   T Technological



New



Redefined



Outdated



Not in line




In line



Achieved

N.A. = not applicable



SDG	Activities	2022 results	Progress	2023–2025 targets	Tag
14 15	Biodiversity conservation	<ul style="list-style-type: none"> <li>Definition of a Group protocol to verify the target on No Net Loss for new projects and applications on pilot projects</li> <li>Definition of a catalog of Nature Based Solutions for urban biodiversity projects and applications</li> </ul>	● ● ●	<ul style="list-style-type: none"> <li>Beginning <b>No Net Loss</b> implementation on selected projects in high importance biodiversity areas starting from 2025</li> <li><b>No Net Loss</b> of biodiversity for new infrastructure by 2030</li> <li><b>No Net Deforestation</b> by 2030</li> <li><b>No Go</b> in UNESCO areas<sup>(3)</sup></li> </ul>	I E
		<p>Minimizing the impact of Enel assets on habitats and species included on the Red List of the International Union for Conservation of Nature (IUCN):</p> <ul style="list-style-type: none"> <li>improvement of company processes for risk assessment and biodiversity management on plants and assets (<b>100%</b> annual progress) <ul style="list-style-type: none"> <li>Group Biodiversity Guidelines implemented by Enel Grids and Enel X.</li> <li>high level risk and opportunity analysis at Group level</li> </ul> </li> <li>definition of Group indicators and implementation of the biodiversity performance monitoring process: <ul style="list-style-type: none"> <li><b>100%</b> revised KPIs</li> </ul> </li> <li>internal biodiversity protection awareness initiatives to reach 100% of the Enel population and increase the partnership framework and stakeholder engagement: <ul style="list-style-type: none"> <li>awareness campaign via webinars and videos to all Enel people; 60 global and local partnerships, including TNFD, Science Based Target Network, Business for Nature, membership of CSR Europe's Biodiversity &amp; Industry platform, WBCSD, TNF, World Economic Forum, Legambiente</li> </ul> </li> </ul>	● ● ●	<ul style="list-style-type: none"> <li><b>Nature-related risk/opportunity analysis:</b> incorporate the assessment of nature-related risks and opportunities into all business activities to align the strategy and risk management processes</li> <li><b>Nature's Footprint – Assessment metrics and restoration plan:</b> assessment of <b>100%</b> relevant assets and revision of nature's restoration Plan on infrastructure</li> <li><b>Biodiversity value awareness and new partnerships:</b> broaden and consolidate global and local scientific and industrial partnership to support the nature positive approach and its implementation</li> </ul>	E G
14 15	Environment Extra Checking on Site (ECoS)	<b>93</b> Environment ECoS carried out	● ● ●	<b>72</b> Environment ECoS in 2025	↻ E S
14 15	Environment Contractor Assessment (CA)	<b>300</b> Environment Contractor Assessments carried out  <i>Target outdated as the Contractor Assessment process is an established operational practice on the whole perimeter</i>	● ● ●		E S

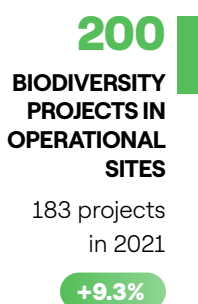
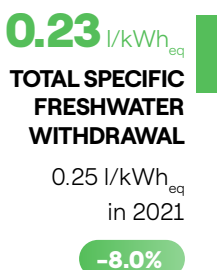
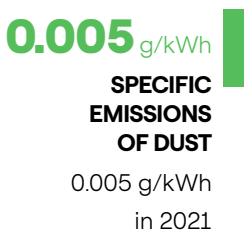
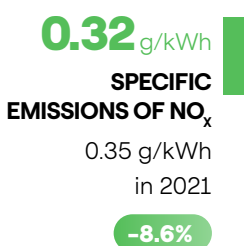
(3) In any case, Enel commits to comply to service obligation with the best adequate and feasible solutions.

# Conservation of natural capital



THE GIAL





## Natural capital conservation

Protecting natural capital and combating climate change are strategic factors and integrated into the planning, operation and development of our activities. Being an energy company, our operations depend on natural resources, but at the same time they have an impact on them. For this reason, we integrate risk and opportunity assessments into our decision-making processes and our Group governance, and we define specific targets for reducing impacts on nature, restoring habitats and sharing the benefits of ecosystem services with the communities with which we interact.

Recent years have marked a significant increase in global awareness of the need to strengthen the commitment to not only limiting climate change, but also tackling the loss of biodiversity and defining a process for restoring it. This commitment was relaunched by the **UN Convention on Biological Diversity (CBD)**, held at **COP 15** in December in Montreal, Canada. The conference resulted in the release of the **Kunming-Montreal Global Biodiversity Framework**, which defines strategic objectives for reducing biodiversity loss, restoring ecosystems and protecting the rights of indigenous peoples and local communities. The plan includes concrete measures to halt and reverse the loss of nature, including protecting **30% of the**

**planet** and restoring **30% of degraded ecosystems by 2030**. Enel actively participated in the COP 15 business forums and supported the approval of the target to require large companies to assess and report on risks, dependencies and impacts on biodiversity.

At European level, the Commission published the Biodiversity Strategy in 2020,<sup>(1)</sup> which involves the introduction of a series of targets that are binding on Member States; subsequently in 2022, the consultation on the proposed **Nature Restoration Law** was launched. The proposal aims to introduce area-based restoration measures for at least 20% of the EU's land and sea area by 2030, and all ecosystems in need of restoration by 2050, requiring Member States to formulate specific national plans. The proposal also includes specific objectives for urban ecosystems, agricultural and forest ecosystems. Enel is actively supporting the Commission's activities, promoting the synergy between the restoration of degraded areas and the development of renewable energies, as well as stimulating the participation of stakeholders. We have also proactively integrated EU principles into our Environmental<sup>(2)</sup> and Biodiversity<sup>(3)</sup> Policies in order to continuously improve the management of our assets and services.

- (1) COMM (2020) 380 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions.
- (2) Enel has had a Group environmental policy in place since 1996, updated in 2018 and again in 2022. The Enel Group's environmental policy covers the entire value chain, applying to: (i) all the production phases of every product and service, including distribution and logistics phases, as well as the management of related waste; (ii) each site and building; (iii) all relationships with external stakeholders; (iv) all mergers and acquisitions; (v) every key business partner (including partners related to non-managed operations, joint ventures, outsourcing or third-party producers); (vi) every supplier, including service and contractor suppliers; (vii) all due diligence and Merger&Acquisition processes.
- (3) In 2015, Enel published the Group's biodiversity policy, which was updated in 2023 following the release of the Kunming-Montreal Global Biodiversity Framework.

During 2022, the European Commission proceeded to adopt the action plan towards zero pollution for air, water and soil ("**Towards a Zero Pollution Ambition for air, water and soil – building a Healthier Planet for Healthy People**"<sup>(4)</sup>). The main lines of action include:

- **Air quality** – In 2022, the Commission launched the proposal to **revise the directives on ambient air quality**, with the aim of improving alignment between EU air quality standards and the new guidelines of the WHO (World Health Organization), with particular attention to urban areas, where the majority of the population lives. Enel actively participates in the review process by promoting the adoption of zero-emission technologies that generate benefits both globally, in terms of GHG reduction, and locally, in terms of reducing atmospheric pollution.
- **Industrial emissions** – As regards industrial pollution of air, water and soil, a proposal to revise the **Industrial Emissions Directive** was published in 2022. Enel supports the review process, in particular for large combustion plants, by committing over the years to the progressive adaptation of power plants powered by fossil fuels thanks to the introduction of technologies with low emissions of polluting substances. Furthermore, Enel actively supports the development of new technologies, such as electrification based on renewable energy, to support other sectors and uses of energy, such as the transport sector or heating and cooling in buildings.

- **Soil strategy** – In November 2021, the Commission launched an **EU soil strategy for 2030**, which sets out measures to restore degraded soils by 2050, setting medium- and long-term objectives for 2030 and 2050 respectively. The strategy is directly linked to that of biodiversity and climate adaptation, also establishing targets relating to the restoration of degraded land, the remediation of contaminated sites and the reduction of soil use. In this context, Enel is supporting the proposed strategy, by promoting a circular approach to land management, in particular through the reuse and redevelopment of brownfield sites, as well as the repowering and lifetime extension of wind farms, in order to limit the use of soil. Also, through the **Futur-e project**, Enel is actively pursuing the reuse of areas within its industrial scope. Enel's Futur-e project is one of the first examples on a global scale of the redevelopment of abandoned industrial sites of different sizes and in different contexts, turning them into a development opportunity for the local area and for the Country system. Futur-e aims to adopt a circular economy approach by converting abandoned industrial sites into eco-sustainable places dedicated to science, art, culture, tourism, or new industrial activities (see the chapter "[Our commitment to a just transition: leaving no one behind](#)").

Enel supports this process through participation with Eurelectric on the Zero Pollution Stakeholder Platform.

## Commitment to nature conservation by partnering with associations and organizations for sustainable development

The growing and renewed attention to nature and its ecosystems has led to the emergence of new coalitions and multilateral initiatives to stimulate the definition of restoration targets and the development of more ambitious policies to preserve biodiversity. Within this context, Enel is actively committed to this process, collaborating with the most relevant global stakeholders and participating in multilateral initiatives and dialogues. In particular, the main activities undertaken in 2022 included:

- partnership with **Business for Nature**, launched in 2020 with the signing of the call-to-action "Nature is Everyone's Business", with whose business delegation Enel took part in the pre-COP 15 negotiations in Geneva, in March 2022. Furthermore, in October 2022, Enel was among the first companies to sign the **Business Statement for Mandatory Assessment and Disclosure**, and

to support the "**Make it Mandatory**" campaign, which makes it mandatory for large companies and financial institutions to assess and report risks, dependencies and impacts on biodiversity by 2030; participation in the multistakeholder dialogue promoted by the World Business Council For Sustainable Development (**WBCSD**) in 2022 for the definition of the "Roadmap to Nature Positive", specifically for the part relating to the energy sector, which will provide companies with a framework of action on nature, supporting them with the definition of targets, as well as with measurement and reporting activities aligned with the implementation of the Global Biodiversity Framework;

- the partnership with the **Taskforce on Nature-related Financial Disclosure (TNFD)** through participation in the Forum, launched in 2021, which is working to establish,

(4) COM (2021) 400 final: Communication Pathway to a Healthy Planet for All – EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil'.



by 2023, a global framework for companies and financial institutions to assess and report on nature- and biodiversity-related risks and opportunities. Connected to this, in October 2022 Enel joined the **TNFD Pilot Program** led by the WBCSD, which brings together 23 companies globally to test the new framework. These companies are divided into three groups: energy, land

use and built environment;

- ongoing support given to the **Science Based Targets Network (SBTN)**, a project that, on the trail of the Science Based Targets initiative (SBTi) in the area of climate, will define specific new improvement targets and objectives for nature and biodiversity conservation.

## Environmental governance and management model

| 2-9 | 2-12 | 2-13 | 2-24 | 3-3 |

Enel's organizational and corporate governance model ensures that sustainability issues are appropriately taken into consideration in all relevant company decision-making processes, by defining specific tasks and responsibilities for the main corporate governance bodies.

The Board of Directors plays a central role in corporate governance as the body vested with powers related to the strategic, organizational and control policies of the Company and Group. In this context, it takes into account the need to pursue sustainable success, particularly: (i) when defining Company and Group strategies; (ii) when drawing up the remuneration policy for the Chief Executive Officer/General Manager and Key Management Personnel, defining specific sustainability objectives the achievement of which is linked to a significant component of the variable pay; and (iii) with regard to the Company's Internal Control and Risk Management System ("SCIGR"), aimed at the effective and efficient identification, measurement, management and monitoring of the main corporate risks, including those of an ESG nature.

The Board of Directors has also established internal board committees with the power to investigate, propose and

advise, in order to ensure an adequate internal division of its functions, as well as a related parties committee. During 2022, the Corporate Governance and Sustainability Committee dealt with nature-related issues, reflected in the strategies and related implementation methods in 2 of the 6 meetings held, in particular during the review of: (i) the Sustainability Report for the 2021 financial year, coinciding with the Consolidated Non-Financial Statement pursuant to Legislative Decree No. 254/2016 for the same year; (ii) the materiality analysis and the guidelines of the Sustainability Plan 2023-2025, including environmental objectives; (iii) updates on the main activities carried out in 2022 by the Enel Group in the field of sustainability, on the status of implementation of the Sustainability Plan 2022-2024 and regarding Enel's inclusion in the main sustainability indices. For more information on the activities carried out by the corporate bodies, please refer to the Enel Report on Corporate Governance and Ownership Structure, available at [www.enel.com](http://www.enel.com), governance section, as well as the chapter on "[Climate governance](#)" in this document.

The Board of Directors approves the Sustainability Report which also contains the Group's environmental policy.



# Environmental policy

## G4-DMA EN

Strategic factors in the planning, implementation and development of Enel's operations include protecting the environment and natural resources, tackling climate change, and contributing towards sustainable economic development. These are also key factors in consolidating the Company's position as leader in the energy market. Enel has had a Group environmental policy in place since 1996, based on **four fundamental principles**:

1. protecting the environment by preventing impacts and exploiting opportunities;
2. improving and promoting the environmental sustainability of products and services;
3. creating shared value for the Company and stakeholders;
4. meeting legal compliance obligations and voluntary commitments, advancing ambitious environmental management practices

and pursuing **ten strategic goals**:

1

**To apply internationally recognized Environmental Management Systems to the whole organization, underpinned by the principle of ongoing improvement and adoption of environmental indices to measure the environmental performance of the whole organization.**

- a. Ensuring annual compliance with ISO certifications 14001 extension to the entire scope of the Group's activities
- b. Streamlining and harmonizing certifications in the various organizational areas, seeking out partnerships and sharing best practices in environmental management

2

**To reduce environmental impacts by using the best available technologies and best practices in the construction, implementation and decommissioning stages of plants, with a view to life cycle analysis and circular economy.**

- a. Assessing the environmental impact caused by the construction of plants or by major restructuring operations
- b. Examining and applying Best Available Technologies (BAT)
- c. Protecting and monitoring surface and groundwater quality in the areas surrounding the plants
- d. Ensuring the internal development and application of international best practices

3

**To build infrastructure and buildings that protect the local area and biodiversity.**

- a. Assessing the risks and opportunities of biodiversity
- b. Developing and implementing infrastructures based on the Mitigation Hierarchy, the No Net Loss and the Zero Net Deforestation principles
- c. Developing and updating a Biodiversity Action Plan with projects that take into account the specific aspects of local environments (conservation of the habitats of protected species, reintroduction of particular species and replanting of indigenous flora in cooperation with research centers and nature observatories)
- d. Implementing biomonitoring activities (terrestrial, marine, river)
- e. Protecting areas of high biodiversity value and, among these, forests and protected areas
- f. Mitigating the visual and landscape impacts of power and distribution facilities and protecting archaeological assets during construction activities
- g. Undertaking research into innovative solutions to promote the development of urban biodiversity in the provision of infrastructures and services

4

**To play a leadership role in renewables, in the decarbonization of power generation, in the electrification of end-use and in the efficient use of energy, water and raw materials.**

- a. Progressively expanding the renewable generation facilities and pursuing the goal of decarbonization
- b. Improving the efficiency of power plants
- c. Reducing network losses tied to electricity distribution
- d. Efficiently managing water resources for industrial uses, with a particular focus on water stress areas
- e. Promoting services and products for electrification and end-use energy efficiency

5

**To ensure optimal waste and drain water management and promote circular economy initiatives.**

- a. Reducing waste production
- b. Reducing the pollutant load of wastewater
- c. Increasing the recovery and recycling rate of waste and drain water produced
- d. Exploiting by-products for use as raw materials in external production processes
- e. Applying the principles of the circular economy and seizing opportunities for reuse in second life equipment and products
- f. Carefully selecting disposal service providers and using IT systems for waste traceability

6

**To develop innovative technologies for the environment.**

- a. Implementing systems to boost plant efficiency and lower emissions
- b. Promoting and developing smart grids and digital asset management solutions to improve their environmental performance
- c. Developing innovative solutions to support renewable production (photovoltaic, geothermal, wind, green hydrogen), integrated with energy storage systems
- d. Promoting and developing electric mobility
- e. Developing innovative solutions for energy efficiency and smart cities
- f. Devising innovative services for the modulation of energy consumption that enable greater flexibility and stability of the electricity grid and more efficient use of resources
- g. Digitalizing processes and cloud computing

7

**To communicate with citizens, institutions and other stakeholders about the Company's environmental performance.**

- a. Publishing the Sustainability Report and providing open data access to the Group's key environmental parameters
- b. Communicating with financial analysts and taking part in various sustainability indices
- c. Consulting and engaging local stakeholders
- d. Disseminating environmental initiatives online

8

**To provide employee training and raise awareness on environmental issues.**

- a. Providing training on environmental issues
- b. Engaging employees in campaigns to support the environment

9

**To promote sustainable environmental practices with suppliers, contractors and customers.**

- a. Applying supplier assessment criteria based on environmental performance
- b. Holding meetings for information and training on relevant environmental aspects at the start of the works
- c. Assessing suppliers based on their environmental performance in activities carried out on Enel's behalf

10

**To meet and exceed legal compliance obligations.**

- a. Ensuring that operations are carried out in accordance with the legal requirements of the various countries and with the voluntary commitments made
- b. Correcting any non-compliance with obligations and voluntary commitments
- c. Assessing further voluntary environmental actions and practices, including where not legally required

Chief Executive Officer  
**Francesco Starace**



Enel ensures constant supervision and monitoring of environmentally relevant activities through a granular and harmonized organization at the level of central coordinating structures and at Country level. Specifically:

- at **Group (Holding)** level there is a central HSEQ (Health, Safety, Environment and Quality) Function with responsibility for guidance, coordination and definition of environmental policy and all other specific guidance policies. Within the HSEQ Function, the SHE.Factory has been created, which is a unit dedicated to specialized training on Safety, Health and Environment issues;
- at **Business Line** level, the HSEQ Functions present in the global structure of each Business Line with a role of coordination in the management of the respective environmental issues, ensuring the necessary specialist support in keeping with the Holding's guidelines;
- at **Country** level, there are staff units with a local coordination function and managers and contact persons identified in the individual operating units who manage the specific aspects of the various industrial sites.

Roles and responsibilities on Health, Safety, Environment and Quality issues are defined and reported in the corporate organization charts; operating procedures and in compliance with Country legislation reflect the Company's commitment to these issues. This organization also ensures that the Integrated Health, Safety and Environment Management System complies with the requirements of the international standards ISO 14001:2015 and ISO 45001:2018.

Application of **ISO 14001 certified Environmental Management Systems (EMS)** is one of the strategic tools defined by the Group's environmental policy; at the end of 2022, almost all (over **99%**) of operations were certified, while for new plants and new installations, the preparatory activities for certification are progressively planned. Given the complexity and variety of activities carried out in the Group, an ISO 14001:2015 certified modular approach has been adopted, with the definition of a management system at Holding level, which provides guidance and coordination to the Business Lines on environmental issues. Each Business Line has launched its own EMS focused on its own specific activities. Furthermore, the main thermal and geothermal production sites in Europe now also have EMAS (Eco-Management and Audit Scheme) registration. In support of activities for monitoring environmental performance and the definition of improved plans for the operating units of the Business Lines, the Group environmental reporting system Enel Data on Environment (EDEN) is used. During 2022, further improvements were made to version 2.0 of the EDEN tool, in order to make the data validation system and the calculation and reporting of environmental KPIs even more robust. Enel also has the global digital dashboards She.metrics and She.start for monitoring environmental accidents and improvement actions, which are defined during assessments or Extra Checking on Site (see the paragraph "[Operational analysis and monitoring tools](#)").

## Training and internal communication

Training is one of the strategic objectives of the Group's policy and forms an integral part of the EMS. Approximately **41 thousand hours of training** were provided in 2022, including 13 thousand hours directly through SHE.Factory. In 2022, implementation of the environmental training program continued, targeted at increasing the skills of the Group's technical staff and people with operational responsibilities (Environmental Competence Building Program), particularly in the field of water management and climate change. Training sessions were also held to update staff on Group policies and on the environmental data management platforms (EDEN), with a view to aligning the

adoption criteria in all Countries. Various communication initiatives were promoted through internal web channels in order to disseminate and strengthen Enel's commitment to preserving biodiversity and nature, by disseminating best practices and active restoration projects in the various Countries where the Group is present, and specific campaigns were launched to raise the awareness of internal personnel (see the "[Near Miss](#)" box). Enel has also established partnerships with local environmental associations to raise awareness among young people in the areas where it operates.



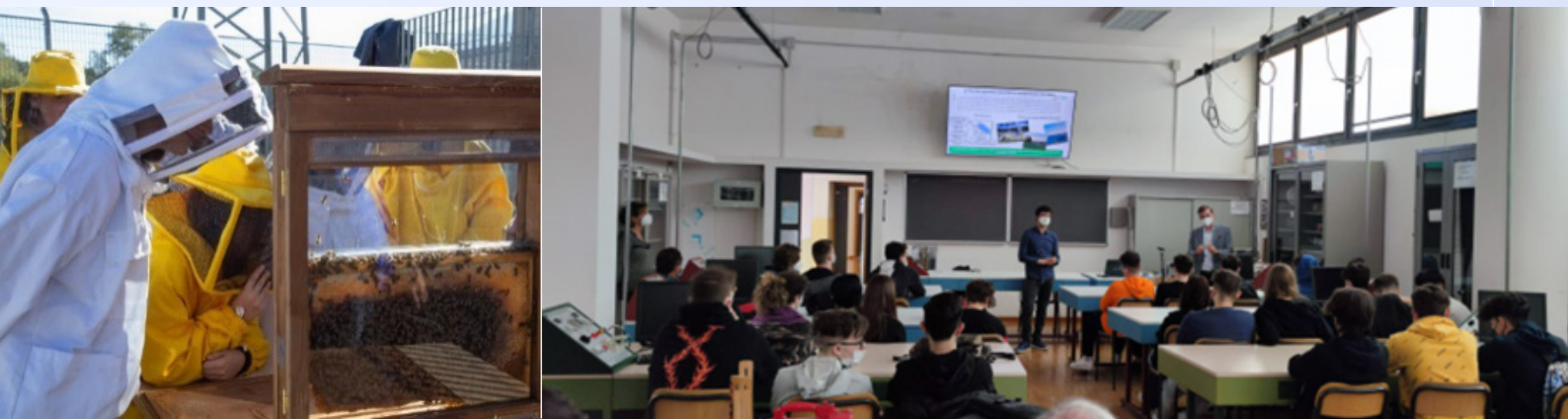
## Training in schools

In 2022, on World Biodiversity Day, Enel launched two innovative training projects in conjunction with Legambiente and Beeing and targeted at primary and secondary school students, to raise awareness of the Company's high level of commitment to defending biodiversity and supporting the energy transition.

**Biodiversity4Young** reached more than 250 students in 7 regions throughout Italy in 2022, thanks to the presence of experts from Legambiente and local Enel colleagues, who illustrated our initiatives with the

passion of those who are part of the local community in the host territory.

**Bee4education** took place in the Training and Education Center in L'Aquila, in partnership with the startup **Beeing**; this project consists of providing a very inspiring experience on energy and biodiversity with the possibility of getting up close to bees, thanks also to an innovative hive with a transparent side that enables the bees to be observed while they work. The training program, which was carried out from May to October 2022 and was targeted at primary and lower secondary schools in the province of L'Aquila, involved 300 students and 34 teachers at 4 local schools.



## HSE Near Miss Campaign

In 2022, an innovative internal communication campaign on HSE Near Misses was launched in all Countries, with the aim of informing Enel X Global Retail people about the meaning of near misses and the importance of reporting them and raising awareness among contractors. Some cartoon examples were shared, which depicted near misses that have actually occurred within the Business Line.



# Identification of impact factors and dependencies on nature and biodiversity

The identification of potential **impact** factors on nature and biodiversity is fundamental for Enel in order to define the most effective strategies to avoid, minimize, remedy or compensate for the associated effects, in line with the provisions of the Mitigation Hierarchy included in the Group's environmental policy. Similarly, the identification of **dependencies** on natural capital and biodiversity enables us to identify the most appropriate strategies to reduce the risks to the Company that may derive from these dependencies.

The activity referred primarily to direct activities that are

not yet inclusive of the entire value chain, and involved all of the Group's main technologies, from electricity generation from renewable sources and combined-cycle gas turbine power plants, to electricity distribution systems. The following were not considered in the analysis: coal-fired thermoelectric generation, which is already the subject of a medium-term phase-out program, in line with the decarbonization strategy adopted by the Group, and infrastructure linked to energy services, such as charging stations for electric cars, as they operate in generally urbanized habitats.

## Impact factors

The main **impact factors** (or pressures) that may be exerted on nature are summarized in the following categories, inspired by those identified by the **Science Based Targets Network (SBTN)**, and which have been adopted as the starting point for analyzing actions implemented to mitigate the associated risks:

1. use and modification of ecosystems (terrestrial, fresh water, marine);
2. use of resources (mainly water withdrawal);
3. climate change (GHG emissions);

4. pollution (emissions, discharge, waste);
5. disturbances (noise, vibration, artificial lighting) and introduction of invasive species.

The table shows the results of the preliminary materiality analysis of impact factors conducted at Group level for the various technologies. In this case, the evaluation approach indicated by the SBTN and the TNFD proposal was used, and the ENCORE tool was used.<sup>(5)</sup> The scores were internally reviewed based on the specific construction and operating solutions adopted by the Group.

Impact factors by technology	Hydroelectric	Solar PV	Wind	CCGT	Networks
1.1 Use of terrestrial ecosystems	VM	M	M	M	M
1.2 Use of fresh water ecosystems	VM			NM	
2. Water withdrawal	M	NM		VM	
3. Climate-changing gas emissions (GHG)	NM			M	M
4.1 Air pollutants (non-GHG)	NM			NM	
4.2 Water pollutants	M			NM	
4.3 Soil pollutants		NM	M	NM	M
4.4 Solid waste	M			NM	M
5. Disturbance factors and invasive species	NM	M	M	NM	M

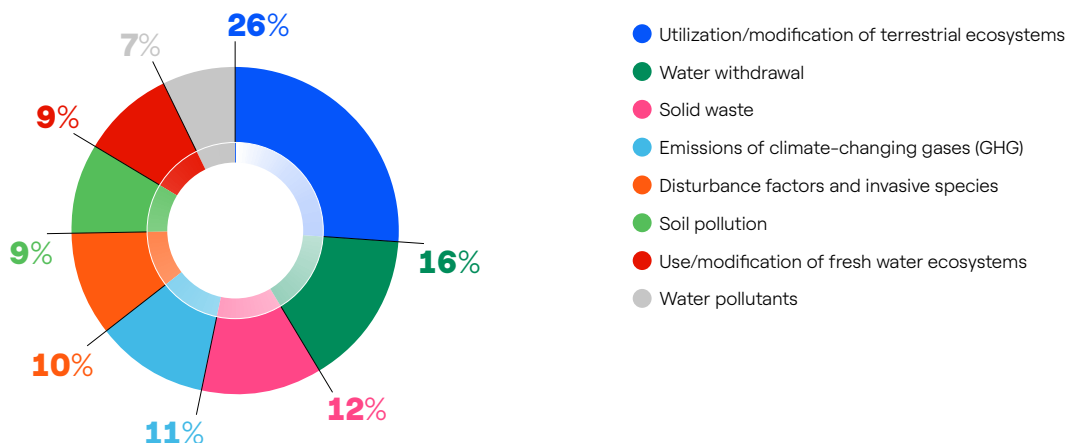
VM Very Material   
 M Material   
 NM Non Material   
  not applicable

(5) ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure), tool developed by the Natural Capital Finance Alliance (<https://encore.naturalcapital.finance/en/about>).

Considering only the material impact factors with respect to the various technologies, each weighted according to

its share of generation at Group level,<sup>(6)</sup> the distribution of priorities shown in the figure is obtained.

### Impact factors prioritized by materiality for the different technologies, weighted according to their share of power generation



The overall analysis therefore shows that, considering the average weighting of the various technologies, the main impacts on the external environment are associated with

**the use/modification of terrestrial ecosystems** and with **water withdrawal**.

## Dependencies

**Dependencies** found to be material based on the criteria indicated by SBTN for the various technologies adopted by Enel are attributable, in relation to the main direct activities, to ecosystem services necessary for the operation of plants and infrastructures, as summarized below:

1. regulation of the climate and climatic events on which the operation of all assets depends;
2. protection from floods and extreme environmental events, which are one of the primary causes of failure and unavailability of renewables plants (photovoltaic and wind) and distribution facilities;
3. use of water in production cycles, mainly in thermoelectric power generation;
4. soil stabilization and erosion control, important for hydroelectric reservoirs, renewables plants (photovoltaic and wind), and network infrastructure;

5. conservation of the water cycle, which enables the operation of hydroelectric power plants.

With regard to the upstream supply chain, the main dependency refers only to the "Use of raw materials (mineral and non-mineral) for the construction and operation of plants".

The results of the preliminary materiality analysis of ecosystem dependencies conducted at Group level for the various technologies are shown in the following table. Also in this case, the evaluation criteria indicated by the SBTN and by the TNFD proposal and the guidelines provided by the ENCORE tool were used. The scores were reviewed internally based on the construction and operating solutions adopted by Enel.

(6) Networks were given a conventional weighting of 25%, being the average of the values associated with the various generation technologies, also by virtue of its transversal function with respect to them.

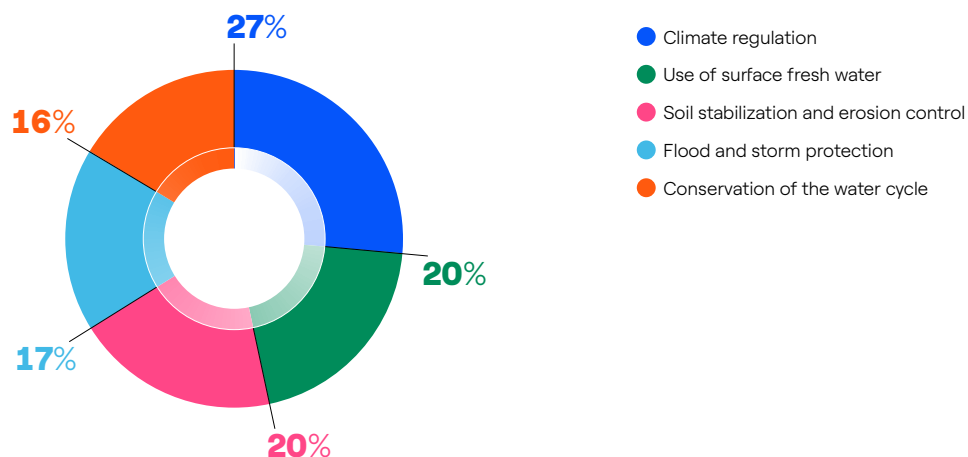
Dependencies by technology	Hydroelectric	Solar PV	Wind	CCGT	Networks
1. Climate regulation	VM	VM	VM	NM	VM
2. Flood and storm protection	M	M	M	NM	VM
3. Use of surface fresh water	VM	NM		VM	
4. Soil stabilization and erosion control	VM	M	M	NM	M
5. Conservation of the water cycle	VM			M	
6. Water resource quality	NM			NM	
7. Filtration of pollutants	NM			NM	
8. Bioremediation	NM				
9. Use of groundwater	NM			NM	

VM Very Material   
 M Material   
 NM Non Material   
  Not applicable

Considering only the material dependencies with respect to the various technologies, each weighted according to

its share of generation at Group level,<sup>(7)</sup> the distribution of priorities shown in figure is obtained.

Dependencies on ecosystem services prioritized by materiality for the different technologies, weighted according to their share of power generation



The overall analysis therefore shows that, considering the average weighting of the various technologies, the main dependencies for the Company are associated with **climate regulation** and **the use of surface fresh water**. Regarding these results, Enel's decarbonization strategy,

which is focused on the phase-out of fossil fuels and the growth of renewables, particularly wind and solar technologies, reduces impact on the climate by helping to reduce pressure on the ecosystem services on which we depend, such as water resources.

(7) The Networks were given a conventional weighting of 25%, being the average of the values associated with the various generation technologies, also by virtue of its transversal function with respect to them.



# Analysis of environmental risks and opportunities

The analysis of environmental risks and opportunities associated with Enel's business activities was conducted with a multifunctional integrated approach in line with the guidelines set out in the guidelines of the TNFD proposal and of the SBTN. The analysis, conducted in 2022 based on the results of the materiality analysis for impacts and dependencies described above, led to the identification for each technology of the main operational and economic-financial risks expected for the Company, as well as social and environmental risks, and the identification of the biggest opportunities in relation to each relevant impact factor and dependency. This preliminary screening analysis led to the definition of an evaluation template for each technology, which was used to identify the main critical events of a physical type (both acute in the short-medium term and chronic in the long term) and of a transitional type (resulting from possible changes in the regulatory, technological, reputational or market framework), and the main associated risks and opportunities expected. The main **operational and material economic-financial risks** for Enel are shown below:

- reduction or interruption of generation capacity;

- recovery and repair needs;
- authorization delays;
- adaptation and technological innovation needs;
- additional insurance fees;
- loss of competitiveness.

Simultaneously, this screening phase selected the following **main opportunities**:

- improvement of environmental and sustainability performance, such as efficiency in the use of resources and initiatives for the protection, restoration and regeneration of natural habitats;
- business opportunities, linked for example to the offer of nature-positive energy products and services, the launch of new partnerships in sustainable innovation sectors, access to green financing, and strategic choices of commitment and sector leadership, aimed at the economic, reputational and financial growth of the Company.

The screening analysis on Group impacts/risks conducted in 2022 reaffirmed the action priorities identified last year and described in the following table.

Impact Factors (or Pressures)	Importance • Magnitude • Probability	Level of control • Goals • Mitigation plans	Priorities
<b>Use of terrestrial ecosystems</b>			
• Land use • Habitat transformation and fragmentation	High	Moderate	High
<b>Use of natural resources</b>			
• Water withdrawal	High	High	Moderate
<b>Climate change</b>			
• Climate-changing gas emissions	Very high	Very high	Moderate
<b>Pollution</b>			
• Pollutant emissions (non-GHG) • Water and soil pollution • Waste production	High	High	Moderate
<b>Disturbance factors and other</b>			
• Noise and other • Invasive species	Low	Moderate	Low

The **identified intervention priorities** relate to the control of risk associated with **land occupation and the transformation of ecosystems**, and particularly to the use of land and the **transformation of terrestrial habitats**, in relation to which new commitments were made at Group level as early as last year (see the paragraph "Enel's commitment to biodiversity"). The analysis also highlighted an already very high level of commitment and control for risks associated with the use of natural resources (water withdrawal) and with potential pollution factors of environmental matrix

(emissions, discharges and waste production), as well as with climate change. In fact, for years Enel has already been defining stringent improvement targets, the results of which are described in the following paragraphs, which make it possible to mitigate the main risks associated with these impact factors in the future.

Following the screening activity described above, a more detailed aggregate analysis (by technology) was launched and is currently under way, which takes into account the estimated magnitude of potential risks or possible oppor-

tunities, the relative probability of occurrence and the mitigation actions already adopted by the Company. At the conclusion of this phase, the risk/opportunity analysis will therefore also be extended to the project and site level, to take into account the specific local context and the interaction of each technological asset with the local characteristics of nature and biodiversity. In this further phase, particular importance and priority will be given to plants in operation and to new assets in the planning and authorization phase which are located in areas of high value or naturalistic vulnerability, such as protected areas, critical habitats and water risk areas.

## Dependency management

Meanwhile, as regards the management of **dependencies**, the main criticality of which is linked to the effects of climate change (climate regulation), an analysis was conducted for each technology and for each geographical area in which the Group is present. The operational and economic-financial risks resulting from the occurrence of acute and chronic meteorological phenomena were also analyzed in order to define specific adaptation and resilience plans. Acute and chronic physical phenomena are intensified and accelerated by ongoing climate change and their effects on the integrity, operational continuity and correct functioning of our plants depend, to an essential extent, on the ecosystem services of mitigation and control performed by the surrounding natural environment, which may be potentially compromised by human impacts (such as the sealing of occupied soil or the extraction of raw materials). Among these ecosystem services, regulation of the water cycle and the ability of vegetation to protect, prevent and mitigate the onset and intensity of flooding or soil subsidence phenomena are particularly relevant, as is the action of extreme winds. For more details, see the paragraph [“Enel’s impact on climate change – Climate scenarios, strategy and risks”](#) in the chapter [“Zero emissions ambition”](#).

## Operational analysis and monitoring tools

From an operational point of view, in order to identify and minimize environmental risks related to our activities, Enel has equipped itself at Group level with a series of important tools for guidance, investigation and intervention with respect to both the environment and the socio-economic context. These tools are referred to below and can operate in a capillary and synergistic way within the organization to protect the environment and associated ecosystems.

**Group Policy for the classification and analysis of environmental accidents.** Environmental accidents are classified according to their type and relevance. This classification is based on their possible impact on the environmental matrices and on any potentially sensitive areas (ecosystems and protected areas), in addition to their negative impact on the organization itself (operational, legal, reputational and financial). In accordance with their classification and magnitude of such accidents, the policy defines communication procedures, the creation of analysis groups with the participation of the Global Functions, cause analysis, and monitoring of subsequent corrective actions and improvements.

**Policy for assessing risks and opportunities related to environmental impacts.** The policy applies to all operational sites (including those being decommissioned) and to Group staff functions in which an EMS compliant with ISO 14001:2015 requirements is adopted. Its application involves the adoption of a single model for the classification and assessment of risks and opportunities linked to impact factors (or pressures) exerted on the environment, through the use of an IT tool called ERA (Environmental Risk Analysis). The analysis process involves evaluating both the interactions of significant operational aspects with various environmental matrices, and mitigation controls adopted for compliance with regulatory compliance, as well as the most stringent voluntary continuous improvement targets; furthermore, taking into account the results of the analysis of any accidental environmental events and periodic environmental visits to the various sites (Extra Checking on Site – ECoS), it allows a high level of integration of continuous control processes between the various levels of the organization and the related prioritization of improvement actions. Finally, the analysis enables the assessment of environmental aspects linked to governance and strategic activities carried out by the central Functions of the organization.

**Extra Checking on Site (ECoS) Policy.** The ECoS is a tool for planning and conducting site visits by cross-divisional teams of experts in support of plants and operational facilities and with a view to identifying improvement plans and sharing best practices. In 2022, the different Business Lines across all the Countries in which the Group operates conducted over 80 ECoS with a focus on the environment. See also the chapter [“Occupational health and safety”](#).

**Environmental qualifications and inspections for suppliers of products and services.** In consideration of the importance and role that suppliers have in determining the overall environmental performances of the Company, Enel has adopted a supplier environmental assessment procedure that is structured and homogeneous for the entire Group, activated in the development phase, above all for high environmental risk activities, and following important environmental events. Environmental assessments aim to verify the EMS of suppliers

as a whole and propose improvement actions to be shared with the supplier. They are also accompanied by environmental inspections conducted at the suppliers' operating sites, which include assessments on specific aspects of biodiversity. In order to standardize inspection standards and obtain a structured and widespread control system, Enel has adopted Group Guidelines on Environmental Inspections, which define the planning criteria as well as methods of execution in the field (see the chapter "[Sustainable supply chain](#)").

**Consequence Management Procedure.** At Group level, Enel has adopted an organizational procedure that defines a global line of action to improve the environmental perfor-

mance of its suppliers; specifically, roles and responsibilities are defined in order to implement Consequence Management, as well as actions against its contractors, in the event of their involvement in significant environmental events and/or due to low performance on specific environmental issues, encountered during the performance of the contract.

Finally, it should be noted that in analyzing the local context, which forms the basis for the community relations model, an assessment of the main social and environmental risks and opportunities is carried out in order to minimize them and promote socio-economic development. See the chapter on "[Engaging communities](#)".

## Preserving biodiversity

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### Enel's commitment to biodiversity

Protection of biodiversity is one of the strategic objectives of Enel's environmental policy and is regulated by a specific policy adopted by Enel in 2015 and renewed in 2023 following COP 15. The policy defines the guidelines for all the Group's biodiversity protection initiatives and the principles according to which they operate, aligned with the Kunming-Montreal Global Biodiversity Framework.

Enel has renewed its commitment to biodiversity, published in the 2022 Sustainability Report, by committing itself to concrete actions and time targets.



## Biodiversity Policy

Enel's roadmap on biodiversity conservation is in line with the Kunming-Montreal global biodiversity framework, embracing the mission of taking action to halt and reverse biodiversity loss by 2030.

In particular, our Company is committed to:

- applying the **mitigation hierarchy principle** in all project phases, avoiding and reducing impacts on high biodiversity areas and ecosystem functions and services, reducing deforestation and habitat transformation; where avoidance is not possible, we strive to minimize adverse impacts, implement rehabilitation and restoration measures and finally, compensating for residual impacts;
- implementing, in the case of biodiversity significant residual impacts for new development projects, compensatory works according to the commitment of "No Net Loss" of biodiversity and "No Net Deforestation", and where applicable to have a Net Positive balance;
- assessing and transparently disclosing impacts, dependencies, risks and opportunities on biodiversity along operations, supply and value chains, setting goals and targets on priority issues;

- promoting biodiversity and nature-based solutions integration into business solutions for customers and urban ecosystem, boosting related environmental and social positive impacts;
- collaborating with public administrations, research centers, environmental and social associations and international stakeholders, as partners in the conservation, restoration and sustainable use of resources, fostering new innovative and systemic approaches and synergies while respecting the rights of indigenous peoples and local communities;
- monitoring and reporting progress towards the achievement of local and global goals and targets in alignment to main international standards and in a transparent and responsible approach, for accounting performances on biodiversity and natural capital management;
- promoting environmental awareness towards workers and stakeholders, to valorize biodiversity conservation and responsible use of natural resources.



## Our commitment to nature

Enel undertakes to achieve **No Net Loss of biodiversity** for new infrastructures from 2030, commencing its adoption on selected projects in areas of high biodiversity importance beginning 2025. To achieve this goal, Enel will work in accordance with the principles of the Mitigation Hierarchy to avoid, minimize and recover impacts on natural habitats or species that are threatened, endemic or restricted in range.

In addition, Enel is committed to conserving forests and, if deforestation cannot be avoided, will reforest areas of equivalent value in line with the principle of “**No Net Deforestation**”.

Enel will not build new infrastructures in areas designated as UNESCO World Heritage Natural Sites.

Enel integrates the assessment of risks and opportunities linked to nature into corporate activities in order to align risk management strategy and processes; it also undertakes to evaluate 100%<sup>(8)</sup> of the significant assets in operation by 2025 in order to update, where necessary, the associated action plan.



<sup>(8)</sup> For Enel Grids, the assessment focuses on significant assets in protected areas.



With technical and specialist support from The Biodiversity Consultancy, Enel has developed a methodology for site-specific adoption of the “No Net Loss” (NNL) principle on biodiversity, developed in a functional manner and integrated into business processes and in line with International Finance Corporation Performance Standard 6 on conserving biodiversity and living natural resources, in order to define any mitigation actions necessary for individual projects.

## No Net Loss: from analysis to implementation

The methodology involves applying an impact mitigation hierarchy starting from a preliminary analysis of natural habitats, including forests, and priority species, by means of a desk analysis that involves the use of application tools such as GIS Portal (Geographic Information System)—for the correlation of georeferenced information relating to assets with global maps on habitats (IUCN Habitat Type Classification) and on species (IUCN Red List of Threatened Species)—and IBAT (Integrated Biodiversity Assessment Tool), which is specifically for biodiversity. In addition to the desk analysis, site surveys are carried out starting from the localization of the new infrastructure, and continuing up to the execution and monitoring phases. In order to mitigate and compensate for any residual impacts on natural habitats—including forests—and species, specific action plans (BAP – Biodiversity Action Plan) are defined and broken down into monitoring, conservation and compensation projects, responding to NNL’s commitment to biodiversity. Enel tested the methodology by developing a number of pilot cases, starting with environmental impact assessments and the related mitigation actions already identified; it emerged that in some cases, the actions identified already guarantee achievement of the NNL, whereas for others, additional offsetting actions are required. By way of example, the results on some of the sites analyzed are shown below.

**Carbo Project** – The project is a study for the construction of a photovoltaic system over a site spanning 96 hectares in Spain (Andalusia), which is situated in natural habitats



characterized by the presence of oaks and shrubs, and in habitats modified by the presence of crops. The species analysis did not highlight any species at risk of extinction (IUCN Red List of Threatened Species). During the impact assessment phase, many actions were defined for the conservation of local biodiversity, such as planting oak trees and green corridors along the perimeter of the plant, as well as protection and conservation interventions for some characteristic species (for example, installation of water stations, construction of protective covers using piles of stones, restoration of old buildings close to the plant used by various species as potential nesting sites) in order to promote the reproductive capacity of the species. The defined compensation plan satisfies the NNL criterion and no additional offsetting actions are required.

**Barzalosa Project** – Additional case to apply the methodology, concerning the design, in the Municipality of Girardot (Cundinamarca), Colombia, of a new primary substation (0.89 ha surface area) and related high voltage line (0.8 km) and medium-voltage line (47.5 km). From the impact assessment, important actions were defined to protect biodiversity, minimize impacts, and carry out reforestation, despite the area being situated within a partially urbanized habitat. Right from the screening phase, Enel identified the type of habitat with the aid of application tools and the use of detailed global satellite maps; desk analysis were also conducted on the animal species in the area, also supported by the results of monitoring campaigns carried out *in situ*. Although the application of the NNL methodology estimated a negligible net loss of biodiversity, Enel nonetheless committed to the restoration, conservation and enhancement of habitat by planting of over 200 native trees.

## Measures taken to reduce impacts

Enel has consolidated experience in managing and protecting biodiversity near its production sites, starting from the site design and construction phases; particularly in the past few years, activity has focused on renewable plants and distribution networks, in line with the Group's decarbonization strategy. The Group Guidelines, issued in 2019, define the principles and procedures for managing impacts on biodiversity during the entire life cycle of plants, from the development phase to operation and decommissioning, through the application of the **Mitigation Hierarchy** in the various phases of the life cycle.

For the Group's plants and installations that have been present in the local area for a long time, environmental protection and monitoring action plans are also adopted. In line with international standards and the principles of the biodiversity policy, the risk to biodiversity is assessed in an integrated manner right from the **feasibility** phase, starting with the location of the site of interest, and involves an assessment of the type of habitat, prioritizing habitats that do not present environmental criticalities, and considering geographical proximity to protected areas, habitats that are critical or important for biodiversity, as well as the potential presence of endangered species in the area of interest. To support the definition of local action plans for the mitigation of any risk identified, Enel adopts a consolidated process of stakeholder engagement, which involves continuous dialogue in synergy with all stakeholders—local communities, competent authorities and research institutes—with a view to supporting increasingly sustainable business for the economy, nature and people.

In the **construction** of new plants, specific action plans are also adopted to protect biodiversity by checking the effectiveness of the actions undertaken and the occurrence of any potential impacts, including at a later stage after the works have started. In the case of large plants, impact mitigation plans are envisaged, developed together with local stakeholders, including reforestation (see box "Restoration of the El Quimbo tropical forest").

Once the infrastructure is **commissioned**, protection of biodiversity becomes an integral part of environmental management, through periodical management for the checking of impacts highlighted in the authorization phase, as well as the continuous assessment of potential impacts that could occur later. This is also the moment where the plant consolidates its relationship with the local area and

where initiatives are developed, such as voluntary projects to safeguard local species and improve habitat conditions, based on knowledge of the environment surrounding the site. The results of monitoring at the local level are communicated and analyzed at global level by means of internal tools, allowing the identification of general issues that need to be addressed with improvement plans or projects at Group level. The main impacts on biodiversity during operations linked to technologies are:

- **wind plants:** impacts related to collision with birds and bats. Among the global initiatives aimed at reducing interference with birds and bats, the Wind Wildlife Challenge project (2022) was launched, which involves identifying increasingly innovative solutions such as the use of sensors and tools, based on radar, chamber and multi-sensor technologies, that can detect and even actuate the automatic shutdown of the turbine concerned; tests are under way on plants in Italy, Spain, Chile, the United States and Canada. This testing campaign follows the one already launched in 2021 in the South African plant of Gibson Bay with ultrasonic deterrent systems specifically for bats;
- **hydroelectric plants:** interference with fish and soil erosion; respectively, fish restocking actions are envisaged to restore the ecosystem and species, such as the restoration or improvement of spawning or fry habitats, the planting of native species directly or near the banks of the reservoir in order to control the stability of the terrain, and also to improve habitat conditions;
- **solar plants:** related to the occupation and possible transformation of habitats. The main initiatives include agrivoltaics, where the spaces between rows of photovoltaic modules are used to plant aromatic and medicinal herbs, food plants and melliferous flowers to also encourage the establishment of pollinator species, which improve the biodiversity of the site's ecosystems and ecosystem services;
- **distribution networks:** risk of birds colliding with overhead lines being electrocuted; for this reason, starting from the design phase to the operation and maintenance of existing sites, according to the biodiversity aspects associated with the site, Enel adopts mitigation measures, including the installation of line marking devices at regular intervals along overhead power lines, as well as the isolation of live parts. Added to this are actions related to the mitigation of interference risks during the construction phase, including the relocation of terrestrial fauna to protected areas.

## Reforestation São Luiz Gonzaga (Rio Grande do Sul)

Maintenance activities on existing networks require deforestation interventions to guarantee the correct and safe functioning of power lines and substations. In order to mitigate the impact of maintenance carried out on operational networks, Enel defines and adopts recovery plans for impacted habitats, through systematic planting of native species.

## Restoration of the El Quimbo tropical forest (Colombia)

Near the El Quimbo hydroelectric plant in Colombia, an important reforestation project focusing on tropical dry forest was started in 2014 and is still ongoing, which will affect a total area of over 11,000 hectares in the various stages of the project. In the initial phase, launched on an area of 140 hectares with the support of Fundación Natura, the best strategies to be implemented in the restoration process were defined and the optimal native species for restoration and propagation were identified; the pilot phase also led to the discovery of a new species

The main initiatives notably include an activity launched in 2017 in the Municipality of São Luiz Gonzaga (Brazil), which was completed and tested as recently as the end of 2022, linked to the license for maintaining the distribution network in the area. It is a reforestation activity using plants for phytodepuration as well as melliferous species, which are used to attract pollinating insects, created at a former landfill. Local communities have also been involved in monitoring herbaceous and shrubby flora grown in the area. Furthermore, some bird species have also been considered, for which a census was carried out based on the sighting and discovery of nesting sites.

of bromeliad *Pitcairnia huiensis*. In 2022, the area covered by the restoration projects totaled approximately 7.3 thousand hectares, including approximately 6.6 thousand hectares of assisted natural regeneration and approximately 0.7 thousand hectares of active restoration. In addition, the "Attalea" Tropical Dry Forest Research Center was created, which works in collaboration with Colombian universities on numerous ecological restoration initiatives, collaborations and projects in support of biodiversity research. Demonstrating the importance of the area from an ecological perspective, around one thousand hectares of the area being restored have already been declared a Civil Society Nature Reserve, while the possibility of extending the protected area to include a further 3 thousand hectares is being evaluated.

## Opportunities for development and shared wellbeing

For us, interacting with the local area and communities is an opportunity to promote socio-economic development, generating value and wellbeing through our services and products, in all the contexts in which we operate. In particular, as far as cities are concerned, the ongoing growing trend of urbanization can generate significant conflicts between natural and urban environments. To meet

this need, Enel recognizes the importance of adopting **nature-based solutions (NBS)** as a powerful tool for sustainable city planning and innovative design for customers who address these issues. Enel X Global Retail proposes NBS solutions that can be integrated into the offer portfolio, and which have been associated with internationally recognized scientific indicators that are used to measure the positive impacts on urban biodiversity. In practice, the NBS solutions can be integrated with technological solutions and are aimed at providing ecosystem services, from climate change adaptation and mitigation to improving the quality of life in urban centers.



## Nature in the city

One of the various global initiatives for integrating NBS with Enel X solutions is an intervention carried out in Santiago, Chile, involving the rooftop refurbishment of the **Mandarin Hotel**; along with the installation of a new photovoltaic system, a biodiversity intervention was carried out involving the construction of a greenhouse, the planting of local fruit trees and the installation of a number of beehives to protect pollinating species and develop urban beekeeping.

A further environmental redevelopment intervention was carried out in the city of **Bogotá (Colombia)**, near the **e-bus terminal**, by Enel X Global Retail. The intervention involved planting urban vegetable gardens and vertical greenery, which was integrated with a number of murals. The initiative also directly engaged the local community in choosing artistic content and enhancing the urban garden.



The strategy linked to urban biodiversity is associated with further opportunities linked to power generation, such as the creation of **agrivoltaic plants**, which integrate business needs with nature. In recent years, many pilot solar plants

have been built, where planting of native and pollinating species has been carried out, to support the entire ecological balance, as well as promoting sustainable crops, in synergy with local communities.

## The biodiversity action plan

In 2022, **200 projects** were carried out to protect species and natural habitats at operating plants, of which 82 were developed in partnership with government agencies and non-governmental organizations and universities, for a total investment of around **11.9 million euros**. The projects were carried out in all countries and regions and mainly concern operational renewable generation plants and distribution networks. The projects included **habitat recovery activities covering 9,452 ha** (9,092 ha in 2021), most of which are related to ecological restoration and reforestation, mainly in Colombia, Brazil, Chile and Spain. Examples of the measures to mitigate impacts on biodiversity carried out to apply the related policy are available on the sustainability section of the [www.enel.com](https://www.enel.com) website, at

the following link: <https://www.enel.com/investors/sustainability/strategy-sustainable-progress/biodiversity>.

In addition, in 2022 a further **63 projects** relating to plant construction sites were carried out, mainly in Brazil, Chile, Spain and North America, targeted at the conservation and monitoring of native species impacted, for an overall capital expenditure of **6.4 million euros**.

**200** projects  
for the protection of  
species and natural habitats

**9,452** ha  
of habitats restored  
(related to projects carried  
out in 2022)



## Interaction of assets with biodiversity and protected areas

Enel measures its environmental performance on aspects of biodiversity in a transparent and responsible way, both in the construction of new plants and during the operation of its power generation sites. For this reason, in 2021 we defined and calculated a set of specific indicators, which

are updated annually, to measure the impacts generated and monitor the effectiveness of action plans.

**Land occupation:** the area of land occupied by assets. This is a general indicator, as it does not provide an indication of the quality of the habitat that has been occupied by the assets.

### Land occupation<sup>(9)</sup> – Power generation assets

Technology	Hectares (ha) in 2021 <sup>(10)</sup>	Hectares (ha) in 2022
Solar	16,632	27,773
Wind	12,660	13,326
Hydroelectric	202,425	202,425
Geothermal	442	442
Thermal	6,318	6,318

In 2022, the land occupation of power generation assets increased by **11,807 ha**, equal to +5%<sup>(10)</sup> of the total (238,477 ha in 2021), including 4.7% solar and 0.3% wind, in line with the development of new plants envisaged by the business strategy.

### Land occupation – Asset Grids<sup>(11)</sup>

This year, data on the occupation of distribution infrastructures is also reported for the first time, calculated by evaluating the buffer zone for high-voltage (HV) and medium-voltage (MV) lines as land occupation, distinguished by voltage level and type of conductor (bare or in cable) and the surface area of transformer substations.

Technology	Hectares (ha) <sup>(12)</sup>	km
Primary and secondary substations	2,539	-
High Voltage Lines	54,296	33,716
Medium Voltage Lines	431,307	653,205
Total	<b>488,142</b>	<b>686,921</b>

**Transformation of natural habitats:** measures the area of land occupied in hectares (ha), classified according to the IUCN<sup>(13)</sup> habitat categories on which the assets have been built. It therefore represents a specific indicator of the impact on habitats that have been transformed to build plants. Power generation plants that entered operation in 2022 occupy land amounting to **11,807 ha**, an increase of 10% on the growth recorded in 2021 (10,700 ha), due to an increase in the development of renewable energies; of this new land occupation, **5,770 ha** (49%) relate to natural habitats (23% less than the previous year, 7,530 ha), and, of these, **537 ha** (5%) are related to forest-type habitats. As far as distribution is concerned, almost all HV and MV lines were built in the 1970s, mainly in urbanized habitats.

Around 70% of the infrastructures built to date are situated in cultivated areas, grazing land and urban areas; only the remaining 30% of the infrastructures have impacted natural-type habitats, of which only 9% are forest-type habitats.

**Presence of assets in protected areas:** mapping was carried out for all power generation assets and from this year also for Grids HV and MV lines, in the main Countries,<sup>(14)</sup> to assess the presence of assets in UNESCO World Heritage Natural areas and IUCN I-IV classified protected areas.

(9) Land occupation was calculated for power generation facilities using a GIS application in which each plant was modeled and georeferenced. The following criteria were used to model land occupation and area of influence: solar, thermoelectric and geothermal were modeled with the plant perimeter; for hydroelectric, the perimeter of the reservoirs was modeled; for wind plants, from the position of the generators the area of land occupation is modeled in a precautionary manner to take into account ancillary works such as yards, roads and areas used when the construction site is operative (in so far as they are subsequently restored).

(10) Compared with last year, KPI mapping and calculation tools were refined, which led to a slight change in the figure compared to 2021.

(11) Italy, Spain, Chile MT, Peru, Colombia and Brazil (São Paulo, Rio de Janeiro, Ceará) are considered.

(12) Land occupation intended as a buffer zone for HV and MV lines and the area occupied by primary and secondary substations was calculated using the PUC (Single Cartographic Portal).

(13) <https://www.iucnredlist.org/resources/habitat-classificationscheme>.

(14) Italy, Spain, Chile MT, Peru, Colombia and Brazil (Sao Paulo and Rio de Janeiro).

### Presence of power generation plants in protected areas as at 2022 – by technology<sup>(15)</sup>

Technology	number of infrastructures in protected areas/total number	Countries	Presence in protected areas (ha)	Presence in protected areas as % of the total occupied by technology
Solar	4/161	Greece	32	0.1%
Wind	8/266	Italy/Spain	116	0.9%
Hydroelectric reservoirs	135/1,096 <sup>(16)</sup>	Italy/Spain/Chile	5,595	2.8%
Geothermal plants	0/39	-	-	-
Thermoelectric plants	2/9 <sup>(17)</sup>	Italy	28	0.4%

### Presence of power plants in protected areas – by Country

Renewable and thermoelectric power plants		
Countries	Hectares (ha)	% in protected area of the total area occupied in the Country
Italy	3,738	19%
Spain	1,986	8%
Greece	32	6%
Chile	15	0.03%
<b>Total</b>	<b>5,771</b>	<b>2.3%</b>

The number of generating plants situated within protected areas (IUCN I-IV) **remains unchanged since 2013**, as no new plants have been built in these areas. The presence of power generation assets in protected areas mainly refers to hydroelectric plants which were largely built before the 1970s (in many cases before the creation of protected areas) and which are managed according to basin management plans shared with the authorities and which promote the conservation of local species. Notable examples are the multi-year ENDESA-bats project, developed voluntarily in the autonomous Spanish provinces of Catalonia, Galicia, Andalusia and Aragon through the study and monitoring of the bat populations that inhabit the tunnels of

hydroelectric plants and infrastructures. This project aims to improve the knowledge and conservation of cave bats, their ecological needs and their relationship with the operation of hydroelectric plants, through study and monitoring campaigns, using new cutting-edge methods and technologies such as automatic monitoring by means of time-lapse photography (photo-trapping) and ultrasound recordings. Through the collation of data, Enel carries out various actions to adapt its plumbing systems so that they promote bat colonies, including the air conditioning of tunnel entrances, the targeted positioning of shelter boxes and a reduction in brightness at a number of points that are critical to the bats.

### Presence of distribution infrastructure in protected areas as at 2022 – by technology

Technology	Hectares in protected areas (ha)	% in protected areas of the total occupied by the asset <sup>(18)</sup>
Primary and secondary substations	28	1.1%
High and medium voltage lines	13,769	2.8%
<b>Total</b>	<b>13,797</b>	<b>2.8%</b>

The countries in the Enel Grids perimeter with the highest proportion of assets present in protected areas are Spain, Italy and Brazil. Most of the Enel Grids infrastructure was built before the 1970s, in many cases before the creation of protected areas. In cases where the infrastructure falls within a protected area, Enel creates the best solutions




to mitigate impact on the surrounding environment, also considering the need to comply with its service obligation. Below are some examples of mitigation projects currently under way for infrastructure that falls within protected areas (IUCN I-IV).

(15) The data reported on GIS has been revised and optimized, leading to adjustments in the value of hectares (ha) and the number of plants compared with last year.

(16) The figure represents individual reservoirs, not hydroelectric power generation plants.

(17) The figure includes plants being decommissioned.

(18) Out of the total of HV and MV lines.

Technology	Country	Plant	Land occupation (ha) in protected areas	Critical species impacted	Habitat	Biodiversity projects
Refurbishment of existing HV line	Colombia	New Hope – Indumil	3	Bromeliaceae ( <i>Tillandsia spp.</i> ), Orchidaceae ( <i>Epidendrum secundum</i> )	Forest	Rescue, translocation and safeguarding of 56 specimens of epiphytic plants (orchids and bromeliads)  Actions for rescue and translocation of epiphytic flora
Refurbishment of existing HV line	Colombia	Zipaquirá – Ubaté	22	Native and non- native plants belonging to different forest species ( <i>Juglans</i> , <i>Quercus</i> , <i>Fuchsia</i> , <i>Trichanthera spp.</i> )	Forest	Planting to offset trees removal and vegetation clearance  Reforestation intervention
HV line maintenance	Brazil/Rio	Casimiro de Abreu/Rio Tabicum	1.5	<i>Schinus</i> , <i>Albizia</i> , <i>Cordia</i>	Forest	Planting to offset trees removal (about 600 specimens)  Reforestation intervention (clearing, digging holes, planting)





## Biodiversity project to protect the huemul (Chile)

The huemul (*Hippocamelus bisulcus*) is a species of deer found in the area of influence of the Ñuble National Reserve, a forest reserve located near the hydroelectric plants located in the Laguna del Laja. It is a native species that is endemic to Chile and an emblem of the country, and is at risk of extinction according to the Red List of Threatened Species compiled by the International Union for Conservation of Nature (IUCN). The huemul population located in Los Nevados de Chillán in central Chile is vulnerable due to its small size and highly fragmented distribution. Since 2018, Enel has participated in a multidisciplinary project led by the Chilean Ministry of the Environment to develop and implement the “Biodiversity project to protect the huemul”, which involves defining a plan for the restoration, conservation and management of the huemul population, with a view to reducing threats to the species and increasing protection measures through habitat restoration and conservation. In February 2022, the plan was approved by the Chilean Ministry of the Environment, recognizing Enel’s contribution to conserving this species and preventing the risk of its extinction.



## Eagle owl conservation project in Catalonia

In the first half of 2021, a project was launched in Catalonia (Spain) to monitor and conserve the eagle owl, which is the largest nocturnal bird of prey in Europe and whose conservation is under threat. Indeed, in Spain it is included in the “List of Wild Species in Regime of Special Protection” and in Catalonia it is listed as a protected species.

The project involves the adoption of specific measures to avoid the birds being killed by medium- and low-voltage lines, an initiative that is part of the voluntary projects of the Endesa Biodiversity Conservation Plan, developed with the Birding Natura company. For several weeks, a live webcam was used to display real-time activity in a nest in the plain of Lleida, in the region of Les Garrigues. In addition, radio tracking transmitters were placed on 6 eagle-owl chicks, tracking a total of 6 chicks and 6 adult






birds. This measure provides information about their flight patterns during a period of one year, in order to identify and analyze the decisive factors in their development.





**Biodiversity Significance:**<sup>(19)</sup> this qualitative indicator makes it possible to classify power generation plants according to the importance of biodiversity present in their vicinity (high/medium/low). The methodology therefore makes it possible to identify priority sites for the protec-

tion of biodiversity in order to ensure proper management to mitigate potential impacts. Also in this case it should be noted that most sites of high significance are related to hydroelectric plants, generally infrastructures built in mountain areas and present in the locality for many years.

					
Sites of high biodiversity significance/ total plants by technology	19 / 161	66 / 266	541 / 1,096 <sup>(1)</sup>	39 / 91 <sup>(2)</sup>	0 / 39

(1) The figure represents individual reservoirs, not hydroelectric power generation plants.

(2) The figure includes plants being decommissioned.

In 2022, **4 new power generation plants** were built in areas of high biodiversity value, 2 fewer than in 2021, including 3 in critical habitats and 1 in areas containing species at

risk of extinction, for which action plans were developed to restore habitats and protect species.

Technology	Country	Plant	Land occupation (ha)	Significance	Critical species potentially impacted	Habitat	Biodiversity projects
Solar	Spain	Sol de Casaquemada	77	Critical habitat	<i>Nyctalus lasiopterus</i> <i>Rhinolophus mehelyi</i> <i>Otis tarda</i> <i>Tetrax</i>	Grassland	Installation of nests, perches, insect boxes and bird feeders
Solar	Spain	Torrecilla	118	Critical habitat	<i>Triturus boscai</i> <i>Aquila adalberti</i>	Wetlands and Grassland	Habitat improvement for amphibious reptiles and other faunal groups: restoration of ponds to promote biodiversity Habitat improvement for wild rabbits in the Francisco Pizarro node Improvement of habitats and shelters for birds of prey
Solar	Spain	Can Lloreta	6	Critical habitat	<i>Olea europaea</i>	Grassland	Restoration of degraded area
Wind	Spain	Tico	9	Endangered species	No endangered species mapped in the project area	Wetlands and Grassland	Monitoring of birds and bats: - baseline definition and species conditions; - impact monitoring before and during construction

**Presence of endangered species near plants/assets:** knowledge of protected species potentially present in the vicinity of assets is important in order to evaluate the actions needed to reduce the risk of interference by Enel assets. This type of mapping is carried out for all infrastruc-

tures for which biodiversity projects are developed and includes both flora and fauna species. The summary of this mapping is presented in the infographic table of biodiversity projects.

(19) To identify areas of high biodiversity importance, the following general criteria are considered: 1) Protected areas (UNESCO World Heritage Natural Sites and IUCN I-IV); 2) Critical habitats as defined by IFC Performance Standard 6; 3) Presence of endangered species, according to the methodology developed and adapted by UNEP-WCMC, Conservation International and Fauna & Flora International ("Biodiversity indicators for site-based impacts", 2020).

- Critically Endangered (CR)
- Endangered (END)
- Vulnerable (VUL)
- Near Threatened (NT)
- Least Concern (LC)

Country	No. of projects	Project type							Group	No. of species on the IUCN Red List					Total
		Mandatory	Voluntary	of which voluntary	Monitoring	Conservation (species)	Restoration (habitats)	Research and other purposes		CR	EN	VU	NT	LC	
Argentina	3	2	1	33%	1	1	-	1		-	-	-	-	-	-
Brazil	46	38	8	17%	16	7	21	2	Birds; Mammals; Fish; Plants	1	9	36	58	285	389
Chile	27	12	15	56%	9	6	6	6	Birds; Plants	-	-	3	3	69	75
Colombia	15	6	9	60%	4	5	4	2	Birds; Plants; Mammals; Reptiles	-	2	3	5	58	68
Greece	2	1	1	50%	2	-	-	-	Birds	-	1	3	3	60	67
Guatemala	8	-	8	100%	5	-	3	-	Birds; Mammals; Plants; Amphibians and Reptiles	3	3	4	8	80	98
Iberia	48	8	40	83%	2	32	8	6	Birds; Bats; Mammals; Plants	-	6	14	13	46	79
Ireland	1	-	1	100%	-	1	-	-		-	-	-	-	-	-
Italy	30	8	22	73%	6	21	3	-	Birds; Bats; Mammals; Plants; Fish	3	3	18	4	37	65
Mexico	4	4	-	-	4	-	-	-	Birds; Bats; Plants	-	1	6	8	38	53
Panama	1	1	-	-	-	-	1	-		-	-	-	-	-	-
Peru	5	3	2	40%	3	2	-	-	Birds; Plants	-	-	-	1	2	3
Romania	9	3	6	67%	3	6	-	-	Birds	-	1	5	2	7	15
South Africa	1	1	-	-	1	-	-	-	Birds; Bats	-	3	1	1	18	23
<b>Total</b>	<b>200</b>	<b>87</b>	<b>113</b>	<b>57%</b>	<b>56</b>	<b>81</b>	<b>46</b>	<b>17</b>		<b>7</b>	<b>29</b>	<b>93</b>	<b>106</b>	<b>700</b>	<b>935</b>

**Assessment of ecosystem services:** among the approaches that have been developed for some years in the scientific community to describe fully the contribution provided by biodiversity and nature, one relates to the optimization of ecosystem services. In this area, Enel continues to de-

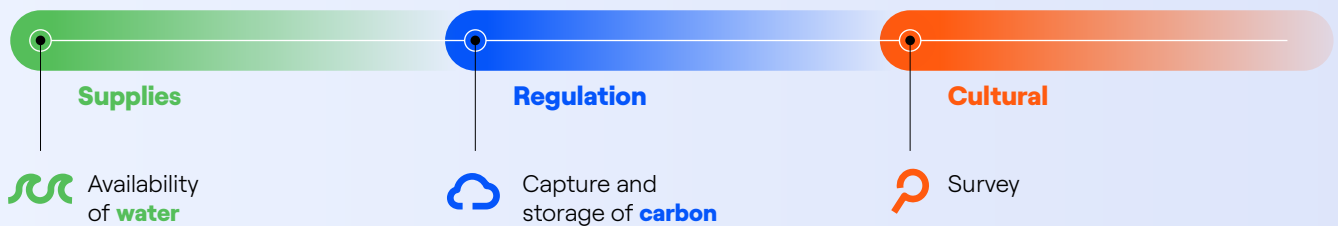
velop studies to verify how this approach facilitates better environmental management of its infrastructures in order to maximize the benefits for the environment and for local communities (see the dedicated box: "[Optimization of ecosystem services in Chile](#)").

## Evaluation study of ecosystem services in the Fundación Huinay

Enel carried out a study in Chile to identify and enhance the most relevant ecosystem services in natural areas taken as a benchmark, in order to propose management measures for their conservation. In addition to the 5 areas assessed last year (totaling an area of 10,300 ha) which are part of the appurtenances of a number of hydroelectric plants owned by Enel in Chile, in 2022 a

survey was conducted on a further 34,300 ha owned by the Fundación San Ignacio del Huinay, of which Enel is a founding member together with the Pontifical Catholic University of Valparaíso.

Ecosystem services have been classified according to the "Common International Classification of Ecosystem Services" (CICES) (<https://cices.eu/>), which selects and classifies services through participatory methods, applying internationally accepted standards. These are presented in three main areas, namely: cultural services, regulating and provisioning. The main ones are shown below:



The significant theoretical aspect of the environmental factor has become an economic model, put into practice on a conceptual level and tested in various environments, both

industrial and uncontaminated, yielding useful results for making socio-environmental decisions.

Ecosystem services

**845,110 €/year**

Economic value creation

### The numbers at a glance

**34,311 ha**

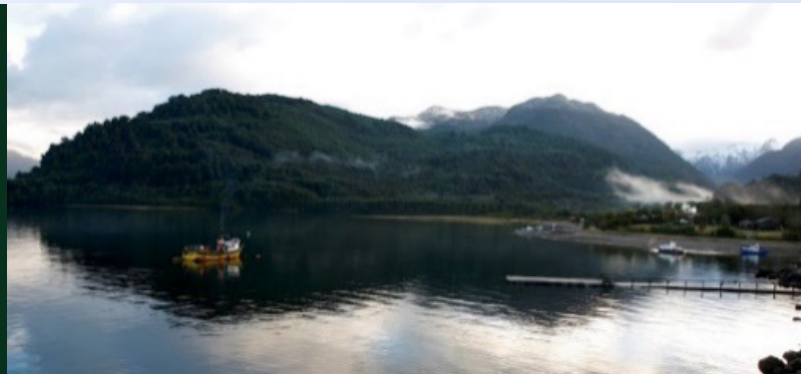
Analyzed surface

**109,705 tCO<sub>2</sub>/year**

CO<sub>2</sub> capture potential

**18**

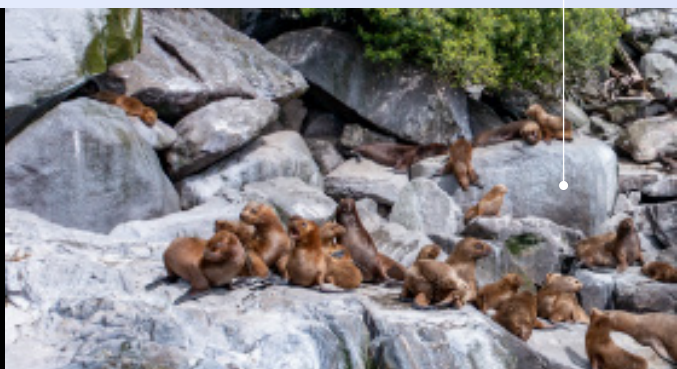
Ecosystem services analyzed and leveraged for a Management Plan



## Huinay – POETA Program – an example of a partnership for researching the impacts of climate on nature

In 2021, Fondazione Centro Studi Enel signed a partnership agreement with Fundación San Ignacio del Huinay with the aim of developing joint projects involving research, analysis and scientific studies. The partnership encompasses ecological issues, management and conservation of ecosystems and biodiversity, and focuses on the development of the POETA program

(Observation of the terrestrial and aquatic ecosystem of Chilean Patagonia) which was launched in 2018 **with the aim of giving a scientific response to the climate emergency in Chile and around the world**. Specifically, the program has a twofold objective: the first is to **conduct long-term monitoring of the essential variables of the climate and the terrestrial and aquatic ecosystems** of Chilean Patagonia, through a network of automatic stations, field sampling and remote detection; the second is to provide, with the help of the **GEOOs portal** (Observational Geoportal), a freely accessible, real-time data management and information transfer system useful for decision-making.



## Reducing pollution

3-3 | 305-7 |

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 technologies available and best international practices. During 2022, Enel continued its commitment on the path towards decarbonization. However, it should be noted that, due to the ongoing energy contingency in some countries in our perimeter, there was an overall increase in coal-fired generation compared with 2021, particularly in Italy due to the disconnection of energy supplies from Russia. For details on greenhouse gas emissions, please refer to the chapter “Zero emissions target”.

The constant commitment to improving air quality in the areas where Enel operates is demonstrated by the care paid to reducing the main atmospheric pollutants associated with thermal generation: sulfur oxides (SO<sub>2</sub>), nitrogen

oxides (NO<sub>x</sub>), and dust. To this end, over the years numerous measures have been taken to improve the environmental performance of most of the thermoelectric plants in the company's fleet, beginning from best technologies and international practices and taking into consideration factors such as context and local priorities, the plant configuration and its potential service life.

For years, the Group has set itself important objectives to reduce specific emissions of pollutants emitted into the atmosphere by 2030. In line with the SBTi certification process with respect to the Group's GHG emissions, which involved revising the 2017 targets and baseline net of asset deconsolidations as at December 31, 2022,<sup>(20)</sup> the 2017 target values and the baseline for the main environmental indicators were also revised. In particular, for emissions of pollutants into the atmosphere, the **new targets** include:

(20) For reference, see the chapter “Zero emissions ambition”.





## Objective of reducing our main emissions (vs 2017 baseline year)

**Dusts**  
**-60%**  
0.005 g/kWh<sub>eq</sub>

**SO<sub>2</sub>**  
**-85%**  
0.05 g/kWh<sub>eq</sub>

**NO<sub>x</sub>**  
**-70%**  
0.16 g/kWh<sub>eq</sub>

Starting from this year, the target of reducing Hg emissions from coal-fired thermoelectric plants by 100% compared to the year of reference will also be introduced.<sup>(21)</sup>

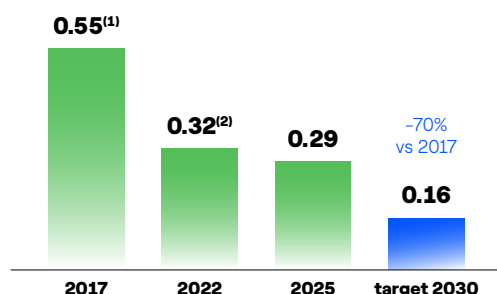
Pollutant reduction trends and targets are consistent with the Strategic Plan and with the Group's decarbonization objective.

Emission measurements are carried out in compliance with each Country's regulatory framework and, in the majority of large plants, a measurement system is used that can assess compliance with the limits in real time. Its reliability is guaranteed by accredited certifying entities and through assessments carried out by inspection authorities.

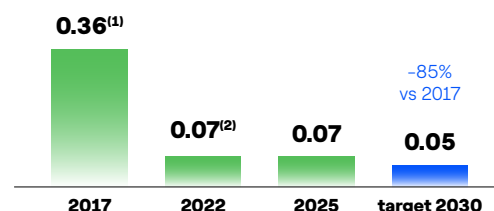
In 2022 there was a slight decrease in NO<sub>x</sub> emissions, in both absolute and specific terms, linked to the concomitant lower overall generation of gas and CCGT plants.

By contrast, SO<sub>2</sub> and dust emissions are in line with last year. In particular, specific emissions of SO<sub>2</sub> totaled 0.07 g/kWh<sub>eq</sub> (in line with 2021, which was 0.07 g/kWh<sub>eq</sub>), NO<sub>x</sub> emissions 0.32 g/kWh<sub>eq</sub> (-8.6% compared with 2021, which was 0.35 g/kWh<sub>eq</sub>) and dust 0.005 g/kWh<sub>eq</sub> (in line with 2021, which was 0.005 g/kWh<sub>eq</sub>). For mercury emissions, the value for the year 2022 was 75 kg of Hg, down 81% compared with 2017. For these emissions—which have also always been subject to constant monitoring and reduction in all plants of the coal-fired thermoelectric park through the adoption of the best available and technologically applicable abatement techniques—as previously stated, the target value of 0 kg of Hg (-100%) by 2030 was set, in line with the expected closure of all coal-fired plants by 2027, whereas the value set for 2025 is 14 kg of Hg (-96% vs 2017).

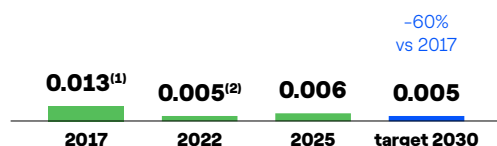
### NO<sub>x</sub> (g/kWh)



### SO<sub>2</sub> (g/kWh)



### Dusts (g/kWh)



(1) Values recalculated net of corporate deconsolidations as at December 31, 2022.

(2) The values for 2022 recalculated net of previous corporate deconsolidations are 0.29 g/kWh for NO<sub>x</sub>, 0.08 g/kWh for SO<sub>2</sub> and 0.006 g/kWh for dust.

(21) The target refers to the Countries for which this measure is prescribed and therefore includes Italy, Spain and Chile, whereas Colombia is excluded. The baseline value of 387 kg of Hg, referred to the year 2017, was calculated net of corporate deconsolidations as at December 31, 2022.

## Using water responsibly

3-3 | 303-1 | 303-2 | 303-3 |

The responsible use and conservation of water resources are fundamental guarantees for the protection of natural habitats and for the wellbeing of the people around us who use the ecosystem services provided by these resources, as well as being essential for the success of our own activities, which also depend to a significant extent on the responsible use and conservation of water resources. For this reason, the responsible use of water has been included among the strategic objectives of our environmental policy and is pursued using an integrated management approach.

The preliminary analysis of environmental risks and opportunities, conducted based on the TNFD criteria and reported in the chapter "Identification of impact factors and dependencies on nature and biodiversity", particularly highlighted the materiality, for some energy generation technologies, of impacts linked to the use of water resources, above all fresh water and particularly in areas with high water stress, where competition between natural and human needs is greatest.

Specifically, the main impacts are above all linked to water withdrawal mainly for industrial purposes. Water is large-

ly used in thermal and nuclear generation, for the cooling of thermal cycles and for operating atmospheric emission abatement systems. Overall water requirements for generation are covered, where available, through withdrawals from so-called "non-scarce" sources (mainly including sea water, which is used as-is in open cycle cooling processes and subjected to desalination to obtain industrial water) and, where necessary, from "scarce" sources, represented by surface water, groundwater and water for civilian use. To minimize these withdrawals, as well as maximize the restoration of internal wastewater, Enel uses, where available, treated wastewater supplied by water management consortia.

The main dependencies are instead attributable—in addition to the aforementioned needs of thermal plants—to hydroelectric plants, which, despite having negligible water consumption, depend for their operation on the water cycle which, through rainfall and the melting of snow, constantly replenishes surface watercourses (for further information, see the following paragraph "[Responsible and integrated management of water catchment areas](#)").



## Efficient use of water resources

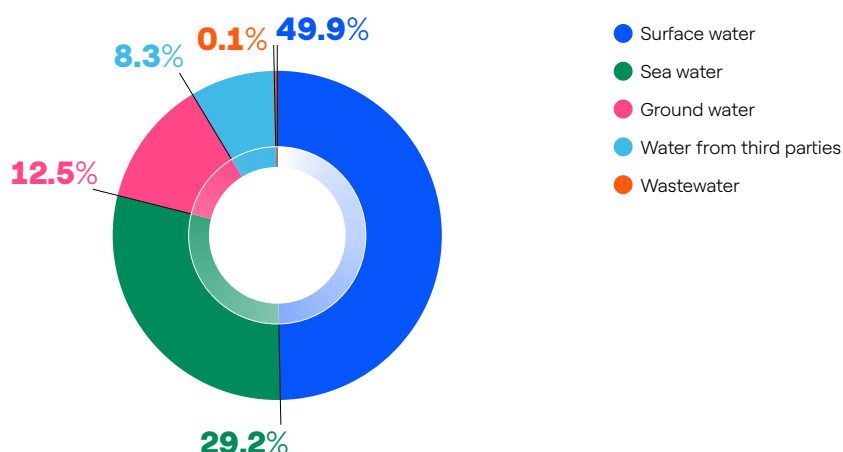
In 2022 total consumption of process and cooling water in a closed cycle<sup>(22)</sup> was approximately 76.0 x10<sup>3</sup> ML, a moderate increase compared to the 2021 figure<sup>(23)</sup> (73.1 x10<sup>3</sup> ML), due to the ongoing international energy contingency and the consequently greater need for electricity generation from coal-fired plants (which are expected to be closed by the end of 2027). As for the specific water requirement<sup>(24)</sup> in 2022 it was 0.27 l/kWh, slightly down on 2021<sup>(25)</sup> (0.29 l/kWh), despite the moderate increase in consumption volumes, thanks to the simultaneous growth of the renewable generation park.

Enel is constantly committed to progressively reducing the specific need for water for its plants and assets, through the efficient use of water in existing thermal plants, the evolution of the energy mix towards renewables, and the progressive reduction of generation from fossil fuels. Among the efficiency measures, particular attention is paid to maximizing the recovery of process wastewater leaving

treatment plants and to measures to increase the efficiency of cooling systems and evaporative towers, by upgrading the control and recovery systems of the drains. Other important optimization interventions concerned the use of crystallizers,<sup>(26)</sup> a technology that allows the complete reuse of waste water in the production cycle, eliminating its discharges (ZLD – Zero Liquid Discharge plants). Finally, great importance is given to the reuse of rainwater collected in plant areas, which cannot be returned as-is to natural receptors as it is potentially contaminated by contact with industrial surfaces. This water is stored in special storage tanks and reused in the generation processes, thus further helping to reduce the environmental footprint of our generation sites.

Measures to improve efficiency in the use of water also make it possible to minimize water effluent as well as total consumption, which are respectively 30.8 x10<sup>3</sup> ML and 45.2 x10<sup>3</sup> ML.

### Water withdrawal by source 2022 (76 x10<sup>3</sup> Mega liters)



(22) The waters used for open cycle cooling are reported separately among the environmental indicators. They are not taken into consideration here in assessing the efficient use of the water resource, as they are returned in full to the natural receptors, without substantial changes in quality, apart from a slight increase in temperature, subject to authorization and continuous control in order to guarantee the absence of measurable impacts on exposed ecosystems.

(23) The total value of process and closed-loop cooling water withdrawal for the year 2021 was recalculated following the refinement in 2022 of the way in which water withdrawn for cooling purposes at certain nuclear power plants in Spain was calculated.

(24) Water needs are constituted by all the water withdrawal quotas from surface (including recovered rainwater) and groundwater sources, by third parties, from the sea and from wastewater (quota for third party procurements) used for processes needs and for closed-cycle cooling, except the quota of seawater discharged back into sea after the desalination process (brine). This latter item (brine) contributes to the total quota of withdrawals.

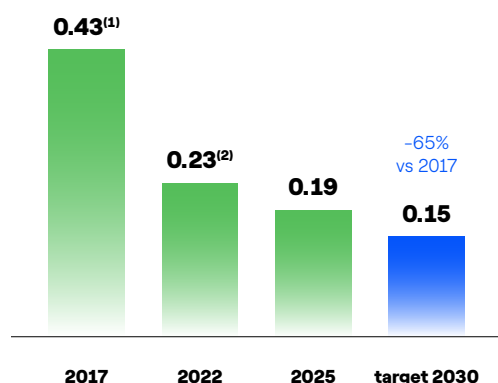
(25) Value also recalculated to take into account the reclassification of the cooling cycles of some nuclear power plants in Spain.

(26) Crystallizers or SEC plants, named after Softening, Evaporation and Crystallization processes.

## The new target for reducing specific fresh water withdrawal and the focus on water-stressed areas

Starting this year, Enel has renewed and relaunched its commitment to conserving water resources by adopting a new, even more challenging target aimed at reducing specific withdrawal of fresh water.

### Specific fresh water withdrawal (l/kWh)



(1) Value recalculated net of corporate deconsolidations as at December 31, 2022.

(2) The value for the year 2022 recalculated net of previous corporate deconsolidations is 0.22 l/kWh.

The target set by the Group for 2030 is a 65% reduction in specific withdrawal of fresh water compared with the base year 2017.<sup>(27)</sup> As already stated, both in this case and as regards the Group's GHG emission reduction targets, the baseline value for 2017 was recalculated to take into account the deconsolidations that took place in the reporting period (see the chapter "Zero emissions ambition"). The new target of reducing specific fresh water withdrawals, turning attention to the most valuable and vulnerable water resource, testifies to the even more explicit commitment to the protection of natural habitats and the needs of local communities. The objective takes into account future developments envisaged by the European legislation on sustainability reporting standards (proposed standard EU EFRAG ESRS-E3 "Water and marine resources"), and the results of the risk and priority analysis carried out at Group level in line with the main international standards being defined (TNFD and SBTN).

The commitment is pursued through the definition, at Group level, of common strategies and specific objectives,

which are implemented locally through the adoption of Environmental Management Systems on all assets for which the resource is material, as well as through water management plans for hydroelectric plants combined with continuous improvement programs shared with local stakeholders (dam authorities, local administrations, control bodies, citizens' committees and NGOs). The measures of impact mitigation and improvement, defined in the management plans, are linked to the guarantee of minimum vital flow and the protection of habitats (see the specific websites of the Environmental Authorities of the various Countries where the group is present).

During 2022, a total of 52.7 x10<sup>3</sup> ML of fresh water was withdrawn for process and closed-loop cooling uses, a slight decrease compared with 2021 (55.5 x10<sup>3</sup> ML), with the specific fresh water withdrawal value at group level standing at 0.23 l/kWh (down on last year's value of 0.25 l/kWh).

Enel also pays particular attention to the vulnerability of the resource, by mapping and constantly monitoring all generation sites located in areas classified as **water-stressed areas**. Mapping of generation, thermal, nuclear and renewable sites falling within water-stressed areas is done in line with the criteria of GRI 303 (2018) with reference to the conditions of "(baseline) Water Stress" indicated by the World Resources Institute Aqueduct Water Risk Atlas.<sup>(28)</sup> Among the sites mapped, those defined as "critical" are those positioned in water-stressed areas and which procure significant volumes<sup>(29)</sup> of fresh water. For these sites, which are specifically thermoelectric and nuclear plants that use water resources for process and closed-cycle cooling needs, water management methods and process performance are constantly monitored, in order to minimize consumption and favor withdrawals from sources of lower quality or which are non-scarce (wastewater, industrial or sea water).

The percentage of water withdrawn in water-stressed areas was approximately 19.3% of total withdrawals in 2022 (23% in 2021). In particular, fresh water withdrawals in water-stressed areas amounted to 12.4 x10<sup>3</sup> ML, generated by 7 significant plants, with an 18% reduction compared with the 2021 value (15.3 x10<sup>3</sup> ML), thanks to optimization actions and the reduced generation of some gas plants located in areas with high water stress.

(27) The values of which have also in this case been recalculated to take into account the corporate divestitures that have taken place in the intervening years, as was done for CO<sub>2</sub> emissions, waste and other atmospheric emissions.

(28) GRI 303 defines "water stressed" areas as those in which, based on the classification provided by the WRI Aqueduct Water Risk Atlas, the ratio, referred to as "baseline water stress", between total annual surface and groundwater withdrawals for different uses (civil, industrial, agricultural and livestock) and the renewable water supply available annually is high (40-80%) or extremely high (>80%). By way of greater environmental protection, those plants located in areas classified by the WRI as "arid" due to the unavailability of water are also considered as located in water stressed areas.

(29) Plants with withdrawals greater than 100 m<sup>3</sup>/year are included.



The specific withdrawal of fresh water in water-stressed areas was 0.12 l/kWh in 2022 (0.16 l/kWh in 2021), lower than the general Group value shown above, demonstrating the Company's priority commitment to adopting, in water-stressed areas, renewable technologies (solar and wind) that do not require significant quantities of fresh water or, in the case of thermoelectric plants, sea water desalination technologies.<sup>(30)</sup>

The strong expansion of the solar plant fleet, which is naturally intended for installation also in water-stressed areas, has nevertheless highlighted potential criticalities for some of these plants resulting from the need to clean the photovoltaic panels in order to remove dust deposited on their

surfaces: although such volumes are insignificant, Enel has adopted innovative solutions for these plants aimed at drastically reducing their water consumption (see the following box on the Roboost project).

In 2020, the Enel Green Power and Thermal Generation division launched the WaVE (Water Value Enhancement) project in order to reduce the use of water resources in all thermoelectric and renewable power generation sites, and to identify improvement actions, particularly in water-stressed areas. The project continued in 2022, refining the mapping of assets and focusing on the effects that climate change may have on the availability of water resources.

## Roboost Project – Robotic washing of solar panels

Our solar plants are often installed in arid regions, where they can benefit from high sun exposure. Although the water consumption needed for washing the panels is low compared to that required for thermal generation, it is nevertheless important to aim at further reducing it in consideration of the particular context of water scarcity in these regions. This year, the methods used to wash our photovoltaic panels were subject to a thorough review, which identified automation as one of the key factors for reducing the amount of water needed to keep the systems efficient.

In this area, Enel is developing its own "Roboost" program of new solutions that use autonomous robots to clean the photovoltaic panels in a fully automatic way without using water. The expected water saving is 5 l/MWh. Initial trials were carried out at the Totana plant in the Spanish region of Murcia. Here, robots supplied by an Italian startup have already been used successfully,



helping to reduce the water consumption needed to keep the panels efficient in what is one of Spain's most arid regions. The installation of other robotic systems is being planned, with the participation of other suppliers: one of the first countries involved will be Chile, where all our solar plants are located in desert regions with high water stress, and where saving water resources is therefore of paramount importance. Being completely electric, the autonomous robots also avoid generating any greenhouse gas emissions during the panel cleaning operations.

(30) The quantities of fresh water withdrawn and the energy generated in water-stressed areas are calculated taking into consideration both thermoelectric and renewable plants located in these areas. In the case of renewable plants managed in geographical clusters that include areas with different levels of water stress, the estimates of the previous quantities were made in proportion to their generation capacity.

## WaVE Project – Reduction of drinking water use in Peru

Enel pays great attention to the use of drinking water in its industrial processes. Where, due to particular local constraints or contingent situations, its use is absolutely necessary, maximum effort is expended to reduce or eliminate it in the near future.

During 2022, the Malacas gas plant in Peru replaced its old turbine burners with more modern “Dry low NO<sub>x</sub>” type burners. These enable nitrogen oxide emissions to be reduced even without the need for injection of demineralized water, which was being produced using water from the municipal aqueduct. The saving obtained from this intervention was approximately 60 thousand m<sup>3</sup>/year of drinking water, equivalent to the annual requirement of a small community. The social



benefits of reducing competition for the use of civil water infrastructure are therefore significant for the local community, given the scarcity of water resources.

## Optimization of liquid wastewater treatment

Downstream of internal recoveries and reuses, wastewater discharged from the plants is returned to the surface water body. Discharge always takes place downstream of a treatment process that removes any pollutants present to a level where they will not have a negative impact on the receiving water body, in compliance with the limits provided

for under national regulations and by operating permits. The potentially polluting substances present in our drains mainly consist of metallic species (Fe, Al, Si, Ca, Mg) in solution or, to a lesser extent, suspended solids. There are also no added nutrients (nitrates and phosphates), pesticides or other substances classified as dangerous.

## Responsible and integrated management of water catchment areas

The activities of hydroelectric power plants are an important element of water management. These power stations, which do not contribute to the Group's water consumption in that the water withdrawn is completely returned to its source, provide a series of additional services for the Company compared to the sole generation of renewable energies. A variety of power plants, jointly run by government and private stakeholders, manages the water resource for multi-purpose services ranging from flood control, drinking water and irrigation and firefighting services, to the management of river waste held by artificial dams, also in-

cluding numerous cultural, leisure and nature-based initiatives, made possible thanks to the presence of the power plants. The reservoirs of hydroelectric plants also carry out a vital role in the response to the effects of climate change, increasing the level of protection of the communities subject to increasingly frequent severe flooding and to prolonged periods of drought. Management of the outflows from hydroelectric plants is done through specific programs to ensure the volumes of water required to preserve the ecological state of rivers (minimum vital water flows).

# Managing waste

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Optimal waste management is a strategic objective of Enel's environmental policy, which results in a constant commitment to reducing its generation, as well as to constantly devising new methods of reuse, recycling and restoration in the perspective of a circular economy of resources, in line with the principles indicated by the new

EU proposal EFRAG ESRS E5 "Resource use and circular economy". These principles are further strengthened and integrated into Enel's operations in the Group Guidelines for Waste Management (PL No. 473), which Enel has adopted in order to collect and share best management practices and rules developed within the Company.

## The target of reducing waste from operational and maintenance activities

For several years, Enel has been pursuing an important target of reducing waste produced by direct, operational and maintenance (O&M – Operation and Maintenance) activities carried out on its plants. The reduction target previously set, linked above all to the ongoing energy transition and to Enel's strategic decision to bring forward the closure of its coal-fired thermal plants, which accounted for the majority of waste produced (mainly ash and gypsum), has already been reached in the last few years (1.2 Mt in 2020 and 2021, which is the target value previously set for 2030).

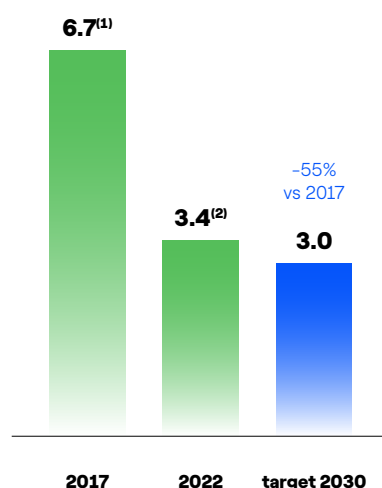
Starting this year, this target has been made more challenging by extending it to O&M waste produced by contractors who, operating on behalf of Enel, generate waste which they manage under their own responsibility as producers, in compliance with applicable laws, authorizations and mandatory qualification and management compliance criteria regularly verified by Enel as the contracting company.

This new adjustment of the target reflects the principles of extended responsibility of the waste producer, as recommended by the recently proposed EU standard EFRAG ESRS E5 "Resource use and circular economy". It also makes it possible to highlight, in the context of the ongoing energy transition, the growing role within the Company of the management of renewable plants and electricity and service distribution networks (for example, public lighting networks) with respect to the operational processes of thermoelectric plants.

The increase in the values reported this year is therefore attributable to the inclusion of O&M waste produced and managed by our contractors, mostly consisting of excavated earth and rocks and inert materials from civil and road construction and demolition, which in some main countries, including Italy, are classified and managed as waste and entirely destined for recovery.

The new target commits the Company to a 55% reduction in waste produced by direct and contracted O&M activities in 2030 compared with the base year 2017.

### Waste production from O&M activities (Mt)



(1) Values calculated net of corporate deconsolidations as at December 31, 2022.

(2) The value for the year 2022 recalculated net of previous corporate deconsolidations is also 3.4 Mt.

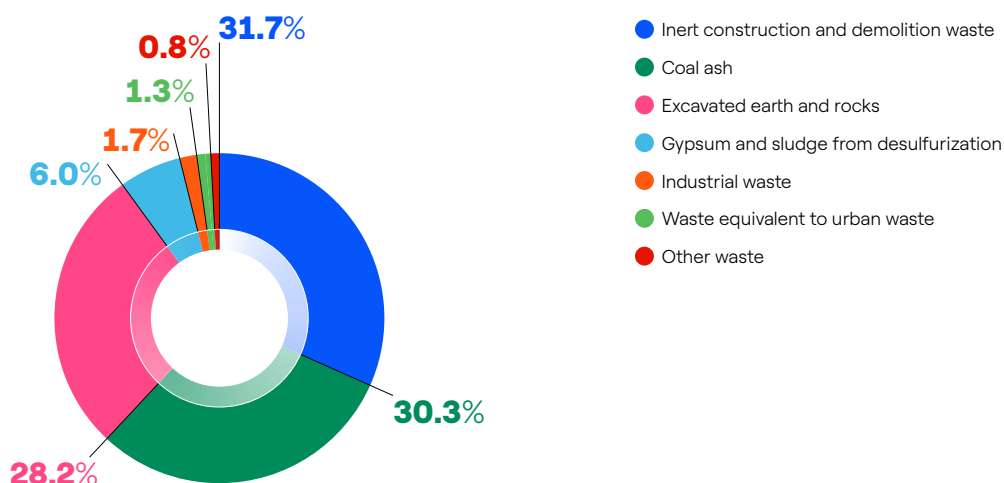
Waste produced in 2022 amounted to 3.4 Mt (corresponding to -50% compared with 2017), a moderate increase compared to that recorded in 2021 (3.1 Mt, also recalculated to include waste produced in O&M activities by contractors), mainly as a consequence of the increase in coal-fired thermoelectric generation in some countries, mainly including Italy, following the ongoing international energy contingency.

The vast majority of waste produced (98.3%) is accounted for by waste classified as non-hazardous and mainly consisting of inert waste from construction and demolition, coal ash and excavated earth and rocks. In particular, pro-

duction of ash from coal and gypsum from desulfurization, which is expected to be completely eliminated by 2030 following the planned decommissioning of coal-fired plants,

was respectively 1.02 Mt in 2022 (52% vs 2021) and 0.11 Mt (57% vs 2021).

### Waste produced by O&M activities (3.4 Mt)



The overall percentage of O&M waste sent for recovery totaled 84.4%. The commitment to a continuous increase in the percentile recovery of waste produced is essential for an effective transition towards a circular economy that minimizes the exploitation of natural resources, in accordance with the objectives of sustainable development and reducing the Company's environmental impact and dependence on ecosystem services. Excavated earth and rocks (94.6%) and construction and demolition waste (86.9%) were recovered almost in their entirety, deriving mainly from the maintenance of power grids as well as of generation plants. Process waste from thermoelectric

generation was also recovered to a significant extent, including coal ash and desulfurization gypsum, which were reused in building works to produce cement, concrete and bricks according to specific technical and environmental control requirements. In particular, the percentage sent for recovery was 80.4% for coal ash and 88.3% for desulfurization gypsum, improving on the results of the previous year (respectively 67% and 81% in 2021). Finally, industrial waste deriving from the maintenance of generation plants and electricity grids was mainly destined for recovery (88.1%), as was an even higher percentage (95.6%) of WEEE and metal waste, including iron, copper and aluminum.

### Waste produced by construction site activities

The objective of reducing waste produced by the operating and maintenance activities described above does not currently include waste deriving from the construction of new renewable plants and the demolition of thermoelectric plants at the end of their life, as these flows are specifically linked to the Group's strategy of decarbonization and energy transition. Above all, these activities are linked to the generation of inert materials, such as excavated earth and rocks, as well as valuable metal waste, in the case of the end-of-life decommissioning of plants. Enel is constantly committed to maximizing their recovery. In particular, for the recovery of waste deriving from the end-of-life decommissioning of plants, selective demolition techniques of the structures and dedicated management procedures

are adopted to maximize their economic value. For more details, see the chapter "Circular economy".

In 2022, waste produced on the construction sites of new renewable plants (wind and solar) and by the 3SUN Giga-factory totaled 0.09 Mt, which consisted almost exclusively of non-hazardous waste (99.9%). The same activities also produced 3.31 Mt of excavated earth and rocks, which was entirely reused *in situ*.

By contrast, waste from the end-of-life demolition of thermoelectric plants totaled 0.39 Mt. Waste from these activities consisted of 92.3% non-hazardous waste (mainly excavated earth and rocks, inert waste from construction and demolition and industrial waste, including mainly metals) with average recovery values of 76%, rising to 93% for



the metallic portion. Programs at country level and dedicated initiatives at plant level are aimed at optimizing the management of this waste, with a view to maximizing its recovery and value (see also the paragraph on the circularity of resources).

Finally, with reference to the specific redevelopment site of the Enel headquarters in Viale Regina Margherita (Rome,

Italy), launched in November 2019 for a duration of approximately 40 months and involving a total area of approximately 80 thousand m<sup>2</sup>, the amount of waste produced in 2022 totaled 26.4 kt, of which 98.2% (about 26.0 kt) consisted of demolition aggregates, glass and metals, which was entirely sent for recovery.

## Improvement initiatives

Among the most significant initiatives, within the Enel Green Power and Thermal Generation Division, the commitment made in 2020 continued with the launch of “Zero Waste”, a global project that aims to reduce the amount of waste produced and improve the percentages of waste recovered through the sharing of best initiatives and good practices implemented in the various Countries. The global initiatives carried out in 2022 continued, notably including the commitment to engage Enel’s contractors through awareness-raising and training initiatives and the adoption of contractual instruments to incentivize waste recovery.

Particular attention was also paid to wind and solar technologies, in order to identify possible strategies for the reuse of components that are subject to replacement and disposal at the end of their life, mainly starting from 2030. As regards wind technology, the “Wind New Life” project for the recovery of wind blades is continuing. Among the possible alternatives for their recovery, the project has also considered the processes of reusing and recovering energy from the turbine blade materials for concrete production. Meanwhile, the “Photorama” project is dedicated to the reuse of photovoltaic panels, focusing above all on the most valuable and difficult-to-source materials, which are potentially reusable for the generation of new panels.

As regards waste produced by grid management activities, in continuity with the programs launched in previous years, Enel is continuing in its commitment to restoring hazardous and non-hazardous special waste, especially as regards dielectric mineral oils used as insulators in electrical equipment, which is delivered to authorized companies for regeneration or, if this option is not feasible, destined for waste-to-energy processes. Also ongoing are the initiatives launched in the various countries for the sustainable replacement of first-generation smart meters and the recovery of their constituent materials.

For further initiatives, see the chapters “Circular economy” and “Sustainable supply chain” in this document.

As part of the provision of products and services for energy efficiency, in 2022 Enel X Global Retail continued its commitment to a sustainable approach that extends to the entire value chain, by further extending the requirement for its suppliers to provide transparent and comparable information on the environmental impact of the materials and products they supply. In particular, for own-brand products, Enel X Global Retail adopts the Extended Producer Responsibility (EPR) model, which also includes the post-consumer phase, by adhering to collective WEEE collection systems in all the markets in which it operates, as well as collection of batteries and packaging, and by launching end-of-life management initiatives for marketed products and optimizing their design with a view to maximizing their reuse and recycling. These initiatives notably include:

- the ALVA (ALternativas de VALorización) project in Spain, aimed at improving performance in the management of waste from electrical and electronic equipment (see the dedicated box);
- the agreement between Enel X Italia and CdC RAEE (Centre for the Coordination of Waste from Electrical and Electronic Equipment), whose partnership enables B2C distributors/installers contracted with Enel X Italia to use the WEEE collection service free of charge, as well as providing greater control/traceability of WEEE along the entire supply chain to the plants where they are ultimately destined;
- a similar project in Peru, but applied to B2G public lighting, with the objective of both extending the life cycle of light bulbs that are still functional and the restoration treatment of spent bulbs through the WEEE RECOLECC consortium in order to recycle the raw materials, thereby creating value and reducing greenhouse gas emissions.

## Spain – ALVA Project (ALternativas de VALorización)

With the aim of applying the principles of the circular economy and in compliance with environmental regulations on waste, Enel X Global Retail has developed a project for reusing and recycling electrical and electronic equipment (EEE) products or components taken back from customers.

The project applies to electronic devices marketed by Enel X which are subject to return, in the case of rentals, or replacement of EEE installed at the customer's premises (1-for-1 takeback). The objective of the project is to ensure virtuous management and traceability of products/waste in order to prioritize EEE reuse operations over disposal. The project engages installers, a qualified repair company and the ECOTIC consortium in managing waste electrical and electronic equipment (WEEE) in order to improve circularity, by providing full traceability of the installation/replacement process, and to increase the reuse and restoration percentages of WEEE in treatment plants, and consequently to reduce CO<sub>2</sub>.

2022 results



**61** installers  
who have signed the  
agreement with ECOTIC

**103** t WEEE collected  
(93–96% material  
recovery / 1–3%  
energy recovery)

**119** t CO<sub>2</sub>  
equivalent saved



# Protection of soil, subsoil and groundwater

## 3-3

Enel is committed to the continuous application of the most advanced technologies available and best practices in order to minimize the possible environmental impacts deriving from its activities, using international standards as a benchmark even where the required environmental protection is less stringent. Among the areas of prevention, the highest level of attention is paid to the protection, monitoring and remediation of soil, subsoil and groundwater in the areas where plants and generation and service facilities are present in all Countries.

The protection of the environment matrices guides every phase of each asset's life, from design choices to construction, operation and end-of-life management. Both active and passive protection and safety measures will be used in the project phase to prevent and, in any case, minimize the risk of uncontrolled or accidental contact of potentially polluting substances (such as fuels, reagents, liquid and waste flows) with soils and subterranean waters. During plant operations, every process undergoes compliance controls as well as ongoing upgrades as required by the Environmental Management Systems to prevent and minimize the risks of any potential environmental contamination. At the same time, control plans are executed to monitor the condition of the previous environmental matrices. In the event of an accident, for example the accidental spillage of polluting substances, the timely application of the Stop Work and Emergency Management Policies makes it possible to prevent or minimize the risk of environmental impacts, rigorously complying with the provisions and the legal obligations of the various countries. For the end-of-life management of power plants, once they have been made safe and prior to them being dismantled and the area reassigned for new development projects, Enel proceeds to verify further the environmental quality of the soil, subsoil and groundwater in the areas where the plant is located, according to the authorized provisions and legal requirements of the various countries. In the event of potential contamination phenomena, characterization of the environmental matrices in the areas potentially affected and, if necessary, implementation of

safety measures and subsequent remediation, are executed according to intervention plans shared with the competent authorities and by resorting to specialist, qualified companies that are able to promptly restore the level of quality suitable for the intended use of the area (industrial, commercial, residential etc.). Particular focus is on power plants falling within large industrial hubs. In order to mitigate further the risk connected to the detention and consequent potential uncontrolled release of substances that can have an impact on the environment, numerous projects have commenced for their progressive substitution, for example, verifications under way on the use of vegetable (hence biodegradable) oil, replacing the traditional dielectric oil of mineral origin.

Within the context of the energy transition launched by Enel, particular importance is given to projects for converting decommissioned plants, with the aim of hosting new renewable generation and energy storage plants, in order to reuse the industrial areas, some common parts of the plant, and the main infrastructures. In this way it is possible to reduce the environmental impacts deriving from demolition and new construction activities, as well as the consequent social and economic impacts on the surrounding communities and stakeholders. In order to optimize the management of plant decommissioning projects, in 2021 Enel adopted dedicated Guidelines ("Environmental issues management in power plants decommissioning"), with the purpose of guaranteeing a standardized approach to identifying, preventing and managing environmental aspects related to the decommissioning of power plants. These Guidelines provide global guidance on applying best management practices in relation to all environmental aspects, including soil and groundwater management.

With a view to continuous improvement and minimizing the possible environmental impacts deriving from decommissioning activities, at the end of 2022 a further set of Guidelines was also issued ("Sustainable Repurposing Model") in order to ensure the increasingly sustainable end-of-life management of plants (see the dedicated box below).



## Habitat restoration to protect native species

The area affected by the environmental restoration project was previously used to store combustion ash from the “Eugenio Montale” thermoelectric plant in La Spezia, Italy. Starting from 2020, following a project authorized by the competent bodies, a waterproof top cover (cap) was created for the two reservoirs on the site, aimed at making them permanently safe while also guaranteeing landscape restoration by planting and grassing the area. The capping activity, completed in July 2022, was carried out in conjunction with a habitat restoration project aimed at restoring and maintaining biodiversity in the area, which is considered “core”, due to the presence of *Rana dalmatina*

frogs (a protected species included in the IUCN National Red List).

The habitat restoration project envisaged the recreation of a semi-open humid environment (azonal *Phragmites australis* reed bed habitat) fed by a channel that conveys runoff surface water from the reservoir caps, in addition to planting native arboreal and herbaceous essences characteristic of submerged wetlands and humid and perhumid environments. This habitat, in addition to providing a safe place during the reproduction period for a species in need of protection such as *Rana dalmatina*, also plays an irreplaceable ecological role by providing a place of rest, shelter and food for numerous other animal species.

For further details, please refer to the chapter “Our commitment to a just transition: leaving no one behind”.



## Sustainable Repurposing Model

The sustainable repurposing model aims to promote the standardized adoption of sustainable practices during all end-of-life disposal activities of plants and assets. The aim is to create synergies with the future redevelopment of the sites, while maximizing the positive environmental and social impacts of the entire process.

To achieve and monitor these objectives, a set of guidelines, a catalog of sustainable practices and specific KPIs have been created. In order to launch and promote the model, some pilot projects on decommissioned plants have been launched in Chile, Spain and Italy. The contin-

uous monitoring, through KPIs, of environmental performance on important aspects such as the reduction of atmospheric emissions, the recovery and recycling of materials and waste, the efficient use of water and the improvement of soil and biodiversity will allow us to continue on our path towards an increasingly efficient energy transition. The proposed model includes, in particular, the identification and application of sustainable principles and practices related to the management of the environmental matrices of soil and groundwater, such as the restoration of reclaimed areas in compliance with the morphological, vegetative and landscape characteristics of the surrounding area, as well as the creation of habitats aimed at promoting biodiversity and ecosystem services.



# Energy efficiency

3-3 | 302-1 | 302-3

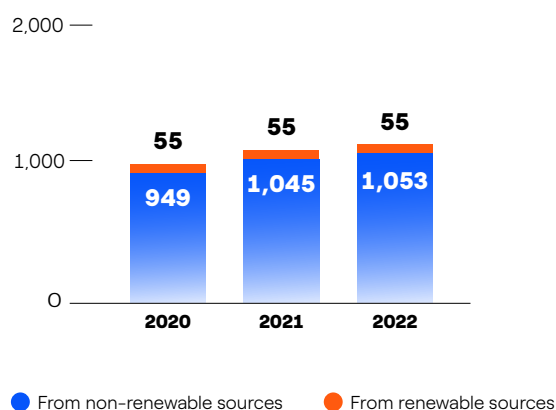
## Energy efficiency in production processes

For Enel, the efficient use of energy is a constant commitment that extends to the entire value chain and which is pursued through the implementation of operational excellence programs across the different Business Lines, both for operations and in buildings. In particular, targeted interventions are aimed at maximizing the efficiency of power generation plants as well as improving the operational efficiency of distribution networks.

Energy consumption is mainly represented by fossil fuels, to operate thermal power plants (with coal accounting for 19% and natural gas 45% in 2022), and by uranium, to operate nuclear power plants (27%). By contrast, a smaller amount of energy consumption is related to the operation of power generation plants relying on renewable sources (biomass and geothermal). Total direct consumption of energy for electricity generation in 2022 amounted to 1,108,069 TJ (26.5 Mtoe), which was basically in line (0.8%) with the energy consumption of fuel recorded in 2021 as a result of the increase in thermoelectric generation from coal (64,571 TJ, up by 46% on 2021), as well as from diesel and nuclear to a lesser extent, replacing generation from natural gas (-79,774 TJ, down 15% on 2021). The Group's energy intensity, which provides a measure of its operational efficiency, was 4.81 MJ/kWh<sub>eq</sub> in 2022, slightly down on the previous year (-0.36%). Activities to optimize the grid structure continued in 2022, allowing for a significant reduction in grid losses. These include pro-

gressively reducing single-phase power lines, constructing additional power lines to alleviate the overload on existing lines, using low-loss transformers, boosting the grid by using conductors with a greater cross-section, and rephasing primary transformer substations. Finally, the realization of new transformer stations that help reduce the length of low-voltage lines, which are characterized by higher levels of loss.

Consumption of primary energy from renewable and non-renewable sources (,000 TJ x10<sup>3</sup>)



## Energy efficiency and electrification products for customers

The electrification of final consumption has become a central element of Enel's strategy. Its intrinsic efficiency makes it the key partner in achieving sustainable goals globally. In line with this approach, several initiatives across our businesses were strengthened and consolidated in 2022 to support commitments towards clean electrification. In 2022, the interventions carried out by the Enel X Global Retail Business Line in relation to efficiency, technological innovation and reduction of CO<sub>2</sub> emissions in the sectors in which the division operates, were strengthened and consolidated. In the public lighting sector, work performed in 2022 by Enel X Global Retail in Italy, Spain, Chile, Colombia and Peru resulted in cumulative savings of approximately 177 GWh. In public transport, Enel X Global Retail participated in the commissioning of more than 500 new electric buses in Chile, Colombia, Spain, Italy and the United Kingdom in 2022.

For its B2C (Business to Consumer) customers in Italy, Spain, Chile and Romania, in 2022 Enel X Global Retail in-

stalled about 78 thousand energy-efficient products, including condensing boilers, air conditioners, air-to-water heat pumps and photovoltaic plants (some with storage systems), while in the B2B (Business to Business) sector, the photovoltaic plants managed by Enel X Global Retail for its customers in Brazil, Spain, Italy, North America and Korea in 2022 made possible a generation of distributed renewable energy equal to about 42 GWh, in addition to the energy savings obtained by the cogeneration and trigeneration plants managed by Enel X Global Retail in Italy and Spain. Overall in 2022, Enel X Global Retail's efficiency and electrification products and services enabled its customers to avoid the emission of approximately 130 thousand tons of CO<sub>2</sub>, equivalent to an environmental benefit of more than 7 million trees per year, values calculated by applying algorithms validated by an internationally recognized certification body according to the principles identified in the UNI EN ISO 14064-2:2019 standard.

For further details, see the chapter "[Clean electrification](#)".

## Environmental legal disputes

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2-4

At December 31, 2022, the number of legal proceedings pending was 168 across the whole Group. The main environmental disputes related to Italy, Latin America and

Iberia. The amount of fines imposed or paid in 2022<sup>(31)</sup> was approximately 1.8 million euros. In addition, 22 non-monetary sanctions were issued.

(31) The relevance threshold for fines is 10,000 USD, therefore only sanctions that individually exceed this amount are reported.



# Managing human rights

## Material topics (I level)



## Plan



## SDG



Below the 2022 results related to the targets of the previous 2022–2024 Sustainability Plan, the resulting progress and the targets of the 2023–2025 Sustainability Plan, which may be redefined, added to, or surpassed with respect to the previous Plan.

SDG	Activities	2022 results	Progress	2023–2025 targets	Tag
16 17	Definition of a strategic framework relating to the management of human rights in business operations, implementation of the ensuing action plans, analysis of the results and tailoring of the inputs to update the initial framework including any evolution of the international landscape	Definition of framework achieved through update of existing framework to keep abreast of the evolution of the international reference frameworks and of our operating, organizational and managerial processes	● ● ●	Implementation of action plans resulting from the definition of the strategic framework on human rights management in business operations, analysis of results, tailoring of the inputs and updating of the strategic framework (also in view of the evolution of the international context)	E S G

For further information on the targets included in the Sustainability Plan, please refer to the Human Rights Content Index.

Goals			Progress		
I Industrial	E Environmental	S Social	⊕	↻	⌚
G Governance	T Technological		New	Redefined	Outdated
			● ● ●	● ● ●	● ● ●
			Not in line	In line	Achieved
			N.A. = not applicable		





# Managing human rights



# Managing human rights

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Our pledge to respect human rights is the guiding principle that permeates all our activities, and it is fully integrated into our corporate purpose and values, since we belong to the territory, and we are an essential element in the lives

of people, businesses, and society at large.

We have adopted the approach of the UN Guiding Principles on Business and Human Rights, setting up a human rights management system based on three pillars:

## OUR COMMITMENT

It includes:

- our **strategic approach** to human rights in business operations
- our **public commitment**: the Human Rights Policy
- **embedding** of the commitment into:
  - operating policies and procedures
  - training topics and practices
- our **governance**

## OUR DUE DILIGENCE PROCESS

It includes:

- **identification** of salient issues
- **management** of salient issues
- **relationship with stakeholders** (workplace, procurement and business relationships, communities, customers and cross-cutting and specific issues)

## ACCESS TO REMEDY

It includes:

- our commitment to provide appropriate **remedy** in case of impacts
- **grievance** channels information
- **redressing** in legacy projects

## Our commitment

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### Our strategic approach

Protection of the environment and natural resources, climate action, and contribution to a sustainable economic development are strategic factors in the planning and development of our operations, alongside our broader commitment to accelerate the decarbonization and electrification processes, in accordance with the Paris Agreement and the United Nations Sustainable Development Goals.

The mitigation of the effects of the increasing environmental degradation and of climate change cannot take place without taking into account their social impact and that is why we believe that transition to net zero should be fair and inclusive.

We measure our commitment by acting in such a way that those who work with us do so in just and favorable conditions, that their health, safety and wellbeing are pivotal to creating value and that the rights of the communities with which we interact, as well as those of our customers, are respected.

A strategic approach aimed not only at mitigating risks in a reactive way, but at managing them proactively by identifying the relative opportunities and exploiting the potential for growth and the creation of shared value.



**Ernesto Ciorra**

Chief Innovability® Officer

“Respecting Human Rights is a fundamental element to empower sustainable progress.

We promote the growth of a **constructive dialogue** that can really help – in an effective way – **with tackling the challenges brought by the social impacts of decarbonization strategies in line with the Paris Agreement, and we have committed to a just transition that does not leave anyone behind.**

**Continuous innovation and embedding of circularity principles are also cornerstones for building a competitive, inclusive and sustainable business model.** Indeed, a sustainable business conduct based on international reference standards **is key to unlock multiple competitive advantages, such as increasing talent attraction & retention, strengthening corporate resilience, meeting customers & civil society expectations, improving access to stock & capital markets, shaping regulation & promoting system advocacy.**”





## Our public commitment: the Human Rights Policy

In 2013 Enel has adopted a Human Rights Policy, approved by the Board of Directors, which has been updated in 2021 to keep abreast of the evolution of the international reference frameworks and of our operating, organizational and managerial processes.

The Human Rights Policy leverages commitments already included in several codes of conduct like the Code of Ethics (adopted as early as 2002), the Zero Tolerance of Corruption Plan and the global compliance models while at the same time strengthening and expanding their content. The content of our policy refers to internationally recognized human rights as defined in the **International Bill of Human Rights** and in the **International Labor Organization conventions** underlying the **Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy** and applicable to business practice.

The commitment also reaches out to:

- the **10 Principles of the Global Compact** that we have joined as an active member since 2004;
- the **United Nations Pledge Letter** we signed in 2019, in which the United Nations asked companies around the world to commit to a just transition and the creation of decent green jobs (for further details, please refer to “[Our commitment to a just transition: leaving no one behind](#)”);
- the **United Nations “Protect, Respect and Remedy” framework**, set out in the guiding principles on business and human rights, and the **OECD guidelines for multinational enterprises**, two of the main international soft law reference standards.

The policy addresses **employment practices and community relations** and society through **12 principles**. Specifically, they establish our rejection of practices like modern slavery, forced labor, and human trafficking, to name a few, and our commitment to promoting diversity, inclusion, and equal treatment and opportunity, guaranteeing that peo-

ple are treated fairly and valued for their uniqueness, as well as focusing on protection of the environment since a safe, clean, healthy and sustainable environment is integral to the full enjoyment of a wide range of human rights.

The principles have been identified based on their relevance to our business activities and relationships, as well as on the outcome of a consultation held with relevant stakeholders (people within our organization, as well as suppliers, human rights experts, think tanks, NGOs, other companies) held in line with the “UN Global Compact Guide for business: how to develop a Human Rights Policy”. Listening and taking account of stakeholders’ perspectives in internal decision-making is, indeed, an integral part of our commitment to respecting human rights. For further details, please refer to “[Materiality analysis process and results for 2022](#)”, “[Our commitment to a just transition: leaving no one behind](#)” and “[Engaging communities](#)”.

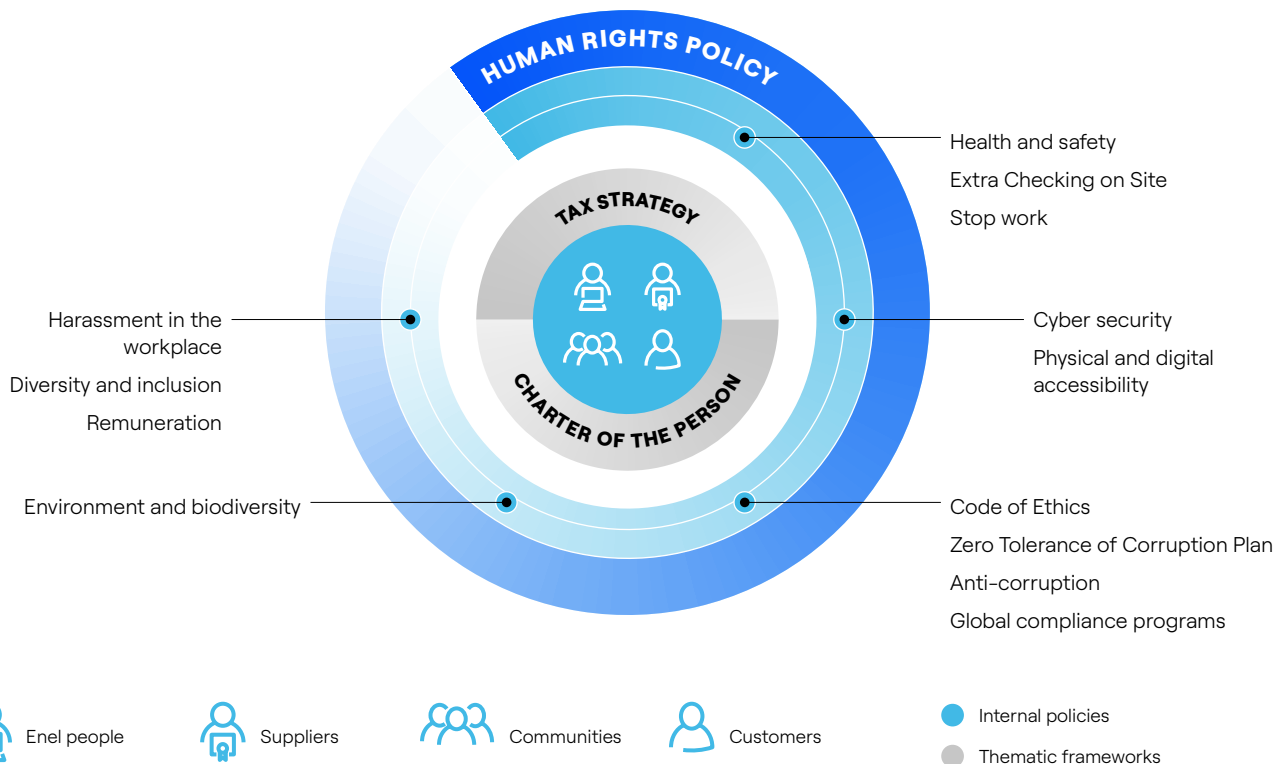
Our commitment extends to supporting heightened responsible business conduct also through European reference organizations, like **Eurelectric**, the utility-sector one, through which, during 2022 we have continued to participate to the process concerning the development of the draft Corporate Sustainability Due Diligence Directive (CSDDDD).

Other participations include the **Solar Stewardship Initiative**, launched by **Solar Power Europe**, the **Global Alliance for Sustainable Energy**, an independent global alliance, as well as the working groups within the **Just Transition Think Lab**, promoted by the **United Nations Global Compact**, the **Business Commission to Tackle Inequality** (BCTI), promoted by the **World Business Council for Sustainable Development** (WBCSD), and **CSR Europe Leaders Hub for an Inclusive Green Deal**, selected group of members of **CSR Europe**. For further details, please refer to “[Our commitment to a just transition: leaving no one behind](#)”.

## Policies and procedures

Integration of the commitment across relevant internal functions and processes is key to prevent and mitigate adverse human rights impacts as well as fostering decent work, inclusive economic growth and sustainable development.

Hereafter a summary classified by stakeholder and thematic group of the key internal policies and external frameworks integrating [our Human Rights Policy](#).



## Security and human rights

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National regulations generally set for security services employed to protect companies' personnel or property that they are assigned only to public forces, or to private forces in the absence of legislative provisions.

In both cases, our commitment is to promote that security forces act in a way consistent with the applicable national laws and international rules and standards and in line with the voluntary principles on security and human rights (principle 2.2.3 of our Human Rights Policy).

Security services providers are selected following our overall procurement and monitoring process during the life of the contract and are therefore subject to the same ESG screening and contractual clauses as any other supplier. For further details, please refer to "[Sustainable supply chain](#)".

For providers included in the high reputational risk category, we also run additional checks regulated through a specific procedure (Counterparty Analysis), a further instrument in reducing and mitigating, as much as possible, actual or potential risks.

Overall security management is entrusted to a dedicated function at Group level (Global security) which acts in coordination with relevant security functions at country level. Main activities are collecting and analyzing information to map potential security risk and related management, also in cooperation with external stakeholders like reference institutions and other critical infrastructure operators.

As for protection services for Enel people travelling in high-risk countries, providers are selected based on specific contractual frameworks managed by the Global Security function.

## Training

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Training and awareness-raising processes dedicated to both Enel people and business partners is a key part of embedding respect of human rights in business operations. Each year we carry out specific training to ensure that anyone working with us is aware of the role they play in ensuring respect of human rights while doing business. Such training also includes specific communication initiatives aimed at internal and external stakeholders to foster proper understanding of the commitment undertaken through the Human Rights Policy.

The training is deployed in different formats and content in order to meet every need, including:

- courses on environmental protection;
- courses on occupational health and safety;
- courses on diversity and inclusion;
- courses on relationships with communities;
- courses on anticorruption;
- digital training courses on issues closely linked with human rights;
- training initiatives on best practices closely linked with human rights.

In 2022, 84% of Enel people attending courses on sustainability, confirming 2021 trend. Specifically, training hours were equal to approximately 1.9 million, with a per capita average of 28 hours. Training on human rights totaled some 7 thousand hours thanks to the online course that exemplifies the key role human rights play in business practice through simple stories and best practice sharing. On top of this, we run induction activities on human rights and business to selected audiences to promote internal awareness on our commitments and to stimulate improvement of its embedding into the operating practices. Activities for 2022 include:

- a training session within the Executive Procurement School, organized with the support of a leading university and dedicated to our global procurement talents;
- a deep-dive with all our country sustainability managers;
- a training session dedicated to a selection of people working with us in renewable operations.

## Governance

Respect of our commitment in terms of human rights is an integral part of our corporate decision-making process. We rely on an organizational and corporate governance model, based on principles of transparency and accountability, that sets out well-defined tasks and responsibilities of the main governance bodies. Namely:

- the Board of Directors, acting through the Control and Risks Committee and the Corporate Governance and Sustainability Committee, which carry out preparatory work aimed at making proposals and providing advice, is responsible for examining the main company rules and procedures of relevance with respect to stakeholders and connected to the Internal Control and Risk Management System. These include our Human Rights Policy, our Code of Ethics, our Zero Tolerance of Corruption Plan and our global compliance models. Both committees are in charge of providing recommendations for changes to the Board for approval, if necessary, in order to bring such procedures in line with national and international best practices and with modifications in appli-

cable laws and regulations;

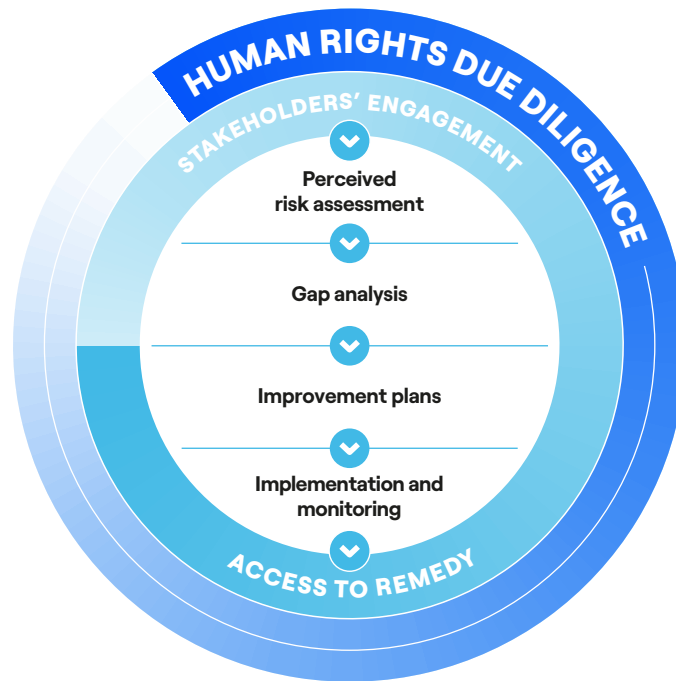
- the Innovability® Function and, namely, the Sustainability Planning and Performance Management and Human Rights unit, is responsible for:
  - managing the positioning on human rights and ensuring that it is correctly reflected in any internal and external communication activity;
  - integrating respect of the principles included in our Human Rights Policy in corporate processes and planning and coordinating due diligence activities on the related management system, with the support of other units relevant to the process;
  - reporting to the Control and Risk Committee and to the Corporate Governance and the Sustainability Committee on the implementation of the due diligence process and on the management of human rights-related activities;
  - reporting annually within the Group's Sustainability Report how we respect human rights commitments.

# Our process of due diligence

2-23

As required by the United Nations Guiding Principles on Business and human rights and by the OECD Due Diligence Guidance for Responsible Business Conduct, we have set up a process, which we have also codified in a global internal procedure, covering the entire value chain across our geographic footprint aimed at identifying if any of our operating procedures and processes require an improvement

plan to strengthen the management system that ensures we comply with the commitments undertaken in our Human Rights Policy. Our process runs on a three-year cycle format, and involves both internal stakeholders by country of operation and function and external ones through human rights experts and key stakeholders. We have just completed the 2020-2022 cycle.



## Perceived risk assessment (identification of salient issues)

Identification of salient human rights issues allows us to better understand where to focus our efforts and resources for the potential impacts that require the greatest urgency, taking into account the relevant stakeholders' perspective.

The 2020 assessment run in our countries of operation with regard to labor, local communities, and environment-related rights involved stakeholders and experts in several fields, including civil society, and academic institutions. Specifically, consultations were held with direct and indirect workers, representatives of indigenous populations and local communities, trade unions, local institu-

tions and peer companies.

Outcomes of the assessment were then plotted into a human rights risk heat map based on the severity and the likelihood of a potential violation.<sup>(1)</sup>

Hereafter, a summary of the most significant results:

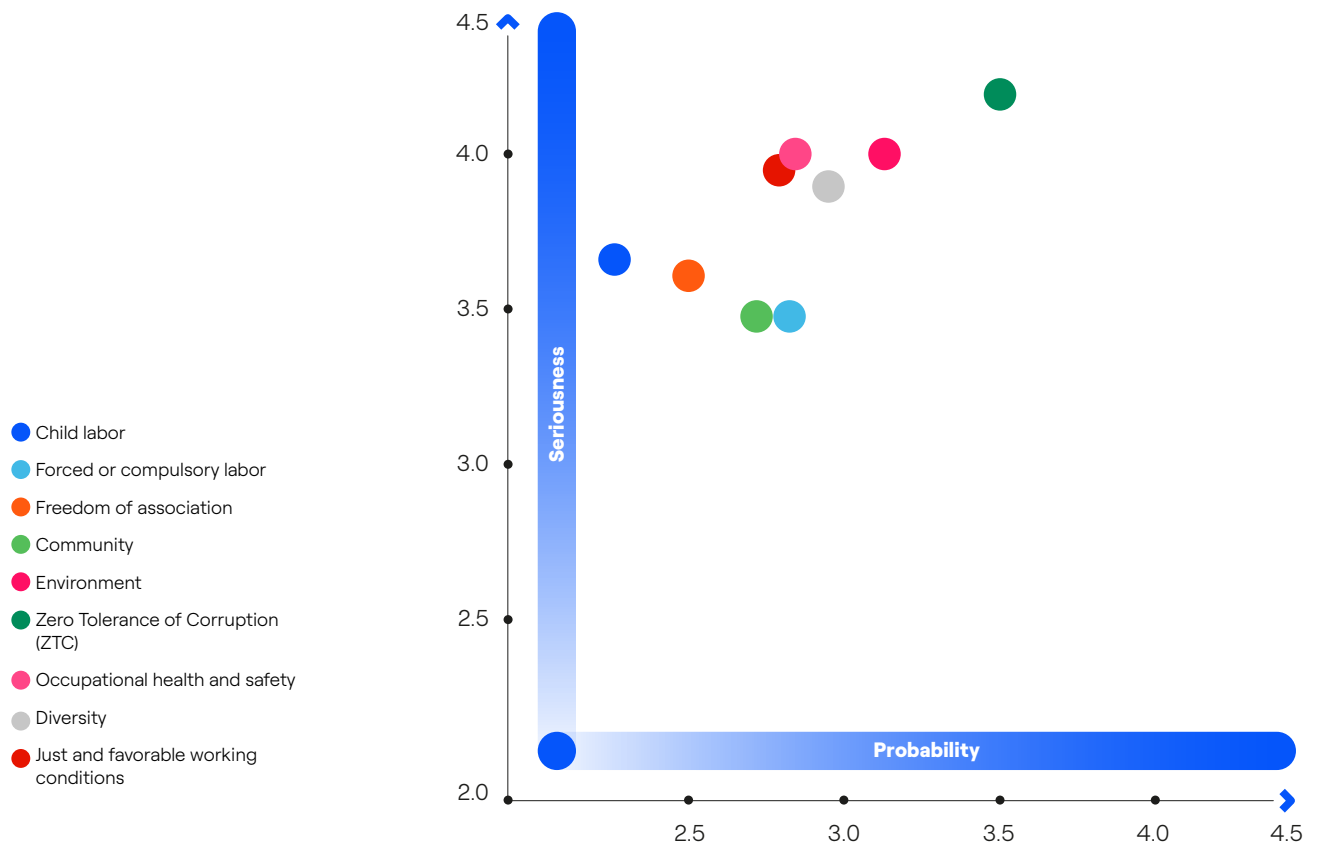
- risks connected to bribery practices and to impact on the environment ranked as "high-priority";
- risks connected to labor practices violations (freedom of association and collective bargaining, rejection of forced and child labor, just and favorable working conditions, occupational health and safety, diversity and inclusion) and to potential impacts on local communities

(1) Risks are classified based on the assessment scale: acceptable risk (minimum level), risk to control, high-priority risk, high risk (maximum level).



ranked as “to be monitored”. Protection of local communities’ rights ranked higher in Latin American countries, confirming the results of the previous cycle, given the

widespread presence of such groups in that geographical region.



In addition, we periodically engage with our stakeholders and sustainability experts through the materiality analysis, a process that allows to identify material topics, i.e., the most significant impacts of the company on economy,

environment, and people, including human rights impacts. For further details, please refer to [“Materiality analysis process and results for 2022”](#).

## Management of salient issues

Besides the identification of salient issues, our management system includes:

1. a **gap analysis** aimed at assessing our operating and risk monitoring processes and identifying any potential shortfall;
2. development of **improvement plan** actions to meet the gaps identified at the previous step;
3. **implementation of actions** and **monitoring** of progress.

Thanks to this process we assess 100% of the policies and operating procedures put in place to identify the risks of our direct and indirect operations along our entire value chain and of our new business relations (e.g., acquisitions, mergers, joint ventures, etc.).

Hereafter, the main outcomes of the 2020-2022 cycle.

## Gap analysis

Practices and policies adopted to respect human rights across our geographic footprint were then assessed based on the human rights potential risks heatmap (please refer to “Assessment of perceived risk – identification of salient issues”) across relevant internal functions and processes to identify any existing gap.

The assessment was based on the four parameters of the UNGPs operating principles:

- public commitment to respect human rights;
- adoption of human rights due diligence process;
- preparation of a plan of action to remedy any gaps identified by the due diligence process;
- adaptation to match local context and regulations.

This entailed interviewing the Top Management of the Group with the broad aim to get their strategic perspectives on business and human rights and assess awareness and perception of related risks and impacts and how they are managed.

Results highlighted that the **management system to potentially mitigate impacts is robust and should enable to adequately manage any identified risks**, which considering the United Nations Guiding Principles framework ranking definitions means **management of salient issues is adequate**.

Below, a summary of key evidence:

Human Rights Principles	SDG	Main policies and procedures to protect human rights	Average perceived risk	System to protect human rights
<b>Labor practices</b>				
Freedom of association and collective bargaining	8	Enel is committed to respecting the freedom and collective bargaining rights of its workers. In particular, Enel recognizes their right to set up or join organizations formed to defend and promote their interests; it recognizes their right to representation by union organizations or other forms of representation, opposing any action of discrimination in the exercise of this right; it recognizes their right to engage in collective bargaining as the preferred instrument to establish the contractual conditions and to regulate relations between company management and trade unions.	To control	Robust
Rejection of forced labor	8	The contracts considered overall regulate labor conditions, clearly defining workers' rights (working hours, remuneration, overtime, indemnity, benefits). Each worker is guaranteed a translated employment contract in his/her native language. Human resources management systems and procedures guarantee the absence of minors in the workforce. Also apprenticeship projects and school-work experience models are carried out.	To control	Robust
Just and favorable working conditions	8		To control	Robust
Rejection of child labor	8		To control	Robust
Diversity and inclusion	5 10	For details, please refer to "Empowering Enel people"	To control	Robust
Health and safety	3	For details, please refer to "Occupational health and safety"	To control	Robust
<b>Community and society</b>				
Community relations	1 3 4 5 7 9 10	For details, please refer to "Engaging communities"	To control	Robust
Environmental impacts	13	For details, please refer to "Conservation of natural capital"	High priority	Robust
Corruption	16	For details, please refer to "Values and pillars of corporate ethics"	High priority	Robust

Average perceived risk: average perceived risk levels identified in the countries under analysis.  
Reference scale of risks: 1. High risk; 2. High-priority risk; 3. Risk to control; 4. Acceptable risk.

The results are expressed in percentage and represent the current maturity of the management systems with respect to the specific Human Rights areas.  
Reference scale of performance values: Robust (75%-100%); Good (50%-74%); Sufficient (25%-49%); To be improved (0%-24%).

## Improvement plans

The residual risk identified at the previous step led to the definition of the necessary remedies which were then included in the improvement plan both at country and at global level, therefore ensuring uniformity of processes and policies across the Group's activities.

Hereby a few examples of the actions defined.

- Italy: inclusion of the link to our Human Rights Policy in the local business development procedures of Enel Grids;
- Argentina and Russia<sup>(2)</sup>: implementation of training and internal communication activities aimed at raising awareness on the importance of respecting the commitments included in the Human Rights Policy;

- Brazil: definition of an operating instruction to assess management of human rights of partners and sub-tier suppliers;
- Chile: i) implementation of a communication and awareness-raising campaign on the Human Rights Policy aimed at all relevant stakeholders; ii) making the policy available to all relevant stakeholders, with particular focus on those with no access to digital media (i.e., indigenous populations).

As for labor practices, the assessment revealed they are perceived as "low risk" given also the compliance of the related control measures and processes with our internal policies and with the main international standards. However, we identified several minor areas of improvement that are summarized in the table below.

Human Rights Principles	Business Lines	Countries	Areas of improvement
Freedom of association and collective bargaining	Sustainability/People and Organization	Greece, Australia, India, Brazil	Development of training programs on human rights aspects, with a special focus on the relationship with social partners and definition of working conditions during bargaining procedures
Rejection of forced labor	People and Organization/ Sustainability/ Communications	Romania, Brazil	Integration of control procedures and definition of further remedies in the case of intimidation and threats
Rejection of child labor	Global Procurement/Legal and Corporate Affairs	Russia <sup>(2)</sup> , Chile, Brazil	Intensification of training and monitoring of the supply chain
Diversity <sup>(3)</sup>	Sustainability, People and Organization	Mexico, Romania, Brazil	Each action plan includes activities on the topic of disability based on the main findings resulting from the <b>Value for Disability</b> project

## Implementation and monitoring

**The consolidated improvement plan for the 2020-2022 cycle includes 170 actions, covering 100% of operations and sites. At the end of 2022, we have achieved over 80% of the plan.**

Full effectiveness of the actions implemented will be assessed through the gap analysis that we will be run in 2023 when the new cycle will begin. Worth noting is that the next cycle will be based on the refreshed Human Rights Policy content.

As a further tool to measure the effectiveness of our human rights management system and governance structure across operations, in 2022 we carried out an asset-level

due diligence activity on five pilot countries: Brazil, Chile, Colombia, Italy, Iberia.

Indeed, as instructed by the OECD Guidelines for multinational enterprises, in addition to standard assessments an enterprise may already employ, additional internal assessments may support a deeper understanding of the potential risks or actual adverse impacts with respect to an enterprise's own activities.

The outcome of the analysis confirmed the main results obtained by the overall due diligence process on the management system just described above in terms of robustness of labor practices issues and engagement with local communities. They also confirmed the key role awareness raising campaigns play.

(2) On October 12, 2022, the Group has closed the sale of its entire stake in PJSC Enel Russia.

(3) Diversity issues also include the assessment of aspects relating to equitable remuneration and non-discrimination.

## Relationships with stakeholders: human rights in practice

| 2-29 |

### The workplace

We are committed to respecting and promoting internationally recognized workers' rights in all the countries where we operate. This means rejecting harmful practices like modern slavery, forced labor, and human trafficking, to name a few, and promoting diversity, inclusion, and equal treatment and opportunity, and guaranteeing that people are treated fairly and valued for their uniqueness throughout the entire value chain of the businesses in which we operate.

All of this has also been codified into the Charter of the Person, a memorandum of understanding adopted in Italy in 2022 and agreed with some trade union organizations. The Charter of the Person originates in a cultural context of transformation in which individuals are becoming aware of the importance of human relationships as a true engine of full realization. In the work carried out with the trade unions we look for the first time at the worker, who is not only and merely passive subject of protection and recognition but an individual who, in a new awareness, pursues a renewed balance between all its needs and inclinations.

### Training and people empowerment | Upskilling and reskilling

(Human Rights Policy, "Employment practices", principle 2.1.5 "Just and favourable working conditions")

We believe in the importance of professional orientation and training for the development of our people and their skills, even the more so in situations impacted by the energy transition that prompt requalification and enhancement of potential by way of reskilling and upskilling programs to foster a just transition.

Facing the undergoing rapid evolutions means setting up an inclusive working environment, aimed at enhancing the human being by placing him at the center of an ecosystem in which lifelong learning, well-being, productivity and safety can reinforce each other, contributing to the fullest realization of the person, in a perspective of ever greater centrality.

For further detail, please refer to "[Our commitment to a just transition: leaving no one behind](#)".

### Inclusion

(Human Rights Policy, "Employment practices", principle 2.1.2 "Respect for diversity and non-discrimination")

We promote principles of diversity, inclusion, and equal treatment and opportunity, and we are committed to guaranteeing the right to working conditions that are respectful of personal dignity, as well as creating a working environment where people are treated fairly and valued for their uniqueness. We are committed to protecting the physical and psychological integrity and individuality of each person, and we oppose all forms of behavior that result in discrimination in relation to gender, age, disability, nationality, sexual orientation, ethnicity, religion, political opinions, and all other forms of individual diversity, or that is detrimental to the person and their convictions or preferences. Accordingly, we promote people's freedom of expression. We do not tolerate physical, verbal, visual, sexual, or psychological harassment such that results in a working environment that is denigrating, hostile, humiliating, intimidating, offensive, or unsafe.

For further detail, please refer to "[Empowering Enel people](#)" and the "[Value for Disability](#)" box in this chapter.

### Health & Safety and well-being

(Human Rights Policy, "Employment practices", principle 2.1.4 "Health, safety and well-being")

We consider health, safety, and psychological, relational, and physical well-being of individuals as the most precious asset to be protected in any moment, at work, as well as at home and during leisure time. We commit to disseminating a robust health, safety, and well-being culture across our organization, to ensure that workplaces are free from health and safety hazards and to promoting behaviors oriented towards work-life integration. We actively commit to foster personal and organizational well-being that are enablers of the engagement and innovative potential of people. We do, so, for example, by providing benefits and services that support the integration of private and working life (for example, support, including financial one, for childcare and maternity or for the care of the elderly).

For further detail, please refer to "[Empowering Enel people](#)" and "[Occupational health and safety](#)".



## Industrial relations

(Human Rights Policy, “Employment practices”, principle 2.1.3 “Freedom of association and collective bargaining”)

We protect the right of the people working with us to form or take part in organizations aimed at defending and promoting their interests. Likewise, we respect their right to be represented, within the various working units, by unions or other forms of representation elected in accordance with the legislations and practices in force in the varying countries where they work. Collective bargaining is for us the favored instrument for setting contractual conditions of the people working with us as well as regulating relations between management and unions.

The Group industrial relations activities continue to be carried out according to the model provided for in the Global Framework Agreement (GFA) signed in Rome in 2013 with the Italian industry federations and the global federations IndustriALL and Public Services International, and which is still recognized as a reference best practice for European and non-European multinationals. The agreement is inspired by the best and most advanced systems of transnational industrial relations of multinational groups and institutions of international reference.

For further detail, please refer to “[Empowering Enel people](#)”.

## Procurement activities and relationships with business partners

(Human Rights Policy)

Besides guaranteeing the necessary quality standards, our partners are requested to adopt best practices in terms of human rights and working conditions, occupational health and safety, environmental responsibility, and respect for data protection by design and by default.

They are also an integral part in our development and awareness programs: each person must feel that they are responsible for their own health and safety as well as for the others.

In terms of specific actions, we secure that our procurement processes are based on criteria that promote sustainable development and social stability, as well as on the principles of free competition, equal treatment, non-discrimination, transparency and rotation that go on top of complying with local legislation. 100% of the purchasing product categories are preliminarily evaluated in terms of risk, on the basis of human rights, environmental, social and economic criteria.

In addition, we support our partners to increase their resilience also in line with the promotion of practices based on a just and inclusive transition.

For further detail, please refer to “[Sustainable supply chain](#)” and “[Occupational health and safety](#)”.

## Communities

(Human Rights Policy, “Communities and Society”, principles 2.1.2, 2.2.3 and 2.2.4 “Respecting the rights of communities”, “Respecting the rights of local communities”, “Respecting the rights of indigenous and tribal peoples”)

Our commitment testifies how much we are aware that our activities can have a direct or indirect influence on the communities where we operate and why we believe that responsible community relations constitute a pillar of our strategy. Indeed, individual conditions, economic and social development, and general well-being of collectivity are strictly connected: we therefore commit to conducting our capital expenditure in a sustainable manner and to promoting cultural, social and economic initiatives for the local and national communities involved to advance social inclusion through education, training and access to energy.

We take due regard for the cultural, social, and economic diversities from one country to another and require that each stakeholder deals with us in accordance with them, with a particular attention to conflict affected and high-risk contexts and vulnerable groups like local, indigenous and tribal ones and have committed to respect the International Labor Organization (ILO) Convention no. 169 on the rights of indigenous peoples.

In developing our projects, we commit to engage all the relevant stakeholders, including indigenous and tribal communities as we believe active community engagement throughout the process is essential.

For further detail, please refer to “[Engaging communities](#)”.

## Customers

(Human Rights Policy, “Employment practices”, principle 2.1.2 “Respect for diversity and non-discrimination”, “Communities and Society”, principles 2.1.2, 2.2.6 and 2.2.7 “Respecting the rights of communities”, “Privacy”, “Communication”)

We are committed to a just energy transition for everyone also through the offer of innovative and inclusive services for our customers, regardless of their age, for weak, destitute, marginalized, vulnerable people, paying particular attention to people with disabilities.

We undertake to always respond to suggestions and complaints made by customers and consumer associations, making use of appropriate and timely communication systems (e.g., call center services and email addresses), and to consider the needs of all our customers, paying once more particular attention to people with disabilities.

We have also committed to ensuring that our products and services are designed to be accessible for all and do not

compromise the safety and physical integrity of our customers, as far as reasonably foreseeable.

Institutional and commercial communications shall be non-discriminatory and respectful of different cultures, while also not adversely affecting the most vulnerable audiences, such as children and the elderly. This means, amongst other, that contracts and communications addressed to our customers should be clear and simple, drawn up using a language as close as possible to the one normally used by the people for which the message is intended to, be exhaustive, available on our website and accessible in order to be inclusive of vulnerable categories. For further detail, please refer to "[Clean electrification](#)".

## Cross-cutting issues

### Privacy

We respect the confidentiality and right to privacy of our stakeholders and we are committed to the correct use of the information and data relating to the people working in our organization, to our customers and to any other stakeholder. Data protection and processing are an important challenge for us in the era of digitalization and market globalization. We process personal data in compliance with the fundamental rights of data subjects and we abide by the rights and principles recognized in law, notably respect for private and family life, home location details and communications, personal data protection, freedom of thought, conscience and religion, freedom of expression and information.

We also undertake to monitor all third-party companies that may be in a position to use customers personal data. To this end, there are dedicated clauses in contracts with partners that use personal data to carry out specific activities, such as sales services or customer satisfaction surveys.

### Innovation

Innovation and sustainability are inseparable parts of our strategy, together with the spirit of service and care for the well-being of people and the society in which we operate. That is why, in line with the Open Power vision, we also promote an open innovation approach to face the challenges of the energy transition. The open innovation model enables the connection of all the areas of the company with startups, industrial partners, small and medium-sized enterprises ("SMEs"), research centers, universities and entrepreneurs, also through the use of crowdsourcing platforms.

The aim is to foster the adoption of solutions that can enhance our sustainable profile, such as favoring circular economy approaches, which help reducing pressure on the use of resources and on supply chains, ensuring inclusivity, and trying to deal with social issues.

For further detail, please refer to "[Innovation](#)".

## Specific salient issues

### Forced labor in the supply chain: the solar sector experience

Since 2013, our commitment against forced or compulsory labor and any form of slavery and human trafficking has been formally set out in principle 2.1.1 Rejection of forced and compulsory labor and of child labor in [our Human Rights Policy](#).

We are committed to contributing to reaching ambitious climate targets, which implies the need to electrify end uses as much as possible while supporting such electrification with a massive deployment of renewable energy production.

Photovoltaics (PV) represents a key technology to enable the energy transition in the European Union (EU) and worldwide, and we believe the EU needs to have strategic PV production inside its borders and to build the related supply chain.

Aware of the challenge ahead of us and of expectations around business contribution to human development also through the UN's 2030 Agenda for Sustainable Development, which go beyond specific legislation, our supplier qualification and contract-awarding processes include rigorous technical, financial, legal, environmental, health and safety, human rights and ethical integrity requirements, applied consistently in all markets.

Moreover, we are pushing for the suppliers to adopt a traceability system to collect information on the supply chain, as well as seeking to visit the companies involved along the supply chain.

Finally, we carry out a number of initiatives to improve transparency across the supply chain both individually and working jointly with other utilities, our suppliers and sector associations (i.e., Global Alliance for Sustainable Energy and Solar Power Europe, to name a few). For further detail, please refer to "[Our commitment to a just transition: leaving no one behind](#)".

On top of this, we are working to get to the roots of the issue. Indeed, we are convinced that if we leverage on the momentum for renewables, thanks to the existing R&D and industrial know-how still present in the EU and with support from the EU itself, a new roadmap can be created toward a European industry for solar panels.

That is why we welcomed the public consultation<sup>(4)</sup> launched in January 2022 by the European Commission on the EU solar energy strategy that gathered input on the main bottlenecks and barriers to investment under existing rules in the 'Stakeholder consultation – Synopsis report' published in May. The results of the consultation confirmed that a number of respondents supported the EU manufacturing of solar panels as a way of ensuring that PV products installed in the EU apply high environmental standards, are

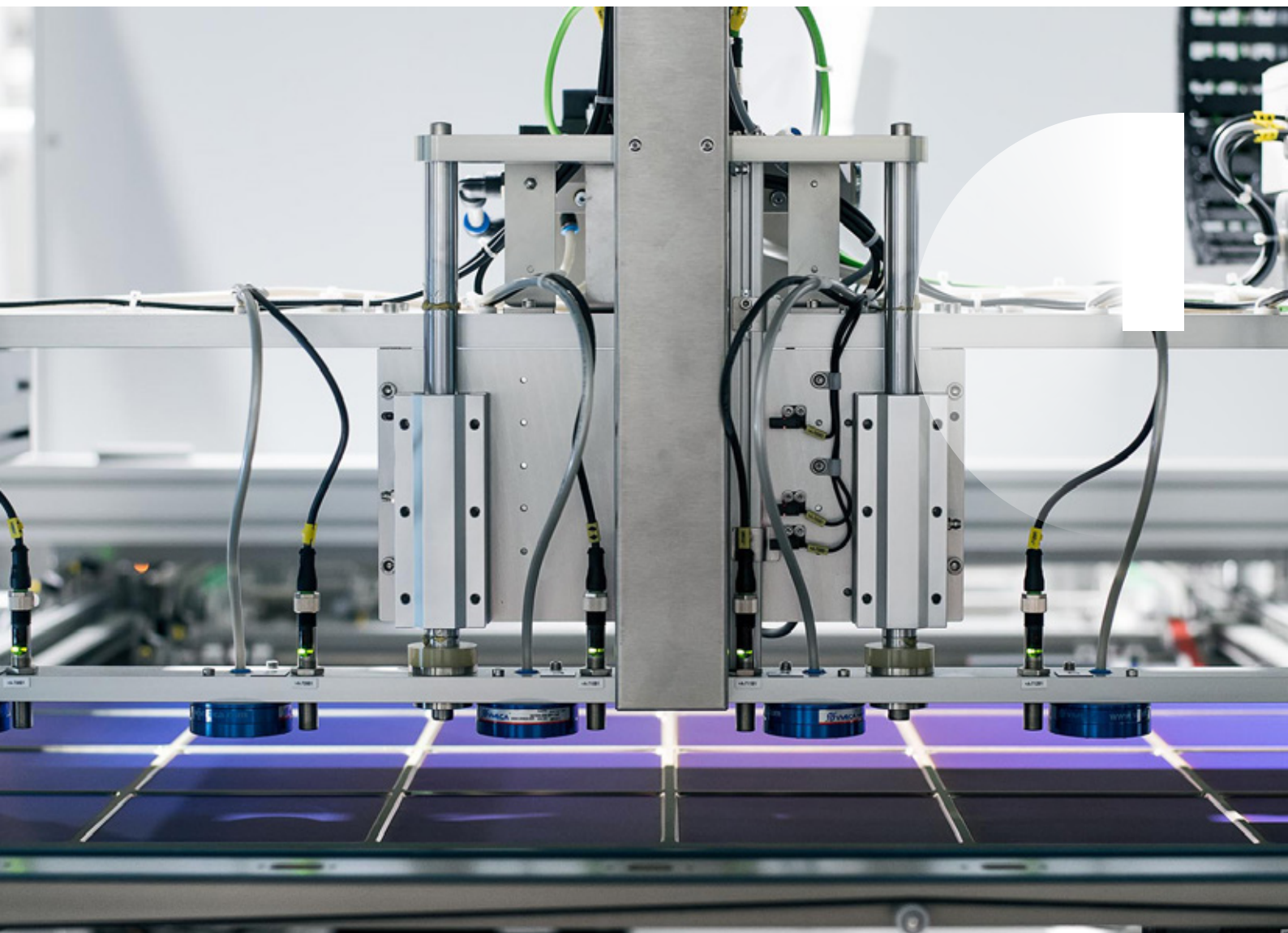
(4) See: <https://ec.europa.eu/info/news/public-consultation-feed-new-eu-strategy-solar-energy-2022-jan-18>.

not produced by forced labor and reinforcing supply chain resilience.<sup>(5)</sup>

In addition, the EU Industrial Strategy published by the European Commission in Spring 2021 identifies solar as one of the key industrial ecosystems. The European supply chain will thus need to be strengthened in order to facil-

itate access to rapidly growing markets within the continent and globally.

For detail on how we are acting to diversify the geographic footprint of the solar supply chain, please refer to "[Clean electrification](#)" and "[Our commitment to a just transition: leaving no one behind](#)".



(5) See: [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13338-EU-solar-energy-strategy\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13338-EU-solar-energy-strategy_en).

# Access to remedy

2-25 | 2-26 |

We continuously monitor whether stakeholders are affected by our company's business operations, and if any impact is identified, we put in place remedial actions.

## Grievance mechanism

In line with the third Pillar of United Nations Guiding Principles, we have set up multiple channels of access to remedy, including:

- a **whistleblowing channel**, available to internal and external stakeholders, through:
  - the web or toll-free number shown on the Enel Code of Ethics web page;

We ensure access to remedy through grievance mechanisms to enable people — inside or outside the company — to flag that there is an issue and to seek a meaningful response.

- by writing to: Enel SpA - Audit Function - Code of Ethics. Via Dalmazia, 15 - 00198 Rome, Italy.
- several **processes and tools available to the communities** in the influence area of our operations;
- **customers complaints** or information **channels** (via mail, website, toll-free number).

Hereby, a summary description of how they work.

## Whistleblowing channel

Grievances are managed following a specific process codified in the 'Management of anonymous and non-anony-

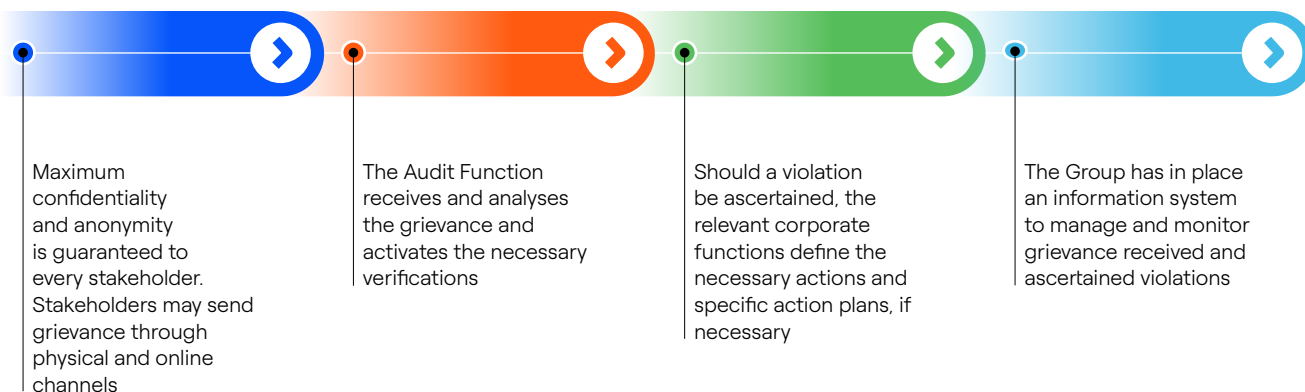
mous reports' policy, illustrated also in our Human Rights Policy, and summarized hereafter:

### Sending a grievance

### Analyzing a grievance

### Acting upon an effective violation

### Management and monitoring



The key elements of the mechanism are:

- anonymity and protection against any form of retaliation;
- protection against groundless allegations made maliciously to harm or cause prejudice to individuals;
- uniformity of treatment at Group level, in compliance with company policies and local regulations.

Identity of stakeholders sending a grievance remains confidential, unless otherwise required by the law.

Whenever, following a grievance, a violation of the princi-

ples contained in the Human Rights Policy is ascertained, the Audit function defines recommendations to implement the corrective actions. The relevant corporate functions thus define the actions to take in accordance with the applicable national legislation provisions.

Furthermore, the Audit Function reports the above violations or any violation recorded during auditing activity as well as the ensuing necessary actions to:

- the Control and Risks Committee, the Chairman of the Board of Directors and the Chief Executive Officer of



Enel SpA, who assess if the Board of Directors should be informed about the most significant cases;

- the corporate bodies of directly or indirectly controlled subsidiaries for the issues of competence.

Access channels are both physical and digital. Moreover, there are also channels at local level and this ensures accessibility to all potentially affected stakeholders in their own language.

For further detail, please refer to the chapter "[Values and pillars of corporate ethics](#)".

## Communities

We provide access channels for reporting by people who need to contact us, using the tools and means available locally, such as local teams or a specific person, toll-free

numbers, or, in the case of isolated rural communities, local leaders who are available to periodically collect any complaints.

## Customers

Customer complaints are managed through dedicated channels and analyzed by a specific working group so that the most suitable actions are taken, both insofar as to the

specific matter of the complaint and, above all, in preventing the underlying causes that have led to the complaint.

## Redressing in legacy projects

3-3 | 413-2 | EU22 | DMA (former EU20)

Hereafter, an illustration of the actual<sup>(6)</sup> impacts relating to a few legacy projects.

### CHILE



1 thermal coal-fired power plant | decommissioned in 2022 | actual impact  
Plant name: Bocamina II | Location: Coronel region of Bío Bío | Size: 350 MW



1 hydro power plants | in operation | actual impact  
Plants names: Ralco | Location: Alto Bío Bío | Overall size: c. 700 MW

### CHILE | BOCAMINA II

#### Actual adverse impact

Land management and relocation.

#### Affected stakeholders

Families living in the area surrounding Bocamina's II unit which was adjacent to the first unit.

#### Background

The plant was part of the coal-fired thermoelectric complex of Bocamina, whose first unit (128 MW) shut down at the beginning of 2021.

The second unit (350 MW), shut down at the end of September 2022, was built in an area characterized by high urbanization and social vulnerability that generated impacts on the housing units around the construction site.

With such closures, after the one involving the Tarapacá plant in 2019, we have become the first power company in the country to stop using coal for its generation operations, 18 years ahead of the original 2040 goal set within Chile's 2019 National Decarbonization Plan and in line with our 2022-2024 Strategic Plan and our 2030 Vision, which place decarbonization and the acceleration of the energy transition at the core.

(6) Impact occurred.

## Remedies identified

### Overview

Engagement with the community has led to the development and the implementation of a broad series of initiatives for the social, economic and entrepreneurial development of the affected community, as well as an ambitious revegetation project to transform the 10-hectare area of the plant's ash landfill, which will no longer be used, into a native forest. In addition, in line with circular economy principles, we are studying various alternatives to reuse the facility's assets in order to provide new life to the site and create development opportunities for the area.

An extensive analysis was carried out in 2017 with the support of a company with considerable experience in this area to review how the original relocation process was carried out with the purpose of remediating any gap vs international existing standards.

Among the gaps that emerged as more evident are the inequality and partiality of the agreements previously reached both with the persons concerned and with local authorities, as well as the misalignment with international standards on resettlement.

The new plan involves approximately 1,400 families, most of them classified as belonging to vulnerable groups by the Ministry of Social Development.

Key actions identified relate to:

- a. preservation of the social and human capital of the communities;
- b. socio-economic development.

### Key lines of work

- a. *Preservation of the social and human capital of the communities:*
  - i. remedy construction defects of some of the new homes which were identified thanks to a joint technical committee involving Enel, the affected community and the Center of Investigation and Technologies of Construction (CITEC) - Universidad del Bío Bío;
  - ii. quantify and compensate the impacts on the quality of life of the families affected by construction defects and the impact associated to 12 churches which were not involved in the resettlement process;
  - iii. finance the reconstruction of the historical school in Coronel, "Rosa Medel" as agreed with the town hall and with the community;
  - iv. requalify new and pre-existing areas adjacent to the plant through the:
    - building 12 community headquarters in various new neighborhoods;
    - painting of a 3,500 square meter mural - one of the largest in Chile - along the external perimeter of the Bocamina power plant, through the narration of the history of Coronel and its inhabitants (involving dozens of neighborhoods and organizations);

- v. Just Transition agreement with Coronel Municipality that will allow local government to invest in strengthening healthcare and education services, along with completing the construction of a new school and park.

### b. Socio-economic development:

- i. support to artisan fishing in the form of dedicated borrowings (defined jointly with the local fishing community);
- ii. support to local businesses, in the form of dedicated funding.

## Grievance

In line with the United Nations Guiding Principles on business and human rights, both physical and online grievance channels have been made available to the community. In 2022, approximately 1,000 complaints have been received, of which 85% have progressed through to the management phase and have been handled.

For a broader perspective, please refer to the box dedicated to Bocamina included in the chapter "Our commitment to a just transition: leaving no one behind", as well as [Enel Chile's Sustainability report](https://www.enel.cl/en/sustainability/creating-shared-value/bocamina.html) and the following webpage: <https://www.enel.cl/en/sustainability/creating-shared-value/bocamina.html>.

## CHILE | RALCO

### Actual adverse impact

Land management and relocation.

### Affected stakeholders

Families living in indigenous land.

### Background

The area of Alto Bío Bío where the plants are located records a historical setting of the indigenous Pehuenche populations whose presence in the area of influence of the plant amounts to c. 3,000 people, equivalent to 800 families spread across 11 communities.

The construction of the Ralco plant led to the flooding of almost 3,500 hectares of indigenous land, and involved the relocation of 81 families (about 400 people) who moved to the territories of the indigenous communities of Ayin Mapu and El Barco, located respectively in the municipalities of Santa Bárbara and Alto Bío Bío.

To support this relocation, we have ensured, for 10 years, social services, housing and a plan of continuity assistance (PAC) to affected families, addressing historical issues and establishing a permanent dialogue with all communities in the area.

## Remedies identified

### Overview

The engagement with the local community has led to the definition of improvement plans concerning:

- a. education;
- b. economic development to support the self-dependence of local communities;
- c. cultural identity programs;
- d. risk reduction initiatives in emergency situations;
- e. access to energy.

#### Key lines of work

- a. *Education for children and young people living in our area of influence:*
  - i. access and permanence in formal education considering that the average number of years of schooling in the area is 6.5 years, well below the number of years of compulsory education in Chile. This is made possible by assigning scholarships that cover school fees, room and board, study materials. More than 560 students participated in such education aid program during 2022, 56% of which female and 97% from the indigenous Pehuenche community;
  - ii. transport support, access to technology, and scholarships for secondary and higher education;
  - iii. involvement of intercultural Pehuenche assistants in the teaching process;
  - iv. design and construction of the Quepuca Ralco school.
- b. *Economic development to support the self-dependence of local communities:*
  - i. improvement of productive facilities and equipment;
  - ii. skills enhancement through training in agriculture

and tourism, amongst other.

- c. *Cultural identity programs:* measures to support indigenous communities in the development of cultural initiatives aiming at promoting, consolidating and supporting cultural practice, like traditional ceremonies, language conservation, dissemination of culture and other.
- d. *Risk reduction initiatives in emergency situations:* agreement with the Municipality of Alto Bío Bío to tackle the multidimensional poverty of local population's dwellings and reduce risks in emergency situations through skills enhancement and training of vulnerable groups to support their response in the occasion of emergencies linked to volcanos eruption and forest fires.
- e. *Access to energy:* Collaboration with the Municipality to maintain 120 photovoltaic panels that belong to families residing in the Alto Bío Bío area so that they can access a clean and sustainable electricity supply.

#### Grievance

In line with the United Nations Guiding Principles on business and human rights, both physical and online grievance channels have been made available to the community. In 2022, 24 complaints have been received, of which 79% have been connected to human rights. All of them have progressed through to the management phase and have been handled.

## COLOMBIA



1 hydro power plant | in operation | actual impact  
Plant name: El Quimbo | Location: department of Huila | Size: 400 MW

## COLOMBIA | EL QUIMBO

#### Actual adverse impact

Land management and relocation.

#### Affected stakeholders

Families resident and people working or having commercial and service activities in the area of influence of the plant.

#### Background

The plant is located in the Department of Huila and its building contributed to the increase in the energy security and the stability of the Colombian electricity system, as well as promoting the growth of the area of influence in line with the Department of Huila development plans.

## Remedies identified

### Overview

Engagement with the community started in late 2014 and has led to the development and the implementation of a multi-year plan including a broad series of initiatives, mainly related to:

- a. environmental management training;
- b. socio-economic development.

### Key lines of work

#### a. Environmental management:

- i. environmental awareness-raising activities;
- ii. protection of biodiversity and nature:
  - large scale ecological restoration of >11k hectares of tropical dry forest (for further detail, please refer to “Conservation of natural capital”).

#### b. Socio-economic development:

Activities focused on providing support on technical issues related to production processes and how to improve their efficiency.

During the last 10 years, more than 30 projects were carried out in the municipalities of Altamira, Tesalia, Paicol, Garzón, Gigante and El Agrado for an investment of higher than 2 million euros that was beneficial to more than 15,000 families in the department of Huila.

The most significant cooperation agreements relate to the implementation of concerted agricultural production plans with nearly 90 resettled families in Garzón, Altamira, El Agrado and Gigante. With an investment of more than 800,000 euros, the beneficiaries improved and increased the production and marketing of different foods such as corn, wheat, lemon, milk, cocoa, tomato, and a wide variety of fruits, also including produce for self-consumption. Hereby, a few examples of the main agreements signed in 2022.

### Garzón Municipality

#### Planting of 100 hectares of coffee jointly with plantains

The project aims at getting coffee varieties resistant to rust and with higher yields and will benefit 100 coffee growers who will receive coffee seedlings, fertilizers and agricultural equipment. In addition, technical, social and environmental monitoring will be carried out to guarantee the sustainability of their crops and increase coffee production.

Enel will cover approximately 40% of the total investment (equal to more than 250,000 euros).

#### Optimization of the local marketplace meat module electrical appliances

The project aims at revamping electrical networks built more than 20 years ago and will benefit more than 70 merchants. Enel will contribute c. 80% of the total investment (equal to more than 110,000 euros).

### Tesalia Municipality

#### Installation of sugarcane molasses processing plant

This initiative will benefit small and medium-sized sugarcane growers, with the construction of a sugarcane molasses processing plant and the planting of 15 hectares of new sugarcane, with the aim of increasing panela manufacturing and improving the living conditions of families.

Enel will cover more than 80% of the total investment (equal to close to 65,000 euros).

#### Livestock infrastructure improvement

This project is aimed at improving livestock infrastructure, sanitary conditions for bovines and increased milk production, with the supply of silage or concentrated feed, generating profitable and sustainable livestock, and thus improving the socio-economic condition of the benefited farms belonging to the ASOGATE, ASOGAPAC and FOGAGRO associations.

Enel will cover more than 80% of the total investment equal to close to 90,000 euros, with the Tesalia municipality and the associations covering the remainder.

#### Strengthening of the productive system of cocoa families

The initiative relates to the delivery of machinery and specialized fertilizers, with the objective of increasing cocoa production by 75%.

Enel will cover 80% of the total investment of over 80,000 euros.

#### Strengthening the production and marketing of cherry tomatoes

The project was achieved in 2022 and involved more than 90 producers from the department of Huila, allowing the cultivation of around 5,500 seedlings of this product and the generation of close to 3,400 euros of income.

The initiative was run in cooperation with three associations Agroprosur, Asocapa and Asosanjosé and Enel has contributed 51% of the total investment (equal to over 80,000 euros) while the remainder was covered by the Municipality of Tesalia, the Agroprosur, Asocapa, Asosanjosé associations, and the hydrocarbon company Hocol (represented by the Fundación del Alto Magdalena).

Three greenhouses were built together with two seedbeds where sowing, vegetative phase and subsequent transplantation of the fruits are currently carried out. In addition, the beneficiaries were trained in permaculture and agroecology, good agricultural practices (run by the National Learning Service – Sena) and attended workshops on harvest management, and marketing.



### Paicol-Huila Municipality

#### Bovine genetic improvement

This project, that will benefit 94 farmers, seeks to contribute to the livestock development of the region, enhancing milk production rates together with the improvement of the genetic quality of the cattle.

Total investment is equal to close to 140,000 euros, 30% of which will be covered by Enel.

#### Cocoa Effect

This is a long-standing project which involves the United States Agency for International Development (USAID), the Luker Foundation, Luker Chocolate, the Saldarriaga Concha Foundation and Eafit University and is aimed at strengthening cocoa production through training of cocoa producers, environmental assessments instrumental to cocoa production, support to cocoa trees cultivation (through all stages of development), assistance to fight pests and diseases.

At the end of 2022, we have started activities to extend the program to a larger number of cocoa farmers.

### Grievance

In line with the United Nations Guiding Principles on business and human rights, both physical and online grievance channels have been made available to the community. In 2022, 604 complaints have been received, of which 100 were just requests of information. The remainder have progressed through to the management phase and have been handled.

### Other relevant information

Some local inhabitants/fishermen have started "acciones de grupo" and "acciones populares", currently pending, declaring that the revenues from their activities have been reduced due to the construction of the power plant and that the activities of filling the El Quimbo dam allegedly impacted downstream fishing and its environment. For further detail, please refer to the paragraph on El Quimbo, in the "[Contingent assets and liabilities](#)" section of the 2022 Consolidated Financial Statements. Further initiatives and information are also available in the [2022 Enel Américas Sustainability Report](#).



## Other projects under development

### WINDPESHI (La Guajira)



1 wind power plant | under development  
Plant name: Windpeshi, | Location: La Guajira | 200 MW

#### Background

The plant will contribute to the country's energy mix diversification.

#### Stakeholders in the area of influence

Indigenous communities resident in the municipalities of Maicao and Uribia, belonging to the department of La Guajira a region characterized by a significant presence of indigenous communities, which represent 20% of the overall population in Colombia.

#### Outcome of the stakeholder engagement process

##### Overview

La Guajira is a region with very high rates of unsatisfied basic needs. Key actions identified relate to socio-economic development

##### Key lines of work

##### a. Socio-economic development:

##### i. access to drinking water:

- two public basins have been built to provide drinking water to the communities in the area of influence;
- an aqueduct that was not working was rehabilitated, providing water to the communities on the road to

Windpeshi.

Both actions have benefited 3,000 people belonging to the Wayuu indigenous population;

##### ii. education:

- agreement signed with SENA, Servicio Nacional de Aprendizaje which provides technical training and certifies the level of ability achieved by the affected communities. Actions concerned job training on basic construction works and support to entrepreneurship development through marketing, sales and handicraft courses aimed at empowering communities to develop their own business;
- joint project with Artesianas de Colombia in the Wayuu territory concerning their artisanal weaving crafts. The training activities benefited 560 people overall, 270 through the agreement with SENA and 290 in the joint project with Artesanías de Colombia.

#### Other

We also reached an agreement with the University of La Guajira for the creation of an [intercultural manual](#), which represents a fundamental tool for understanding the dynamics and particular aspects of the ethnic communities.

### Midelt, Boujdour & Essaouira



3 wind power plants | 1 in operation and 2 under development  
Sizes: 210 MW, 300 MW and 270 MW

#### Background

In March 2016, a consortium between Enel Green Power and the Moroccan company Nareva, in partnership with the supplier Siemens Renewable Energy, was awarded the project for the development, construction, and management of wind plants.

The energy produced by the wind farm will be sold to ONEE that will use this energy for the benefit of all final users, including the local population.

#### Status up-to-date

In operation: Midelt, a 210 MW wind plant located about 20 Km from the Midelt city center.

Under construction: Boujdour, a 300 MW wind plant located approximately 180 km south of Laayoune Port (Marsa

port) and Essaouira, a 270 MW wind plant located about 28 km from Essaouira city.

#### Stakeholder engagement

##### Midelt

2015: preliminary analysis of the social, economic, and environmental context ("SEECA") to identify relevant socio-economic issues and specific needs of local communities;  
2019: environmental and social impact assessment (Environmental Social Impact Assessment - ESIA);  
2020: new SEECA and consultation.

#### Key actions implemented

- a. *Environment (sustainable building site and during operations):*

- i. assessment and mitigation of environmental impacts, including CO<sub>2</sub> emissions, waste, and water, by means of:
  - photovoltaic mini-grid plus storage used to power basecamp, auxiliary services of the base camp and turbines erection;
  - stand-alone PV modules used to power prefabricated buildings/containers and streetlights;
  - utilization of energy efficient technology (LED lamps, solar water heating system) to reduce electricity consumption;
  - water recycling solution installed in all water systems;
  - implementation of a biodiversity preservation plan aimed at protecting the local ecosystem, among which plantation of local trees and species nearby the building area.
- b. *Occupational health and safety:*
  - i. application of highest standards, in line with Enel's customary practices.
- c. *Socio-economic development during construction and operation & maintenance:*
  - i. training and hiring of more than 250 people for non-qualified works, all belonging to the Midelt community;
  - ii. maximized hiring of local small and medium-sized businesses for auxiliary services (including transportation, cleaning, catering, supply of materials, etc). This was aimed also at supporting the local economy particularly affected by the consequences of the pandemic;
  - iii. food basket provision to the most vulnerable local families.
- d. *Promotion of education, including during the operations & maintenance phase:*
  - i. classes dedicated to approximately 1,400 beneficiaries of 6 local schools in Amersid & Mibladen rural communes, held by local volunteers that covered topics related to renewables and the operation of wind plants;
  - ii. setting up of a yearly scholarship granted to one university student coming from the community of Midelt;
  - iii. implementation of a sustainability and environmental education program called AKABAR AL MAARIFA to train trainers at schools in Midelt and educate kids at primary schools with the aim to:
    - develop ecological and social awareness, environmental sensitivity, behaviors and skills;
    - promote an active participation in community issues from early childhood so to build an environmental citizenship since primary schools;
    - introduce, in addition, an effective training and professional development program to equip teachers

with the knowledge, values, skills and strategies necessary to implement the above environmental citizenship.

**e. *Healthcare during the operations phase:***

- i. setting up of a medical facility (caravan) made available to 1,400 students coming from surrounding schools for specialist examinations of various types (general practitioners, dentists, ear, nose, and throat doctors, etc. plus provision of eyeglasses when needed) as a mean to fight children school dropout caused by health issues.

**Boujdour**

- 2015: preliminary analysis of the social, economic, and environmental context ("SEECA") to identify relevant socio-economic issues and specific needs of local communities, including infrastructure development, education, healthcare, poverty issues, social services, and protection of cultural heritage;
- 2019: environmental and social impact assessment (Environmental Social Impact Assessment – ESIA);
- 2020: human rights due diligence<sup>(7)</sup> and a new SEECA and consultation involving vulnerable people groups who self-identified as Saharawi.

**Key actions implemented**

- a. *Environment (sustainable building site and during operations):*

Please refer to Midelt description.
- b. *Labor, with regards to occupational health and safety:*
  - i. application of highest standards, in line with Enel's customary practices.
- c. *Socio-economic development (during construction and operation):*
  - i. training and hiring of Saharawi people:
    - setting up of a training centre in the base camp with training in civil and electrical capabilities aimed at filling the local gap of expertise thus creating the opportunity of using such skills also in the future;
    - hiring of c. 200 people for non-qualified works, of which >90% from the local Saharawi community;
    - hiring of technical staff for O&M management, turbine service provider and substation maintenance, security services and housekeeping;
  - ii. maximized hiring of more than 100 local small and medium-sized businesses for auxiliary services (including transportation, cleaning, catering, supply of materials, etc.). This was also aimed at supporting the local economy particularly affected by the consequences of the pandemic;
  - iii. *ad hoc* infrastructures for the needs of people and

(7) In line with UN Guiding Principles on Business and Human Rights and in collaboration with an independent no profit organization with an international expertise in business and human rights.

of the local small businesses in the area of influence of the project:

- during civil works, new sections of road were built as well as requalifying existing ones (c. 60km). This activity allowed to reconnect main roads with grazing areas, thereby benefiting the pastoral communities in remote areas;
- due to the newly available renewable electric energy generated by the Boujdour plant, the local electricity connection to the city of Boujdour is being reinforced;
- iv. support to local Saharawi camel nomads through the provision of water tanks and cisterns;
- v. food basket provision to the most vulnerable local families.
- d. *Promotion of education:*
  - i. Education and vocational training programs designed to fight against primary school dropout, filling the mismatch between training and employment opportunities, providing knowledge about renewable energy. The initiatives involved approximately 1,000 beneficiaries of 11 local schools, and related specifically to:
    - entrepreneurship masterclass: Workshop with INJAZ ALMAGHRIB to get young people from the college acquainted with business activities;
    - 'It's My Business': with INJAZ ALMAGHRIB aimed at fostering entrepreneurship skills of middle school students through gamified activities and multiple examples of nationally and internationally well-known entrepreneurs;
    - company program: with INJAZ ALMAGHRIB addressing all stages of business creation and making young high school students able to participate to different competitions, at local, national and regional level (MENA);
    - classes held by local volunteers of Nareva and Enel Green Power Morocco covering topics related to renewables and the operation of wind plants;
    - setting up of a yearly scholarship granted to one university student coming from the community of Boujdour.
- e. *Healthcare:*
  - i. setting up of a medical facility (caravan) made available to 1,000 students coming from surrounding schools for specialist examinations of various types (general practitioners, dentists, ear, nose, and throat doctors, etc. plus provision of eyeglasses when needed) as a mean to fight children school dropout caused by health issues.

#### Essaouira

- 2015: preliminary analysis of the social, economic, and environmental context ("SECEA") to identify relevant socio-economic issues and specific needs of local communities, including infrastructure development, education, healthcare, poverty issues, social services, and pro-

tection of cultural heritage;

- 2021: environmental and social impact assessment (ESIA).

#### Key actions implemented

- a. *Environment:*  
Please refer to Midelt and Boujdour description.
- b. *Occupational health and safety:*
  - i. application of highest standards, in line with Enel's customary practices.
- c. *Socio-economic development during construction:*
  - i. training and hiring of people employed for civil and electrical works;
  - ii. hiring of 210 people belonging to the local community for non-qualified works;
  - iii. maximized hiring of local small and medium-sized businesses for auxiliary services (including transportation, cleaning, catering, supply of materials, etc.).
- d. *Promotion of education and other services:*
  - i. training dedicated to approximately 400 beneficiaries of local schools, held by local volunteers that covered topics related to renewables and the safety measures for the construction of wind plants;
  - ii. installation of safety fences for local schools near the roads;
  - iii. rehabilitation of a local religious saint visitors' place to the benefit of the local community.

#### Grievance

Management system for all three plants in line with the United Nations Guiding Principles on business and human rights.

- Set up: once received, complaints are registered, analyzed and classified from 1 to 3 (score range takes into account repetition, severity; 1 is the lowest, 3 the highest).
- The analysis leads to the identification of the possible solution. Once the solution is agreed, the complaint is considered as solved.
- Tools available to the community: complaints may be received through on-site suggestion boxes, traditional mail, email, by phone, company representatives during their staff visits.

The language used is "Arabic" and when a member of the community is not able to write and talks a dialect, a translator is identified within or out the building site.

#### Midelt | Complaints managed concerned:

1. Request on using local labor from the community.  
Solution agreed: hired non-qualified workers as described at point c., i. of the Midelt key actions implemented.
2. Request for using local SME's.  
Solution agreed: contractors, with the support of local stakeholders, launched a beauty contest to select local service providers from the city of Midelt as suppliers for the services and equipment needed as described at point c., ii. of the Midelt key actions implemented.



**Boujdour** | complaints managed concerned:

1. Request for using local labor from the Saharawi community.  
Solution agreed: hired non-qualified workers as described at point c., i. of the Boujdour key actions implemented.
2. Request for using local SME's.  
Solution agreed: contractors, with the support of local stakeholders, launched a beauty contest to select local service providers from the city of Boujdour as suppliers for the services and equipment needed as described at point c., ii. of the Boujdour key actions implemented.

**Essaouira** | Complaints managed concerned:

1. Request for using local labor from the community.  
Solution agreed: hired non-qualified workers as described

at point c., ii. of the Essaouira key actions implemented.

2. Request for using local SME's.  
Solution agreed: contractors, with the support of local stakeholders, launched a beauty contest to select local service providers from the city of Essaouira as suppliers for the services and equipment needed as described at point c., iii. of the Essaouira key actions implemented.
3. Request of repairing water pipes that were damaged.  
Solution agreed: the water pipe was repaired to ensure water supply continuity while starting the building of a brand new one.
4. Request to reduce the lifting of dust by trucks.  
Solution agreed: contractors started irrigating roads using recycled water or pumped from the sea so as to reduce lifting of dust during transportation.

## VALUE4DISABILITY

**With the Enel Value4Disability project people with disabilities lead the way: not only inclusion but empowerment**

**O**ur commitment to inclusion, as defined in our Human Rights Policy, relies on considering proactively the needs and priorities of individuals and society at large.

In addition to ensuring that no one is left behind, this approach encourages the generation of new ideas and is an essential condition for creating sustainable value in the long term.

Since 2019, we are part of **Valuable 500**, a global organization involving 500 CEOs and their companies, whose mission is to drive lasting change for more than 1 billion people around the world who live with a disability.

In 2020, therefore, we launched the **Enel Value4Disability** global project, which aims to empower Enel people and customers with disabilities, enable the environment of startups dealing with assistive technologies and make digitally accessible both the main web portals used by Enel people/customers and the software application development, testing and release processes.

In 2022 we achieved important results, also thanks to the dissemination of the project both on internal communication channels (magazine and corporate intranet) and through external communication initiatives (National Geographic, Financial Times, influencers and interviews and articles on the topic of inclusive business on specialized sites).

We also joined **Business for Inclusive Growth (B4IG)**, a global coalition of CEOs from global companies fighting inequalities. Through its strategic partnership with the OECD, B4IG interacts with governments around the world to promote inclusive growth.



## For Enel people

Globally, there are 2,129 people with disabilities, of which over 70% in Italy.

We make sure to listen to their needs thanks to “focal points” present in all countries where at least one colleague with a disability is present.

This allows us to develop dedicated initiatives both locally and globally, in line with our Human Rights and Diversity and Inclusion Policies. In particular, these initiatives allow to carry out work in complete autonomy, through tools, services and methodologies that can create an inclusive working and relational environment for all, and to raise awareness and train all people, with particular focus on specific roles more affected by these issues (new hires, managers, people & business partners, customer contact points).

Empowering initiatives include:

- Global Inclusive Travel services to ensure an inclusive experience of stay and travel for business trips of colleagues with disabilities (for example, information on accessibility services in hotel facilities, activation of travel assistance service, travel accompanying services). 47% of colleagues can use at least one of the Inclusive Travel services;
- participation in the Generation Valuable project promoted by the Valuable 500 network with the aim of spreading the culture of inclusion and empowerment of people with disabilities through mentoring meetings between talented colleagues with managers;
- drawing of global guidelines to ensure adoption of accessibility principles for the development of e-learning content;
- assistance and support for the adoption of assisting tools by a dedicated team in Italy;
- “Ability line” service in Romania to support colleagues in recognizing disability;

- initiatives to ensure physical and relational accessibility in Spain and Chile and to promote digital accessibility in Colombia;
- hiring and internships of people with disabilities in Italy, Spain and Brazil, integration initiatives in collaboration with local institutions in Chile, Argentina and Mexico, inclusive staff research in collaboration with research and selection platforms in Romania, Argentina, Peru and Colombia;
- pilot project, in Brazil, of tutoring in a process of onboarding, listening and development in which more than 140 people with disabilities are participating and which involves about 100 managers and about 30 people and business partners.

Awareness and training initiatives include:

- design of an initiative at global level to spread awareness about the Design for all principles application to business processes and contexts so as to foster an inclusive mindset in Enel’s people;
- the videos “Our ability”, to learn everyday stories of colleagues with disabilities in their working environment, and the webinar “Neurodiversity and autism” on the value of neurodivergent thinking in Italy;
- the online course “Hablamos de Discapacidad” and the web fiction “La casa de la inclusión” in Spain, subsequently customized for Romania, where podcasts on the inclusion of diversity and disability have also been developed, and the “D&I hour” when onboarding new hires;
- workshops and thematic podcasts in Chile and Colombia, where all colleagues were also offered an induction on sign language.

For further detail, please refer to [“Empowering Enel people”](#)

## For our customers

One of the most innovative aspects of the Value4Disability project is **inclusive business**, namely the Group’s commitment to opening new opportunities in terms of social innovation and business development starting from the solution of social needs. To promote this new approach in an integrated way, it is necessary to have a single vision of customer needs in terms of inclusiveness and accessibility.

In 2022 we have:

### a. defined who vulnerable customers are and what are their needs.

“Vulnerable customers, for Enel, are both individuals and entities who when looking at the combined effect of their intrinsic features, socio-demographic elements, economic and environmental conditions:

- cannot participate or risk being adversely impacted

by the energy market or by any of Enel Group’s operations;

- have difficulties in obtaining or using information to represent their interests;
- are less comfortable accessing and using appropriate services and products.

Customers who are not directly vulnerable may fall under this definition if vulnerable people live in the same family and depend on family support or other assistance.”

By focusing on temporary or permanent **conditions**, vulnerability results from the interaction between personal characteristics and changing environmental and socio-economic conditions.

Moreover, the application of this definition is not limited to individuals, but is extended to all entities that

may be in a vulnerable position (for example, family small enterprises in which the owner dies, associations or businesses affected by economic situations such as earthquakes, floods, wars, financial crises). Therefore, social<sup>(8)</sup> and economic vulnerability, disability, dependence on medical equipment, and other diversity aspects such as seniority, language, literacy, and any other feature that causes a certain degree of exclusion fall within the vulnerability definition;

**b. developed ad hoc initiatives to promote customer inclusion**, thanks to intensive benchmarking and the support of business leaders and the contribution of internal communities of colleagues with disabilities. Here are some examples:

- **training course on vulnerable customers**, dedicated to those who relate directly with customers;
- **guidelines for accessible and welcoming stores**;
- **inclusive electrification process**: we have launched a pilot project in Colombia to ensure that the electrification and contract signing phases are sustainable

and inclusive. In particular, we are experimenting the application of the Social Inclusion Boosting Program involving the Social Inclusion Community, a selected group of people representing all the vulnerabilities typical of that context;

- **Enel Premia Wow! for All**: project carried out as part of Enel Energia's loyalty program for the free market, aimed at the periodic inclusion in Enel Premia Wow! of discount coupons related to the theme of inclusion;

**c. involve our Business Lines in developing inclusive business initiatives.**

Enel X Way has, for example, made available in open source mode the redesign of spaces for charging electric vehicles to make them 'accessible' to anyone, from public administrations to other companies in the e-mobility sector. In addition, Enel X Way WayAbilityTM has been modified and updated: it is a product that makes it possible to recharge electric wheelchairs thanks to the public charging infrastructure in urban areas.

## For our communities

As part of the sustainability projects planned in the area of influence of "Coral" in India, where we developed a wind farm of about 170 MW and, following the usual process of listening to local stakeholders, a grazing animal (a buffalo) for the production of milk was given to a member of the community in Gujarat, born with lower limb disability. By investing the earnings of milk sales in awareness raising and empowerment activities of people with disabilities in other villages, such person has become a natural leader, developing a network of about 450 individuals. In practice, such member of the community supports the network of wom-

en and men with disabilities in modifying their condition of marginality, which is considered non-productive, in a condition that supports the whole family.

Moreover, vulnerable conditions are a source of stimulus and continuous social innovation. An example of these innovations is the sign language interpreting, subtitling and translation service, developed together with 2 startups (VEASYT and Padius) that will be tested within the Group in 2023.

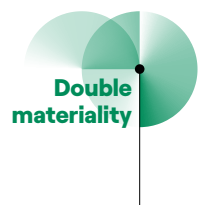
(8) For example: gap in the use of technology, acting as caregivers, economic situations such as earthquakes, floods, wars, financial crises etc.

# Occupational health and safety

## Material topics (I level)

## Plan

## SDG



• Occupational health and safety



Occupational health and safety



Below the 2022 results related to the targets of the previous 2022–2024 Sustainability Plan, the resulting progress and the targets of the 2023–2025 Sustainability Plan, which may be redefined, added to, or surpassed with respect to the previous Plan.

SDG	Activities	2022 results	Progress	2023–2025 targets	Tag
8	Safety Extra Checking on Site (ECoS)	124 Safety ECoS carried out	●●●	80 Safety ECoS in 2025	S
8	Safety Contractor Assessments	1,134 Safety Contractor Assessments carried out <i>Target outdated as it was substituted with the target on proactive Evaluation Groups, both related to checks activities on contractors supplier control activities</i>	●●●		S
8	Evaluation Group (EG) proactive towards contractors	N.A.	N.A.	47 in 2025	⊕ S
8	Reduction of injury frequency rates compared to prior years (LTIFR)	-23% vs 2021 (LTIFR = 0.50) <sup>(1)</sup>	●●●	-1% compared to the previous year	↻ S
8	Training hours provided by SHE Factory	65,304 hours <i>Target outdated as the focus of the training approach changed from extensive to intensive, through the provision of specific training courses for professional profiles required by the business</i>	●●●		S

(1) This figure is the result of the calculation made using unrounded decimal values and refers to the combined LTIFR, Enel people and contractors. This index is calculated by establishing the ratio between the number of injuries (all injuries, also those with 3 days of absence or less) and hours worked/1,000,000.

### Goals

### Progress

I Industrial E Environmental S Social  
G Governance T Technological



New



Redefined



Outdated



Not in line



In line



Achieved

N.A. = not applicable



SDG	Activities	2022 results	Progress	2023-2025 targets	Tag
8	Global health and safety project Q	N.A.	N.A.	1 project per year in the period 2023-2025 (+)	S
8	Global health and safety communication initiative Q	N.A.	N.A.	1 initiative per year in the period 2023-2025 (+)	S



#### Read more

The **global project** includes the preparation of webinars and communication material on "Correct posture" and "Emerging risks from remote working".



#### Read more

The **global communication initiative** consists of the completion and roll out to the entire Enel population of the "Safety Message" (SMM) application.

# Occupational health and safety

e-distribuzione

| 2-24 | 3-3 | 403-1 | 403-2 | 403-3 | 403-4 | 403-5 | 403-6 | 403-7 | 403-9 | 416-1 |

| EU18 | DMA EU (former EU21) | DMA EU (former EU16) |



The health, safety and psychological and physical well-being of individuals is the most precious asset to be protected at all times of life, at work, at home and during leisure time. As part of the wider commitment to respect of human rights, in fact, we are committed to developing and promoting a robust safety culture in order to guarantee a workplace that is free from health and safety hazards for everyone who works with and for the Group.

The constant commitment of all, integration of safety in processes and in training activities, disclosure and analysis of events, rigorous selection and management of contractor companies, continuous quality controls, sharing of experience and benchmarking with the top international players are the foundational elements of our safety culture.

The protection of health and safety is the responsibility of everyone who works for Enel. The **Stop Work Policy** requires that both company employees as well as personnel of contractor companies are asked to intervene promptly and stop work that could endanger their own safety and health as well as the safety and health of others, or that could harm the environment, understood as compromising the quality of its components. The Stop Work order is applied without consequences. No fault or responsibility will be attributed to an employee or contractor who signals a risky situation in good faith.



**2.25**

**TOTAL RECORDABLE INJURY  
FREQUENCY RATE (TRI FR) ENEL  
AND COMPANIES COMBINED**

2.86 in 2021 **-21.3%**

**217**

**EXTRA CHECKING ON SITE (ECoS)  
SAFETY AND ENVIRONMENT**

279 in 2021 **-22.2%**

**0.50**

**LOST TIME INJURY FREQUENCY RATE  
(LTI FR) ENEL AND COMPANIES  
COMBINED**

0.65 in 2021 **-23.1%**

**1,245** thousand hours

**OF TOTAL TRAINING FOR ENEL PEOPLE**

1,188 thousand hours **+4.7%**



## "Statement of Commitment to Health and Safety" and "Stop Work Policy"

The "**Statement of Commitment to Health and Safety**" and the "**Stop Work Policy**", both signed by the Chief Executive Officer, are two documents on which the commitment of our Group is based, also as approved by our Policy on human rights.

The Statement of Commitment is based on the following principles:

- compliance with legislation, adoption of the best standards and sharing of experience;
- creation, implementation and continual improvement of the Occupational Health and Safety Management System in compliance with international standard ISO 45001;
- reduction of injuries, occupational diseases and other accidental events through the implementation of suitable preventive measures and checking of their adequacy and effectiveness;
- assessment of all health and safety risks and adoption of a systematic approach to eliminate them at the source if possible, or to minimize them, while guaranteeing maximum protection for anyone working for Enel;
- promotion of informative initiatives to disseminate and consolidate a culture of good health, safety and organizational well-being;
- adoption of working methods inspired by quality and their dissemination by means of incisive and effective training that aims to create a lasting connection between technical aspects and safety aspects;
- direct commitment of the persons in charge aimed at strengthening a robust culture of leadership in relation to safety;
- adoption of safe and responsible conduct throughout all levels of the organization;
- design of workplaces and supply of suitable equipment and tools for the execution of operating activities, guaranteeing optimal and the safest conditions;
- rigorous selection and management of contractors and vendors, promoting their involvement in safety performance continual improvement programs;
- constant attention towards communities and towards all those who work with or come into contact with the Group's activities by sharing a culture of health and safety protection;
- annual definition of priorities, specific and measurable goals and continual monitoring to check their effective implementation through the involvement of Top Management.

## The health and safety system

In line with the Policy on Human Rights, Code of Ethics, Statement of Commitment and Stop Work Policy, we have defined a specific **Health & Safety Policy** that requires every Group Business Line to have its own **Health & Safety Management System** in compliance with international standard ISO 45001.

The Management System is based on the identification of hazards, the qualitative and quantitative assessment of the risks, the planning and implementation of the preventive and protective measures, as well as checking their effectiveness, any corrective measures and the preparation of work teams. The Management System involves both Enel people and personnel from contractor companies who work at Enel's plants and sites, and is based on the following shared principles:

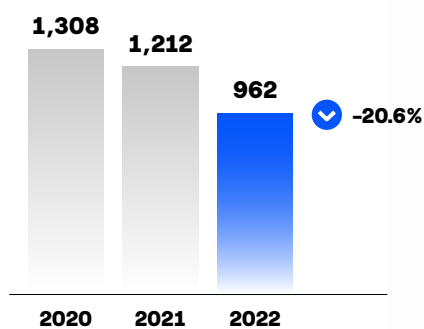
- prior evaluation, elimination and/or reduction of risks through application of the latest technical know-how;
- identification of the necessary preventive measures and the associated implementation program;
- adoption of residual risk mitigation measures, awarding priority to collective rather than personal solutions;
- active, responsible and integrated intervention of all parties concerned with safety, involving workers and/or workers' representatives, starting from the identification of risk situations up to the choice of solutions to prevent and/or reduce them;
- appointment of a medical officer, when required, and setting up health surveillance for workers responsible for specific high-risk processes;
- preparation of a program of information and training of workers in order to increase awareness when dealing with situations of risk;
- regular upkeep and cleaning of workplaces;
- the adoption of tools, also technological tools, to support the assessment of the risk and its resulting mitigation.



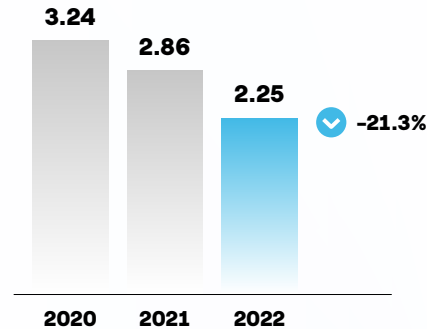
The Holding Health, Safety, Environment and Quality unit (HSEQ) performs the roles of supervision, guidance and coordination, promoting the dissemination and sharing of best practices within the Group and external health and safety benchmarking with top international players in order to identify improvement opportunities and ensure

constant commitment in the area of risk reduction. The Global Business Lines and Country HSEQ structures orient and support the business in relation to health and safety issues, define improvement plans and monitor their execution.

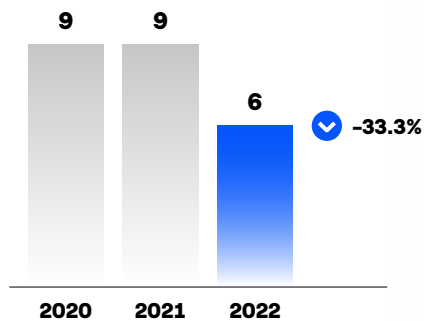
**Total Recordable Injuries (TRI) no.**



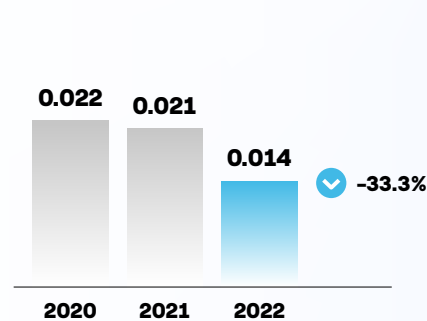
**Total Recordable Injury Frequency Rate (TRI FR) i**



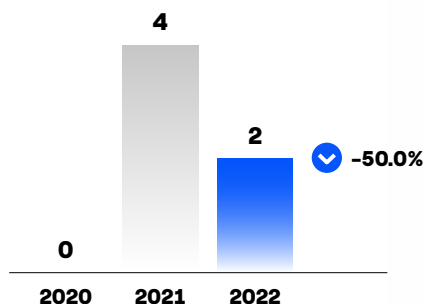
**Number of Fatal Accidents (FAT) no.**



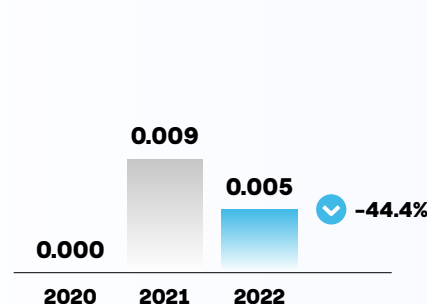
**Fatality Frequency Rate (FAT FR) i**



**Number of Life Changing Accidents (LCA) no.**



**Life Changing Accidents Frequency Rate (LCA FR) i**



**Enel's  
commitment  
is: zero injuries  
every day, all days**

Combined values,  
Enel people and  
contractors

As compared to the previous year, **in 2022 there was a consistent reduction in all injury frequency rates**, in relation to a number of hours worked that has remained more or less constant (+1.1%).

**In 2022, the Total Recordable Injury Frequency Rate (TRIFR) decreased 21.3% compared to 2021**, with approximately 2.2 injury events for every million hours worked. This decrease involves both Enel people (-2.4%) as well as personnel from contractor companies (-24.4%).

Furthermore, as regards events with the highest impact, there were **6 fatalities** involving 1 employee of the Group (Enel Grids in Romania) and 5 involving contractors (all in Enel Grids, 3 in Brazil, 1 in Italy and 1 in Argentina). The causes of all these injuries are mainly associated with electrical (5) and mechanical (1) related accidents. Furthermore, during the year there was only 1 Life Changing injury that involved a Grids contractor in Brazil.

There were also **2 Life Changing injuries**, that is injuries with consequences that changed the life of the injured person, one from Grids in Brazil and the other Enel X in Chile, both contracting company personnel.

**217 Extra Checking on Site (ECoS)** assessments were performed in 2022, meaning the internal assessment of safety and environment in order to evaluate the suitability of the

organization and processes in a specific operating area of the Group. These checks are performed by expert HSEQ personnel who come from outside the operating unit under assessment, in addition to technical profiles who are specific to the business. After the check is performed, a report is issued with the evidence found in the field and the proposed corrective measures, whose implementation is monitored until complete conclusion.

As regards the collection, analysis and management of the events, the Group uses Policy 106 "Classification, communication, analysis and reporting of incidents", which defines roles and methods employed to guarantee prompt communication of incidents, ensuring the related cause analysis process, definition of improvement plans, and monitoring of the associated actions depending on the event type. Based on evidence resulting from the monitoring and control system, a data-driven approach was implemented that is based on IT tools and analytical dashboards, which makes it possible to appraise the performance of the organizational units and suppliers, identify areas at greater risk of fatalities and Life Changing injuries and the subsequent management methods. This approach is combined with the collection and sharing of the best practices that support the process of continuous learning and help avoid the same events from repeating.

## Safety in contract processes

Safety at Enel is integrated in tender processes and the performance of companies is monitored both on a preliminary level, by means of the qualification system, and during contract execution through a large number of control processes and tools such as the Supplier Performance Management tool (SPM).

During the tender phase, a specific document is prepared ("**HSE Terms**"), and attached to all contracts that must be signed by contractors when work is awarded. The document, which is the same throughout the entire Group, defines the obligations in relation to health, safety and environmental aspects that the contractors must respect, placing the same obligation on their subcontractors. This tool clarifies Enel's requirements and conveys their importance to contractors; it also defines a list of safety and environmental violations that can involve specific penalties, up to the termination of the contract and/or suspension of qualification on the Enel supplier portal.

As regards supplier safety and environmental checks, during 2022 the performance of the **Contractor Assessment (CA)**, continued at the offices of the suppliers and at their job sites, or also remotely when it was not possible to visit them on site. **1,434 CA** were carried out distributed among all the Enel Business Lines and Countries and Regions. The Contractor Assessment is carried out during the qualification phase for each new supplier, in cases in which criticalities emerge (severe injuries or fatalities) or low SPM (Supplier Performance Management) rating scores. In addition, **55 Evaluation Groups (EG)**, which are periodic multidisciplinary meetings, were held in 2022 distributed in all the Business Lines and Countries and Regions, which make it possible to assess the safety performance of suppliers and define targeted actions as well as accompaniment and support plans customized for the companies, in order to reach the desired safety standards and mitigate possible areas of risk in advance.

# Infrastructure safety and technological innovation

Enel views technological innovation as a valid tool capable of improving a large number of processes from the Health & Safety perspective. In continuation with what was done in previous years, the development and application of some innovative safety and health projects were continued also in 2022.

**“Personal Voltage Detectors”**, portable devices designed to identify electrical voltage on medium-voltage power lines located at operationally significant distances from the worker but not necessarily involved in the activity in progress, are being used in the Infrastructure and Networks area to reduce the electrical risk.

Within the scope of the **“Intrinsic Safety”** program, which was implemented with synergy and co-design between various Enel Global Business Lines and Holding Functions, many experiments and innovative projects are being developed, such as: **“AI4Lifting”**, which uses Artificial Intelligence to detect any potential situations of danger when handling loads, and **“Hop Safe”**, a system that allows personnel to use a ladder when working at a height only when they are properly connected to the life line.

The experimentation of innovative solutions is being continued in the area of **HMI (Human-Machine Interaction)** to prevent the risk of accidental impacts with moving work equipment or with underground service lines, as in the case of the following projects:

- **Anticollision System**: whose objective is to improve the

functionality of devices that generate alarms through the use of Artificial Intelligence programs;

- **Smart Bucket**: which implements a system that is able to prevent damaging underground utilities during excavation works, which are a significant market problem that can create construction delays and risks for the safety of machine operators;
- **AME**: a project with the purpose of creating a device able to define a safe work area dedicated to operators and vehicles, through the use of proximity and voltage presence sensors.

Finally, innovative solutions are being developed for **monitoring health conditions during work activities** in order to prevent and quickly manage potential situations of danger and/or emergency. An example is **Safety 4 Lone workers** which involves the use of a multifunctional device (smart-watch) that uses specific algorithms to monitor the main biometric parameters in order to prevent possible situations of risk, in particular for Enel workers working alone. In parallel, 2022 marked the end of the test campaign for the **Youcare T-shirt**, an innovative wearable proposed by the “Accyourate” company, which was fitted with electro-medical sensors that detect up to 9 bio-vital parameters, whose positive result opens up further scenarios in the area of injury prevention and in the planning of campaigns for data driven based health.

## Health

3-3 | 403-3

Health is a fundamental value for the care and development of our people. For this reason, the Enel Group has adopted a structured health management system based on preventive and protection measures, and is committed to developing a corporate culture oriented toward the promotion of psychological-physical health, organizational well-being and balance between the professional and personal spheres.

This approach is described in the Policy on Human Rights and the new version of the **“Health and Well-being”** Policy, approved in January 2022, and defines in three main steps – health surveillance, prevention and well-being – the path for promoting good health and well-being.

From this point of view, from a global and local perspective, we are promoting initiatives targeted toward improving the quality of the work day on a physical and psycholog-

ical level, and are implementing awareness campaigns for promoting healthy lifestyles. For example, in 2022, a global campaign on health risks connected to smoking was carried out, and 2 webinars were held, translated into the main languages of the Group Countries and available to all employees that explained the effects of smoking on health and provided advice on how to quit.

As regards work-correlated stress, over the past years we have carried out 3 surveys, starting from a coverage of approximately 20% up to all employees. The last survey was started at the end of 2022. These surveys did not point out true work-correlated stress, but some Company areas emerged with a greater number of “borderline” cases, for which we planned and implemented actions to reduce the average stress level of the unit.

As regards occupational diseases, our analyses did not

find cases related to renewable energies that, due to their nature, decrease the risk caused by the greater speed of building the plants and their more simple management.

In addition, we are providing screening programs targeted toward preventing the onset of diseases and offer **conventions that provide ready access** to medical and healthcare services, assistance actions for persons with disabilities and specific preventive medicine initiatives.

As regards **business travel**, the “Health, safety and emer-

gency aspects for expats or long term travelers” policy is in force, which in addition to providing guidelines to travelers in terms of health, safety and emergency management, also defines in a uniform manner the preliminary steps and authorization flow for the temporary assignment of Enel people abroad. For the latter and their families, insurance coverage was activated since last year, which provides access to health care services in the host country, as well as home care.

## Development of safety culture: training and information

3-3 | 403-5 | EU18 |

To support the processes of change and guarantee the dissemination of a solid safety culture on all levels, the Enel Group has a structured process for the management and provision of training to all employees.

Overall in 2022, **Enel people received approximately 1,245 thousand training hours regarding health and safety**, with the purpose of protecting the health and psychological-physical well-being of people and increasing the know-how and specific skills of workers throughout the Group.

In particular, in the Holding HSEQ organizational unit, the **SHE Factory** unit is active, which has the specific objective of implementing, integrating and harmonizing training projects throughout the entire Group dedicated to promoting a new mentality for a better way to work that is safer for people and more sustainable for the environment. SHE Factory unit provided more than 65 thousand hours of internal training.

In 2022, this unit provided various specific training courses on health, safety, environment and quality (HSEQ), which involved **approximately 18 thousand employees**, for a total of **more than 65 thousand hours of training supplied**. As regards safety, the main topics that were addressed last year were **Safety Leadership, Stop Work Policy, Buddy Partner and Mentor**.

The **Buddy Mentors** can be defined as “safety influencers” and are based on a fundamental assumption: “Working safely means ensuring the safe work also of your buddies”. This is a project characterized by innovation, change (cultural and organizational), transferability and effectiveness of the results. With this initiative targeted toward Enel Grids personnel, Enel won the “AIF Training Excellence Award (Italian Trainer Association)” in Italy, in the category “Health, Safety, Organizational Well-being”, targeted toward all professional structures working in the public or private sector.

Particular attention is also placed on suppliers with the **“Partnership for safety, health and the environment”** project, which focuses on assisting Enel partners in adapting their company standards regarding HSEQ, with assessments and collaboration opportunities in the field. From this point of view, SHE Factory provided all suppliers with a global software platform, ENEL4SHARE Platform, for the sharing of training material which can be downloaded and used by the supplier to hold training for their employees.





### HEALTH WEBINAR – The importance of prevention: risks to health deriving from smoking cigarettes

**Sergio Martínez González**

Health and Safety Manager,  
HSEQ Holding



**We are committed to developing a corporate culture oriented toward the promotion of psychological-physical health, organizational well-being and balance between the professional and personal spheres**

*"For Enel, worker good health and well-being have always been a top priority. We are working to protect the psychological and physical well-being of all our colleagues, not only at work, but also at home and during their free time. For this reason, we are committed to promoting healthy life styles and developing a new well-being-oriented corporate culture. We are convinced that our contribution is able to improve the lives of our colleagues and their loved ones, and this motivates us to always do better."*



Cigarette smoking is one of the main causes of disease and death world-wide. Fortunately, many of the negative effects of smoking can be prevented or reduced by quitting smoking. It does not matter how long you have smoked, quitting can still considerably reduce the risk of developing diseases associated with smoking.

The Health and Safety unit of HSEQ Holding, organized a global awareness event on damage caused by smoking on May 31, on occasion of the "World No Tobacco Day".

With Professor Laura Carrozzi, Full Professor of Respiratory System Diseases at the University of Pisa, and Director of the AOUP Pneumology Unit, and Dr. Francesco Pistelli,

Senior Researcher of Respiratory System Diseases at the University of Pisa and Manager of CEST, "Center for the Study and Treatment of Tobacco Use", we discussed prevention, the health benefits that result from deciding to stop smoking, products that replace the traditional cigarette, how the pandemic changed smoking habits and the environmental impact of smoking.

The webinar, which is also available in on-demand mode, has been translated into the main languages of the Group and recorded the participation of approximately 3,600 people, equal to approximately 5% of all Group employees.

# Safety of communities and third parties

3-3 | 416-1 | EU25 |

Establishing solid and long-lasting relations with local communities in the countries in which Enel operates represents a fundamental pillar of the Group's strategy. This, together with constant attention to social and environmental factors, makes it possible for Enel to implement on the one hand a new fair development model that does not leave anyone behind and on the other hand is able to create shared value over the long term for all stakeholders.

Our installed plants are built in compliance with legislative prescriptions and the rules of best technical practice. Plants, machines and work equipment are subject to systematic and periodic checks and maintenance activities to guarantee correct operation in compliance with regulations and in accordance with the adoption of the best safety standards.

In order to guarantee the health and safety of the community and reduce the impact of the typical activities of the Company's generation process on the external envi-

ronment, the Company carries out monitoring campaigns. These include, for example, measurement of the electromagnetic fields of power networks, the detection of the noise level, vibration and dust created by the electrical machines of power plants and distribution and transformer substations. Also the following environmentally significant factors are monitored: atmospheric emissions and air quality, effluent discharge into surface waters, water quality, production, reuse and disposal of waste, soil quality, biodiversity impacts.

Considerable attention has been devoted to preventing injuries involving members of the public who accidentally come into contact with electricity networks during operations such as job sites near transmission lines or sports and leisure pursuits (fishing, flying kites, etc.). For this reason, awareness campaigns are conducted periodically, addressed both to the general public and to specific categories such as, for example, construction companies and sport's associations.

## Emergencies management

DMA EU (former EU21) |

Our Group has defined a common crisis and critical events management system across the various countries where we are present, described by policy 24 "Critical Event Management". This system involves evaluation of the impact caused by critical events by means of a standard reference scale with three levels. High-impact crises are managed centrally, while medium- or low-impact crisis situations are managed within the specific organization in the individual countries.

High-impact crises ("Group Red Code") are also addressed by creating a central crisis committee in the Security Control Room at the Viale Regina Margherita headquarters in

Rome, supplying support 24/7 for communication and coordination of information flows. Moreover, the crisis committee defines strategies and actions to deal with critical events and coordinates all actions designed to restrict damage to the Enel Group's property, profitability and reputation.

In parallel, if the critical event can involve risks to the health and safety of people, the policy 203 "Guideline for Emergency Management" foresees on a global level the immediate activation of emergency measures, in compliance with the locally adopted safety management systems.

## Nuclear policy

In the context of its operations in the field of nuclear technologies, Enel has made a public commitment, in the role of shareholder, to guarantee that a clear nuclear safety policy is adopted in its atomic energy plants and that the plants are managed in accordance with criteria capable of assuring the absolute priority of safety and protection of workers, the community and the environment.

Further details are available on the Enel website (<https://www.enel.com/it/investitori/sostenibilita/impegno-quotidiano/salute-sicurezza-lavoro/enel-nucleare>).

# Industrial relations on health and safety topics

In order to consolidate the culture of safety and promote the adoption of behaviors that are consistent with Company policies, Enel supports social dialogue and participation of workers' representatives. Joint committees have been set up for this purpose in the main countries in which Enel is present, dedicated to monitoring the issues and projects concerning workers' health and safety on the national level and also in terms of Business Lines. In Italy, in implementation of the matters provided for by the national trade union agreement on the "Italian model of Enel Italia industrial relations", there has been a bilateral commission on workplace safety and protection policies in force since 2012. The commission examines the main projects aimed at improving safety standards, training projects, preventive initiatives. In 2013, the Enel Global Framework Agreement

created an analogous bilateral commission at the Group level, which defined a "joint recommendation" concerning health and safety standards applicable in all Enel countries. Negotiations are in progress to renew the Enel Global Framework Agreement.

On March 29, 2022, Enel and the trade unions signed the "Charter of the Person", which is a document containing important principles also concerning the safety culture and behaviors that are being implemented on a Group level, as the agreement was implemented also in other Countries and Regions.

The following details concern the commissions that operate in the main countries on the national and/or local levels.

COUNTRY	JOINT COMMITTEES FOR HEALTH AND SAFETY
Italy	<b>The Occupational Safety and Environment Policies Committee</b> performs an important role of analysis and planning of projects that concern safety, the processing of prevention policies and organizational solutions; promotion of safety training courses for personnel and employees of contractor companies, with particular attention to the prevention and protection service manager. The <b>Health and Safety Bilateral Bodies per Business Area</b> are responsible, in particular in the Grids area that follows the guidelines dictated by the Bilateral Committee, applying them to the specific context of the Grids, for analyzing the injury trend, suggesting innovative safety projects, analyzing training plans and modify operating instructions. During the last two years, both the Committee as well as the Health and Safety Bilateral Bodies were particularly active, with periodic meetings almost every 15 days, in order to review in particular all the aspects correlated to the pandemic, as well as for the management of safety issues in order to identify and accompany innovative projects targeted towards continuously improving the prevention of injuries, but above all to work on the safety culture also as specified in the <b>Charter of the Person</b> .
Romania	In compliance with legislative provisions, there is an Occupational Health and Safety Committee comprised of representatives appointed by the trade organizations who represent the workers for each company (worker representatives) on the one hand, and on the other, a number of people representing the employer equal to the number of worker representatives. The occupational health physician is required to participate in the CSSM meetings. The Occupational Safety and Health Committee aims to guarantee employee involvement in the development and implementation of decisions regarding occupational health and safety. Committee members meet periodically (every three months and each time it is necessary) to discuss specific problems and propose measures/actions for managing, controlling and improving the level of employee health and safety. Based on the CLA, every Enel company also has joint committees comprised of representatives of the members of the company and union/worker representatives that meet periodically/ every time it is necessary to resolve problems that arrive when applying the valid CLA, as well as to create an organizational framework that permits them to remain in permanent contact in order to prepare the negotiations for the new CLA.
Spain	The <i>Comisión de participación y control</i> has been set up on the national level, while the local level is handled by <i>Comités de seguridad y salud territoriales</i> .
Argentina	The power plants have bilateral committees responsible for health and hygiene issues, which meet once a month or once every two months. The agreement does not specify the frequency with which the meetings are held.
Chile	The <b>mixed health and safety committees</b> are active and have the task of avoiding occupational injuries by implementing measures for the prevention of risks for employers, implementing permanent work and programs on the safety of work places.
Peru	We have bilateral committees (workers and Company representatives) that approve occupational health and safety policies according to law.
Brazil	The <i>Comissão interna de prevenção de acidentes</i> has been established at all sites, which is comprised of Company representatives and worker representatives; the committee focuses on the creation of injury prevention initiatives.
Colombia	Two joint committees have been set up (COPASST), one for networks and one for generation, with the role of promoting occupational medicine legislation.
Mexico	The <b>Health and Safety committee</b> is active: as required by law, there is a Mixed Commission for Safety and Hygiene (MCSH) for each plant, including also the corporate offices. This represents the obligations of the employer according to "NOM-019-STPS-2011" (constitution, integration, organization and operation of the safety and hygiene commissions), being a bipartisan body comprised of an equal number of worker and employer representatives, whose purpose is to identify hazardous and unsafe agents and conditions, investigate the causes of occupational injuries and illnesses; suggest measures for preventing them, and to control observance. The personnel part of the Mixed Commission for Safety and Hygiene (MCSH) perform a safety walk at each plant and site every three months.

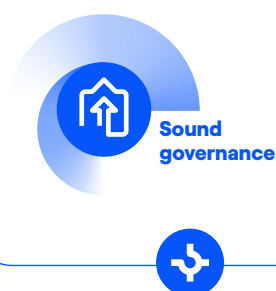
# Sound governance

## Material topics (I level)



- Sound governance and fair corporate conduct

## Plan



## SDG



Below the 2022 results related to the targets of the previous 2022-2024 Sustainability Plan, the resulting progress and the targets of the 2023-2025 Sustainability Plan, which may be redefined, added to, or surpassed with respect to the previous Plan.

SDG	Activities	2022 results	Progress	2023-2025 targets	Tag
16	<b>Diversity Policy</b> - Monitoring of the implementation of the Diversity Policy in the Board of Directors	The composition of the Board of Directors appointed by the Shareholders' Meeting of May 14, 2020 is consistent with the objectives set out in the Diversity Policy for the various types of diversity	●●●	Monitoring of the implementation of the Diversity Policy in the Board of Directors	G
16	<b>Recommendations and best practices</b> - Continual alignment with international recommendations and best practices for governance	<ul style="list-style-type: none"> <li>• Ensured alignment with international corporate governance best practices, including those recommended by leading proxy advisors and leading institutional investors</li> <li>• Full compliance with the new Italian Corporate Governance Code ensured</li> </ul>	●●●	Continual alignment with international recommendations and best practices for governance	G
16	<b>Induction plan</b> - Structured induction plan for Directors and Statutory Auditors during their term in office, which includes the sustainability issues	Induction activities carried out to provide Directors and Statutory Auditors with adequate knowledge of the sectors in which the Group operates, market trends and the regulatory framework, including sustainability issues	●●●	Structured induction plan for Directors and Statutory Auditors during their term in office, which includes the sustainability issues	G
16	<b>Engagement</b> - Implementation tracking and possible updating of Enel SpA's Engagement Policy and supporting the Investor Relations unit in engagement activities with institutional investors and proxy advisors on corporate governance issues	<ul style="list-style-type: none"> <li>• Enel SpA's Engagement Policy has been implemented in a regular manner</li> <li>• The relevant corporate Function has duly supported the Investor Relations unit in engagement activities regarding corporate governance issues</li> </ul>	●●●	Implementation tracking and possible updating of Enel SpA's Engagement Policy and supporting the Investor Relations unit in engagement activities with institutional investors and proxy advisors on corporate governance issues	G

Structure of the Board of Directors and Top Management

### Goals

- I Industrial
- E Environmental
- S Social
- G Governance
- T Technological



New



Redefined



Outdated

### Progress



Not in line



In line



Achieved

N.A. = not applicable



	SDG	Activities	2022 results	Progress	2023-2025 targets	Tag
Structure of the Board of Directors and Top Management	16	<b>Board review</b> – Board review carried out with the support of an independent consultant	Board review activities started in November 2022 <sup>(1)</sup>	● ● ●	Board review carried out with the support of an independent consultant	G
	16	<b>Share Ownership Guidelines</b> – Drafting by the competent organizational structures and adoption by the Board of Directors of share ownership guidelines applicable to the Chief Executive Officer and Key Management Personnel	N.A.	N.A.	Drafting by the competent organizational structures and adoption by the Board of Directors of guidelines applicable to the Chief Executive Officer and Key Management Personnel and concerning the minimum threshold of ownership of Enel shares to be reached within a given term from their appointment and to be maintained during their mandate	+ G
Anti-corruption	16	<b>Anti-corruption certification</b> – ISO 37001 anti-corruption certification retained for the main Italian Companies, extended also to the Group's foreign companies	Certification obtained for the main Italian and foreign companies of the Group subject to the retention of certifications already acquired	● ● ●	<b>100%</b> retention of ISO 37001 certifications acquired by Group companies	G S
	16	<b>Compliance Program</b> – Ongoing improvement of Compliance Programs/Models to prevent criminal risks	<ul style="list-style-type: none"> <li>Process continued to adopt the Enel Global Compliance Program regarding the acquisition and set-up of companies at Group level</li> <li>Ongoing updates of the criminal risk prevention models related to foreign companies</li> </ul>	● ● ●	Ongoing improvement of Compliance Programs/Models to prevent criminal risks	G
Robust Organizational Model and Compliance Program	16	<b>Training</b> – Additional extension of training on Model 231 and Enel Global Compliance Program	Online training on ethical issues (such as Model 231, Anti-corruption Management System, EGCP) extended to all employees of the Group's Italian and foreign companies	● ● ●	Online training on ethical issues (e.g. Model 231, Anti-corruption Management System, Enel Global Compliance Program)	G S
	16	<b>International Sanctions Program</b> – Ongoing improvement of the international sanctions program and sanctions risk prevention model	N.A.	N.A.	Ongoing monitoring of the regulatory environment and possible updating of the international sanctions program to ensure full compliance with international sanctions regulations	+ G
Tax transparency	16	<b>Cooperative Compliance Index</b> – Group companies membership to cooperative compliance schemes (cooperative compliance with tax authorities)	<b>95.7%</b>	N.A.	<b>96.0%</b> in 2025	+ G

(1) It is expected to finalize the activities by March 2023.

# Sound governance

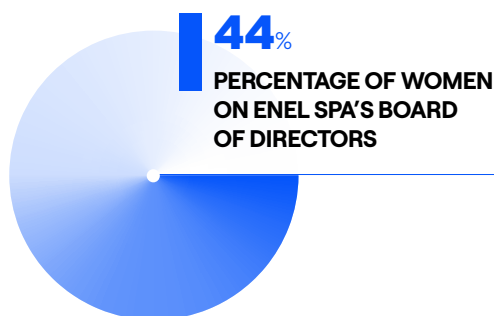
| 2-1 | 2-9 | 2-12 | 2-17 | 2-29 |



## Enel shareholders

Enel is a Company listed since 1999 on the Euronext Milan stock exchange and managed by Borsa Italiana SpA and has the most shareholders of all Italian companies. Notably, the **shareholder structure at December 31, 2022** was as follows: **(i) 56.7% institutional investors; (ii) 19.7% retail investors; (iii) 23.6% Ministry of the Economy and Finance.** Enel's corporate structure includes the main international investment funds, insurance companies,

pension funds and ethical funds, thanks also to the adoption, by the Company and the Group, of the best international practices on transparency and corporate governance. Moreover, at the date of this Sustainability Report, the Enel Group includes a further 11 companies issuing shares listed on the Brazilian, Chilean, Peruvian, Spanish, and US Stock Exchanges.



**12**  
ENEL SPA'S BOARD OF DIRECTORS  
MEETINGS CONCERNING  
SUSTAINABILITY

**172**  
REPORTS  
CONCERNING  
THE CODE OF  
ETHICS

**29**  
VIOLATIONS  
OF THE CODE  
OF ETHICS

**7**  
DATA  
BREACH

## Policy for managing the dialog with institutional investors and with all shareholders and bondholders

Enel considers it to be in its specific interest – as well as a duty toward the market – to ensure a constant and open relationship that is based on the mutual understanding of the roles with all shareholders and bondholders, as well as with the institutional investors and their representative associations in order to increase the relative level of understanding regarding the activities performed by the Company and the Group. In this context, Enel maintains dialogue with counterparties based on principles of fairness and transparency, in compliance with EU and national regulations on market abuse, as well as in line with international best practices. This engagement activity has led to the positive result, over recent years, of a significant increase in participation of the institutional investors in the Shareholders' Meetings.

In order to regulate the methods for developing this dialog, in March 2021 the Board of Directors adopted a specific Policy, (i.e. "Engagement Policy"), acting on a proposal of the Chairman made in agreement with the Chief Executive Officer, which clarified to a large extent the practices already followed by Enel and whose use takes into account the applicable best practices adopted by the institutional investors and reflected in the stewardship codes.

This Engagement Policy, which was applied consistently during 2022, also identifies the corporate structures that, in line with the practices established by Enel from the moment their shares were listed on the stock exchange, are responsible for the dialog activities, and specifically with: (i) a specific Investor Relations office which is part of the Administration, Finance and Control Function, which interacts on a continuous basis with the institutional investors (as well as with the financial analysts and the rating agencies); as well as (ii) a specific area in

the Corporate Affairs office, which is in turn part of the Legal and Corporate Affairs Function, which interacts on a continuous basis with the retail shareholders and bondholders, providing them with all useful explanations regarding the respective issues of interest.

The information provided to Enel's institutional investors and all their shareholders and bondholders by the above-indicated organizational structures – as well as by any other duly authorized Company member – complies with the criteria of truthfulness, clarity, coherence, completeness and symmetry of information; the information is also supplied in a timely manner and in compliance with what is required by the regulation adopted by Enel regarding the processing of corporate information.

In particular, the Investor Relations structures are, for example, responsible for the following: (i) preparing Enel's equity story and organizing meetings between the Company's Top Management and the financial community; (ii) managing relationships with ratings agencies and with the fixed income investors; (iii) managing relationships with institutional investors and financial analysts; (iv) coordinating the management of relationships with the institutional investors who have an interest in the listed share capital controlled by Enel; (v) preparing market analyses and reports concerning Enel shares, also monitoring the consensus of the financial analysts; (vi) supporting the Communications Function, in coordination with the Corporate Affairs unit with the definition and approval of Enel's price sensitive press releases, as well as developing and updating the content dedicated to investors on the Company website and in the app called "Enel Investor".

For more details, refer to the Report on Corporate Governance and Ownership Structure for 2022. Also, Enel's website ([www.enel.com](http://www.enel.com), "Investors" section) provides access to economic, financial, environmental, social and governance information and updated data and documents of particular interest, providing a multidisciplinary and integrated vision.



# Corporate governance model

| 2-9 | 2-10 | 2-11 | 2-12 | 2-13 | 2-14 |

Enel's corporate governance system complies with the principles contained in the Italian Corporate Governance Code published on January 31, 2020<sup>(1)</sup> (the "Corporate Governance code"), to which the Company adheres, was also inspired by the international best practices. The corporate governance system adopted by Enel is oriented toward the goal of sustainable success, given that it is aimed at creating value for shareholders over the long term, aware of the importance from an environmental and social point of view of the Enel Group's operating activities and the con-

sequent need to proceed with adequate consideration of all the interests of the relevant stakeholders.

For a detailed illustration of Enel's corporate governance, we invite you to refer to the Report on Corporate Governance and Ownership Structure for 2022, which is available on the Company's website ([www.enel.com](http://www.enel.com)); we further refer you to the specific sections of this Sustainability Report for an illustration of the governance of sustainability and the management of climate change.

## 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**

(1) It is available on the Borsa Italiana website (at <https://www.borsaitaliana.it/comitato-corporate-governance/codice/2020.pdf>).



# 2022

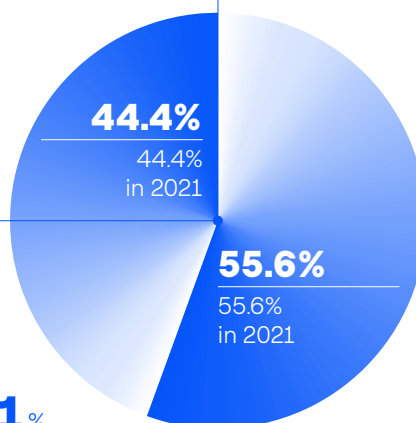
## COMPOSITION OF THE BOARD OF DIRECTORS

**1** executive director  
1 in 2021

**8** non-executive directors  
8 in 2021  
of which 8 independent<sup>(1)</sup>  
8 in 2021

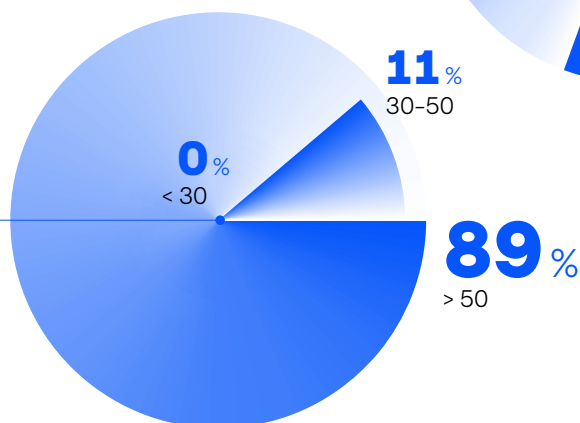
### GENDER

**4**  
Women  
4 in 2021



**5**  
Men  
5 in 2021

### AGE



### 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).

# Board of Directors

| 2-9 | 2-10 | 2-11 | 2-12 | 2-13 | 2-14 | 2-16 | 2-17 | 2-18 | 3-3 | 405-1 |

The Board of Directors in office was **appointed by the Ordinary Shareholders' Meeting of May 14, 2020** and consists of nine members.

Enel applies diversity criteria, also in relation to gender, in the composition of the Board of Directors, in line with the priority goal of ensuring adequate competence and professionalism of its members. Specifically, in January 2018 the Board of Directors, acting on a proposal of the Corporate Governance and Sustainability Committee and the Nomination and Compensation Committee, and in implementation of what is required by the Single Financial Act, approved a diversity policy that describes the optimal characteristics of the Board's composition to ensure it can fulfil its duties as effectively as possible, making decisions that can tangibly benefit from the contribution of a plurality of different qualified members able to examine the issues under discussion from diverse perspectives.

The Board of Directors held **16 meetings in 2022, of which 12 addressed climate-related matters, reflected in the strategies and related implementation methods**. In order to provide Directors with an adequate overview of the business sectors in which the Group operates (including sustainability issues), a broad and comprehensive induction program was organized commencing in the second half of 2020, followed by specific examination of the topics of corporate governance and climate change during 2021. During 2022, the induction program continued with further examination of the topics of cyber security and risk governance.

The maximum number of offices that the members of the Board of Directors can hold on the Board of Directors or governing bodies of other companies of a relevant size is regulated by a specific corporate policy, which was last updated in 2020 in order to adapt the contents to the relevant best practices prepared by the main proxy advisors and relevant institutional investors.

In order to regulate the way in which the Company engages with institutional investors and with all shareholders and bond holders, in March 2021 the Board of Directors adopt-

ed a specific Policy (i.e. "Engagement Policy"), acting on a proposal of the Chairman formulated in agreement with the Chief Executive Officer, which clarified to a large extent the practices already followed by Enel and whose use takes into account the applicable best practices adopted by the institutional investors and reflected in the "stewardship" codes.

In relation to the topic of succession plans for executive directors, in September 2016 the Board of Directors, acting on a proposal of the Nomination and Compensation Committee made in agreement with the Corporate Governance and Sustainability Committee, shared the contents of a specific "**contingency plan**" aimed at regulating the steps to be taken to assure proper management of the Company in case the Chief Executive Officer ceases to hold office before the end of their ordinary term (defined as "crisis management" cases).

Finally, at the end of 2022 and during the first months of 2023, with the assistance of an independent consultant, the Board of Directors carried out an assessment of the size, composition, and functioning of the Board itself and its committees (i.e. "**board review**"), in line with the most advanced corporate governance practices followed internationally and assimilated in the Corporate Governance Code. The board review was conducted also in accordance with the peer-to-peer review method, i.e. through assessment not merely of the operation of the body considered globally, but also of the style and contents of the contribution provided by each of its members, and was extended to the Board of Statutory Auditors. Within the scope of the board review, specific attention was dedicated to verify the Directors' perception regarding (i) the effectiveness of the induction activities, as well as (ii) the involvement of the Board of Directors in sustainability issues and the integration of sustainability topics in corporate strategy, including those related to climate change. The results of the board review are provided in Enel's Report on Corporate Governance and Ownership Structure.

## Remuneration policy

| 2-18 | 2-19 | 2-20 | 2-21 |

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 defined in consideration of (i) the recommendations contained in the Italian Corporate Governance Code, pub-

lished on January 31, 2020; (ii) the national and international best practices; (iii) the information that emerged from the favorable vote of the Shareholders' Meeting of May 20, 2021 on the remuneration policy for 2021; (iv) the results of the engagement activities regarding corporate governance carried out by the Company between January

and March 2022 with the main proxy advisors and some relevant institutional investors with an interest in Enel capital; (v) the results of a benchmark analysis regarding 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 prepared by the independent consultant Mercer.

The purpose of this Policy is to (i) promote Enel's sustainable success, which is based on the creation of long-term value to the benefit of its shareholders, taking into due consideration the interests of the other relevant stakeholders, in order to encourage reaching the strategic goals; (ii) attract, retain and motivate people with the skills and professionalism required for the delicate managerial tasks assigned to them, in consideration of the compensation and work conditions of the Company and Enel Group employees; as well as (iii) promote the company mission and values.

The remuneration policy for 2022 sets out the following compensation for the Chief Executive Officer/General Manager and for Key Management Personnel (referred to as DRS – Dirigenti con Responsabilità Strategiche):

- a fixed component;
- a short-term variable component (MBO), to be paid based on the achievement of specific performance targets. Specifically:
  - for the Chief Executive Officer/General Manager, the 2022 MBO is based on the following annual performance targets:
    - Ordinary consolidated net income;
    - Group Opex;
    - Funds from operations/Consolidated net financial debt;
    - System Average Interruption Duration Index – SAIDI (gateway objective), commercial complaints on the free commodities market in Italy (gateway objective) and commercial complaints on a Group level;
    - Safety in the workplace;
  - for the DRS, the respective MBO identify the annual objectives and specific objectives correlated to the Strategic Plan and identified together with the Administration, Finance and Control Function and by the People and Organization Function;
- a long-term variable component linked to participation

in specific multi-annual incentive plans. In particular, for 2022 this component is linked to participation in the Long-Term Incentive Plan destined for the management of Enel SpA and/or of its subsidiaries pursuant to article 2359 of the Italian Civil Code ("2022 LTI Plan"), which contains the following three-year performance goals:

- average Enel TSR (Total Shareholders Return) vs average Euro Stoxx Utilities – UEM index TSR in the three-year period 2022-2024;
- cumulative ROIC (Return on Invested Capital) – WACC (Weighted Average Cost of Capital) in the three-year period 2022-2024;
- emissions of GHG Scope 1 per equivalent kWh generated by the Group in 2024;
- percentage of women in the top management succession plans at the end of 2024.

The 2022 LTI Plan also requires any premium accrued to be represented by a share component, to which – based on the level of achievement of the various targets – a monetary component can be added. In particular, 130% of the base bonus of the Chief Executive Officer/General Manager (with respect to a maximum amount that can reach 280% of the base bonus) and 65% of the base bonus of the DRS (with respect to a maximum amount that can reach 180% of the base premium) is to be disbursed in Enel shares, mainly purchased from the Company. In addition, the disbursement of a significant portion of the long-term variable remuneration component (70% of the total) is deferred to the second subsequent financial year with respect to the three-years of reference for the objectives of the 2022 LTI Plan (i.e. "deferred payment").

For more information on the contents of the 2022 remuneration policy, refer to the Report on the [Enel remuneration policy for 2022 and on the compensation paid in 2021](#), available on the Company website ([www.enel.com](http://www.enel.com)).

Finally, the table below presents for 2019, 2020, 2021 and 2022 the ratio between the total remuneration accrued by the Chief Executive Officer/General Manager of Enel and the average gross annual remuneration of Group employees (i.e. "pay ratio"). This report is indicated, for complete disclosure, also in reference to only the fixed component of the remunerations in question.

	2022	2021	2020
Pay Ratio – Ratio between the total remuneration of the CEO/GM of Enel and the average annual gross remuneration of Group employees <sup>(1)</sup>	60x (32x fixed remuneration)	90x (33x fixed remuneration)	143x (35x fixed remuneration)

(1) To eliminate the exchange rate effect, the 2021 and 2020 amounts were recalculated using the 2022 exchange rate.

# Enel Group risk governance model

| 2-9 | 2-10 | 2-11 | 2-12 | 2-13 | 2-14 |

When performing its industrial and commercial activities, the Enel Group is exposed to risks that could influence its economic and financial results if they are not effectively monitored, managed and mitigated.

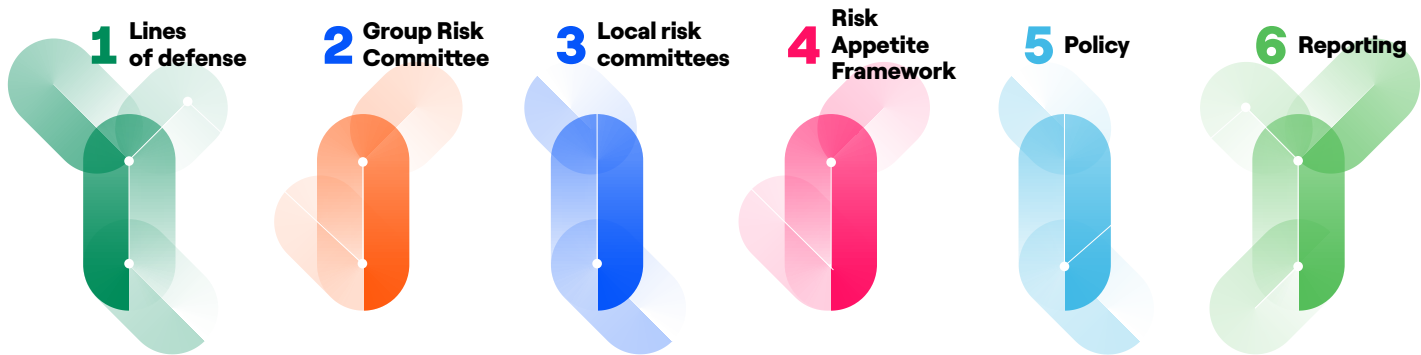
In this regard, in compliance with the architecture of the Internal Control and Risk Management System ("ICRMS")<sup>(2)</sup>

adopted by Enel, the Group has also implemented a risk governance model based on specific "pillars", as well as a homogeneous taxonomy of risks (so-called "risk catalogue") that facilitates management and organic representation.

## The "pillars" of risk governance

Enel has adopted a reference framework concerning risk governance that is expressed in detail through specific

management, monitoring, control and reporting measures for each of the identified risk categories.



**1. 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.

**2. 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:

- the analysis of the main exposures and the main risk issues for the Group;
- the adoption of specific risk policies applicable to Group companies in order to identify the roles and responsibilities for the risk management, monitoring and control processes, in compliance with the principle of organizational separation between the units responsible for management and those responsible for the monitoring and control of risks;
- the approval of specific operating limits, authorizing, where necessary and appropriate, exceptions to these limits for specific circumstances or needs;

- the 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 by the head of the Risk Control unit, which is part of the Administration, Finance and Control Function. The committee met four times during 2022.

**3. Integrated and wide-spread system of local risk committees.** The presence of specific local risk committees, according to the main global Business Lines and Countries and Regions of the Group and chaired by the 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 the opportunity for sharing information and mitigation strategies regarding the most significant exposures with the Group's Top Management, as well as local implementation of the guidelines and strategies defined at Group level.

<sup>(2)</sup> More details can be found in the Report on Corporate Governance and Ownership Structure ([www.enel.com](http://www.enel.com), "Investors" section), as well as in the ICRMS guidelines available in the "Governance" section.



- 4. Risk Appetite Framework ("RAF").** The Risk Appetite Framework represents the framework of reference for determining the appetite for risk 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 briefly describes the identified risk strategies and the indicators and/or limits applicable to each risk.
- 5. Risk policy.** The allocation of responsibilities, the coordination mechanisms and the main control activities

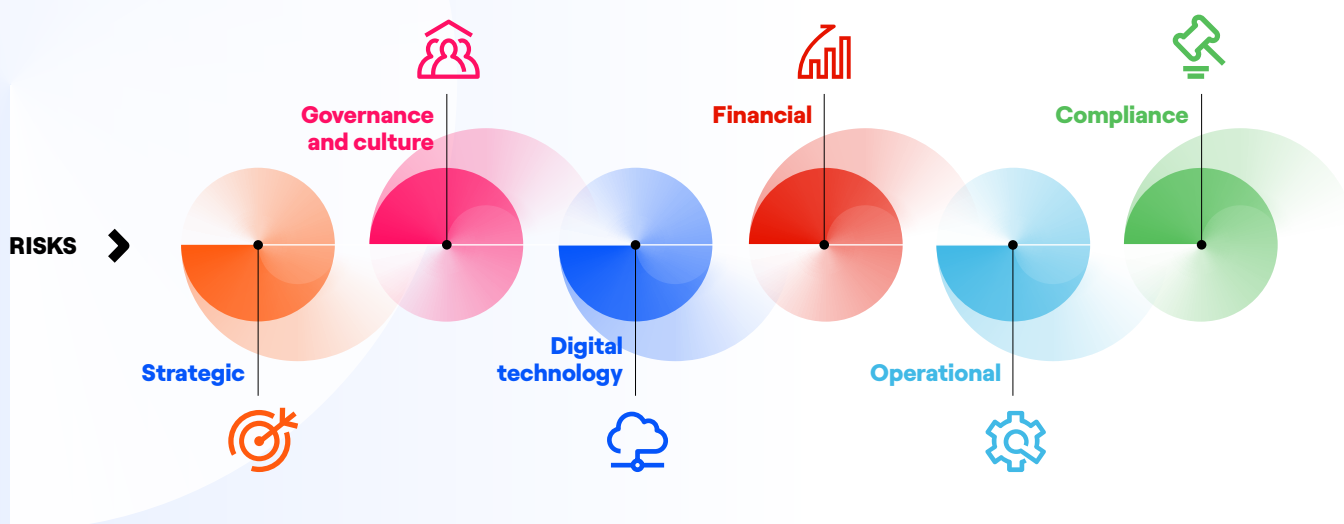
are represented in specific policies and organizational documents defined according to specific approval procedures that involve the directly involved Company structures.

- 6. 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's "risk catalogue" and the main ESG risks

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.



Due to the nature of its business and its geographical distribution, the Group is exposed to different types of ESG risk (environmental, social, and governance), identified within the reference framework of risk categories adopted by Enel.

The following aspects were considered in order to identify the main potential ESG risks:

- the results of the materiality analysis (see the section “Our strategy for sustainable progress”);
- the 2023 Global Risk Report of the World Economic Forum (WEF), involving more than 1,000 experts and leaders from all over the world;
- the risk assessments carried out as part of Enel’s due diligence process on human rights, which involved numerous experts from different sectors, including civil society, academic institutions, local communities, customers and suppliers, in the various countries in which the Group operates;

- the analyses of some of the most highly internationally accredited ESG rating agencies, which use specific risk assessment systems to rate the level of company performance in relation to sustainability.

In the risk identification and assessment stage, the “Precautionary Principle”<sup>(3)</sup> was applied, particularly in relation to risks relating to the environment, health, and safety. For each type of risk, specific actions have been identified to mitigate effects and ensure correct management. Enel also applies this principle to risk management, especially with regard to the development and introduction of new products/technologies, planning of operating assets and the development and construction of new plants/assets.

The following is a description of the main ESG risk types and the actions intended to mitigate the effects and assure their correct management.

## STRATEGIC



### Macroeconomic and geopolitical trends Legislative and regulatory development Competitive landscape

#### Risk definition

Risk of ineffective identification, assessment and monitoring of global economic, financial, political and social trends and monetary, fiscal and trade policies evolutions.

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.

Risk of ineffective identification, assessment and monitoring of evolutionary market trends that may impact Group competitive positioning, growth and profitability.

#### Reference scenario and description of risk

In 2023, the macroeconomic context will see inflation levels well above the objectives of Central Banks in almost all economies.

Even if it is expected for inflation to moderate gradually during the year, some underlying inflationary dynamics related to final services and goods could remain persistent over the coming quarters.

To address this, Central Banks could delay the process of normalizing their monetary policies, which will further exacerbate financial conditions.

This represents a strong risk especially in emerging economies such as Latin America, where further generalized worsening of the risk appetite could lead to further capital outflows and greater costs for the bond issues for local governments. Furthermore, new risks can resurface with the spread of new Covid-19 variants, which could force governments to reintroduce measures that restrict mobility and, as a result, generate new distortions on a supply chain level.

(3) Rio Declaration on the Environment and Development (Rio de Janeiro, June 3-14, 1992), Principle 15.

### **Mitigation actions and associated strategic goals**

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 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.

More specifically, the Open Country Risk model has the ambition to measure the economic resilience of each country, which is defined as a balanced position with respect to the external environment, effectiveness of domestic policies, the vulnerability of the banking and corporate system that can predict systemic crisis, attractiveness in terms of economic growth and, ultimately, a quantification of extreme climate events as a source of environmental and economic stress (economic factors). In addition, an assessment is performed of the robustness of institutions and the political context (institutional and political factors), an in-depth analysis of social phenomenon and human rights targeted toward measuring the level of well-being, inclusion and social progress (social factors), the efficiency of the energy system and its position within the energy transition process, which are essential factors for assessing the sustainability of investments over a medium-long term period (energy factors).

### **Risk definition**

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.

### **Reference scenario and description of risk**

The physical risks arising from climate change can be classified as acute (or extreme events) or chronic: the former are linked to extremely intense weather-climatic conditions, while the latter refer to gradual and enduring changes in climatic conditions.

Extreme events may expose the Group to potential unavailability of assets and infrastructure, service restoration costs, inconvenience for customers, etc. Chronic changes in climatic conditions, on the other hand, may expose the Group to other physical risks or opportunities (depending on the geographical location): for example, structural changes in rainfall or wind patterns could impact the Group's business in generation terms, while structural temperature changes can impact electricity demand.

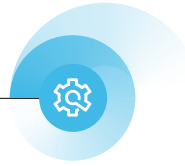
With regard to the energy transition process towards a more sustainable model with a progressive electrification and reduction in CO<sub>2</sub> emissions in line with the Group's decarbonization strategy, there are risks, but above all opportunities, tied to both the changing regulatory context and the technological and electrification trends, and resulting market developments, with potential effects also on commodity and energy prices..

### **Mitigation actions and associated strategic goals**

In order to facilitate the proper identification and management of risks and opportunities related to climate change, a Group policy was published in 2021. The policy describes common guidelines for assessing the risks and opportunities arising from climate change. The "Climate change risks and opportunities" policy defines a shared approach for the integration of climate change and energy transition issues into the Group's processes and activities, thus informing industrial and strategic choices to improve business resilience and long-term sustainable value creation, consistent with the adaptation and mitigation strategy.

A detailed description of the strategic objectives and mitigation actions/management methods is provided in the "[Zero emissions ambition](#)" chapter of this document.

## Climate change



## Environment

### Risk definition

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.

### Reference scenario and description of risk

In recent years, a growing sensitivity of the entire community has emerged in relation to risks linked to models of development that generate impacts on the quality of the environment and on ecosystems, with the exploitation of scarce natural resources (including raw materials and water).

In some cases, synergistic effects between these impacts, such as global warming and the growing exploitation and degradation of water resources, increase the risk of environmental emergencies arising in the most sensitive areas of the planet, with the risk of competition among different water resource uses, i.e. industrial, agricultural, and civil.

To address these needs, institutions are updating environmental regulations to be more restrictive, placing increasingly stringent constraints on the development of new industrial initiatives, obliging or facilitating a shift away from technologies considered to be no longer sustainable in what are seen as the highest impact sectors.

Also the international commitment to mitigating impacts on biodiversity is growing, as already shown in Europe by the Green Deal and introduced in 2022 by the Global Biodiversity Framework approved at COP 15 in Montreal. In this context, companies in each sector, and especially leading companies, increasingly aware that environmental risks are also economic risks, are urged to step up their commitment and take on greater responsibility in identifying and adopting innovative and sustainable technical solutions and development models.

### Mitigation actions and associated strategic goals

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 certified within the Group ensures the presence 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 actions and improvement objectives inspired by the best environmental practices, with requirements higher than those linked to simple environmental regulatory compliance, mitigates the risk of impacts on the environmental matrix, reputational damage and legal disputes. An important contribution is also made by the multiplicity of actions to achieve the challenging environmental improvement goals established by Enel, concerning e.g. atmospheric emissions, waste produced, and water consumption, especially in high water stress areas, 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, suitable actions are being implemented for ecosystems in order to protect, restore and conserve biodiversity, the natural species in the habitats, respecting the principle of mitigation hierarchy (avoid, minimize, restore and compensate), as well as suitable terrestrial, marine and river monitoring activities to check the effectiveness of the adopted measures.

Enel is an active part of the international debate with stakeholders and the networks with the most influence on the topic (for example, Business for Nature, Taskforce on Nature-related Financial Disclosure, World Business Council for Sustainable Development and Science Based Targets for Nature).

For the issues related to nature and biodiversity, also refer to the "[Conservation of natural capital](#)" chapter in this document.



**Risk definition**

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.

**Reference scenario and description of risk**

The main health and safety risks to which Enel's people and contractors are exposed are related to the operating assets carried out at the Group's sites and its assets. In this context, violation of the laws, regulations, and procedures in force concerning to health and safety, workplaces, management of structures, company assets and processes, which can have a negative impact on the health of employees, workers, and stakeholders, can give rise to the risk of administrative or judicial penalties with associated economic-financial and reputational impacts. The main operational risks for safety and health are evaluated in depth at each site or Company asset.

These risks were identified by analyzing the main events that occurred in the past three years. In particular, in relation to probability of occurrence, mechanical risks (falls, knocks, crushing and cuts) are the most likely, whilst in terms of potential associated impact, electrical risks are those with the most severe consequences (fatalities).

Also, in relation to the Group's presence in different geographical contexts worldwide, employees and contractors may be exposed to health risks relating to emerging infectious diseases, of epidemic and potentially pandemic nature, which may affect their good health and well-being.

**Mitigation actions and associated strategic goals**

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

For its implementation, each of the Group's Business Lines has its own Occupational Health and Safety Management System in compliance with international standard BS OHSAS 45001, based on identifying hazards, qualitative and quantitative risk assessment, planning and implementing preventive and protective measures, verifying the effectiveness of preventive and protective measures, and any corrective actions required.

The Enel Group has defined a structured health management system based on preventive and protective measures, functional also in respect of the development of a corporate culture oriented towards promoting mental-physical health and the organizational well-being of workers, and also the balance between the professional and personal spheres.

This system also considers the rigorous selection and management of contractors and suppliers, promoting their involvement in continuous safety performance improvement programs.

Furthermore, with regard to emergencies relating to risks resulting from the current and persistent pandemic scenario, a unit has been set up within the Holding P&O Function with references in each Business Line and Country, in order to assure the definition of the global strategy and policies for management of the emergency and their adoption 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.

Further information on risk management is given in the ["Occupational health and safety"](#) chapter.

## Customers' needs and satisfaction

### Risk definition

Risk of failure of Group's products and services in achieving customers' expectations and needs in terms of quality, accessibility, sustainability and innovation.

### Reference scenario and description of risk

The leadership of a company like Enel necessarily passes through customer care and attention to quality service, aspects that refer not only to the supply of electricity and/or natural gas, but also and above all to the intangible aspects of the service perceived by the customer.

Potential increase in the number of vulnerable customers and energy poverty due to an increase in the price of electricity.

### Mitigation actions and associated strategic goals

The Company is constantly committed to maximizing value for customers:

- through a robust business model that focuses on the continuous improvement of efficiency, effectiveness and resilience in process management (activation of new services, billing, payments and credit, customer focus) and digitalization.
- making them more aware with offers geared towards increasing awareness of their consumption, different time slots, rewards for reducing consumption compared to the past, clear and simple communication;
- proactively managing their needs;
- accompanying them toward electrification.

Furthermore, Enel supplies innovative and inclusive products and services for customers of all ages, weak, destitute, marginalized, vulnerable families (for example the so-called "social bonus" as a form of support for paying the bills for vulnerable families).

The Group monitors the rate of customer satisfaction in every Country in which it operates through specific surveys and analysis of the received feedback.

Further information on risk management is provided in the "[Clean electrification](#)" chapter

## Procurement, logistics and supply chain

### Risk definition

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.

### Reference scenario and description of risk

Enel could be exposed to reputational, economic or financial risks following ineffective procurement activities along the entire process. Starting from the supplier qualification phase in which, for example, an analysis is not performed regarding environmental and social aspects (including work practices, such as refusal of forced or child labor, respect for diversity and non-discrimination, freedom of association and collective bargaining, fair and favorable working conditions); during the tender stage, not requiring specific sustainability requirements; during the entire contract period without correctly monitoring the requirements applied in the tender; in the case of excessive recourse to direct awards, and the failure to apply penalties.

### **Mitigation actions and associated strategic goals**

Group procurement processes and the related governance documents constitute a structured system of standards and checkpoints that make it possible to combine the achievement of economic business goals with full compliance with the fundamental principles set down in the Policy on Human Rights, Code of Ethics, Enel Global Compliance Program, and Zero Tolerance of Corruption Plan, while continuing to promote initiatives aimed at sustainable economic development.

These principles are expressed in the processes and organizational measures that Enel has decided to adopt from a self-regulation point of view in order to establish relationships of trust with all its stakeholders and to define stable and constructive relations that do not only guarantee economic competitiveness but that account for the best practices in essential areas for the Group, such as the refusal of forced and child labor, promotion of occupational health and safety conditions, and environmental responsibility. Thanks to greater interaction and integration with the external world and with the various parts of the Company organization, the procurement process is taking on an increasingly central role in value creation as it contributes to creating a resilient and sustainable supply chain, thinking in terms of circular economy, encouraging innovation, sharing the Group's values and objectives with suppliers who, as such, become partners and enabler for achieving Enel's targets.

More specifically, reward factors are introduced in the tenders, aimed at generating 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. Global Procurement therefore pushes its suppliers to objectively measure their carbon footprint and to embark on pathways of improvement.

From the perspective of the procurement process, the preferred tool is that of a tender, which guarantees maximum competition and equal opportunity of access to all operators having the necessary technical, economic-financial, environmental, safety, human rights, legal and ethical characteristics. Procurement by direct award and without competitive bidding can occur only in exceptional suitably motivated circumstances in compliance with relevant statutory legislation.

Moreover, the supplier qualification system, the same one throughout the Enel Group, checks – even before the procurement process starts – that potential suppliers are in line with the strategic corporate vision and with expectations in relation to all the mentioned profiles and requirements.

With regard to the risk governance system, the Group is focused on the application of metrics that indicate the level of risk before and after the mitigation action, in order to implement precautionary actions to reduce uncertainty to a tolerable level or to mitigate any impacts in all business, technological and geographical areas.

The effectiveness of risk management in the supply chain is monitored using specific indicators, including the probability of insolvency, the concentration of contracts with individual suppliers or industrial groups, the supplier's dependence on Enel, the performance index for proper conduct during the tender, quality, punctuality and sustainability in the execution of the contract, Country risk, etc., for which thresholds are defined that guide the definition of the procurement, negotiation and award strategy of a tender, allowing informed choices based on potential risks and benefits (savings).

During the Covid-19 emergency, actions were taken, which were made structural, for the differentiation of procurement sources (to prevent interruptions in the supply chain) and for performing, remotely, activities that would normally require physical interaction between Enel and the supplier (e.g. company on-site inspections).

Furthermore, in order to counter the consequences of the geopolitical situation in Ukraine, which increased market volatility and further stressed the supply chain, which already seriously tested during the period of the Covid-19 pandemic, Global Procurement constantly monitors the activities inherent to the supply/logistics chain, also with the active participation of the suppliers, through a specific contractual obligation to monitor in order to mitigate the risks deriving from market shortages or critical issues regarding logistics and business interruptions.

Further information on risk management is provided in the [“Sustainable supply chain”](#) chapter.

### **Risk definition**

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.

### **Reference scenario and description of risk**

Enel may be exposed to the risk of judicial or administrative sanctions, economic or financial losses, and reputational damage as a result of partial or total interruption of commercial operations and of electricity supplies to customers, caused by technical faults, malfunctions of assets and plants, human error, sabotage, unavailability of raw materials or adverse weather events, or infectious diseases with epidemic or pandemic potential that may limit the normal functioning of the Group's activities or of its supply chain.

### **Mitigation actions and associated strategic goals**

Enel has systems and mechanisms to guarantee a continuous and safe energy supply to the national electrical systems of the countries in which it operates. Enel is therefore constantly at work to develop and improve the efficiency of the transport and distribution network, in coordination with the other entities operating on the network infrastructure in various capacities. Enel carries out actions of network development, modernization, and maintenance on the infrastructure existing in all Countries, with the primary aim of improving the quality of the service delivered and reducing the number and duration of outages. Enel also constantly takes operational efficiency and safety measures to guarantee correct functioning and availability of all its power plants. Lastly, the Group's assets are covered by adequate insurance mechanisms to protect the Company from potential negative economic consequences resulting from future and uncertain events.

Moreover, with special reference to the management of critical events, Enel has drawn up Group, Business Line and Country policies to ensure effectiveness of the decision-making process in the management of any event that could impair continuity of the public service and the Company's business, including health emergencies with a local and/or global impact.

Enel implements adequate protocols, plans and actions to ensure the smooth running of its business activity worldwide or, if necessary, its rapid recovery in the event of service interruptions.

Especially in relation to the health emergency, Enel defines specific protocols designed to limit the spread of contagion among the people involved in operating assets and consequently guarantee the continuity of service.

Further information on risk management is provided in the "[Clean electrification](#)" and "[Sustainable supply chain](#)" chapters.



### **Risk definition**

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.

### **Reference scenario and description of risk**

Enel has placed sustainability at the center of its strategy as the core of its business model in order to contribute toward reaching the sustainable development goals of the United Nations 2030 Agenda. The Group has divided sustainability into different geographic, economic and social contexts to guide the just transition, which is essential for the future of the planet, accelerating the aims to lead the transition towards a more sustainable development system, essential for the future of the planet, accelerating the process of decarbonization of its energy mix through the increase in renewables and the ever-increasing electrification of consumption. The profound social, economic and cultural transformations we are experiencing, from energy transition to the digitalization and technological innovation processes have a profound impact also on the world of work, renewing the paradigms, imposing significant cultural and organizational changes that require new professional profiles and skills.

To face the change, it is mandatory to act in an inclusive manner, putting people at the center in relation to their social and work aspects, with tools suitable for facing this epic transformation. Organizations must be increasingly oriented toward new agile and flexible work and business models that are sustainable along the entire value chain. It is also essential to adopt policies that value diversity and the talents of everyone, with the awareness that the contribution of the individual represents an essential component for the creation of widespread and shared value.

### **Mitigation actions and associated strategic goals**

Recognition of the value of a person as unique, constant listening, empathy, sharing, passion, involvement are only some of the key words that guide our way of working and experiencing the Company, along a pathway that starts from I and arrives at Us.

The centrality of persons and the management of human capital take on a fundamental role in energy transition as enabling factors and represent the priorities to which specific objectives are linked, the main ones including: development of digital skills and expertise, promotion of reskilling and upskilling programs for our people (continuous, customized, flexible, accessible and transversal) to ensure long life employability, the sharing of best sector practices and training targeted also to those who work with our people, both suppliers and contractors, the correct wide-spread involvement of the Company purpose, which ensures better results supported by higher personal satisfaction, understood as motivation and well-being; development of the workplace and performance appraisal systems; the dissemination, in all the Countries in which the Group is present, of the diversity and inclusion policy, as well as an inclusive organizational culture based on principles of non-discrimination and equal opportunities, key drivers to attract and retain talent.

The Group is committed to strengthening the resilience and flexibility of its organizational models through the simplification and digitalization of processes, in order to enable the autonomy and responsibilities of the individuals and teams, strengthening our people empowerment processes and favoring the entrepreneurial approach through a "gentle" leadership model that promotes talents, attitudes and aspirations of persons in the affirmation of Us. The hybrid work method, which combines work on site and remote working in flexible proportions that take the needs of everyone into account, such as the use of innovative and flexible organizational models, are tools targeted toward sustaining this evolution of the organizational culture in terms of trust and responsibility rather than hierarchy and control.

In line with this strategy, also social dialog is evolving toward a model that increasingly reinforces the centrality of persons. For example, Enel and the Italian trade unions signed the "Charter of the Person", an innovative protocol focused on the well-being, involvement, motivation and participation of the individual, whose principles were also welcomed and implemented in other Countries where the Group is present.

The commitment is also targeted toward creating figures in the organization who, as "ambassadors", promote the adoption of shared models and behaviors that are focused on the sustainability of relations.

Further information on risk management is provided in the "[Empowering Enel people](#)" chapter.



### Stakeholders' engagement

#### Risk definition

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.

#### Reference scenario and description of risk

The risk of ineffective engagement of key stakeholders in relation to the strategic positioning of Enel on sustainability and financial objectives, due to the lack of understanding, anticipation, or orientation of their expectations, could cause incomplete integration of such expectations within the Company's business strategy and sustainability planning processes, with a potential negative impact on its reputation and competitiveness.

Enel currently operates in a vast geographical area, with a presence in more than 40 countries distributed in five continents, conducting business activities that call for the development of infrastructure in local areas, which can provoke criticism or potential disputes with communities in some cases. Such conditions could lead to delays in the execution of projects for new sites and impacts on operational continuity, with a potential negative economic-financial and reputational effect.

On the other hand, Enel's commitment to decarbonize its energy mix – with a particular focus on the coal mining phase – could have a potential negative impact in local areas that are heavily dependent on coal operations (mining and electricity generation) in terms of job losses and socio-economic development. This could ultimately expose Enel to reputational risks or even delay the Group's achievement of the decarbonization goals set out in its Strategic Plan. In the meantime, the outlook of investors is shifting fast: the changes in progress and challenges presented by the modern world are also revolutionizing the method of investing.

ESG investors are growing constantly: at December 31, 2022, SRI funds constituted approximately 14.9% of the share capital (14.6% higher at December 31, 2021), while PRI (Principles for Responsible Investment) signatory investors represent 42.1% of the share capital. (vs 46.6% at December 31, 2021). The possible incorrect or incomplete disclosure by Enel of the results obtained, and likewise ineffective communications to the financial community of its strategy, which aims to create value for customers, society, and the environment, could have significant negative impacts on the assessment of Enel's shares and bonds.

#### Mitigation actions and associated strategic goals

In order to identify the priority issues for the Company and its stakeholders, materiality analysis is carried out annually, aimed at engaging and listening to all the Group's main stakeholders.

From an operational viewpoint, knowledge of specific local requirements and continually listening to the needs of stakeholders are fundamental elements for mapping as comprehensively as possible the potential positive, but also negative impacts that the Group's activity has on the communities where our plants operate. Since 2015, a Creating Shared Value (CSV) model has been in force, centered on the integration of sustainability in the business, in which the Company's success is directly related to the prosperity of the communities where it operates.

The CSV model, applied to all Business Lines, therefore introduces a new way of managing community relations and integrating socio-environmental factors within our business processes and throughout the entire value chain, with special reference to operations of business development, engineering and construction and procurement, in addition to the management and maintenance of assets.

Through specific context analysis tools, stakeholder mapping and the definition of materiality matrices and action plans, the development of a business project is accompanied by initial exploratory approaches to its final definition.

In addition, Enel promotes a fair and inclusive energy transition, through global reconversion and hybridization projects, which currently involve more than 40 sites around the world, with the aim of finding sustainable solutions (focused primarily on the development of energy reconversion and hybridization, promoting the circular economy and innovation) for the areas involved with the closure of conventional plants. By means of dialog with shareholders and bondholders, the Investor Relations unit collects feedback on how to integrate and improve the Group's reporting process and make its communications as effective as possible, meeting the needs of the financial markets.

Further information on risk management can be found in the ["Our strategy for sustainable progress"](#) section and in the ["Engaging communities"](#) and ["Sound governance"](#) chapters.

## DIGITAL TECHNOLOGY



### Cyber security

#### Risk definition

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.

#### Reference scenario and description of risk

The speed of technological development, which brings an endless stream of new challenges, the frequency and intensity of the ever-increasing number of cyberattacks, as well as the tendency to strike critical infrastructure and strategic industrial sectors, highlight a risk that can cause normal business operations to grind to a halt in extreme cases. Cyberattacks have changed dramatically in recent years: the number has grown exponentially, as has their level of complexity and impact, with timely identification of sources becoming increasingly difficult. Within the scope of the Group, the management of the cyber security risk results, among other aspects, from the numerous contexts in which it operates (data, industry, and people), in addition to the intrinsic complexity and interconnection of resources which, over the years, have been increasingly integrated into routine operating processes.

#### Mitigation actions and associated strategic goals

The Group has designed and adopted a holistic governance model in relation to cyber security, which is applied to the Information Technology (IT), Operational Technology (OT) and the Internet of Things (IoT) sectors. The framework is based on the commitment of Top Management, the global strategic approach, the involvement of all business areas, as well as the units engaged in the design and implementation of systems. The framework also strives to use the best technology available on the market to design ad hoc business processes, also working on the human factor through initiatives targeted toward increasing awareness and knowledge regarding cyber security by people, making them the first lever of company defense. Furthermore, the framework directs the regulatory requirements regarding IT security, such as the execution of in-depth tests (in IT, OT and IoT areas) that aim to identify and remove vulnerabilities, identify and strengthen people's IT awareness and implement regulatory requirements related to IT security.

Moreover, the Group has defined and adopted a risk management method for IT security in accordance with risk-based and cyber security by design approaches, thereby making the corporate risk analysis a key step in all strategic decisions and integrating the safety requirements along the entire solution and service life cycle. Enel has also set up a Cyber Emergency Readiness Team (CERT) to respond to and proactively manage possible incidents in the field of cyber security. In addition, since 2019, in order to mitigate exposure not only with technical countermeasures, the Group has taken out insurance on the risks related to cyber security.

Further information on risk management is provided in the ["Digitalization"](#) and ["Innovation"](#) chapters.

## Digitalization, IT effectiveness, and service continuity

### Risk definition

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.

Risk of ineffective support of IT systems to business processes and operating activities.

Risk of exposure of IT/OT systems to service interruptions and data losses.

### Reference scenario and description of risk

The Group is carrying out a complete digital transformation of the management of the entire energy value chain, developing new business models and digitalizing its business processes, integrating the systems and adopting new technologies. One result of this digital transformation is that the Group is increasingly exposed to risks relating to the operations of IT systems integrated across the Company, with impacts on processes and operating assets that could lead to the exposure of IT and OT systems to service interruptions or data losses.

### Mitigation actions and associated strategic goals

Control of such risks is guaranteed by a series of internal measures developed by the Group to oversee the digital transformation. In particular, an internal control system has been set up, which introduces control points along the entire IT value chain, enabling us to prevent the emergence of risks relating to such issues as the creation of services that do not meet business needs, the failure to implement 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. Enel is also promoting the dissemination of digital culture and skills within the Group, so as to guide the digital transformation successfully and minimize the associated risks.

Further information on risk management is provided in the ["Digitalization"](#) and ["Innovation"](#) chapters.

## COMPLIANCE



## Data protection

### Risk definition

Risk of a breach in complying with applicable data protection and privacy laws.

### Reference scenario and description of risk

In the era of digitalization and globalization of markets, Enel's business strategy is focused on accelerating the process of transformation towards a business model based on a digital platform, by means of a data driven and customer-focused approach, which is being developed throughout the entire value chain.

The Company, which is present in more than 40 countries, has the largest customer base in the public utilities sector (around 70 million customers), with a current workforce of approximately 67 thousand people; consequently, the Group's new business model calls for management of an ever larger volume of personal data, to reach the financial and business results set down in the 2022-2024 Strategic Plan.

This implies an exposure to the risks associated with personal data protection (also due to the increasing volume of privacy regulations in the majority of countries in which Enel is present). These risks can take the form of a loss of confidentiality, integrity, and availability of the personal data of customers, employees, and others (e.g. suppliers), resulting in the application of penalties in proportion to global sales, obstructing processes with consequent economic or financial losses and reputational damage.

### Mitigation actions and associated strategic goals

In order to manage and mitigate this risk, Enel has adopted a global model of personal data governance, also through the assignment of Data Protection Officers – "DPOs" – both at a global and Country level, as well as through the adoption of digital compliance instruments to map applications and processes and manage relevant risks to personal data protection, in compliance with the specific aspects of local sector regulations.

Further information on risk management can be found in the ["Data protection"](#) section of this chapter.



### **Risk definition**

Other compliance risks: Antitrust compliance and consumers' rights, Corruption, External disclosure. Financial regulation compliance, Tax compliance, Compliance with other laws and regulations.

### **Reference scenario and description of risk**

Enel may be exposed to the risk of judicial measures, administrative sanctions, economic or financial losses and reputational damage as a result of:

- illegal or illicit conduct, including active and passive acts of corruption, perpetrated by personnel inside or outside the Group in order to secure an unjust benefit for themselves or for others;
- infringement of international, national or local laws and regulations concerning: accounting, financial, or tax discipline, market disclosures, anti-trust and consumer rights issues or other applicable legislative provisions (e.g. rules concerning permitting or contracts, regulation of electricity markets, international sanctions, etc.).

### **Mitigation actions and associated strategic goals**

Enel has adopted an Internal Control and Risk Management System expressed in company rules and procedures that all who work in Enel or on behalf of Enel are required to follow, by means of their respective contractual commitments. The Internal Control System also includes specific compliance programs, i.e.: the Code of Ethics, the Zero Tolerance of Corruption Plan ("ZTC Plan"), the Policy on Human Rights, the Policy on international sanctions, the Enel Global Compliance Program ("EGCP"), the Model pursuant to Italian Legislative Decree 231/01 and other national compliance programs adopted by Group companies in accordance with their national legislation. Furthermore, to further pursue its commitment to fighting corruption, Enel voluntarily decided to certify its Anti-Bribery Management System (SGPC) in compliance with the requirements of international standard ISO 37001:2016 (international certification of anti-bribery management systems). This certification process has involved the Group's main subsidiaries.

External staff, working for Enel Group company suppliers, undertake to comply with the ethical clauses set out in their respective contracts, which incorporate references to Enel's commitment in terms of business integrity in the pursuit of its activities.

The ongoing monitoring of legislative and regulatory developments at the local, national and international levels is guaranteed by the operations of specific company Functions with competence in relation to these matters.

The Sustainability Report, which represents the Consolidated Non-Financial Statement, is subjected to a limited review by KPMG and for a set of indicators, also providing reasonable assurance.

Further information on risk management is provided in the "[Sound governance](#)" chapter and the "[Methodological note](#)".

In relation to the specific contexts pursuant to Italian Legislative Decree 254/16 concerning climate change, human rights, and the fight against corruption, we invite you to refer to the sections dedicated to these topics in this Sustainability Report.

The other types of risk to which the Enel Group is exposed are detailed in the "Risk Management" section of the [Integrated Annual Report](#) available on the website ([www.enel.com](http://www.enel.com), "Investors" section).

# Transparency in institutional processes

Enel constantly manages relations with institutions (local, national, European, and international) in line with the Enel Compliance Program, providing complete and transparent information with the aim of placing institutional counterparts in the best possible position to make the decisions within the sphere of their competence. Enel also contributes to the consultation processes regarding political and legislative dossiers on energy and environmental issues. In the context of relations with European institutions, Enel actively contributes to every phase of the consultation process on political and legislative dossiers of corporate interest through careful monitoring and analysis (see also the chapter “Zero emissions ambition”).

The Enel Group has been enrolled in the EU voluntary transparency register since its creation in 2008. The register aims to provide citizens with a single and direct access point to information on who carries out activities aimed at influencing the EU decision-making process, the interests pursued, and the resources invested in these activities (<http://ec.europa.eu/transparencyregister/public/homePage.do>). In line with the provisions of the Code of Ethics, paragraph 3.26, Enel does not finance political parties, their representatives or candidates in Italy or abroad, nor does it sponsor conventions or events whose sole purpose is political propaganda. It refrains from any direct or indirect pressure on

politicians (for example, by granting the use of its facilities, accepting new recruit recommendations, or awarding consultancy contracts). Enel and its subsidiaries are present in various trade and employer associations whose role includes representing the positioning of its members in the regulatory processes inherent in the business activity. The annual contributions paid to the above-mentioned organizations in the form of membership fees in 2022 totaled approximately 9.6 million euros, compared to 8.4 million euros in 2021.<sup>(4)</sup> In particular, in 2022 the three largest contributions in terms of overall amount concerned AELEC (Asociación de Empresas de Energía Eléctrica) in Spain, Confindustria and Elettricità Futura in Italy.<sup>(5)</sup>

The institutional dialogue with the trade and employer associations in which Enel and its subsidiaries took part in 2022 concerned the support of regulatory and consultation processes, including also the following main issues:

- **development of energy policies:** including, among other topics, the strategic outlook of the sector, energy efficiency, the growth of renewables, smart grid development and energy costs;<sup>(6)</sup>
- **increasing business competitiveness:** including, among other topics, tax regulation, labor law issues and environmental policies.<sup>(7)</sup>

(4) These amounts include the contributions paid by Enel SpA (including the main Italian companies) and by its foreign subsidiaries Endesa, Enel Américas and Enel Chile.

(5) Specifically: AELEC (formerly UNESA) 1.9 million euros; Confindustria 1.5 million euros; Elettricità Futura (formerly “Associazione Nazionale delle Imprese Elettriche”) 0.6 million euros.

(6) The 2022 contribution was 5.5 million euros.

(7) The 2022 contribution was 4.0 million euros.

# Values and pillars of corporate ethics

2-15 | 2-16 | 2-23 | 2-26 | 3-3 | 205-1 | 205-2 | 205-3 |  
405-1 | 406-1 | 408-1 | 409-1 | 413-1 | 415-1 |

A solid and dynamic ethical system, constantly oriented towards implementing best practices on the national and international levels is the foundational element of the Enel system of values underpinning the Company's operating assets, and of relations entertained with all its key stakeholders. A system based on compliance programs, including the Code

of Ethics, Policy on Human Rights, the Zero Tolerance of Corruption Plan (ZTC Plan), Enel Global Compliance Program, the Model pursuant to Italian Legislative Decree 231/01, plus any other national compliance models adopted by Group companies in accordance with local regulations.

## Code of Ethics

In 2002, Enel adopted a Code of Ethics<sup>(8)</sup> that expresses the commitments and ethical responsibilities to which it adheres in its operating assets, regulating and harmonizing corporate conduct according to standards based on the maximum transparency and integrity towards all stakeholders. The Code of Ethics is applicable to the entire Group, notwithstanding the cultural, social, and economic diversity be-

tween the various countries in which Enel operates. Enel also requires all its main suppliers and partners to adopt conduct in line with the Code's general principles.

More information is available on the website <https://www.enel.com/investors/sustainability/daily-commitment/sound-governance-ethical-conduct/principles-underpinning-our-work/code-ethics>.

## Stakeholder reports

Any violation or suspected violation of the ethical system can be reported, also anonymously, through a single platform at Group level ("Ethics Point"), which is accessible at [www.enel.ethicspoint.com](http://www.enel.ethicspoint.com).<sup>(9)</sup> The Audit Function receives and analyzes these reports, performing the related checks and ensuring uniform treatment at Group level, in compliance with Company policies and local regulations.

The reports management process is governed by the whistleblowing policy, "Management of anonymous and non-anonymous reports", which guarantees anonymity and protection against any form of retaliation and also ensures adequate protection against groundless reports made maliciously to harm or cause prejudice to individuals and/or companies.

KPI	UM	2022	2021	2020	2022-2021	%
Reports received	n.	172	153	151	2	+12.4
Violations related to incidents of: <sup>(10)</sup>	n.	29	44	26	-15	-34.1
Conflict of interest/corruption	n.	9	8	2	+1	+12.5
Misappropriation	n.	4	5	14	-1	-20.0
Labor practices <sup>(11)</sup>	n.	11	27	9	-16	-59.3
Community and society	n.	-	1	-	-1	-
Other reasons	n.	5	3	1	+2	+66.7

(8) Last update: February 2021.

(9) The Ethics Channel can also be used to send reports regarding the Group's commitments regarding human rights.

(10) Of the 172 reports received in 2022, 15 are being analyzed. During the year, the verification of all the reports received in 2021 was completed: the number of confirmed violations for 2021 was therefore revised from 41 to 44. The three additional violations are to be ascribed to a case of conflict of interest and two cases of inappropriate behaviour related to labor practices.

(11) In 2022 4 violations were recorded relating to cases of discrimination at the workplace, in particular cases of harassment.

During 2022 **172 reports** were received, recording a slight increase as compared to the number of reports received in 2021 (153), mostly in countries on the South American content.

The analyses confirmed a limited number of violations, decreased as compared to 2021, referring to the behavior of employees and/or suppliers that does not comply with the policies on the protection of persons or the internal procedures regarding:

- “Conflict of interest/corruption” for the pursuit of personal interests or interests that harm the company;
- “Labor practices”, connected to inappropriate behavior by individual employees that is detrimental to respect for diversity and non-discrimination and the failure to com-

ply with the internal procedures on health and safety issues, principles approved by the Group’s Human Rights Policy;

- “Fraud/misappropriation” to the detriment of the Company.

In addition to having adopted disciplinary measures and/or sanctions against the responsible parties, during the year training and awareness initiatives implemented by the companies of the Enel Group continued in order to promote behaviors that are in line with the adopted Code of Ethics and policies, which include the events organized in the South American countries to disseminate a culture of integrity and ethics in the Company (“*semana etica*”).

## Enel Global Compliance Program (“EGCP”)

In September 2016, Enel approved the Global Compliance Program, targeted toward the foreign companies in the Group, which is a governance tool aimed at strengthening the Group’s ethical and professional commitment to preventing offences committed internationally that might result in corporate criminal liability and reputational risks. The identification of the relevant types of offences in the Enel Global Compliance Program – which is associated

with the provision of behavioral standards and areas to be preventively monitored – is based on illicit conduct generally considered as such in most parts of the countries, such as, for example, offences of corruption, crimes against the public administration, fraudulent accounting, money laundering, offences committed in violation of the regulations on safety at work, environmental offences, etc.

## Organizational and Management Model pursuant to Italian Legislative Decree 231/01

Italian Legislative Decree 231 of June 8, 2001 introduced an administrative (essentially criminal) liability into the Italian legal system for companies in respect of certain types of offences committed by directors, managers, or employees in the interest of or for the benefit of the companies concerned. Al-

ready in 2002, Enel – the first in Italy – adopted an Organizational and Management Model that meets the requirements of Legislative Decree 231/01 (Model 231). Since then, it has been constantly updated in line with the reference regulatory framework and current organizational context.

## Active and passive fight against corruption

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In compliance with the 10th Global Compact principle, according to which “companies are committed to combating corruption in all its forms, including extortion and bribery”, Enel intends to pursue its commitment to fighting corruption in all its forms – whether direct or indirect – by applying the principles expressed in the pillars of its Anti-Bribery Management System.

Enel’s Anti-Bribery Management System (ABMS) is based on the Group’s commitment to fighting corruption by applying the criteria of transparency and conduct as set out in the Zero Tolerance of Corruption Plan (ZTC Plan) and confirmed in the Anti-Bribery Policy adopted in compli-

ance with international standard ISO 37001:2016 (on anti-bribery management systems).

Together with the ZTC Plan, the pillars underpinning the ABMS are:

- the Code of Ethics;
- models to prevent the main criminal risks (for example, bribery in relations with public administrations and among private individuals, environmental offences, corporate offences and, for Italian companies, manslaughter, severe personal injury or grievous bodily harm committed in violation of the rules on the protection of occupational health and safety), as described by the



applicable regulations on corporate responsibility (i.e. "Compliance Program") in the various countries where the Group operates (for example, Organizational Model 231 for Italian companies, the "Modelo de prevención de riesgos/Programa de Integridade" for Group companies in Spain and South America);

- the Enel Global Compliance Program ("EGCP"), a governance tool aimed at strengthening the Group's ethical and professional commitment to preventing offences committed outside Italy that might result in corporate criminal liability and reputational risks. The EGCP applies to the Group's non-Italian companies and supplements any compliance programs adopted by the same companies, in compliance with local regulations.

The mentioned governance measures (in relation to which we refer you to the specific section of the website), together with the current body of procedures, outline an effective prevention system, which is an integral part of the Group's Internal Control System.

In 2022 the Audit Function plan included the analysis of the suitability of the Internal Control system relevant for the purposes of the Anti-Bribery Management System for all

Group Business Lines and the staff Functions; the specific audit work programs included verifications for the assessment of the risk and suitability of the design and operation of the controls, to complement the periodic activities on a sample basis as required by the Compliance Programs adopted by the Group companies.

In 2017 Enel SpA was among the first companies in the world to obtain certification of the conformity of its Anti-Bribery Management system to international standard ISO 37001:2016 ("Anti-Bribery Management System"). This certification was issued following an independent verification process, carried out by a primary accredited certification body, which was carried out in two separate phases, aimed primarily at certifying the adequacy of the design of the Enel Anti-Bribery Management System (in terms of governance, roles, and responsibilities, control procedures, etc.), and secondarily at assessing the level of application and effectiveness.

After Enel SpA obtained certification ISO 37001 for its anti-bribery management system, it gradually extended the 37001 certification plan to the

Group's main Italian and foreign subsidiaries, guaranteeing the maintenance of those already obtained.

## Data protection

| 3-3 | 418-1 |

Protection and processing of personal data are an important challenge for Enel in the era of digitalization and market globalization, and also a constant commitment to ensure continuous improvement of the service we supply to our customers.

To respond to this challenge in line with the provisions of the General Data Protection Regulation (EU 2016/679) ("GDPR"), in 2017 Enel set up a specific unit within the Legal Function (**Data Protection Office**) and appointed the data supervisors ("**Data Protection Officer**" – **DPO**). The DPOs are appointed based on their professional skills and knowledge, and their ability to carry out the assigned tasks in accordance with the principle of independence. The Data Protection Office is structured as follows:

- **Data Protection Governance:** a unit that monitors the evolution of data protection legislation and defines the Group's compliance. The office also carries out the role of DPO in countries in which the creation of a local Data Protection Office is not necessary;
- **Data Protection Staff Holding, Global Procurement and Global Digital Solutions:** a unit that promotes privacy by design from phase of process planning at the global level and ensures consistent development at the national level;
- **Data Protection Global Business Lines and Global Customer Operations:** a unit that supports the Global Busi-

ness Lines in compliance concerning data protection, and monitors the evolution of data protection certification mechanisms for products and services;

- **Country units:** units that monitor the evolution of regulations on a local level and support the local Business Lines as regards compliance related to data protection. In 2020 country units were set up in Latin America (Argentina, Brazil, Chile, Colombia, Peru), alongside the European area units already in place (Italy, Portugal, Romania, Spain).

The Enel Group has developed a global compliance program on personal data protection, founded on the principles of the main privacy regulations, including the GDPR, the Brazilian law *Lei Geral de Proteção de Dados Pessoais* ("**LGPD**"), the California Consumer Privacy Act ("**CCPA**"), as well as the local legislation of the countries in which the Group operates. This compliance program is translated into a global policy on personal data protection, which defines the privacy principles applicable to all Group companies.

In particular, the Data Protection Office implements processes and activities in compliance with the indications of legislation concerning personal data protection and is committed to drawing up data protection agreements and clauses; planning data governance and corporate policies; providing consulting in line with the principles of privacy by design and by default; ensuring adequate risk manage-

ment and monitoring the consistency of data protection policies within the organization; as well as performing periodic and regular training and awareness campaigns for personnel on the main Data Protection issues.

Furthermore, the Audit Function includes specific activities in their work programs targeted toward evaluating the Internal Control System on Data Protection Risk Management and on compliance with GDPR: analysis activities are planned in various geographical areas, also those not subject to GDPR, that aim to evaluate the safety measures in systems that contain personal data, commercially-sensitive data and employees data managed in HR processes. In order to guarantee full and effective protection of personal data, the Group has adopted a digital platform (Data Protection Platform), which is able to ensure digital compliance, through the use of the following tools, based on the size and complexity of Enel:

- **Processing register**, which integrates the registers of the data controller and the data processor on a single platform, guaranteeing the dynamic mapping of the processing activities and their life cycle, as well as the fulfilment of the obligations required by the regulation. For the Enel Group, this tool also represents an essential resource for designing and monitoring intra-group dynamics;
- **Privacy by Design**, which makes it possible to create every new project, from the beginning, in line with the principles regarding privacy;
- **DPIA (Data Protection Impact Assessment)**, which makes it possible, not only, to perform an evaluation of the effective risks for the freedom and rights of the data subjects and to monitor the current risk of each pro-

cessing operation that is changed in light of the implementation of a remedy plan;

- **DTIA (Data Transfer Impact Assessment)**, which makes it possible to evaluate the transfer risk that accounts for the methods by means of which the data is transferred, as well as the regulatory aspects of the country where this data is transferred;
- **Data Breach Management**, which permits the structured and timely management of all possible incidents that involve multiple companies and countries, and the possibility to study these events in order to implement common prevention solutions;
- **Analytics**, that, with the definition of precise KPI, makes it possible to continuously analyze, compare and monitor the data and processes processed by the companies.

With specific reference to relationships with its suppliers, the Enel Group Code of Ethics and Policy on Human Rights expressly require suppliers to have a clear commitment and to respect the main obligations required by the applicable privacy regulation. Furthermore, a specific clause in the Group's General Contract Conditions extends the principles of the Enel privacy policies to all suppliers, requiring them to be committed to handling personal data in compliance with the obligations imposed by industry legislation. In 2022, the Group's companies handled more than **19,105 communications concerning personal data protection from customers**, of which: (i) **595** in **Romania**, (ii) **5,009** in **Iberia**, (iii) **13,376** in **Italy** and (iv) **125** in **Latin America**.

Furthermore, the same companies collaborated with the national authorities, receiving **134 requests for information and clarifications**, of which: (i) **2** in **Romania**, (ii) **105** in **Iberia**, (iii) **5** in **Italy** and (iv) **22** in **Latin America**.

## Procedures started by competent Supervisory Authorities

With specific reference to **Italy**, on March 8, 2021, the Data Protection Authority started a procedure, based on some reports from consumers, for the adoption of corrective measures and sanctions against the Servizio Elettrico Nazionale (SEN) for presumed violations of privacy regulations, in particular due to the performance of undesired phone calls and the wrongful provision of personal data (POD, supply address, tax code, etc.) to unauthorized parties for the promotional purposes of third parties. SEN has filed a statement of defence, contesting the charges. On April 26, 2021 a hearing was held at the Authority and a decision is pending.

Furthermore, on January 18, 2022, the Data Protection Authority issued an order against Enel Energia, imposing a fine for approximately 26 million euros on the Company for asserted violations of the privacy regulations. In particular, the Authority contested the inadequacy of Enel Energia's surveillance and control activities for the internal data processing processes, within the scope of telemarketing ac-

tivities, as well as the failed adoption of a comprehensive and effective action to contrast the undesired phone calls. The penalty, which also imposed a series of prescriptive measures, was contested by Enel Energia on February 9, 2022 before the Civil Court of Rome which, with an order dated March 20, 2022, ordered the immediate suspension of its effects. On February 15, 2023, the Court of Rome fully upheld Enel Energia's appeal and, as a result, canceled the penalties issued by the Authority. The publication of the reasons is pending.

Furthermore, during 2022, the Data Protection Authority carried out two inspections, the first concerning e-distribuzione, regarding the handling of personal data within the scope of the so-called "Indemnification system", which ended with the dismissal of the proceedings, and the second concerning Enel Energia, targeted toward acquiring information on marketing and telemarketing activities carried out by agencies on behalf of the company.

In 2022, in **Spain** the local control Authority, based on complaints presented by the data subjects, started 63 administrative proceedings against Endesa Energía SA, Endesa X Servicios SL, Edistribución Redes Digitales SL and Energía XXI Comercializadora de Referencia SL. Many of these proceedings have been dismissed and, in the majority of the cases, the events that triggered the complaints were resolved thanks to out-of-court settlements. During 2022, Endesa Energía SA received two penalties equal respectively to 50,000 and 40,000 euros, issued due to the conclusion of contracts without the consent of the data subject.

In **Portugal**, in 2022, the local control Authority started 23 proceedings against Endesa Energía SA – Sucursal Portugal, as a result of sending direct marketing communications to data subjects without their valid prior consent. Endesa presented their defence against these proceedings and is waiting for the decision of the local Authority. With regard to prior proceedings related to marketing communications made in 2019 and 2020, for which Endesa has already presented its defence, in 2022 the Authority issued 18 judgments, two of which led to the dismissal of the proceedings, whereas the others issued penalties with an overall value of 96,000 euros.

## Data breach

Regarding data breaches, during 2022, seven violations of personal data were recorded within the scope of the Enel Group.

In particular, in **Italy**, two violations of personal data were notified to the Data Protection Authority. As regards Enel Energia, the latter notified the Authority of a violation that occurred in April 2022, concerning the personal data of some customers caused by a hacker attack against the IT systems of a supplier of Enel Energia. The company provided the data subjects with the necessary information. The analysis carried out by Enel Energia showed that there was no abnormal use of the personal data and that the supplier then reinforced their safety measures. As regards e-distribuzione, the latter reported a data breach caused by the theft of IT equipment by unknown persons who entered

In **Romania**, during July 2022, the local control Authority, after an investigation, issued a penalty equal to 49,337 lei (10,000 euros) against Enel Energie Muntenia SA for violation of article 32 of GDPR. The company has contested this penalty and is still waiting for the final judgement of the Authority.

In relation to **Brazil**, ENEL SP notified the local Authority about a data violation that took place in November 2020. This administrative procedure was dismissed without penalties by the Authority in August 2022. Furthermore, between 2021 and 2022, ENEL SP received 2 requests for information from the local Authority regarding 2 complaints from data subjects, for which the company presented the necessary clarifications and after which there were no further updates.

In **Colombia**, on February 10, 2021, the local control Authority started proceedings against Codensa due to the failure to observe the terms specified in the regulation concerning the online maintenance of the personal data of a data subject on the company's website. On February 23, 2021, Codensa filed an appeal regarding these proceedings. On November 25, 2022, the proceedings were dismissed due to lack of evidence sufficient for demonstrating the asserted violations of the local privacy regulation.

the premises of a company suppliers. The analysis carried out by e-distribuzione did not find any abnormal use of the involved personal data.

In **Spain**, the company Endesa Energía SA notified the local Authority of a data violation consisting in the publication of some advertisements in Facebook for the sale of the access credentials assigned to various suppliers for accessing some company applications, which resulted in fraudulent contracts without the consent of the data subjects.

In **Colombia**, the local control Authority was notified of four data breaches, three of which involving the unauthorized dissemination of personal data and one a ransomware attack (RansomHouse type) which affected the websites and activities of a supplier.



# Tax transparency

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## Tax strategy

Since 2017, the Enel Group has had a tax strategy understood as a set of principles and guidelines inspired by the values of transparency and legality and published online at [www.enel.com](http://www.enel.com). The Group's subsidiaries are required to

adopt the tax strategy approved by the Parent Company, thereby assuming the responsibility for ensuring its acknowledgement and application.

## Tax strategy objectives

The **Board of Directors** of Enel SpA (BoD) defines the tax strategy of the entire Group in order to ensure equitable, accountable and transparent tax contribution with the aim of ensuring uniform management of taxation for all concerned entities, which is inspired by the following logic:

- correct and timely determination and settlement of tax-

es due under the law and implementation of the respective obligations;

- correct management of the tax risk, understood as the risk of violating of tax rules or abusing the principles and purposes of the tax system.

## Tax strategy principles

The tax strategy principles are the guidelines for Group companies, underpinning their business operations when managing the fiscal variable. The principles also require suitable processes to be adopted to ensure their effectiveness and application.

**Values:** in line with its own sustainability strategy, the Group manages its tax assets in compliance with the values of honesty and integrity and is aware that the revenues deriving from levies represent one of the main sources of contribution toward economic and social development of the communities in the countries in which it operates.

**Legality:** the Group pursues behavior oriented toward observance of the applicable tax provisions and is committed to interpreting them in order to respect not only their form but also their substance.

**Tone at the top:** the Board of Directors has the role and responsibility of guiding the promotion of a corporate culture that is based on the values of honesty, integrity and the principle of legality.

**Transparency:** the Group is transparent to all stakeholders and actively collaborates with the tax authorities, enabling the latter, inter alia, to gain a full understanding of the facts underlying the application of tax rules.

**Stakeholder value:** the Group implements a sustainable business model, aimed at creating and distributing value to all stakeholders over the long term. Tax contribution is one of the key components of the value distributed to communities and is managed in compliance with the principle of legality and through active cooperation with the tax authorities in accordance with the principle of transparency.

## Governance

Enel SpA ensures that the tax strategy is acknowledged and applied within the Company through the governance bodies. Its interpretation is left to the Parent Company,

through the Tax unit, which also manages its periodic updates.

## Compliance

Group entities must respect the principle of legality, by swiftly applying the tax laws of the countries where the Group operates, to ensure that the wording, spirit and purpose of the applicable tax rule or system are respected. In addition, the Enel Group does not engage in behaviors and operations, domestic or cross-border, that result in purely artificial constructions that do not respect economic real-

ity and which may be reasonably assumed to offer undue tax advantages. This is because they are contrary to the purpose or spirit of the relevant tax provisions or system and generate phenomena of double deduction, deduction/non-inclusion or double non-taxation, including as a result of asymmetries between the tax systems of the different jurisdictions.



## Intercompany transactions

Intercompany relations are structured at market prices and conditions, ensuring value creation in the locations where the Group conducts its business. For all intercompany transactions relevant to transfer pricing regulations, the Enel Group has adopted a policy that is in line with the arm's length principle, an international standard established by the Model Tax Convention and referred to in the OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (hereinafter also referred to as the "OECD Guidelines").

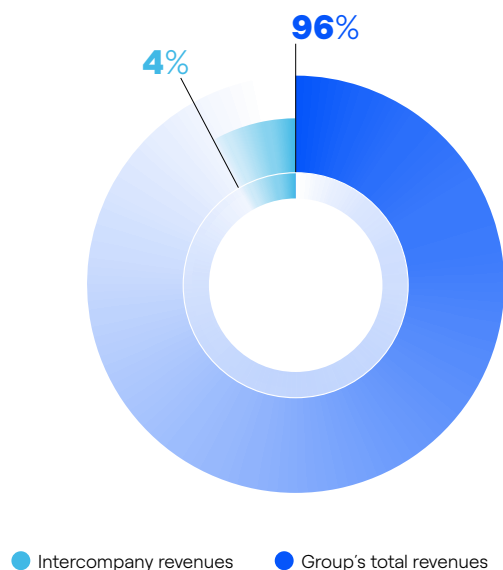
To this end, the Group has put internal policies in place to support the methods set out in the OECD Guidelines, which provide for the application of the Comparable Uncontrolled Price – CUP method (which compares the price of goods and/or services transferred in a transaction concluded between associated companies with the price applied in transactions between independent third parties). In addition, consistent with the applicable regulations, the signing of Advance Pricing Agreements (APAs) with local tax authorities is promoted. These concern the definition of transfer pricing methods, the allocation of profits and

losses to permanent organizations, and the application of rules regarding cross-border flows between Group entities.

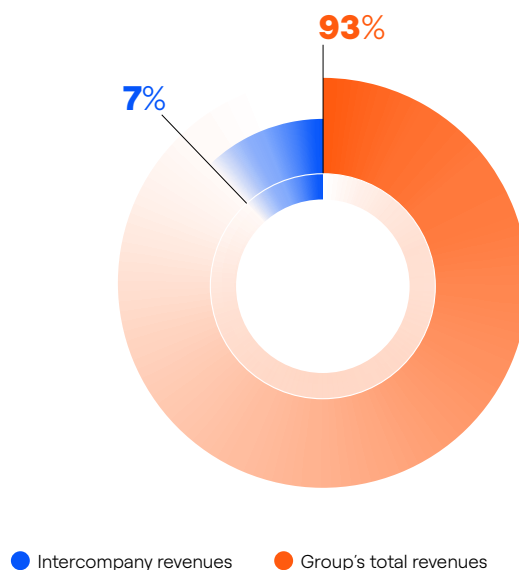
With specific regard to intercompany financial transactions, the Enel Group has organizationally adopted a centralized finance model for its subsidiaries, which requires that the Group's two financial companies, Enel Finance International (EFI) and Enel Finance America (EFA), centralize part of the treasury and financial market access activities and act as the primary point of reference for the management of financial or liquidity needs generated by the operating entities.

Finally, when analyzing the size of intercompany transactions, it can be seen that these account for a minimal percentage (generally around 7%<sup>(1)</sup>) of the Group's total aggregate revenues,<sup>(2)</sup> due to the fact that the energy business is conducted almost entirely within the boundaries of the individual country, from the power generation process to market sales. In 2022, intercompany transactions as a percentage of the Group's total aggregate revenue amounted to approximately 4%.

### Intercompany transactions 2022



### Average intercompany transactions (2019-2021)



(1) The average value shown is higher than the average value for previous years due to the results for the 2021 tax year, which, with the same number of intercompany transactions, saw an exponential growth in commodities and associated hedging transactions, with impacts on revenues, which led to an increase in this percentage to 9% in the reporting year.

(2) The calculation was carried out by comparing the revenues of cross-border intercompany transactions on the basis of the total revenues reported in the OECD CbCRs (Country-by-Country Reports) for the respective tax periods (i.e., 125,029 million euros in 2019; 108,165 million euros in 2020; 156,619 million euros in 2021, and 267,912 million euros in 2022).

## Low-tax jurisdictions

The Group does not make investments in or through countries considered to be tax havens for the sole purpose of reducing its tax burden. Such investments may only be proposed if they are supported by sound economic and strategic reasons and have the aim of developing the activities included in the Group's corporate purpose.

In cases where, in circumscribed situations (for example, in the case of the purchase of companies from third parties), the presence of structures created for the sole purpose of reducing the tax burden or located in territories qualified as tax havens is found, the Group is committed to the elimination of such structures at the earliest practicable time.

## Tax incentives

Tax incentives are a key, development-oriented mechanism for economic policy, which countries use to stimulate growth and attract investment to support the national policy.

The use of tax incentives generally determines a reduction in long-term tax payables (tax reduction) or else only the temporary deferral of the tax payment.

The Enel Group only uses widely applicable tax incentives for all operators and respects all specific regulations, where the incentives are in line with its industrial and operational objectives and are consistent with the economic substance of its investments.

# Tax governance, control and risk management

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## Governance body

Enel's organization model provides: i) for a constant flow of information to the Board of Directors by the Tax unit ("Tone at the top") with regard to the tax risk management and control system and the Tax Transparency Report, in which all relevant tax aspects of the Group are set out; ii) that the Holding's Tax Affairs unit has the task, among others, of implementing the Group's tax strategy defined by the Board of Directors, identifying, analyzing and managing

the various optimization initiatives, monitoring the most significant tax issues, and providing support to the various Business Lines; iii) that in addition to the Holding Function, the Tax Affairs units in the different countries, acting in accordance with the values and principles set out in the tax strategy, are in charge of compliance management and tax planning and monitoring activities at the local level.

## Organization

Enel has adopted a set of rules, procedures and standards which are part of the Group's wider organization and control system and which are considered key points of reference that all parties, depending on their type of relationship with the Group, are required to observe.<sup>(3)</sup> The various corporate policies and procedures applicable both at Group level and country level govern the activities, as well as their management procedures and Tax Affairs responsibilities, including in relation to other corporate Functions.

These documents are published on the Company intranet and are accessible to all Enel people. They form the general rules of conduct applicable within the Group when carrying out activities. Specifically in relation to taxation, in addition to the tax strategy there are specific organizational documents in force – both at global and local level – regarding the processes of tax compliance, tax planning, tax monitoring, transfer pricing and tax risk management. The general principle is that the Tax units must be of the

(3) For example: Code of Ethics; Zero Tolerance of Corruption Plan; Enel Global Compliance Program (EGCP), corporate policies, models and procedures; the tax strategy; the Internal Control and Risk Management System; the proxy system; the sanctions system referred to in the applicable CCNL; any other documentation relating to the current control systems; the relevant accounting standards; procedures and IT applications.

appropriate size and equipped with the necessary skills to perform the role of a decision-making analysis center within the governance and business processes, in addition to the role of compliance oversight. For this purpose, spe-

cific and ongoing training initiatives on tax issues at both country and global level have been set up, with recurring meetings between all of the Group's Tax Managers in order to ensure appropriate alignment.

## Tax risks

The Group has a Tax Control Framework (TCF) the main aim of which is to provide the Tax units with a single and consistent set of guidelines for adopting a correct and effective approach to tax risk management within the Group. The framework sets out guidelines and methodological rules so as to assess, monitor and manage the relevant tax risk for the companies consistently, in accordance with the principles and guidelines set out by the tax strategy and Tax Risk Policy, and in the knowledge that the Group companies operating in different jurisdictions must adopt the TCF with respect for the specific corporate context and domestic regulations of each country in question.

In this regard, Enel has adopted a Tax Risk Policy the main objective of which is to provide unambiguous and consistent guidance to the Tax units when adopting the TCF at the local level.

In accordance with the established principles and guidelines, the Enel Group aims to manage the tax risk proactively and believes that adopting a TCF can ensure the timely detection, correct measurement and control of the tax risk.

The task of the TCF is to identify the sources of tax risk for the purpose of compliance and interpreting tax regulations, while mapping out the respective processes and activities in order to form a network of risk detectors, to be associated with the resulting control measures.

In particular, as the set of detectors and control measures identify sources of risk, the TCF can perform a broad spectrum of control. As such, any materialization of the tax risk can be intercepted and managed by each Tax unit in question. The effectiveness and ongoing updates of the TCF are ensured through periodic monitoring of the risk map, regular internal audit processes, as well as through the tax authority systems set out under cooperative compliance schemes (where implemented).

The results from the monitoring of tax risks are periodically brought to the attention of the competent Functions and corporate bodies, including to establish the most appropriate way to mitigate such risks.

Where applicable, the tax control system is subject to external certification, as in the case of Spain. In this regard, the subsidiary Endesa obtained certification by AENOR<sup>(4)</sup> for its Tax Compliance Management System in accordance with the requirements of the UNE 19602 standard. This tax compliance certification represents one of the highest standards by which Spanish companies can demonstrate that they prevent and mitigate tax risks by fully meeting the requirements of UNE 19602.<sup>(5)</sup>

Finally, with regard to the outcome of this risk control activity and to potentially uncertain tax positions, please refer to the relative indications and comments in the [Integrated Annual Report](#).

## Participation in cooperative compliance schemes

For companies that meet the legal requirements for participation, the Enel Group promotes participation in cooperative compliance schemes where they exist in the various countries in which it operates.

In particular, Enel participates in the Collaborative Fulfilment (*Adempimento Collaborativo*) scheme in Italy,<sup>(6)</sup> for larger companies, in the equivalent Code of Good Tax Practices

(*Código de Buenas Prácticas Tributarias*)<sup>(7)</sup> scheme in Spain and is collaborating with the federal tax authority in a pilot project for the creation of a local Cooperative Tax Compliance model (*Projeto CONFIA – Conformidade Cooperativa Fiscal*) in Brazil.<sup>(8)</sup> In addition to the above-mentioned countries, various activities are under way for potential accession to additional cooperative compliance schemes.

(4) AENOR (Asociación Española de Normalización y Certificación) is a leading body in the certification of management systems, products and services and is responsible for the development and dissemination of UNE standards.

(5) UNE standard 19602, published in February 2019, sets out requirements and guidelines for companies to voluntarily adopt a system that reinforces tax compliance best practices. The standard requires companies to identify and assess potential tax risks and to minimize them by establishing financial controls and due diligence processes for the organization's exposed personnel and suppliers, as well as a channel for complaints and consultations.

(6) <https://www.agenziaentrate.gov.it/portale/web/guest/schede/agevolazioni/regime-di-adempimento-collaborativo/elenco-societa-ammesse-al-regime>.

(7) <https://sede.agenciatributaria.gob.es/Sede/colaborar-agencia-tributaria/relacion-cooperativa/foro-grandes-empresas/codigo-buenas-practicas-tributarias/adhesiones-codigo-buenas-practicas-tributarias.html>.

(8) <https://www.gov.br/receitaefederal/pt-br/acesso-a-informacao/acoes-e-programas/confia>.

In order to monitor the progress of this activity, an index (the Cooperative Compliance Index – CCI) was developed to measure the participation of Enel Group companies in cooperative compliance regimes in various countries

based on their size and membership requirements.<sup>(9)</sup>



## Mechanism for stakeholder reports

For the Enel Group, tax compliance is considered a key aspect of the Company's ethical and accountable management. As such, breaches that can be reported through the Company's internal channels also include those relating to tax. The Group's Code of Ethics is the framework of "eth-

ical management" which Enel operates, tying in fully with the tax strategy. Provisions for violations of the Code of Ethics are appropriate to ensure the effectiveness of the requirements contained therein and should be understood to extend to the provisions of the tax strategy.

## Transparent relations with stakeholders

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The constant commitment of the Enel Group to transparency with respect to the tax authorities and all stakeholders concretely underlines the importance it attributes to the tax variable and its role in the sustainable development of the Company.

Therefore, the Group is committed to providing a transparent explanation of the tax issues that can be of interest to third parties, also on its website, making the latter an information hub that is easily accessible and understandable to all.

This commitment also extends to the Group's other listed companies. For example, Endesa has once again topped the best practice ranking for transparency and tax responsibility according to the Contribution and Transparency Report 2021 published by the Haz Foundation. Endesa has been ranked top among the IBEX 35 companies for its best practices in terms of tax risk management and control. Endesa also obtained the t\*\*\* transparency seal awarded by the Haz Foundation, which certifies compliance with twelve indicators analyzing various good practices in the area of fiscal responsibility. These awards demonstrate Endesa's solid commitment to tax transparency and responsibility in terms of economic and social contribution in the jurisdictions in which it operates.

Additionally, all stakeholders can send in their remarks, questions and opinions using the contact information channels provided by Enel and found on the website: (<https://www.enel.com/media/explore> and <https://www.enel.com/investors/overview>).

Finally, the Enel Group ensures transparency and integrity in its relations with the tax authorities in the event of audits on both the Group companies and third parties. To consolidate this transparency with tax authorities, the Enel Group promotes engagement in cooperative compliance schemes for companies that integrate the requirements of their respective domestic regulations in order to reinforce their relations. It also complies with the transfer pricing documentation provisions in accordance with OECD Guidelines, taking the "three-tiered approach", divided into Master File, Local File and Country-by-Country Report. Moreover, to avoid double taxation, the Group promotes Mutual Agreement Procedures (MAP) for the settlement of international disputes, which include the direct involvement of tax authorities from the contracting countries.

Commitment to transparency is also reflected with regard to customs. In this regard, some of the most active companies in dealing with customs authorities (Enel Global Trading SpA and Enel Produzione SpA) obtained the status of Authorized Economic Operator (AEO) respectively in 2016 and 2015. Those qualified as an AEO are deemed to be trustworthy entities due to them having demonstrated an adequate level of compliance of their processes. Said qualification requires compliance with certain criteria, including "customs and tax compliance", to be demonstrated and maintained through an appropriate level of control and training.

(9) The index compares the revenues of companies that have joined the existing cooperative compliance schemes to those of all Enel companies legally eligible to join. The index does not consider countries in which the schemes have not been legally established, or companies that do not meet qualifications to join (i.e., because their size is below statutory thresholds), even though the schemes exist in their countries. Nevertheless, the Group's overall coverage was more than 77% in terms of cooperative compliance companies' revenues compared to the Group's revenues.

## Tax advocacy

Enel consistently acts with a transparent and collaborative approach with all national and international institutions and trade associations to support the development of effective tax systems in the various countries where it operates.

In particular, Enel supports fair, effective and stable tax systems in order to reduce uncertainty for both governments and companies. Enel believes that a transparent and coordinated approach between countries is essential to improve the international tax system and it supports a consensual approach to regulatory choices. To this end, it contributes by supporting governments and international organizations through active participation in public consultation phases on new regulatory processes, where they exist, either directly or through participation in various national and international associations.

Regularly sharing knowledge and best practices through participation in national and international associations is essential in order to contribute to the development of new regulatory procedures by providing qualified technical support on complex business matters. In this respect, the most representative organizations in which Enel has been involved for years to support the evolving tax legislation are: Assonime,<sup>(10)</sup> EuropeanIssuers,<sup>(11)</sup> Confindustria<sup>(12)</sup> and Foro de Grandes Empresas.<sup>(13)</sup> It also participates in a CSR Europe project<sup>(14)</sup> for a collaborative platform on tax responsibility and transparency, with the aim of develop-

ing an index to assess the performance of companies from all sectors in terms of fiscal transparency and responsible fiscal behavior.

In 2019, Enel joined the **European Business Tax Forum** (EBTF), an association that aims to facilitate a public debate on taxation by providing a balanced and comprehensive perspective of the taxes paid by companies. In view of this objective, tax information and data are provided to the various stakeholders concerned. On its website (<https://ebtforum.org>), the Forum continuously publishes various studies on tax transparency: Total Tax Contribution,<sup>(15)</sup> Best Practices for Good Tax Governance<sup>(16)</sup> and Tax Transparency and Country-by-Country Reporting.<sup>(17)</sup>

Furthermore, in 2021 Enel adhered to the **B Team Responsible Tax Principles**, that is, the principles developed by the B Team<sup>(18)</sup> for promoting responsible and sustainable tax practices for a better future. B Team is an organization created by a group of multinationals, with the contribution of civil society, investors and representatives of international institutions, in order to promote responsible and sustainable tax practices.

Through its active and public participation in all these associations, Enel believes it can make its own technical contribution by sharing its experience in support of fair, effective and sustainable taxation.

(10) <https://www.assonime.it/Pagine/Home.aspx>.

(11) <https://www.europeanissuers.eu/>.

(12) <https://www.confindustria.it/home>.

(13) <https://sede.agenciatributaria.gob.es/Sede/colaborar-agencia-tributaria/relacion-cooperativa/foro-grandes-empresas.html>.

(14) <https://www.csreurope.org/newsbundle-articles/csr-europe-launches-new-collaborative-platform-on-tax-responsibility-and-transparency>.

(15) Several studies have been published relating to the EU/EFTA Total Tax Contribution, which report the yearly aggregate data for the various types of taxes paid by the largest European multinational companies by turnover and/or by stock market capitalization, including in 2021 a dedicated section for Country-by-Country Reporting.

(16) The paper was drafted by a group of tax directors from three organizations (Tax Executives Council of the Conference Board, The B Team and the European Business Tax Forum) to provide guidance on the best practices that multinationals can adopt in order to develop transparency and assurance vis-à-vis their stakeholders.

(17) First study dedicated exclusively to Country-by-Country Reporting data.

(18) <https://bteam.org/>.



## Reporting

3-3 | 207-4

Acting with honesty and integrity is one of the main cornerstones of Enel tax strategy, as is our commitment to transparency.

The publication of **Country-by-Country Reporting (Cb-CR)**<sup>(19)</sup> supplemented with details of our **overall tax contribution in the main economies in which the Group operates** (hereafter also "Tax Transparency Report"), underlines the importance that the Group attributes to tax related issues, to their social role and, in general, to transparency as a factor that facilitates sustainable development.

The approach followed also aims to eliminate potential ambiguities that may derive from complex accounting and tax treatments, while supporting and, at the same time, improving other annual financial information and continuing along a pathway targeted at supplying an increasingly in-depth and clear vision of our tax position.

As of 2019 (FY 2018-2017), we have adopted a Total Tax Contribution model for the main countries where we operate, providing evidence of taxes paid and of withholding tax deductions.

Beginning in 2021 (FY 2020), on the other hand, we adopted an integrated model: the Tax Transparency Report. This is prepared consistently with the rules provided for under OECD Country-by-Country Reporting<sup>(20)</sup> and includes information and data for Total Tax Contributions in the main countries where we are present.

The integrated model of the Tax Transparency Report is available on our site (<https://www.enel.com>). The Group believes that this model ensures a broad vision and a detailed measurement of the organization's contributions to economic and social development in the regions/countries in which it operates.

## Tax Transparency Report – principles

The Tax Transparency Report adopts the **cash basis accounting criterion** as a general principle for representing tax data, considering it to be the most adequate for disclosing the actual tax contribution. More specifically, the total tax data, as defined and detailed in what follows, is determined through the various taxes paid<sup>(21)</sup> by all the entities in the scope of each tax jurisdiction in the year subject to reporting, regardless of the tax year to which the taxes refer. As anticipated previously, on applying an approach adopted by the OECD,<sup>(22)</sup> the Tax Transparency Report classifies the different taxes into categories and distinguishes them between those that constitute an expense for the Company (**taxes borne**) and those that the Company pays due to rebate mechanisms, substitution etc. (**taxes collected**) but that, at any rate, are the result of the Company's own economic activities.

Specifically, taxes, both borne and collected, are classified into the following five macro-categories.

**Profit – Income taxes:** this category includes taxes on company income that can be both borne (e.g. tax on the

income of companies at State or local level, taxes on production, solidarity contributions, tax levied on income deriving from specific activities such as the extraction of natural resources, the generation and sale of hydroelectric energy as well as taxes withheld at source) and collected, in the case where they are applied to a third party or to a physical person (for example, withholding taxes on interest income, royalties, subcontractors and suppliers). Income taxes do not include taxes on dividends paid by Enel Group entities.

**People – Taxes on labor:** this category generally includes taxes on labor, comprising those on incomes and social welfare contributions. Taxes applied to the employer are considered taxes borne (e.g., social welfare contributions, health insurance, pensions, disability contributions), while income taxes applied to workers are considered as taxes collected (e.g., taxes on incomes of physical persons or social welfare contributions debited to workers that are normally withheld by the employer).

**Products – Taxes on products and services:** indirect tax-

(19) See the circular Assonime (Association of Italian Joint Stock Companies) no. 1/2021. "Gli obblighi di trasparenza in materia di tassazione nelle dichiarazioni non finanziarie secondo lo standard GRI 207" (Transparency obligations in the matter of taxation in Non-Financial Disclosures according to standard GRI 207), in which it is clarified that it is possible to make reference to Country-by-Country reports sent to the Agenzie delle Entrate (Italian Revenue Agency) made public voluntarily, even if they are related to the preceding tax period with respect to the time period considered in the Non-Financial Disclosure. In this regard, the Group has decided to report the information for the current year, prepared consistently with the rules provided for under OECD Country-by-Country Reporting, actually anticipating by a year the activities required for tax reporting.

(20) Beginning 2018, the Enel Group presented the Country-by-Country Reports for the years 2016-2021. This was by way of transmission thereof to the Italian Agenzia delle Entrate which in turn supplied them to the other States with which an agreement is in force for the exchange of information, in compliance with the indications of Action 13 of the BEPS project, as amended. Action 13 is a project in which the OECD and the countries of the G20 have participated in order to reply in a coordinated and shared manner to the strategies of aggressive tax planning put in place by MNEs with a view to "artificially shifting" profits in jurisdictions characterized as tax havens.

(21) The data for taxes paid includes payments on account, taxes for previous years, including after assessments, net of repayments and rebates obtained. Interest and penalties are not considered.

(22) Working Paper no. 32, "Legal tax liability remittance responsibility and tax incidence".

es applied on production, sale or use of goods and services, trade and international transactions. This category includes taxes that can be paid by businesses with reference to their own consumption of goods and services, regardless of the fact that they are paid to the supplier of the goods and services rather than directly to the government. This category includes both taxes borne (e.g., taxes on consumption, turnover taxes, excise duties,<sup>(23)</sup> customs duties, import duties, taxes on insurance contracts, non-deductible VAT) as well as taxes collected (e.g., VAT paid, excise duties,<sup>(24)</sup> taxes on goods and services).

**Property – Property taxes:** taxes on property, the use or transfer of property, plant and equipment or intangible assets. This category includes both taxes borne (e.g. taxes on property and the use of real estate, capital tax applied on the increase of risk capital, taxes on the transfer, purchase or sale of assets, net equity and capital transactions, stamp duty, stamp duty for the transfer of real estate, stamp duty for the transfer of shares, taxes on financial transactions that imply loans or borrowings from a foreign source), and taxes collected (e.g. taxes on leases collected by the lessor and paid to the government).

**Planet – Environmental taxes:**<sup>(25)</sup> these include taxes and duties on energy products (including fuel for vehicles), on motor vehicles and transport services, and on the supply, use or consumption of goods and services considered harmful to the environment, as well as the management of waste, noise, water, land, soil, forests, biodiversity, wild animals and fish stocks to be paid by the entity. Examples of taxes borne: taxes on the value of the generation of electricity, taxes on the production of nuclear fuels and carbon tax. Examples of taxes collected: taxes on electricity, taxes on hydrocarbons and duties on gas and electricity.

Furthermore, the financial-equity data represented follow the **accounting requirements** below.

**Data source:** the data represented in the report are expressed on the basis of IFRS-EU accounting principles adopted by the Group and are at stand-alone entity level.

Subsequently, these data are aggregated by tax jurisdiction. To take account of intercompany relations, the data are represented according to logic of aggregation by tax jurisdiction (that is, the country in which the entities are resident for tax purposes and where they enjoy fiscal autonomy) and not according to a logic of consolidation.

**Entities within the scope:** falling within the scope of the report are all those companies consolidated using the full consolidation method or the proportional method (hereafter also “entity within the scope”) on the basis of accounting principles used for the drafting of the Consolidated Financial Statements on the part of the Ultimate Parent Entity (Enel SpA).<sup>(26)</sup> With reference to the list of companies in the Group and their activities, please refer to the specific prospectus in the Integrated Annual Report 2022.<sup>(27)</sup>

**Currency:** the report considers the euro as the currency of reference in that it is the one used by the Parent Company. Since IFRS-EU accounting data are extracted in local currencies, economic data (such as revenues, earnings before taxes, taxes accrued and taxes paid) have been converted into the euro at the average exchange rate of the currency, while balance sheet data (property, plant and equipment) have been converted into the euro at the exchange rate in force at year's end.

**Third party revenues:** the sum of third party revenues accounted for by the entities within the scope in the pertinent tax jurisdiction in the reporting year. The term “revenues” is understood in the broadest possible sense<sup>(28)</sup> to include all revenues, comprising those from extraordinary operations.

**Cross-border inter-company revenues:** the sum of revenues from transactions carried out between entities within the scope resident in different jurisdictions in the tax reporting year, including income from extraordinary operations and excluding dividends.<sup>(29)</sup>

**Profit (Loss) before income taxes:** the sum of profits (losses) before income taxes generated in the year of reference and involving all entities within the scope in each tax jurisdiction. The Profits (Losses) before income taxes must

(23) With the exception of those recorded under environmental taxes (e.g. duties on gas and electric energy).

(24) With the exception of those recorded under environmental taxes (e.g. duties on gas and electric energy).

(25) The classification of taxes as environmental is based on the shared definition within the harmonized statistic framework developed jointly, in 1997, by Eurostat, the European Commission, the Organization for Economic Co-operation and Development (OECD), and the International Energy Agency (IEA), according to which environmental taxes “are taxes whose tax base is a physical quantity (or the proxy of a physical quantity) of an element that has a proven and specific negative impact on the environment ([https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Environmental\\_tax](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Environmental_tax)). All taxes on energy, transport, pollution and resources are included, whereas all taxes on added value are excluded. For further details, see Eurostat: “Environmental taxes – a statistical guideline”, para. 2.3 and 2.6 (<https://ec.europa.eu/eurostat/documents/3859598/5936129/KS-GQ-13-005-EN.PDF>) e OECD: Special feature: Identifying environmentally-related tax revenues in Revenue Statistics (<https://www.oecd-ilibrary.org/sites/52465399-en/index.html?itemId=/content/component/52465399-en#>).

(26) However, the companies consolidated using the equity method are excluded. Furthermore, the data of Permanent Establishments are reported in the jurisdiction of their operations and not in the jurisdiction of residence of associated companies. Therefore, the data of the latter do not include the data of the Permanent Establishment. Finally, all stateless companies of the Enel Group are flow-through entities incorporated in the same country in which income is imputed and is effectively taxed in the partner company (e.g., the United States).

(27) See circular Assonime no. 1/2021. Gli obblighi di trasparenza in materia di tassazione nelle dichiarazioni non finanziarie secondo lo standard GRI 207 (Transparency obligations in the matter of taxation in Non-Financial Disclosures according to standard GRI 207), where it is clarified that it is possible to make reference to other sources (known as “incorporation by reference”) such as the Directors’ Report in the Consolidated Financial Statements or in the annexes for the list of Group companies and their main activities, and the Directors’ Report or other sections of the NFD with regard to information already contained therein on uncertain tax positions and on any other information relevant for the purposes of GRI 207.

(28) Specifically, also included are (i) other income, (ii) all extraordinary income (e.g., capital gains from the sale of real estate, unrealized capital gains/capital losses and (iii) financial income (with the exception of dividends from other companies within the scope) or any extraordinary item. Revenues from income taxes (deriving from deferred tax liabilities or from tax consolidation) are excluded.

(29) Revenues do not include payments received from other entities within the scope that are considered dividends in the tax jurisdiction of the payer.

costs.<sup>(30)</sup>

**Income taxes accrued for companies (current taxes):** the sum of current taxes (i.e., for the year in progress) on taxable income in the reporting year of all entities within the scope in each tax jurisdiction, regardless of whether or not they have been paid. The data for these does not take account of provisions for tax debts that are not yet certain as regards either their amount or existence, of adjustment of current taxes for previous years and of prepaid and deferred taxes.

**Tangible assets:** the sum of net accountable values of tangible fixed assets resulting from the balance sheet, of all entities within the scope in each tax jurisdiction.<sup>(31)</sup>

**Number of employees and remuneration:** the number of employees at the end of the period considering all the entities within the scope; conversely, as regards their remuneration, please see the Sustainability Report as well as the Tax Transparency Report.

**Capital:**<sup>(32)</sup> the accounting value of share capital as taken from the financial statements of all the entities within the scope.

**Profit reserves:** this item represents the amount of net profit realized by the entities within the scope in each tax jurisdiction over the past years, net of dividends paid and any other reduction due to losses, capital increases, etc.



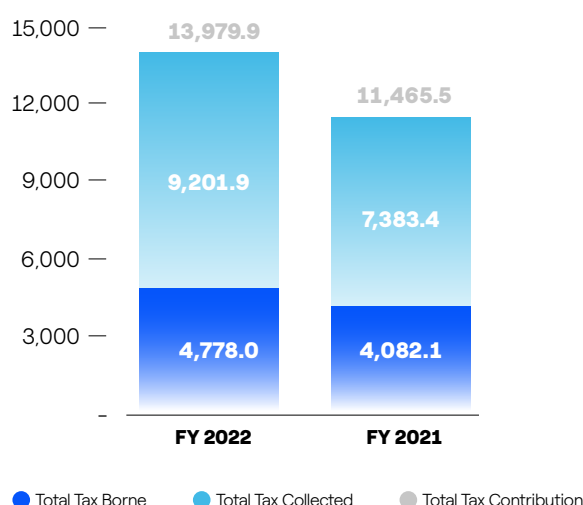
(30) Consistent with the reporting criteria applied to Revenues, Profits (Losses) before income taxes are indicated net of dividends paid by the companies within the scope (as also indicated by the OECD in the report "Guidance on the Implementation of Country-by-Country Reporting" published in 2019 point II.7).

(31) Tangible fixed assets do not include cash and cash equivalents, intangible assets or financial assets.

(32) The introduction of the disclosure related to the "Capital" and "Undistributed profit" items in the Sustainability Report 2021 further enriches the Report content in relation to OECD CbCR. Furthermore, the introduction of this information, in particular that related to "Undistributed profit" supplements the disclosure with that required by the Directive 2013/34 (amended by Directive (EU) 2021/2101) on the topic of the publication of income tax information (the so-called public CbCR). This additional information provides the disclosure with this content in advance of what is required under Article 48-(8) of the above-mentioned Directive.

# Tax Transparency Report – general analysis

## Total Tax Contribution (€/mil)



In 2022, the **Total Tax Contribution**<sup>(33)</sup> (TTC), with respect to all the countries in which we operate, was **13,979.9** million euros.

2022 showed an increase in the total tax contribution of **2,514.4** million euros (**+21.9%**) compared to 2021.<sup>(34)</sup>

This trend is the result of an **increase** in both **tax borne** and **tax collected** and reflects the **economic conditions of the market** in question characterized by a significant increase in raw material procurement costs and a sharp rise in electricity and gas prices.

In this context, on an overall level, both revenue-related indirect taxes and, albeit more moderately, profit-, labor- and property-related taxes grew significantly. More specifically, an **analysis of the total tax contribution data** broken down into the five tax categories shows:

- i. a significant **increase in taxes on products and services**, mainly as a result of higher revenues due to the increased quantities of electricity and gas (especially in Italy and Spain) sold at growing average prices;
- ii. an **increase in environmental taxes**, influenced by the extraordinary repayments received in 2021 in Spain. Net of this effect, environmental taxes have in fact decreased mainly due to the suspension/reduction of energy excise taxes adopted by the governments of some countries to cope with high energy prices;
- iii. an **increase in taxes on profits** due to both the introduction of extraordinary levies on companies operating in the energy production and distribution sectors and the effects of mechanisms for payment on account and balance of income taxes;<sup>(35)</sup> and
- iv. an **increase in property and labor taxes**, consistent with the dynamics of the business, in which there are increasing levels of investment and staff remuneration.<sup>(36)</sup>

In general, the **value of taxes paid** highlights once again the importance of the **Group's tax contribution** to the **communities** and the economic and social systems of the countries in which it operates, something which has become even more relevant as we face the challenges of the post-pandemic period.

An analysis of the tax contribution from a **geographical perspective** shows that the **distribution** of taxes paid is **consistent** with that of the **revenues generated** and the number of **staff employed**: **Italy, Spain and Brazil** together account for **85%** of the **tax contribution**, around **84%** of **revenues** and around **75%** of **employees**.

The distribution of the total contribution in the various countries in which the Group operates is shown in the table below.

(33) The total tax contribution has been calculated considering the main countries in which the Group is present. These represent more than 99% of revenues and more than 99% of income taxes paid. For all the other countries, the income taxes have nonetheless been indicated in detail. The following countries are included: Italy, Spain, Brazil, Colombia, Portugal, Peru, Argentina, Romania, Chile, France, the United States, Canada, Germany, the Netherlands, Panama, Mexico, Greece, Guatemala, India, South Africa and Costa Rica.

(34) It should be noted that refinements and changes to the scope of consideration have been introduced for the purpose of preparing this section of the document. The 2021 figures presented in this document may not coincide with that represented in the Enel Group's "Sustainability Report 2021".

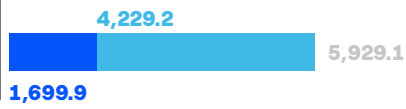
(35) In the majority of countries where Enel operates, Income Taxes are paid for the reporting year based on the historical values of the previous year (so-called "historical method"). Therefore, the financial effects of the overall value of income taxes for the reporting year are fully recognized only the following year.

(36) Net of the effect related to Russia, whose activities are effectively divested.

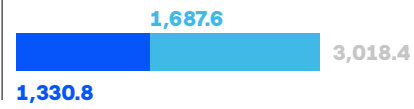
Total Tax Contribution per country  
(€/mil)

- Total Tax Borne (cash accounting)
- Total Tax Collected (cash accounting)
- Total Tax Contribution (cash accounting)

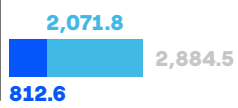
**Italy**



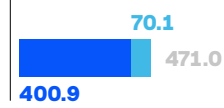
**Spain**



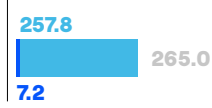
**Brazil**



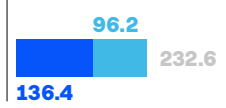
**Colombia**



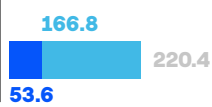
**Portugal**



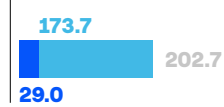
**Peru**



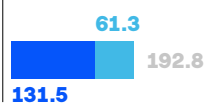
**Argentina**



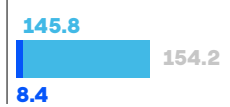
**Romania**



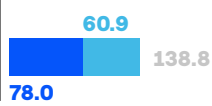
**Chile**



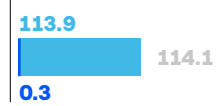
**France**



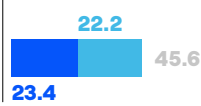
**USA&Canada**



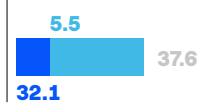
**Germany**



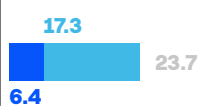
**Netherlands**



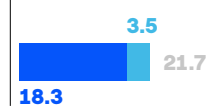
**Panama**



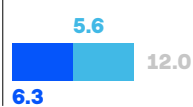
**Mexico**



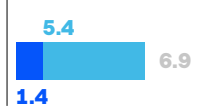
**Greece**



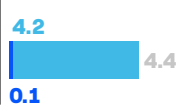
**Guatemala**



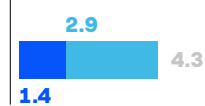
**India**



**South Africa**



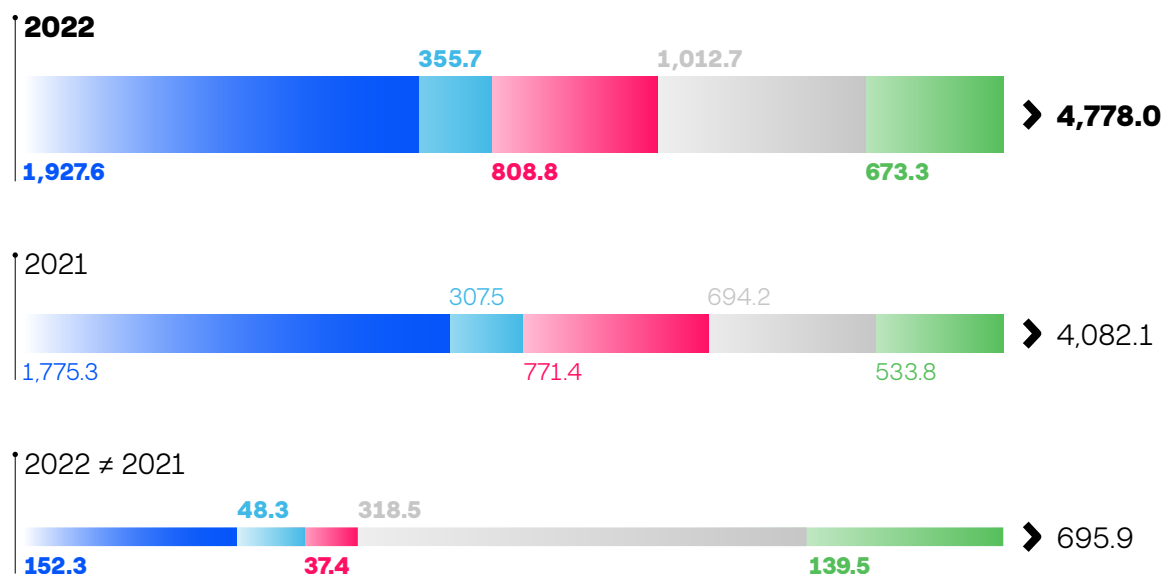
**Costa Rica**





## Tax Borne (€/mil)

● Profit taxes ● Property taxes ● Employment taxes ● Taxes on products and services ● Environmental taxes



In 2022, the **Total Taxes Borne**<sup>(37)</sup> amounted to **4,778.0 million euros**<sup>(38)</sup> an overall increase of **695.9 million euros (+17.0%)** compared to 2021.

This increase affected **all tax borne categories** and especially **taxes on products and services, environmental taxes** and **taxes on profits**.

The payment of **taxes on products and services increased** by **318.5 million euros**, due to higher payments in (i) Brazil (+185.6 million euros), mainly as a result of an increase in social taxes PIS ("Programa de Integração Social") and COFINS ("Contribuição para Financiamento de Seguridade Social")<sup>(39)</sup> following new clarifications provided by the competent authorities for the application of these taxes, and Spain (+114.1 million euros) where revenues increased as a result of rising electricity prices.

The payment of **environmental taxes increased** overall by **139.5 million euros**. The largest increases were recorded in:

- i. Spain (+80.7 million euros) where, on the one hand, taxes paid relating to the "canon hidráulico" (water tax) increased compared to 2021 (+270.6 million euros), a year in which extraordinary repayments<sup>(40)</sup> were received,

and on the other hand, payments relating to the "Impuesto sobre el valor de la producción eléctrica" (tax on electricity production) decreased (-204.2 million euros), due to the suspension of this tax for the entire year;

- ii. Italy (+41.2 million euros) as a result of paying the coal excise duty adjustments for 2021, due to higher consumption in 2021 compared to 2020;
- iii. Chile (+16.0 million euros) due to the increase in electricity production.

The payment of **income taxes** has **increased** overall by **152.3 million euros**. The **largest increases** were recorded in:

- i. Italy (+167.3 million euros) due to the introduction of extraordinary contributions charged to companies operating in the energy production and distribution sectors and higher advance payments made in 2022 compared to 2021 as a result of the method used to calculate the same<sup>(41)</sup> and the inclusion of a new company in the scope;<sup>(42)</sup>
- ii. Spain (+95.3 million euros) due to both lower depreciation and amortization as a result of extending the tax life of certain production facilities and the payment of taxes

(37) Taxes borne are taxes that constitute a cost for a company.

(38) Taxes borne include, among income taxes, specific corporate income taxes of 1,799.8 million euros paid in 2022 and 1,723.3 million euros paid in 2021.

(39) The exclusion of the ICMS ("Imposto sobre Circulação de Mercadorias e Serviços") from the basis for calculating the PIS ("Programa de Integração Social") and COFINS ("Contribuição para Financiamento de Seguridade Social") on which Brazil's Federal Supreme Court (STF) ruled in 2021, was a controversial topic in the country and the subject of much debate in that year. In 2022, Enel revised its methodology for calculating PIS/COFINS taxes in light of new clarification provided by the competent authorities, which resulted in an increase in taxes paid.

(40) The repayment refers to the amounts paid during the period 2013-2020. Following a judgment of the Spanish Tribunal Supremo, the charge was repaid as it was declared non-applicable.

(41) In the case in question, the payments on account (calculated using the historical method and partly using the forecast method) made in 2022 increased due to an increase in taxable income between 2020 and 2021, as well as a higher expected income in 2022 than in 2021.

(42) Taxes on Enel Hydro Appennino Centrale, the company acquired in 2022, were paid in 2022.

related to previous years, made following a restatement of the tax base; and

- iii. Colombia (+18.7 million euros) due to an increase in taxable income of some companies related to an improvement in operating results.

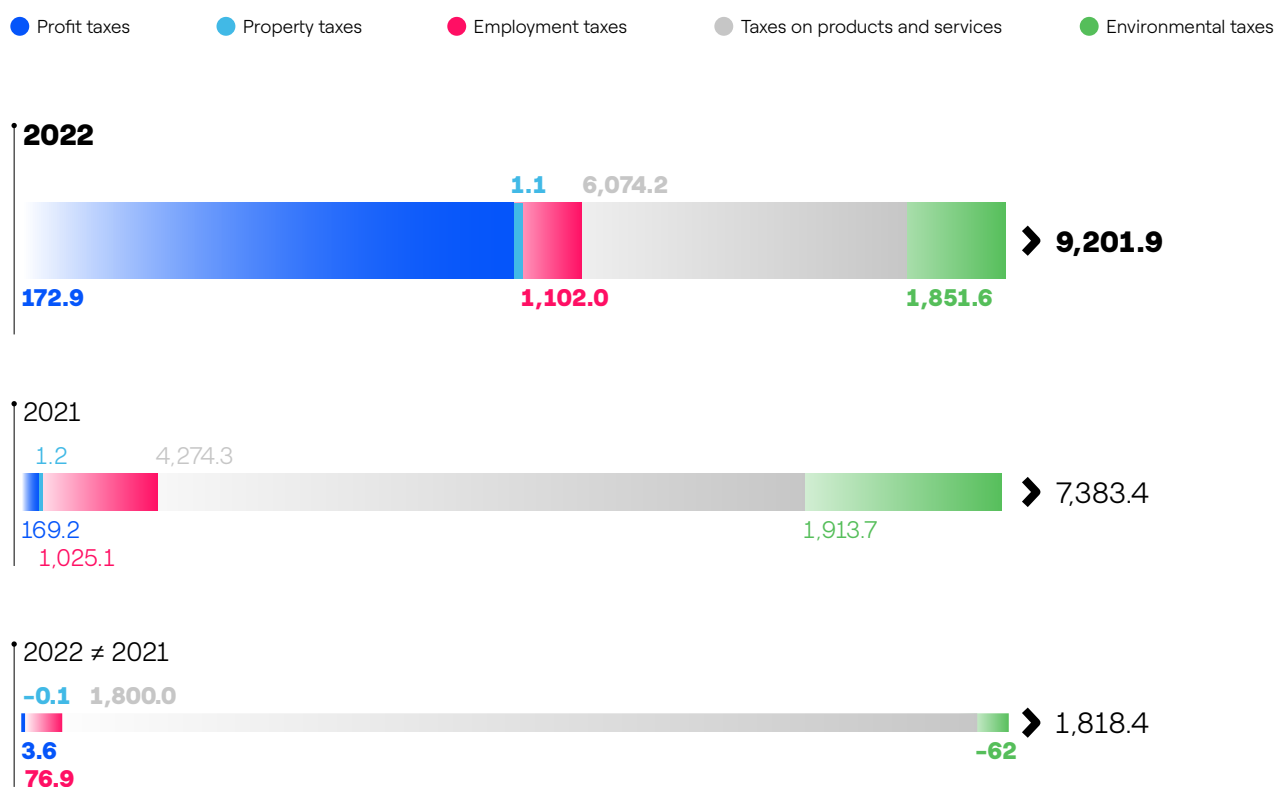
This was partially offset by a **reduction in taxes on profits** in:

- iv. Brazil (-63.7 million euros) due to both a change in the way some entities<sup>(43)</sup> pay taxes during the year and a reduction in taxable income;
- v. Chile (-48.8 million euros) due to the reduction of taxable income caused by exchange losses;
- vi. Holland (-26.5 million euros) due to a reduction in tax-

able income in 2021,<sup>(44)</sup> which, based on the historical payment mechanism, affected the taxes paid in 2022.

The payment of **property taxes** increased overall by **48.3 million euros**. The most significant increases were recorded (i) in the United States of America (+22.5 million euros) due to the commissioning of new renewable energy plants, (ii) in Brazil (+18.5 million euros) as a result of certain financial transactions (discharge of foreign financial debts and capital contribution) subject to capital taxation, and (iii) in Italy (+3.9 million euros) due to the updating of the “*canone unico patrimoniale*” (single property charge) introduced as of 2021.

## Tax Collected (€/mil)



(43) Some Brazilian entities changed the frequency of income tax settlement from annual to quarterly during the year. Following this change, taxes for the last quarter of 2022 were paid in January 2023, with a consequent reduction in payments by 2022.

(44) 2021 was characterized by a debt restructuring operation as a result of which securities issued in the past were repurchased early, and new sustainability-linked bonds were issued, in line with the industrial objectives that the Enel Group has set for itself in terms of sustainability and decarbonization. The restructuring operation generated around 560 million euros in extraordinary costs.

**Total Taxes Collected** amount to **9,201.9 million euros**, up **1,818.4 million euros (+24.6%)** as compared to 2021. This increase is mainly attributable to **higher taxes on products and services**.

Indeed, the **taxes on products and services increased by 1,800.0 million euros**. The largest increases were recorded in:

i. Italy (+1,000.0 million euros), where in 2021, as a result of

the first year of adoption of the so-called "VAT Group" – a measure that simplified a number of tax obligations<sup>(45)</sup> – no payments on account had been made;

ii. Spain (+516.2 million euros), Portugal (+103.7 million euros), France (+61.4 million euros) and Germany (+49.9 million euros), due to higher revenues related to the increase in prices and sales volumes as described above.

A representative global and concise index of the **Group's tax contribution** from a cash perspective is:

TTC Rate  
**64.7%**

The **Total Tax Contribution (TTC Rate) index** provides a concise and complete measurement of the burden for all taxes that the business has effectively paid and is calculated as a percentage of taxes borne in relation to Earnings Before Taxes. In 2022, the TTC rate of 64.7% was higher than the average for the last three years (57.5%) mainly due to the increase in taxes borne already mentioned.

Another concise indicator of the tax contribution for business income is represented by:

Current income  
tax rate  
**68.1%**

At Group level, in FY 2022 the **Current Income Tax Rate**, determined as the ratio of accrued corporate income taxes (3.0 billion euros) to profit before income taxes (4.41 billion euros), was 68.1%, higher than the average rate of the OECD Member States (23.1%).<sup>(46)</sup>

In line with OECD best practice,<sup>(47)</sup> the following tables show the figure for corporate income taxes paid on a cash basis and the figure for current taxes booked on an accrual basis country by country. Current taxes represent taxes calculated on the basis of income produced in the year following the tax rules of each country and normally deviate from taxes paid in the same year in so far as the definitive payment of the balance is made in the year following that in which they accrued.

The trends of the two values are substantially destined to realign over time. In 2022, the current income taxes on a

Group level were equal to 3.0 billion euros, whereas the income taxes paid were equal to 1.8 billion euros.

The significant value of current taxes and the difference between current taxes and taxes paid relating to 2022 is mainly attributable to the higher cost of current taxes recorded in Italy, related to the extraordinary contribution on high utility bills and solidarity contributions (approximately totaling 721 million euros). The upward effect on taxes paid will be evident in 2023 due to tax payments based on historical data.

(45) <https://www.agenziaentrate.gov.it/portale/web/guest/schede/istanze/costituzione-gruppo-iva/scheda-informativa-costituzione-gruppoiva>. With this scheme, a single and autonomous taxable entity is established with a single VAT Number valid for all member companies, replacing their individual VAT Numbers. This also benefits the suppliers of the various companies (e.g., a single VAT Number of reference for the invoices to all Group Companies).

(46) Source OECD Stat, "Table II.1. Statutory corporate income tax rate – Combined corporate income tax rate".

(47) For the purposes of Country-by-Country Reporting (BEPS Project – Action 13).





## Tax Transparency Report – tables by geographical area

To ensure greater legibility and transparency, below are given the data of the single countries.

### Europe – main countries

	UM	France	Germany	Greece	Italy
<b>Taxes Borne</b>		<b>8.4</b>	<b>0.3</b>	<b>18.3</b>	<b>1,699.9</b>
Profit taxes	€/mil	6.6	-0.1	12.0	930.8
Income tax paid	€/mil	6.3	-0.1	12.0	859.9
Property taxes	€/mil	0.1	-	0.3	152.2
Employment Taxes	€/mil	1.7	0.4	1.4	541.3
Taxes on products and services	€/mil	-	-	4.6	2.2
Planet/Environmental Taxes	€/mil	-	-	0.0	73.4
<b>Taxes Collected</b>		<b>145.8</b>	<b>113.9</b>	<b>3.5</b>	<b>4,229.2</b>
Profit taxes	€/mil	-	-	-	27.2
Property Taxes	€/mil	-	-	-	-
Employment Taxes	€/mil	1.2	0.7	2.0	643.2
Taxes on products and services	€/mil	97.8	87.6	1.5	1,934.9
Planet/Environmental Taxes	€/mil	46.9	25.5	-	1,624.0
<b>Total Tax Contribution (cash accounting)</b>	<b>€/mil</b>	<b>154.2</b>	<b>114.1</b>	<b>21.7</b>	<b>5,929.1</b>
<b>Economic data</b>	<b>UM</b>	<b>France</b>	<b>Germany</b>	<b>Greece</b>	<b>Italy</b>
Revenues Unrelated	€/mil	1,161.3	484.4	111.7	103,258.9
Revenue related cross border	€/mil	72.1	81.8	14.5	4,608.8
Profit (Loss) before income tax	€/mil	35.1	42.6	38.7	810.7
Income tax accrued	€/mil	5.1	3.8	6.1	1,339.8
Tangible assets other than cash and cash equivalents	€/mil	4.4	0.3	595.7	31,700.4
Number of employees	no.	63	23	130	31,643
Accumulated earnings	€/mil	-2.2	-46.2	-159.0	8,503.2
Corporation Stock	€/mil	4.1	47.7	623.7	53,668.4
TTC Rate	%	22.6%	0.7%	40.6%	103.0%
TTC in relation to revenues	%	12.5%	20.2%	17.2%	5.5%
Taxes borne in relation to revenues	%	0.7%	0.1%	14.5%	1.6%
Taxes collected in relation to revenues	%	11.8%	20.1%	2.8%	3.9%



Netherlands	Portugal	Romania	Spain	2022	2021	2022-2021	%
<b>23.4</b>	<b>7.2</b>	<b>29.0</b>	<b>1,330.8</b>	<b>3,117.2</b>	<b>2,631.5</b>	<b>485.7</b>	<b>18%</b>
22.8	6.3	19.9	257.4	<b>1,255.7</b>	<b>1,013.3</b>	<b>242.4</b>	<b>24%</b>
22.8	6.3	19.3	227.7	<b>1,154.3</b>	<b>984.2</b>	<b>170.0</b>	<b>17%</b>
-	0.0	3.8	99.2	<b>255.5</b>	<b>250.8</b>	<b>4.8</b>	<b>2%</b>
0.2	0.9	2.7	133.7	<b>682.4</b>	<b>671.1</b>	<b>11.4</b>	<b>2%</b>
0.5	-	2.4	308.9	<b>318.5</b>	<b>213.3</b>	<b>105.2</b>	<b>49%</b>
-	-	0.1	531.6	<b>605.0</b>	<b>483.1</b>	<b>121.9</b>	<b>25%</b>
<b>22.2</b>	<b>257.8</b>	<b>173.7</b>	<b>1,687.6</b>	<b>6,633.7</b>	<b>4,955.4</b>	<b>1,678.3</b>	<b>34%</b>
-	0.0	-	75.5	<b>102.7</b>	<b>103.4</b>	<b>-0.7</b>	<b>-1%</b>
-	0.1	-	0.2	<b>0.3</b>	<b>0.2</b>	<b>0.1</b>	<b>81%</b>
1.0	1.7	39.4	242.0	<b>931.1</b>	<b>885.9</b>	<b>45.2</b>	<b>5%</b>
15.2	238.5	125.9	1,260.6	<b>3,761.9</b>	<b>2,063.4</b>	<b>1,698.4</b>	<b>82%</b>
6.0	176	8.4	109.3	<b>1,837.8</b>	<b>1,902.5</b>	<b>-64.8</b>	<b>-3%</b>
<b>45.6</b>	<b>265.0</b>	<b>202.7</b>	<b>3,018.4</b>	<b>9,751.0</b>	<b>7,587.0</b>	<b>2,164.0</b>	<b>29%</b>
Netherlands	Portugal	Romania	Spain	2022	2021	2022-2021	%
2,744.1	1,582.7	3,140.7	37,331.6	<b>149,815.3</b>	<b>75,051.8</b>	<b>74,763.5</b>	<b>100%</b>
1,415.2	493.6	65.8	1,737.3	<b>8,489.1</b>	<b>15,491.3</b>	<b>-7,002.2</b>	<b>-45%</b>
-64.2	74.2	-179.8	91.9	<b>849.2</b>	<b>3,679.5</b>	<b>-2,830.3</b>	<b>-77%</b>
26.6	18.1	19.2	339.1	<b>1,757.7</b>	<b>1,251.5</b>	<b>506.2</b>	<b>40%</b>
0.6	6.5	2,036.7	22,957.6	<b>57,302.2</b>	<b>55,597.2</b>	<b>1,705.0</b>	<b>3%</b>
20	82	3,265	9,489	<b>44,715</b>	<b>43,219</b>	<b>1,496</b>	<b>3%</b>
-342.6	-5.3	1,109.5	35,656.7	<b>44,714.0</b>	<b>65,981.9</b>	<b>-21,267.9</b>	<b>-32%</b>
11,550.1	18.8	1,281.8	28,679.1	<b>95,873.8</b>	<b>67,978.6</b>	<b>27,895.3</b>	<b>41%</b>
-36.9%	9.6%	-17.0%	111.4%				
1.1%	12.8%	6.3%	7.7%				
0.6%	0.3%	0.9%	3.4%				
0.5%	12.4%	5.4%	4.3%				

## Europe – minor countries<sup>(1)</sup>

Economic data	UM	Ireland	Norway	Poland	Slovakia	Turkey	United Kingdom	Russia	2022	2021	2022-2021	%
Revenues Unrelated	€/mil	10.9	0.4	19.4	-	0.0	22.0	327.1	379.8	612.0	-232.2	-38%
Revenue related cross border	€/mil	3.9	0.1	0.2	-	1.0	0.9	21.3	27.5	13.2	14.2	107%
Profit (Loss) before income tax	€/mil	1.7	-1.7	1.9	-1.3	-2.5	2.0	43.2	43.4	33.8	9.5	28%
Income tax accrued	€/mil	-	0.0	0.5	-	0.1	-	5.5	6.2	0.1	6.1	4847%
Income tax paid	€/mil	0.0	-	0.4	-	0.1	-	0.0	0.5	5.5	-5.0	-90%
Tangible assets other than cash and cash equivalents	€/mil	0.5	0.0	0.4	0.0	0.0	0.1	2.7	3.7	852.2	-848.5	-100%
Number of employees	no.	57	4	22	-	1	32	5	121	1,566	-1,445	-92%
Accumulated earnings	€/mil	-0.6	-0.4	-1.6	-	-7.5	-7.1	5.1	-12.1	346.8	-358.9	-103%
Corporation Stock	€/mil	30.0	5.1	5.8	-	2.9	20.9	3.5	68.1	1,020.1	-952.0	-93%

(1) Beyond what is shown, in some tax jurisdictions the Group is present through entities in pre-operations phase and/or in liquidation and whose overall values are immaterial. For this reason, these countries are not represented in the report. They are: Serbia and Sweden.

## North America – main countries

Economic data	UM	USA & Canada	Mexico	2022	2021	2022-2021	%
<b>Taxes Borne</b>	<b>€/mil</b>	<b>78.0</b>	<b>6.4</b>	<b>84.4</b>	<b>57.5</b>	<b>26.9</b>	<b>47%</b>
Profit taxes	€/mil	1.6	3.9	5.5	7.8	-2.3	-30%
Income tax paid	€/mil	1.6	3.9	5.5	7.8	-2.3	-30%
Property taxes	€/mil	60.0	-	60.0	37.6	22.5	60%
Employment Taxes	€/mil	15.7	2.5	18.2	10.5	7.7	73%
Taxes on products and services	€/mil	0.7	-	0.7	1.6	-0.9	-58%
Planet/Environmental Taxes	€/mil	-	0.0	0.0	0.0	-0.0	-55%
<b>Taxes Collected</b>	<b>€/mil</b>	<b>60.9</b>	<b>17.3</b>	<b>78.2</b>	<b>65.8</b>	<b>12.4</b>	<b>19%</b>
Profit taxes	€/mil	-	0.0	0.0	0.2	-0.2	-97%
Property Taxes	€/mil	-	0.8	0.8	1.0	-0.2	-20%
Employment Taxes	€/mil	60.3	4.5	64.9	49.2	15.7	32%
Taxes on products and services	€/mil	0.6	12.0	12.5	15.3	-2.8	-19%
Planet/Environmental Taxes	€/mil	-	-	-	-	-	0%
<b>Total Tax Contribution (cash accounting)</b>	<b>€/mil</b>	<b>138.8</b>	<b>23.7</b>	<b>162.6</b>	<b>123.3</b>	<b>39.3</b>	<b>32%</b>
Economic data	UM	USA & Canada	Mexico	2022	2021	2022-2021	%
Revenues Unrelated	€/mil	2,130.7	351.2	2,481.9	1,752.0	729.9	42%
Revenue related cross border	€/mil	51.0	14.4	65.4	23.9	41.5	174%
Profit (Loss) before income tax	€/mil	239.9	-590.2	-350.3	107.6	-457.9	-425%
Income tax accrued	€/mil	48.3	8.1	56.4	-2.8	59.2	2132%
Tangible assets other than cash and cash equivalents	€/mil	12,876.9	841.2	13,718.1	11,410.2	2,307.9	20%
Number of employees	no.	1,775	325	2,100	1,914	186	10%
Accumulated earnings	€/mil	1,104.5	-32.8	1,071.7	913.7	158.0	17%
Corporation Stock	€/mil	23,185.6	1,702.2	24,887.8	17,383.3	7,504.5	43%
TTC Rate	%	24.6%	-1.1%				
TTC in relation to revenues	%	6.4%	6.5%				
Taxes borne in relation to revenues	%	3.6%	1.8%				
Taxes collected in relation to revenues	%	2.8%	4.7%				

## Latin America – main countries

	UM	Argentina	Brazil	Chile	Colombia	Costa Rica	Guatemala	Panama	Peru	2022	2021	2022-2021	%
<b>Taxes Borne</b>	<b>€/mil</b>	<b>53.6</b>	<b>812.6</b>	<b>131.5</b>	<b>400.9</b>	<b>1.4</b>	<b>6.3</b>	<b>32.1</b>	<b>136.4</b>	<b>1,574.8</b>	<b>1,392.7</b>	<b>182.1</b>	<b>13%</b>
Profit taxes	€/mil	22.1	135.5	71.8	285.5	0.6	5.8	29.5	113.9	664.8	753.9	-89.0	-12%
Income tax paid	€/mil	19.3	135.5	71.8	262.8	-	5.7	29.5	113.9	638.6	730.9	-92.3	-13%
Property taxes	€/mil	1.3	30.2	3.6	1.6	0.2	0.2	0.4	2.6	40.1	19.1	21.0	110%
Employment Taxes	€/mil	18.7	72.1	-	13.8	0.6	0.3	0.5	2.1	108.1	89.8	18.3	20%
Taxes on products and services	€/mil	7.9	574.6	17.9	77.2	-	-	0.2	15.6	693.4	479.3	214.2	45%
Planet/Environmental Taxes	€/mil	3.6	0.2	38.1	22.9	0.0	0.0	1.5	2.1	68.3	50.6	17.7	35%
<b>Taxes Collected</b>	<b>€/mil</b>	<b>166.8</b>	<b>2,071.8</b>	<b>61.3</b>	<b>70.1</b>	<b>2.9</b>	<b>5.6</b>	<b>5.5</b>	<b>96.2</b>	<b>2,480.3</b>	<b>2,356.2</b>	<b>124.1</b>	<b>5%</b>
Profit taxes	€/mil	10.6	18.5	9.8	20.6	0.0	0.9	4.7	1.6	66.8	64.3	2.5	4%
Property Taxes	€/mil	-	-	-	-	-	-	-	-	-	-	-	0%
Employment Taxes	€/mil	18.7	42.6	19.8	10.9	0.2	0.1	0.4	8.1	100.8	85.5	15.3	18%
Taxes on products and services	€/mil	137.4	2,010.8	31.7	24.7	2.7	4.6	0.4	86.5	2,298.8	2,195.3	103.5	4.7%
Planet/Environmental Taxes	€/mil	-	-	-	13.9	-	-	-	-	13.9	11.1	2.8	25%
<b>Total Tax Contribution (cash accounting)</b>	<b>€/mil</b>	<b>220.4</b>	<b>2,884.5</b>	<b>192.8</b>	<b>471.0</b>	<b>4.3</b>	<b>12.0</b>	<b>37.6</b>	<b>232.6</b>	<b>4,055.1</b>	<b>3,748.9</b>	<b>306.2</b>	<b>8%</b>
<b>Economic data</b>	<b>UM</b>	<b>Argentina</b>	<b>Brazil</b>	<b>Chile</b>	<b>Colombia</b>	<b>Costa Rica</b>	<b>Guatemala</b>	<b>Panama</b>	<b>Peru</b>	<b>2022</b>	<b>2021</b>	<b>2022-2021</b>	<b>%</b>
Revenues Unrelated	€/mil	3,216.0	10,435.1	6,897.2	2,837.0	21.2	95.8	179.7	1,516.6	25,198.6	18,971.6	6,226.9	33%
Revenue related cross border	€/mil	27.3	295.7	476.5	7.9	1.0	2.5	0.3	0.1	811.4	113.8	697.6	613%
Profit (Loss) before income tax	€/mil	261.1	241.7	1,935.2	932.3	1.9	44.2	79.6	448.8	3,944.7	1,341.8	2,602.9	194%
Income tax accrued	€/mil	44.2	225.8	374.2	371.0	0.4	5.6	23.2	138.4	1,182.9	595.6	587.4	99%
Tangible assets other than cash and cash equivalents	€/mil	2,402.1	4,198.6	7,525.3	3,558.7	29.4	359.3	416.9	2,803.7	21,294.1	18,602.9	2,691.2	14%
Number of employees	no.	4,032	7,506	2,197	2,327	35	92	96	1,075	17,360	18,762	-1,402	-7%
Accumulated earnings	€/mil	765.4	295.8	1,305.0	874.9	-85.9	175.1	128.8	-340.2	3,118.9	6,788.5	-3,669.6	-54%
Corporation Stock	€/mil	1,097.7	14,772.4	22,150.2	1,932.2	275.9	264.2	437.7	2,896.8	43,827.0	36,381.3	7,445.7	20%
TTC Rate	%	18.2%	88.4%	6.6%	37.5%	42.1%	14.2%	39.1%	28.9%				
TTC in relation to revenues	%	6.8%	26.9%	2.6%	16.6%	19.3%	12.2%	20.9%	15.3%				
Taxes borne in relation to revenues	%	1.7%	7.6%	1.8%	14.1%	6.2%	6.4%	17.8%	9.0%				
Taxes collected in relation to revenues	%	5.1%	19.3%	0.8%	2.5%	13.2%	5.7%	3.0%	6.3%				

### Latin America – minor countries<sup>(1)</sup>

<b>Economic data</b>	<b>UM</b>	<b>Uruguay</b>	<b>2022</b>	<b>2021</b>	<b>2021-2020</b>	<b>%</b>
Revenues Unrelated	€/mil	0.3	<b>0.3</b>	<b>1.6</b>	<b>-1.2</b>	<b>-80%</b>
Revenue related cross border	€/mil	-	<b>-</b>	<b>0.0</b>	<b>-0.0</b>	<b>0%</b>
Profit (Loss) before income tax	€/mil	-0.2	<b>-0.2</b>	<b>1.2</b>	<b>-1.4</b>	<b>-119%</b>
Income tax accrued	€/mil	-	<b>-</b>	<b>0.1</b>	<b>-0.1</b>	
Income tax paid	€/mil	0.2	<b>0.2</b>	<b>0.0</b>	<b>0.1</b>	<b>0%</b>
Tangible assets other than cash and cash equivalents	€/mil	0.0	<b>0.0</b>	<b>0.0</b>	<b>-0.0</b>	<b>0%</b>
Number of employees	no.	1	<b>1</b>	<b>1</b>	<b>-</b>	<b>0%</b>
Accumulated earnings	€/mil	0.4	<b>0.4</b>	<b>-0.8</b>	<b>1.2</b>	<b>157%</b>
Corporation Stock	€/mil	-	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

(1) Beyond what is shown, in some tax jurisdictions the Group is present through entities in pre-operations phase and/or in liquidation and whose overall values are immaterial. For this reason, these countries are not represented in the report. They are: El Salvador.



## Africa and Oceania – main countries

	UM	South Africa	2022	2021	2022-2021	%
<b>Taxes Borne</b>	<b>€/mil</b>	0.1	<b>0.1</b>	-	<b>0.1</b>	
Profit taxes	€/mil	0.1	<b>0.1</b>	-	<b>0.1</b>	
Income tax paid	€/mil	0.1	<b>0.1</b>	-	<b>0.1</b>	
Property taxes	€/mil	-	-	-	-	<b>0%</b>
Employment Taxes	€/mil	-	-	-	-	<b>0%</b>
Taxes on products and services	€/mil	-	-	-	-	<b>0%</b>
Planet/Environmental Taxes	€/mil	-	-	-	-	<b>0%</b>
<b>Taxes Collected</b>	<b>€/mil</b>	<b>4.2</b>	<b>4.2</b>	<b>3.8</b>	<b>0.4</b>	<b>10%</b>
Profit taxes	€/mil	0.4	<b>0.4</b>	<b>0.2</b>	<b>0.2</b>	<b>132%</b>
Property Taxes	€/mil	-	-	-	-	<b>0%</b>
Employment Taxes	€/mil	3.9	<b>3.9</b>	<b>3.7</b>	<b>0.2</b>	<b>5%</b>
Taxes on products and services	€/mil	-	-	-	-	<b>0%</b>
Planet/Environmental Taxes	€/mil	-	-	-	-	<b>0%</b>
<b>Total Tax Contribution (cash accounting)</b>	<b>€/mil</b>	<b>4.4</b>	<b>4.4</b>	<b>3.8</b>	<b>0.5</b>	<b>14%</b>
<b>Economic data</b>	<b>UM</b>	<b>South Africa</b>	<b>2022</b>	<b>2021</b>	<b>2022-2021</b>	<b>%</b>
Revenues Unrelated	€/mil	120.5	<b>120.5</b>	<b>133.3</b>	<b>-12.9</b>	<b>-10%</b>
Revenue related cross border	€/mil	0.2	<b>0.2</b>	<b>7.2</b>	<b>-7.0</b>	<b>-97%</b>
Profit (Loss) before income tax	€/mil	-16.9	<b>-16.9</b>	<b>-1.8</b>	<b>-15.1</b>	<b>-835%</b>
Income tax accrued	€/mil	-	-	-	-	<b>0%</b>
Tangible assets other than cash and cash equivalents	€/mil	384.3	<b>384.3</b>	<b>1,271.6</b>	<b>-887.3</b>	<b>-70%</b>
Number of employees	no.	182	<b>182</b>	<b>178</b>	<b>4</b>	<b>2%</b>
Accumulated earnings	€/mil	-166.3	<b>-166.3</b>	<b>-223.7</b>	<b>57.4</b>	<b>26%</b>
Corporation Stock	€/mil	689.7	<b>689.7</b>	<b>1,151.5</b>	<b>-461.9</b>	<b>-40%</b>
TTC Rate	%	-0.7%				
TTC in relation to revenues	%	3.6%				
Taxes borne in relation to revenues	%	0.1%				
Taxes collected in relation to revenues	%	3.5%				

## Africa and Oceania – minor countries<sup>(1)</sup>

Economic data	UM	Australia	Kenya	Morocco	New Zealand	Zambia	2022	2021	2022-2021	%
Revenues Unrelated	€/mil	45.2	0.0	4.4	3.9	7.4	60.8	86.0	-25.2	-29%
Revenue related cross border	€/mil	1.6	-	-	0.3	-	1.9	2.7	-0.8	-29%
Profit (Loss) before income tax	€/mil	-25.4	-0.5	-2.4	0.2	0.4	-27.7	-18.4	-9.3	-50%
Income tax accrued	€/mil	0.0	-	0.0	0.1	-	0.1	2.1	-2.0	-94%
Income tax paid	€/mil	0.0	-	-	0.1	-	0.1	-0.4	0.5	123%
Tangible assets other than cash and cash equivalents	€/mil	334.3	0.0	0.9	0.1	26.7	362.0	316.8	45.1	14%
Number of employees	no.	95	2	39	6	6	148	139	9	6%
Accumulated earnings	€/mil	-66.9	-3.9	1.5	-0.4	-7.1	-76.8	-55.9	-20.9	-37%
Corporation Stock	€/mil	496.6	2.7	59.8	2.0	9.5	570.6	434.8	135.8	31%

(1) Beyond what is shown, in some tax jurisdictions the Group is present through entities in pre-operations phase and/or in liquidation and whose overall values are immaterial. For this reason, these countries are not represented in the report. They are: Namibia, Ethiopia and Egypt.

## Asia - main countries

	UM	India	2022	2021	2022-2021	%
<b>Taxes Borne</b>	<b>€/mil</b>	<b>1.4</b>	<b>1.4</b>	<b>0.4</b>	<b>1.0</b>	<b>260%</b>
Profit taxes	€/mil	1.4	1.4	0.4	1.0	260%
Income tax paid	€/mil	1.4	1.4	0.4	1.0	246%
Property taxes	€/mil	-	-	-	-	0%
Employment Taxes	€/mil	-	-	-	-	0%
Taxes on products and services	€/mil	-	-	-	-	0%
Planet/Environmental Taxes	€/mil	-	-	-	-	0%
<b>Taxes Collected</b>	<b>€/mil</b>	<b>5.4</b>	<b>5.4</b>	<b>2.2</b>	<b>3.3</b>	<b>149%</b>
Profit taxes	€/mil	3.0	3.0	1.1	1.9	169%
Property Taxes	€/mil	-	-	-	-	0%
Employment Taxes	€/mil	1.4	1.4	0.9	0.5	52%
Taxes on products and services	€/mil	1.1	1.1	0.2	0.9	0%
Planet/Environmental Taxes	€/mil	-	-	-	-	0%
<b>Total Tax Contribution (cash accounting)</b>	<b>€/mil</b>	<b>6.9</b>	<b>6.9</b>	<b>2.6</b>	<b>4.3</b>	<b>166%</b>
<b>Economic data</b>	<b>UM</b>	<b>India</b>	<b>2022</b>	<b>2021</b>	<b>2022-2021</b>	<b>%</b>
Revenues Unrelated	€/mil	42.2	42.2	14.4	27.8	193%
Revenue related cross border	€/mil	9.0	9.0	7.5	1.5	20%
Profit (Loss) before income tax	€/mil	-20.7	-20.7	-5.7	-15.1	-267%
Income tax accrued	€/mil	-	-	0.1	-0.1	
Tangible assets other than cash and cash equivalents	€/mil	225.6	225.6	320.3	-94.7	-30%
Number of employees	no.	397	397	418	-21	-5%
Accumulated earnings	€/mil	-23.3	-23.3	-22.2	-1.1	5%
Corporation Stock	€/mil	210.9	210.9	189.3	21.6	11%
TTC Rate	%	-70%				
TTC in relation to revenues	%	13.5%				
Taxes borne in relation to revenues	%	2.8%				
Taxes collected in relation to revenues	%	10.6%				

## Asia – minor countries<sup>(1)</sup>

Economic data	UM	China	Indonesia	Israel	Japan	Singapore	South Korea	Taiwan	2022	2021	2022-2021	%
Revenues Unrelated	€/mil	0.0	-0.0	1.2	176	0.4	30.7	1.3	51.2	39.8	11.4	29%
Revenue related cross border	€/mil	0.4	-	-	0.2	-	0.1	0.0	0.7	0.6	0.1	20%
Profit (Loss) before income tax	€/mil	-3.5	-0.1	-0.0	0.1	-2.3	-1.8	-1.4	-9.1	-10.7	1.7	16%
Income tax accrued	€/mil	-	-	0.0	-0.0	0.0	0.0	-	-0.0	0.1	-0.1	-117%
Income tax paid	€/mil	-	-	0.0	0.0	-	0.0	-	0.0	0.0	-0.0	0%
Tangible assets other than cash and cash equivalents	€/mil	0.2	0.0	0.0	0.3	0.2	8.1	1.1	10.0	8.4	1.6	19%
Number of employees	no.	12	-	1	21	2	43	10	89	81	8	10%
Accumulated earnings	€/mil	-3.7	-3.0	-	1.4	-76	-24.0	-1.7	-38.7	-33.2	-5.5	-16%
Corporation Stock	€/mil	3.2	3.7	-	0.2	6.4	34.6	4.8	52.9	59.9	-7.0	-12%

(1) Beyond what is shown, in some tax jurisdictions the Group is present through entities in pre-operations phase and/or in liquidation and whose overall values are immaterial. For this reason, these countries are not represented in the report. They are: Saudi Arabia and Vietnam.

## Reconciliations with the 2022 Integrated Annual Report

In the following paragraphs, a reconciliation of data represented in the Tax Transparency Report is made with respect to the contents of the [Integrated Annual Report 2022](#).

This reconciliation is necessary given the different methods for drafting the Tax Transparency Report – which have been changed by the OECD rules for Country-by-Country Reporting – with respect to the principles adopted for the drafting of the Consolidated Financial Statements.

€/mil			
Items subject to reconciliation	Tax Transparency Report	Consolidated Financial Statements	Difference to be reconciled
Third party revenues	170,151	140,518	-37,633
Earnings before taxes	4,411	8,741	4,330
Tangible assets	93,300	88,615	-4,685
Taxes paid	1,800	1,934	134

### Third party revenues

The deviations between the data given in the Tax Transparency Report and the data in the [Integrated Annual Report 2022](#) are:

- i. Derivatives (-25,827 million euros):** for the purposes of the Integrated Annual Report, derivatives are the responsibility of the companies that do not operate in the market (direct balance sheet accounting management) while in the individual financial statements of the countries that operate on the market they are recognized in the income statement;
- ii. Financial income (-8,287 million euros):** for the purposes of the Integrated Annual Report the financial data for financial income is entered in the financial statements on a specific line of the Profit and Loss statement that is different than the revenue item, which differs from what is requested by the OECD rules<sup>(48)</sup> applied for the purposes of the Tax Transparency Report;
- iii. Revenue from discontinued operations<sup>(49)</sup> (-3,998 million euros):** for the purposes of the Integrated Annual Report, the revenues related to Group components (branches, companies or geographical areas) that have been discontinued or classified as held for sale are stated in a single net

amount on a separate line of the Profit and Loss statement, whereas for the purposes of the Tax Transparency Report these revenues are represented analytically among the results of the companies within the scope;

- iv. Fair value of companies consolidated using the equity method (436 million euros):** for purposes of the Integrated Annual Report, revenues related to impairment operations on companies consolidated using the equity method are included in the year results. For the purposes of the Tax Transparency Report, the results related to the companies consolidated using the equity method are excluded as these entities are not relevant;
- v. Dividends from companies consolidated using the equity method (-262 million euros):** for purposes of the Integrated Annual Report, dividends received from consolidated companies<sup>(50)</sup> are eliminated. These revenues are considered in the Tax Transparency Report;
- vi. Other consolidation adjustments** made on the basis of the application of international accounting principles **(305 million euros<sup>(51)</sup>)**.

€/mil	
<b>Third Party Revenues – Tax Transparency Report</b>	<b>178,151</b>
Derivatives	-25,827
Financial income	-8,287
Revenues from discontinued operations	-3,998
Fair value of companies consolidated using the equity method	436
Dividends from companies consolidated using the equity method	-262
Other consolidation adjustments	305
<b>Revenues – Consolidated Financial Statements</b>	<b>140,518</b>

(48) For the purposes of Country-by-Country Reporting (BEPS Project – Action 13).

(49) For more details regarding the definition of discontinued operations, refer to the Integrated Annual Report.

(50) Using the full, proportional and equity method.

(51) These include the following specific situations listed by way of example only: (i) elimination of intercompany margins and gains, (ii) recognition of any negative goodwill following M&A transactions, (iii) capitalizations of financial expenses in cases of equity injection and (iv) adjustments to contracts with physical delivery stated at fair value.



## Earnings before taxes

The deviations between the data given in the Tax Transparency Report and the data in the Integrated Annual Report are:

- i. Impairment on shareholdings (3,326 million euros):** the accounting records for equity investments consolidated with the full method does not have an impact on the Profit and Loss statement. These accounting records however involve a reduction in profit before taxes for the purposes of the Tax Transparency Report;
- ii. Derivative management (1,467 million euros):** for the purpose of the Integrated Annual Report, the accounting records related to the reversal of the Cash Flow Hedge reserve for a possibly different qualification of the derivatives between the stand alone view of the Company and that of the Group do not have any impact on the Profit and Loss statement. These accounting records however involve a reduction in profit before taxes for the purposes of the Tax Transparency Report;

- iii. Company dividends measured at equity (-262 million euros):** for the purposes of the Integrated Annual Report, dividends received from consolidated companies are eliminated. These revenues are considered in the Tax Transparency Report;
- iv. Results from discontinued operations (-154 million euros):** for the purposes of the Integrated Annual Report, the results related to Group components (branches, companies or geographical areas) that have been discontinued or classified as held for sale are stated as a single net amount on a separate line of the Profit and Loss statement, whereas for the purposes of the Tax Transparency Report these revenues are represented analytically among those of the companies within the scope;
- v. Other consolidation adjustments** made on the basis of the application of international accounting principles **(-47 million euros<sup>(52)</sup>)**.

€/mil	
<b>Earnings before taxes – Tax Transparency Report</b>	<b>4,411</b>
Impairment losses on shareholdings	3,326
Derivative management	1,467
Dividends from companies accounted for using the equity method	-262
Results from discontinued operations	-154
Other consolidation adjustments	-47
Earnings before taxes – Integrated Annual Report	8,741

## Tangible assets

The deviations between the data given in the Tax Transparency Report and the data in the Integrated Annual Report

are due to Adjustments from consolidation **(-4,685 million euros)**.<sup>(53)</sup>

€/mil	
<b>Tangible Assets – Tax Transparency Report</b>	<b>93,300</b>
Adjustments from consolidation	-4,685
Consolidated Tangible Assets	88,615

(52) These include the following specific situations listed by way of example only: (i) adjustments for adaptation of value following impairment tests and consequent adjustments of depreciation and amortization, (ii) elimination of gains from intercompany sales of assets and consequent adjustments of depreciation and amortization and (iii) changes during the year in the scope of consolidation, (iv) provision (or release) of funds in the Profit and Loss statement, (v) result of companies accounted for using the equity method, and (vi) intercompany capital losses (capital gains).

(53) Adjustments due to the effects of (i) Purchase Price Allocations made during acquisition of controlling interests in companies, (ii) impairment of cash generating units, (iii) capitalizations of financial expenses of fixed assets realized internally, (iv) elimination of any gains during the sale of intercompany assets and (v) elimination of effects related to discontinued operations and assets qualified as Available for Sale.

## Income taxes paid

The data of income taxes paid for the purposes of the [Integrated Annual Financial Report](#) is determined through the method of indirect recognition, provided for under international accounting principle IAS 7.

Contrarily, the Tax Transparency Report recognizes the data for income taxes paid on the basis of information col-

lected from the individual companies in the different tax jurisdictions, consistent with the rules laid down by the OECD for Country-by-Country Reporting.

The deviation is due to the different methods of recognizing the data and to the principles to which they refer.<sup>(54)</sup>

€/mil	
Taxes paid – Tax Transparency Report	1,800
Differences due to the use of the indirect method for the purposes of the statement of cash flows	134
Taxes paid – Integrated Annual Report	1,934

## Tax Rate

With reference to the reconciliation between the theoretical and actual tax rate, reference should be made to the analysis contained in the Integrated Annual Report 2022.

(54) By way of example only, the differences in 2022 can be related to: (i) inclusion in the data of the Integrated Annual Report of the taxes related to dividends (excluded from the data in the Tax Transparency Report) and (ii) changes during the year in the scope of consolidation.



TOPIC VIEW

5.

# Appendix

## 5.1 Methodological note

## 5.2 Sustainability Statement: performance indicators

## 5.3 Content Index

GRI

SASB

TCFD

EUROPEAN COMMISSION GUIDELINES ON  
REPORTING CLIMATE-RELATED INFORMATION

WEF

SUSTAINABLE FINANCE DISCLOSURE  
REGULATION (PAI)

HUMAN RIGHTS

## 5.4 Our position on and commitment to the European Taxonomy



# Methodological note

[2-1](#) | [2-2](#) | [2-3](#) | [2-4](#) | [2-5](#) | [2-29](#) | [3-1](#) | [3-2](#) |

Since 2003 Enel has been publishing a Sustainability Report each year, at the same time as the Group Consolidated Annual Report.

In compliance with the requirements of Italian Legislative Decree 254 of December 30, 2016, "Implementation of Directive 2014/95/EU of the European Parliament and of the Council of October 22, 2014, amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large companies and groups", Enel has been publishing a Consolidated Non-Financial Statement (NFS) since 2017. The Sustainability Report will constitute Enel's NFS with effect from the 2019 financial year. Accordingly, from that financial year on, the NFS is no longer published as a separate document. This Report of the Enel Group at December 31, 2022 was therefore drawn up in compliance with Italian Legislative Decree 254/16 and the 2019 Budget Act and article 5 of the CONSOB Regulations adopted with Resolution no. 20267 of 18 January 2018 and it is a separate document with respect to the Report on Operations. The document is published in the "Investors" section of the Enel website ([www.enel.com](http://www.enel.com)).

The Sustainability Report 2022 is addressed to the Enel Group's stakeholders and is designed to present the actions taken in pursuit of the Group's sustainability goals and thus to respond to the legitimate expectations of all stakeholders, providing a complete overview of the most significant impacts on the economy, the environment and on the people

of the Enel Group, including on human rights and how they manage these impacts.

With respect to previous years, the structure of this document has been redefined, providing an entire section on the materiality analysis in a specific chapter, "[Materiality analysis process and results for 2022](#)" and attaching a specific table linking the topics and information required by the European Regulation that regulates disclosures in the area of sustainable finance (SFDR, Sustainable Finance Disclosure Regulation) with content provided in this document, indicating the specific chapter of reference in the document. Furthermore, a separate section was prepared for reporting related to the just transition, in line with the main sustainability trains (see chapter "[Our commitment to a just transition: leaving no one behind](#)").

To the extent necessary to ensure an understanding of the Company's activities, performance, results and impact, this document covers environmental, social, labor, human rights and active and passive anti-corruption topics that are material to Enel, in view of the Company's activities and characteristics, according to the process described below (see the chapter "[Materiality analysis process and results for 2022](#)").

The following table shows the areas required by Italian Legislative Decree 254/16, specifying the document chapter in which they are discussed.

Information and in-depth analyses on the issues and indicators presented in this Report can be requested from:

**Enel SpA**  
**Innovability® Function (Innovation and Sustainability)**  
**Sustainability Planning and Performance Management**  
**and Human Rights**

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E-mail [sustainability@enel.com](mailto:sustainability@enel.com)  
Web <https://www.enel.com/it/investors1>

Topic of the Report/ Italian Legislative Decree 254/16	Topic of the materiality analysis	Report chapter	Risks	Policies and management models	Activities and results
Environment	Decarbonization of the energy mix	Zero emissions ambition	"Zero emissions ambition" chapter	"Zero emissions ambition" chapter	"Zero emissions ambition" chapter
	Conservation of ecosystems and environmental management	Conservation of natural capital	"Sound governance" chapter	"Conservation of natural capital" chapter	"Conservation of natural capital" chapter
Social	Engaging global and local communities	Engaging communities	"Sound governance" chapter	"Engaging communities" chapter	"Engaging communities" chapter
	Sustainable supply chain	Sustainable supply chain	"Sound governance" chapter	"Sustainable supply chain" chapter	"Sustainable supply chain" chapter
Employment and labor-related	People management, development and motivation	Empowering Enel people	"Sound governance" chapter	"Empowering Enel people" chapter	"Empowering Enel people" chapter
	Occupational health and safety	Occupational health and safety	"Sound governance" chapter	"Occupational health and safety" chapter	"Occupational health and safety" chapter
Human rights	Sound governance and fair corporate conduct				
	People management, development and motivation				
	Engaging global and local communities	Managing human rights	"Sound governance" chapter	"Managing human rights" and "Sound governance" chapters	"Managing human rights" and "Sound governance" chapters
	Conservation of the ecosystems and environmental management	Sound governance			
	Sustainable supply chain				
Active and passive fight against corruption	Sound governance and fair corporate conduct	Sound governance	"Sound governance" chapter	"Sound governance" chapter	"Sound governance" chapter

## How this document has been constructed

The Sustainability Report 2022 was prepared in compliance with the reporting standards “Consolidated set of GRI Standards” defined by GRI in 2021 with the inclusion of the GRI Universal Standard 2021, and also considering the Electric Utilities Disclosure supplement dedicated to the sector issued in 2013, also by GRI and still applicable today.

Moreover, for comprehensive reporting in relation to the material topics identified following the materiality analysis, the directors deemed it necessary to include several additional disclosures, as more fully specified in this document. This information, in compliance with standard GRI 1: Fundamental Principles 2021, the disclosures in question were subjected to the same technical rigor required by the reporting standard adopted. The reporting standards adopted, as described above, comply with the disclosure obligations pursuant to Italian Legislative Decree 254/16 art. 1 letter “f” and art. 3, par. 3, which the directors decided to adopt organically in order to fully represent the social and environmental topics – in compliance with the mentioned decree – of significance for the Enel Group in consideration of the Group structure, the specific business sectors, and the reference geographical areas.

Furthermore, the Appendix to the Sustainability Report contains specific tables of reconciliation with indicators proposed by the WEF white paper “Toward Common Metrics and Consistent Reporting of Sustainable Value Creation” and with the indicators proposed by the Sustainability Accounting Standards Board (SASB – in relation to Enel’s core business area in the Electric Utilities & Power Generators Sector) as well as a specific table linking the topics and information related to the protection of human rights and the Group’s Human Rights Policy. Starting from 2022, a specific table is attached that links the

topics and information required by the European Regulation that regulates disclosures in the area of sustainable finance (SFDR). The Sustainability Report 2022 also responds to the qualitative indications of the Taskforce on Climate-related Financial Disclosures (TCFD) and the UN Guiding Principles Reporting Framework; the alignment is pointed out in the TCFD Content Index, which includes the section of the financial statements that cover the qualitative disclosure requests of the TCFD and European Community Climate Guidelines.

The Sustainability Report is part of the Enel corporate reporting system, and the information it provides is more detailed than and supplementary to the annexed documents cross referenced in the Report. The non-financial information to be presented within the various corporate reporting system documents is selected based on the materiality analysis results and considering the approach set down in “Reporting on enterprise value”, released in December 2020 by the main reference International organizations (CDP, CDSB, GRI and SASB). In particular, the content formulation process was based on the principles of relevance (or “materiality”), stakeholder inclusivity, sustainability context and completeness of the data and information: Enel provides concise information on its performance in specific sections of the Sustainability Report (see [“Our sustainable progress”](#) and [“Our performance”](#)); these chapters contain descriptions also of the goals and associated progress referred to the Sustainable Development Goals (SDG), in order to provide full disclosure of all relevant information in the reporting period, together with reliable estimates for the future. The quality of information reported is assured by proceeding in compliance with the principles of accuracy, balance, clarity, completeness, sustainability context, timeliness, and verifiability.



This report is also compliant with the AccountAbility AA1000 Stakeholder Engagement Standard (AA1000SES), and took into account the draft of the ESRS 1 standard – General Requirements prepared by EFRAG (European Financial Reporting Advisory Group), as well as the Value Reporting Foundation – SASB standard. Finally, the main UN SDGs are referenced in the various chapters, in accordance with the instructions in “Linking

the SDGs and the GRI standards” published by GRI in January 2021, and SDG Compass, the guide published in November 2015 and developed by GRI, UN Global Compact and the World Business Council for Sustainable Development (WBCSD) to help companies align their strategies with the SDGs and measure and manage their contribution to the goals.

# Reconciliation of the topics of the materiality analysis and GRI Standards

| 3-1 | 3-2 | 3-3 |

The materiality analysis carried out in compliance with standard GRI 3: 2021 materiality topics made it possible to identify the material topics for the Company. The table contains the codes for the material topics identified with the GRI Standards or the “Aspects” of the GRI supplement

dedicated to the electric utilities sector (“Electric Utilities Sector Disclosures”) of reference, along with an indication of the context internal and external to the organization and the limitations on the scope, and is provided in the chapter [“Materiality analysis process and results for 2022”](#).

## The reporting process

The structure of the Sustainability Report 2022 was developed in accordance with the materiality analysis, focusing more closely on the material topics covered in detail in the dedicated chapters. Likewise, the materiality level of the topics – divided in turn into dedicated sub-topics – influenced the level of detail with which to treat each subject and report the associated GRI indicators (GRI Standards and Electric Utilities Sector Disclosure) and also the choice of the most appropriate tools to represent them (2022 Integrated Annual Report and appended reports), to which reference was made for the treatment or detailed investigation of more specific topics, respectively, of economic performance and governance. The materiality analysis also

formed the basis for definition of Enel’s sustainability goals for the 2023–2025 period, as illustrated by the Sustainability Plan (see chapter [“We empower sustainable progress”](#)). The GRI Context Index, included in the Appendix, contains references to the 2022 Sustainability Report and the Group’s other reporting instruments. Please also consult the website [www.enel.com](http://www.enel.com) for further information, for example regarding innovation projects or the activities of Enel’s foundations and the 2022 *Informe de Sostenibilidad* by Endesa and Enel Américas for additional details concerning initiatives dedicated to customers and local communities in Spain and South America.

## Drafting and assurance

| 2-5 |

The process of reporting and monitoring the Key Performance Indicators (“KPIs”) relevant to sustainability involves the Holding Company, with regard to transversal issues, and all Group Business Lines, Functions and companies for issues and indicators specific to the various sectors of activity.

Those responsible for collecting, verifying and processing the relevant KPIs are identified within the units involved. The Sustainability Planning and Performance Management and Human Rights unit, which forms part of the Innovability® Function, is responsible for consolidating information and coordinating the entire 2022 Sustainability Report drafting process.

On March 28, 2023, the Report was submitted for analysis and evaluation by the Corporate Governance and Sustainability Committee and on April 5 to the Enel Control and Risk Committee. It was approved by the Board of Directors on April 6. The document will then be presented to the General Shareholders’ Meeting together with the Group’s

Consolidated Annual Report.

This Report has been subjected to a limited audit by and independent auditing company, KPMG SpA, engaged also to audit the Enel Group’s Consolidated Annual Report. The limited audit was conducted in accordance with international standard ISAE 3000 (Revised) 1 and, accordingly, the Code of Ethics for Professional Accountants, including professional independence and verification of the absence of conflicts of interest that may affect the ethical principles of integrity, objectivity, professional competence and diligence, confidentiality and professional conduct. As of the 2021 financial year, the audit approach has been extended to include the comprehensive scrutiny (reasonable assurance) of a set relevant indicators, equal to 36 KPI for 2022 (25 KPI in 2021). This activity is aimed at obtaining greater security regarding the selected indicators as compared to indicators and other information subject to limited scrutiny and makes it possible to guarantee to the various stakeholders of the Sustainability Report greater reliability



of the topics and information it contains. The conclusions of the limited reasonable assurance activity are set out in the Mixed Audit Report on the Enel Group non-financial statement and on the selection of 36 indicators, issued in accordance with Art. 3, paragraph 10 of Italian Legislative Decree 254/16 in compliance with ISAE 3000 Revised, and in compliance with the provisions of the Consob Regulations and the guidelines issued by the professional bodies concerned (i.e. ASSIREVI). The said report, which contains a detailed description of the principles adopted, activities performed and conclusions reached, is attached hereto. The 36 indicators subjected to reasonable assurance are indicated below.

#### **Occupational safety**

1. No of fatalities – Enel
2. No of fatalities – Contractors
3. Fatality frequency rate – Enel
4. Fatality frequency rate – contractors
5. Lost Time Injury Frequency Rate with absence of work greater than 3 days – Enel
6. Lost Time Injury Frequency Rate with absence of work greater than 3 days – Contractor
7. Injury frequency index with absence from work – Enel
8. Injury frequency index with absence from work – Contractors
9. High Potential injury frequency rate – Enel
10. High Potential injury frequency rate – Contractors
11. Frequency rate of total injuries – Enel
12. Frequency rate of total injuries – Contractors
13. “Life changing” injury frequency rate – Enel
14. “Life changing” injury frequency rate – Contractors

#### **Grid resiliency**

15. SAIDI – System Average Interruption Duration Index
16. SAIFI – System Average Interruption Frequency Index

#### **Climate**

17. Direct emissions Scope 1
18. Specific CO<sub>2eq</sub> emissions – Scope 1
19. Scope 2 emissions – market based
20. Scope 2 emissions – location based
21. Scope 3 emissions
22. Intensity of GHG Scope 1 emissions related to power generation

23. Intensity of GHG Scope 1 and 3 emissions related to Integrated Power
24. Absolute Scope 3 GHG emissions relating to gas retail
25. Climate governance
26. Climate strategy
27. Climate Risk Management

#### **Gender diversity**

28. Percentage of female managers and middle managers
29. Percentage of women in the managerial succession and top managerial plans
30. No. of total employees who are women

#### **Supply chain**

31. Qualified suppliers evaluated in relation to social aspects
32. Qualified suppliers evaluated in relation to environmental aspects

#### **Tax transparency**

33. Current Income Tax Rate

#### **Other**

34. Confirmed violations of the Code of Ethics by type, stakeholder, country
35. Commercial complaints on the Group level
36. Number of cyber security incidents managed by CERT, classified with a severity level between 2, 3 and 4

In addition, the report on the green bond, also subjected to limited scrutiny by KPMG SpA according to the criteria indicated in standard ISAE 3000, is annexed to this Report; the related audit report is supplied as an attachment to this Sustainability Report. The Statement of the proportion of activities considered eco-sustainable (Art. 8, Reg. EU 852). The GHG Inventory Statements were audited by DNV GL, with a reasonable level of certainty for Scope 1, Scope 2 and Scope 3 emissions, restricted to natural gas sales activities, and with a limited level of certainty for the other Scope 3 emissions included in the scope of application of the inventory. The audit was conducted according to ISO 4064-3 for compliance of greenhouse gas (GHG) inventories with the WBCSD/WRI Corporate Accounting and Reporting Standard (GHG Protocol).

# Report boundaries

2-2 | 2-3 | 2-4 | 2-5 | 2-6 | 3-2 |

The information and data presented in the Report refer to Enel SpA and the companies within the scope of line-by-line consolidation at December 31, 2022, in accordance with the Group's financial consolidation scope. In addition to the line-by-line consolidation scope, the document also includes the data and information regarding the company Asociación Nuclear Ascó-Vandellós II AIE (ANA CNVII AIE), to which the two Spanish nuclear plants of Ascó and Vandellós are attributed. The company, considered to be a joint operation in line with the provisions of accounting standard IFRS 11,<sup>(1)</sup> is included in the Group's financial scope of consolidation under the proportional method, and is included in this report using the same method to ensure the impacts are adequately represented, given that it is a significant Group entity. The sole exception to the line-by-line consolidation scope are the companies acquired in 2022, for which, on the basis of prevailing practice, as also represented in the Consob report of January 19, 2018<sup>(2)</sup>, it was decided to begin consolidation, with regard to some of the areas covered in this document, with effect from 2023, in the light of the reduced acquisition period. The areas of exclusion have been indicated directly in the specific chapters.

In particular, the main organizational changes affecting the Enel Group in 2022 were:

- completion of the acquisition of 527 MW of hydroelectric plants by Enel Produzione SpA;
- acquisition by Enel X of 50% of Mooney Group SpA, and the subsequent sale to it of all the activities related to the lending services of Enel X in Italy, marketed with the Enel X Pay brand (Enel X Financial Services, CityPoste Payment, PayTipper and Junia Insurance);
- sale of the entire investment held in PJ C Enel Russia completed on October 12, 2022, which involved the sale of all the electricity generation assets in Russia, which include approximately 5.6 GW of conventional capacity and approximately 300 MW of wind capacity in various stages of development;
- completion of the sale of the electricity transmission business in Chile, through the sale of the company Enel Transmisión Chile SA;
- finalization of the sale of 50% of Gridspertise to CVC;
- completion of the sale of the electricity distributing

company in the State of Goiás in Brazil.

For more detailed information on the changes, refer to the 2022 Consolidated Annual Report in the sections "Main changes in the scope of consolidation" and "Significant events in 2022".

If the associated companies (measured at equity in the Consolidated Annual Report) and other entities over which Enel exercises significant influence (including joint ventures) produce substantial impacts, for the purpose of the content of the present document, they are included in the data calculation in proportion to Enel's holding, and specific disclosure is referenced in the text. We invite you to refer to the 2022 Consolidated Annual Report for details of the companies included the scope of consolidation.

In this Statement, the terms "Corporate", "Holding Company" and "Parent Company" refer to Enel SpA, whereas "Group", "Enel" and "Company" refer to Enel SpA and its subsidiaries.

Various deviations from the KPIs and information included in the 2021 Sustainability Report are the result of changes in the Group's scope of consolidation.

The effects of changes in the scope of consolidation, together with any significant changes or limitations of the scope or methods of calculating individual indicators compared with 2021, are expressly indicated in the text and/or the Appendix, along with the effects on the related data. See the notes in the tables in the Appendix for all further details regarding adjustments with respect to already published data, calculation methods, assumptions or significant limitations of indicators.

The data have been thoroughly calculated on the basis of the results of Enel's accounting, non-accounting and other information systems, and validated by the persons responsible in each case. Data determined through the use of estimates and related calculation method have been expressly indicated. In the comparison of the data over time, it should be noted that differences between 2022 and 2021, in absolute and percent terms, have been calculated considering decimal places in some cases not visible in the printed document. In the tables containing quantitative data, percent changes in excess of |100%| are indicated by "-"

(1) A "joint operation" is a joint-control arrangement in which the parties that hold joint control have rights to the assets and obligations for the liabilities associated with the arrangement.

(2) Illustrative report on the results of the consultation and the consequences for regulation, the activities of companies and operators and the interests of investors and savers.

# Performance indicators

Key sustainability performance indicators are presented from page 457 to page 499 and form an integral part of this Sustainability Report. In order to facilitate a reading of the performance indicators in conjunction with the quali-

tative information presented in the document, the quantitative indicators will be reported in a separate booklet in the printed copy. This booklet will be contained in the pocket on the inside back cover.

## Units of measure

- .000 / thousands
- .000 d / thousands of days
- .000 h / thousands of hours
- .000 t / thousands of tons
- % / percentage
- years / years
- cent euros / euro cents
- g/kWh / grams per kilowatt hour
- g/kWh<sub>eq</sub> / grams per equivalent kilowatt hour<sup>(3)</sup>
- GBq per unit / gigabecquerels per unit
- gCO<sub>2</sub>/kWh CO<sub>2</sub> grams per kilowatt hour
- gCO<sub>2eq</sub>/kWh CO<sub>2</sub> equivalent grams per kilowatt hour
- dd / days
- GW / gigawatts
- GWh / gigawatt hours
- h / hours
- h/per cap / hours per capita
- r / rate
- kg / kilograms
- km / kilometers
- kWh / kilowatt hours
- kWh<sub>eq</sub> / equivalent kilowatt hours<sup>(3)</sup>
- kWh/t / kilowatt hours per ton
- kWp / peak kilowatts
- l/kWh / liters per kilowatt hour
- l/kWh<sub>eq</sub> / liters per equivalent kilowatt hour<sup>(3)</sup>
- billions of m<sup>3</sup> / billions of cubic meters
- MJ/kWh<sub>eq</sub> / megajoules per equivalent kilowatt hour<sup>(3)</sup>
- ML / megaliters
- mil million
- mil A4<sub>eq</sub> / millions of equivalent A4 sheets
- mil euros / millions of euros
- Mh / mil h / millions of hours
- MI / mil l / millions of liters
- Mm<sup>3</sup> / mil m<sup>3</sup> / millions of cubic meters
- Mt / mil t / millions of tons
- M tCO<sub>2eq</sub> / mil tCO<sub>2eq</sub> / CO<sub>2</sub> equivalent millions of tons
- M t<sub>eq</sub> / mil t<sub>eq</sub> / millions of equivalent tons
- min / minutes
- Mtoe / millions of tons of oil equivalent
- MW / megawatts
- MWh / megawatt hours
- no. / number

- sec / seconds
- t / tons
- TBq per unit / terabecquerels per unit
- TOE / tons of oil equivalent
- TJ / terajoules
- TWh / Terawatt hours

## Acronyms

- HV High Voltage
- EIB European Investment Bank
- BOD Biochemical Oxygen Demand
- LV Low Voltage
- CCGT Combined Cycle Gas Turbine
- BoD Board of Directors
- CERT Cyber Emergency Readiness Team
- CSV Creating Shared Value
- COD Chemical Oxygen Demand
- CSR Corporate Social Responsibility
- EBT Earnings Before Tax
- EBIT Earnings Before Interest and Tax
- EBITDA Earnings Before Interest, Tax, Depreciation and Amortization
- ESG Environmental Social & Governance
- EGP Enel Green Power
- EPS Earnings per Share
- RT Remote Training
- IPO Initial Public Offering
- IRAP Imposta Regionale sulle Attività Produttive (Regional Business Tax)
- IRES Imposta sul Reddito delle Società (Corporate Income Tax)
- LBG London Benchmarking Group
- MV Medium Voltage
- PCBs Polychlorinated Biphenyls
- R&D Research & Development
- S&P Standard & Poor's
- SRI Socially Responsible Investor
- TSR Total Shareholder Return
- SCIGR Internal Control and Risk Management System
- SDG Sustainable Development Goal
- TCFD Task Force on Climate-related Financial Disclosure
- UN United Nations

(3) Corresponding to the sum of electrical energy and heat.

# Sustainability Statement: performance indicators

# We empower sustainable progress

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
EU1	<b>GENERATION</b>							
	<b>Installed capacity</b>							
	<b>Net efficient generation capacity by primary energy source</b>							
	<b>Thermal net capacity:</b>	(MW)	<b>27,689</b>	<b>33,664</b>	<b>35,623</b>	-5,975	-17.7	Enel
	Coal	(MW)	6,590	6,910	8,903	-320	-4.6	Enel
	CCGT	(MW)	13,894	15,039	15,009	-1,145	-7.6	Enel
	Oil/Gas	(MW)	7,204	11,715	11,711	-4,511	-38.5	Enel
	<b>Nuclear net capacity</b>	(MW)	<b>3,328</b>	<b>3,328</b>	<b>3,328</b>	-	-	Enel
	<b>Renewable net capacity:</b>	(MW)	<b>53,561</b>	<b>50,066</b>	<b>45,016</b>	3,495	7.0	Enel
	Hydroelectric	(MW)	28,355	27,847	27,820	508	1.8	Enel
	Wind	(MW)	15,735	14,903	12,412	832	5.6	Enel
	Geothermal	(MW)	931	915	882	16	1.8	Enel
	Biomass and cogeneration	(MW)	6	6	5	-	-	Enel
	Photovoltaic	(MW)	8,534	6,395	3,897	2,139	33.5	Enel
	<b>Total net electrical capacity</b>	(MW)	<b>84,578</b>	<b>87,058</b>	<b>83,967</b>	-2,480	-2.8	Enel
	<b>Net efficient generation capacity by geographic area</b>							
	<b>Italy</b>	(MW)	<b>26,252</b>	<b>25,609</b>	<b>26,400</b>	643	2.5	Italy
	<b>Iberia</b>	(MW)	<b>22,044</b>	<b>21,140</b>	<b>21,652</b>	904	4.3	Iberia
	<b>Latin America</b>	(MW)	<b>24,524</b>	<b>23,903</b>	<b>21,960</b>	621	2.6	Latin America
	Chile	(MW)	8,409	7,973	7,118	436	5.5	Chile
	Argentina	(MW)	4,419	4,419	4,419	-	-	Argentina
	Colombia	(MW)	3,711	3,589	3,592	122	3.4	Colombia
	Peru	(MW)	2,255	2,294	2,301	-39	-1.7	Peru
	Brazil	(MW)	5,071	4,981	3,922	90	1.8	Brazil
	Uruguay	(MW)	-	-	-	-	-	Uruguay
	Costa Rica	(MW)	81	81	81	-	-	Costa Rica
	Guatemala	(MW)	164	164	164	-	-	Guatemala
	Panama	(MW)	415	401	362	14	3.5	Panama
	<b>North America</b>	(MW)	<b>9,532</b>	<b>7,941</b>	<b>6,643</b>	1,591	20.0	North America
	<b>Europe</b>	(MW)	<b>1,020</b>	<b>6,524</b>	<b>6,402</b>	-5,504	-84.4	Europe
	<b>Africa, Asia and Oceania</b>	(MW)	<b>1,206</b>	<b>1,941</b>	<b>911</b>	-735	-37.9	Africa, Asia and Oceania
	<b>Total net electrical capacity</b>	(MW)	<b>84,578</b>	<b>87,058</b>	<b>83,967</b>	-2,480	-2.8	Enel
	<b>Power generation plants</b>							
	<b>Thermoelectric plants<sup>(1)</sup></b>	(no.)	<b>63</b>	<b>69</b>	<b>71</b>	-6	-8.7	Enel
	Coal plants	(no.)	7	8	10	-1	-12.5	Enel
	CCGT plants	(no.)	20	23	23	-3	-13.0	Enel
	Oil/Gas plants	(no.)	44	48	48	-4	-8.3	Enel
	<b>Nuclear plants</b>	(no.)	<b>4</b>	<b>4</b>	<b>4</b>	-	-	Enel
	<b>Renewable energy plants</b>	(no.)	<b>1,233</b>	<b>1,187</b>	<b>1,173</b>	46	3.9	Enel
	Hydroelectric plants	(no.)	765	739	748	26	3.5	Enel
	Wind plants	(no.)	266	266	262	-	-	Enel
	Photovoltaic plants	(no.)	161	141	122	20	14.2	Enel
	Geothermal plants	(no.)	39	39	39	-	-	Enel



GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	Biomass plants	(no.)	2	2	2	-	-	Enel
OPERATING RESULTS								
EU2	GENERATION							
	Net production by primary energy source							
	Thermal net production	(GWh)	88,811	88,285	75,909	526	0.6	Enel
	Coal	(GWh)	19,722	13,858	13,155	5,864	42.3	Enel
	CCGT	(GWh)	54,436	51,718	43,353	2,718	5.3	Enel
	Oil/Gas	(GWh)	14,652	22,709	19,401	-8,057	-35.5	Enel
	Nuclear net production	(GWh)	26,508	25,504	25,839	1,004	3.9	Enel
	Renewable net production	(GWh)	112,448	108,817	105,360	3,631	3.3	Enel
	Hydroelectric	(GWh)	51,728	57,001	62,437	-5,273	-9.3	Enel
	Wind	(GWh)	43,255	37,791	30,992	5,464	14.5	Enel
	Geothermal	(GWh)	6,117	6,086	6,167	31	0.5	Enel
	Biomass and cogeneration	(GWh)	43	40	1	3	6.5	Enel
	Photovoltaic	(GWh)	11,306	7,899	5,763	3,407	43.1	Enel
	Total net production	(GWh)	227,767	222,605	207,108	5,162	2.3	Enel
	Net production by geographic area							
	Italy	(GWh)	48,460	47,964	42,495	496	1.0	Italy
	Iberia	(GWh)	64,715	57,592	56,269	7,123	12.4	Iberia
	Latin America	(GWh)	75,594	70,376	69,165	5,218	7.4	Latin America
	Chile	(GWh)	22,215	19,034	19,331	3,181	16.7	Chile
	Argentina	(GWh)	11,121	13,099	13,901	-1,978	-15.1	Argentina
	Colombia	(GWh)	13,663	13,241	14,146	422	3.2	Colombia
	Peru	(GWh)	9,615	9,585	8,774	30	0.3	Peru
	Brazil	(GWh)	16,608	12,713	10,713	3,895	30.6	Brazil
	Uruguay	(GWh)	-	-	-	-	-	Uruguay
	Costa Rica	(GWh)	216	198	213	18	9.3	Costa Rica
	Guatemala	(GWh)	659	548	518	111	20.2	Guatemala
	Panama	(GWh)	1,498	1,958	1,569	-460	-23.5	Panama
	North America	(GWh)	23,385	20,356	17,182	3,029	14.9	North America
	Europe	(GWh)	12,513	23,736	20,461	-11,223	-47.3	Europe
	Africa, Asia and Oceania	(GWh)	3,099	2,580	1,537	519	20.1	Africa, Asia and Oceania
	Total net production	(GWh)	227,767	222,605	207,108	5,162	2.3	Enel
	Development of renewables							
	New renewable power <sup>(2)</sup> :	(MW)	4,966	5,176	2,908	-210	-4.1	Enel
	Hydroelectric	(MW)	557	33	15	524	-	Enel
	Wind	(MW)	1,827	2,596	2,086	-769	-29.6	Enel
	Geothermal	(MW)	17	33	4	-16	-48.0	Enel
	Biomass and cogeneration	(MW)	-	1	-	-1	-100.0	Enel
	Photovoltaic	(MW)	2,559	2,513	803	46	1.8	Enel
	NETWORK							
EU4	Total electricity distribution network	(km)	2,024,038	2,233,368	2,232,022	-209,330	-9.4	Enel
	Total high-voltage network	(km)	40,566	46,860	46,661	-6,294	-13.4	Enel
	- of which underground cable	(km)	1,748	1,529	1,992	-1,289	-84.3	Enel
	Total medium-voltage network	(km)	717,992	891,221	894,343	-173,229	-19.4	Enel
	- of which underground cable	(km)	230,216	212,077	223,507	-204,925	-96.6	Enel
	Total low-voltage network	(km)	1,265,480	1,295,287	1,291,018	-29,807	-2.3	Enel
	- of which underground cable	(km)	410,142	387,314	413,636	-379,105	-97.9	Enel
EU4	Electricity distribution network by geographic area							
	Total electricity distribution network Italy	(km)	1,165,131	1,151,482	1,159,921	13,649	1.2	Italy
	High-voltage network	(km)	20	19	20	1	3.0	Italy

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	- of which underground cable	(km)	3	3	11	-3	-100.0	Italy
	Medium-voltage network	(km)	361,775	348,699	357,860	13,076	3.7	Italy
	- of which underground cable	(km)	157,618	154,983	153,073	-154,983	-100.0	Italy
	Low-voltage network	(km)	803,336	802,764	802,041	572	0.1	Italy
	- of which underground cable	(km)	279,646	279,325	278,936	-279,325	-100.0	Italy
	<b>Total electricity distribution network Romania</b>	(km)	<b>133,116</b>	<b>132,334</b>	<b>131,322</b>	782	0.6	Romania
	High-voltage network	(km)	6,531	6,528	6,528	3	0.0	Romania
	- of which underground cable	(km)	315	311	312	-311	-100.0	Romania
	Medium-voltage network	(km)	36,094	35,931	35,630	163	0.5	Romania
	- of which underground cable	(km)	14,648	14,368	13,981	-14,368	-100.0	Romania
	Low-voltage network	(km)	90,491	89,874	89,164	617	0.7	Romania
	- of which underground cable	(km)	21,454	27,586	27,586	-27,586	-100.0	Romania
	<b>Total electricity distribution network Iberia</b>	(km)	<b>317,829</b>	<b>316,506</b>	<b>315,365</b>	1,323	0.4	Iberia
	High-voltage network	(km)	19,763	19,713	19,642	50	0.3	Iberia
	- of which underground cable	(km)	807	805	793	-805	-100.0	Iberia
	Medium-voltage network	(km)	114,673	114,336	114,003	337	0.3	Iberia
	- of which underground cable	(km)	41,747	41,362	41,033	-41,362	-100.0	Iberia
	Low-voltage network	(km)	183,393	182,457	181,720	936	0.5	Iberia
	- of which underground cable	(km)	87,430	86,639	86,024	-86,639	-100.0	Iberia
	<b>Total electricity distribution network Latin America</b>	(km)	<b>407,962</b>	<b>633,047</b>	<b>625,415</b>	-225,085	-35.6	Latin America
	High-voltage network	(km)	14,252	20,600	20,472	-6,348	-30.8	Latin America
	- of which underground cable	(km)	623	721	885	-481	-66.7	Latin America
	Medium-voltage network	(km)	205,450	392,255	386,850	-186,805	-47.6	Latin America
	- of which underground cable	(km)	16,202	15,732	15,420	-8,580	-54.5	Latin America
	Low-voltage network	(km)	188,260	220,192	218,093	-31,932	-14.5	Latin America
	- of which underground cable	(km)	21,612	21,350	21,090	-13,141	-61.6	Latin America
	<b>Lenght of transmission lines by geographic area</b>							
	<b>Brazil (Enel CIEN SA)</b>	(km)	742	742	742	-	-	Brazil
	<b>Energy transported<sup>(3)</sup></b>	(TWh)	507.7	510.6	485.2	-2.9	-0.6	Enel
	<b>SALES</b>							
	<b>Electricity volumes sold by market</b>							
	<b>Italy</b>	(GWh)	<b>97,195</b>	<b>92,768</b>	<b>90,205</b>	4,427	4.8	Italy
	- of which free market	(GWh)	78,334	65,577	59,900	12,757	19.5	Italy
	- of which regulated market	(GWh)	18,861	27,191	30,305	-8,330	-30.6	Italy
	<b>Iberia</b>	(GWh)	<b>79,003</b>	<b>79,458</b>	<b>80,772</b>	-455	-0.6	Iberia
	- of which free market	(GWh)	70,793	68,753	69,430	2,040	3.0	Iberia
	- of which regulated market	(GWh)	8,210	10,705	11,342	-2,495	-23.3	Iberia
	<b>Romania</b>	(GWh)	<b>9,816.0</b>	<b>9,294</b>	<b>8,821</b>	522	5.6	Romania
	- of which free market	(GWh)	9,809	9,036	7,178	773	8.6	Romania
	- of which regulated market	(GWh)	7	258	1,643	-251	-97.3	Romania
	<b>Latin America</b>	(GWh)	<b>135,093.0</b>	<b>127,906</b>	<b>118,388</b>	7,187	5.6	Latin America
	- of which free market	(GWh)	39,317	32,593	23,694	6,724	20.6	Latin America
	- of which regulated market	(GWh)	95,776	95,313	94,694	463	0.5	Latin America
	<b>Total volumes of energy sold</b>	(GWh)	<b>321,107</b>	<b>309,425</b>	<b>298,186</b>	11,682	3.8	Enel
	- of which free market	(GWh)	198,253	175,958	160,202	22,295	12.7	Enel
	- of which regulated market	(GWh)	122,854	133,467	137,984	-10,613	-8.0	Enel
	<b>Volumes sold gas</b>	(bn m³)	<b>10.2</b>	<b>9.9</b>	<b>9.7</b>	0.3	3.5	Enel
	<b>Italy</b>	(bn m³)	<b>4.7</b>	<b>4.3</b>	<b>4.4</b>	0.4	9.9	Italy
	- mass market customers	(bn m³)	3.2	2.9	2.9	0.3	8.9	Italy
	- business customers	(bn m³)	1.6	1.4	1.5	0.2	12.1	Italy
	<b>Iberia</b>	(bn m³)	<b>4.9</b>	<b>5.2</b>	<b>5.0</b>	-0.3	-5.6	Iberia

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	Romania	(bn m³)	0.3	0.2	0.1	0.1	33.0	Romania
	Latin America	(bn m³)	0.3	0.2	0.2	0.1	71.0	Latin America
<b>2-6</b>	<b>ECONOMIC RESULTS<sup>(4)</sup></b>							
	<b>Revenues</b>	(mil euros)	<b>140,517</b>	<b>85,719</b>	<b>66,004</b>	54,798	63.9	Enel
	Italy	(mil euros)	83,508	45,417	32,203	38,091	83.9	Italy
	Iberia	(mil euros)	32,833	21,052	17,170	11,781	56.0	Iberia
	Latin America	(mil euros)	21,334	16,957	13,903	4,377	25.8	Latin America
	Europe	(mil euros)	87	14	2,085	73	-	Europe
	North America	(mil euros)	2,214	1,513	1,367	701	46.3	North America
	Africa, Asia and Oceania	(mil euros)	266	241	153	25	10.4	Africa, Asia and Oceania
	Other, eliminations and adjustments	(mil euros)	275	525	-877	-250	-47.6	Other, eliminations and adjustments
	<b>EBITDA</b>	(mil euros)	<b>19,918</b>	<b>17,567</b>	<b>16,903</b>	2,351	13.4	Enel
	Italy	(mil euros)	6,307	6,633	7,824	-326	-4.9	Italy
	Iberia	(mil euros)	5,230	4,183	3,775	1,047	25.0	Iberia
	Latin America	(mil euros)	6,579	4,143	4,150	2,436	58.8	Latin America
	Europe	(mil euros)	27	-5	509	32	-	Europe
	North America	(mil euros)	940	684	778	256	37.4	North America
	Africa, Asia and Oceania	(mil euros)	83	110	55	-27	-24.5	Africa, Asia and Oceania
	Other, eliminations and adjustments	(mil euros)	752	1,485	-188	-733	-49.4	Other, eliminations and adjustments
	Italy	(%)	31.7	38.5	46.3	-6.8	-	Italy
	Iberia	(%)	26.3	24.3	22.3	2.0	-	Iberia
	Latin America	(%)	33.0	24.0	24.6	9.0	-	Latin America
	Europe	(%)	0.1	0.0	3.0	0.1	-	Europe
	North America	(%)	4.7	4.0	4.6	0.7	-	North America
	Africa, Asia and Oceania	(%)	0.4	0.6	0.3	-0.2	-	Africa, Asia and Oceania
	Other, eliminations and adjustments	(%)	3.8	8.6	-1.1	-4.8	-	Other, eliminations and adjustments
	<b>EBIT</b>	(mil euros)	<b>8,741</b>	<b>5,378</b>	<b>5,463</b>	3,363	62.5	Enel
	<b>Group net income</b>	(mil euros)	<b>5,218</b>	<b>3,758</b>	<b>3,622</b>	1,460	38.9	Enel
	<b>Value generated and distributed for stakeholders<sup>(4)</sup></b>							
	<b>Economic value generated directly:</b>							
	Revenues	(mil euros)	140,821	85,865	66,100	54,956	64.0	Enel
	<b>Economic value distributed:</b>	(mil euros)	<b>131,748</b>	<b>78,684</b>	<b>57,932</b>	53,064	67.4	Enel
	Operating costs	(mil euros)	114,384	62,063	42,634	52,321	84.3	Enel
	Personnel and benefit cost	(mil euros)	3,646	4,296	3,956	-650	-15.1	Enel
	Payment to lenders of capital (shareholders and lenders) <sup>(5)</sup>	(mil euros)	7,691	7,409	7,082	282	3.8	Enel
	Payments to governments	(mil euros)	6,027	4,916	4,260	1,111	22.6	Enel
	<b>Economic value generated</b>	(mil euros)	<b>9,073</b>	<b>7,181</b>	<b>8,168</b>	1,892	26.3	Enel
	<b>Investments</b>							
	<b>Investments<sup>(6)</sup></b>	(mil euros)	<b>14,347</b>	<b>12,997</b>	<b>10,197</b>	1,350	10.4	Enel
	Italy	(mil euros)	4,640	3,842	2,842	798	20.8	Italy
	Iberia	(mil euros)	2,316	2,202	1,638	114	5.2	Iberia
	Latin America	(mil euros)	4,289	3,772	2,859	517	13.7	Latin America
	Europe	(mil euros)	224	456	411	-232	-50.9	Europe
	North America	(mil euros)	2,491	2,293	1,816	198	8.6	North America

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	Africa, Asia and Oceania	(mil euros)	164	217	417	-53	-24.4	Africa, Asia and Oceania
	Total Abroad	(mil euros)	9,484	8,890	7,142	594	6.7	Total Abroad
	<b>Adjustments</b>	(mil euros)	<b>223</b>	<b>265</b>	<b>213</b>	-42	-15.8	Enel

- (1) In some thermal plants, multiple technology units are present.
- (2) New renewable power, excluding disposals and changes in scope, mainly in North, Central and South America.
- (3) The distributed electricity figure for 2021 takes into account a more precise determination of the quantities transported.
- (4) The figures for 2021 have been restated, for comparative purposes only, to take into account the classification under "Net income from discontinued operations" of the results pertaining to the assets held in Russia (sold in Q4 2022), Romania and Greece, as the requirements of IFRS 5 for their classification as "discontinued operations" have been met.
- (5) The amount includes the "Total Tax Borne", which represents the costs for the taxes paid by the Group. The 2021 figures include a more specific determination.
- (6) The data refers only to continuing operations and therefore do not include the figures for 'assets held for sale'.

# Zero emissions ambition, Conservation of natural capital

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
<b>EMISSIONS</b>								
<b>305-1</b>	<b>Direct greenhouse gas emissions (Scope 1)</b>							
	CO <sub>2</sub> emissions from the electricity production and heat	(mil t)	51.93	50.56	44.67	1.37	2.7	Enel
	Other CO <sub>2eq</sub> emissions due to electricity production and other activities <sup>(1)</sup>	(mil tCO <sub>2eq</sub> )	1.14	1.01	0.90	0.13	12.9	Enel
	<b>Total direct emissions (Scope 1)</b>	(mil tCO <sub>2eq</sub> )	<b>53.07</b>	<b>51.57</b>	<b>45.57</b>	1.50	2.9	Enel
<b>305-2</b>	<b>Indirect greenhouse gas emissions (Scope 2)</b>							
	<b>Purchased electricity from the grid<sup>(2)</sup></b>							
	- location based	(mil tCO <sub>2eq</sub> )	<b>0.76</b>	<b>0.81</b>	<b>0.79</b>	-0.05	-6.2	Enel
	- market based	(mil tCO <sub>2eq</sub> )	<b>1.20</b>	<b>1.35</b>	<b>1.30</b>	-0.15	-11.1	Enel
	<b>Distribution and transmission system: energy losses<sup>(3)</sup></b>							
	- location based	(mil tCO <sub>2eq</sub> )	<b>3.26</b>	<b>2.97</b>	<b>2.77</b>	0.29	9.8	Enel
	- market based	(mil tCO <sub>2eq</sub> )	<b>4.86</b>	<b>4.76</b>	<b>4.68</b>	0.10	2.1	Enel
	<b>Total Scope 2</b>							
	- location based	(mil tCO <sub>2eq</sub> )	<b>4.02</b>	<b>3.77</b>	<b>3.56</b>	0.25	6.6	Enel
	- market based	(mil tCO <sub>2eq</sub> )	<b>6.06</b>	<b>6.11</b>	<b>5.98</b>	-0.05	-0.8	Enel
<b>305-3</b>	<b>Other indirect greenhouse emissions (Scope 3)<sup>(4)</sup></b>							
	Supply chain (category 1) <sup>(5)</sup>	(mil tCO <sub>2eq</sub> )	14.18	12.99	11.00	1.19	9.2	Enel
	Coal mining (category 3)	(mil tCO <sub>2eq</sub> )	1.53	1.07	1.06	0.46	43.0	Enel
	Transport of coal by sea (category 3)	(mil tCO <sub>2eq</sub> )	0.35	0.17	0.10	0.18	-	Enel
	Extraction and transport of gas (category 3)	(mil tCO <sub>2eq</sub> )	8.42	10.01	9.13	-1.59	-15.9	Enel
	Transport of other fuels (gas oil, biomass, WDF) (category 3)	(mil tCO <sub>2eq</sub> )	0.01	0.01	0.01	-	-	Enel
	Purchase of electricity for selling to end client (category 3)	(mil tCO <sub>2eq</sub> )	28.40	23.96	23.19	4.44	18.5	Enel
	Transport of raw materials and waste (category 4)	(mil tCO <sub>2eq</sub> )	0.01	0.00	0.00	0.01	-	Enel
	Use of gas sold to end client (category 11)	(mil tCO <sub>2eq</sub> )	22.90	22.25	21.95	0.65	2.9	Enel
	<b>Total indirect emissions (Scope 3)</b>	(mil tCO <sub>2eq</sub> )	<b>75.80</b>	<b>70.46</b>	<b>66.45</b>	5.34	7.6	Enel
<b>305-4</b>	<b>Specific emissions</b>							
	Intensity of GHG Scope 1 emissions <sup>(6)</sup>	(gCO <sub>2eq</sub> /kWh)	<b>233</b>	<b>229</b>	<b>218</b>	4	1.7	Enel
	Intensity of CO <sub>2</sub> emissions related to energy production <sup>(7)</sup>	(gCO <sub>2</sub> /kWh)	<b>225</b>	<b>222</b>	<b>211</b>	3	1.4	Enel
	Intensity of GHG Scope 1 emissions related to energy production (SBTi) <sup>(8)</sup>	(gCO <sub>2eq</sub> /kWh)	<b>229</b>	<b>225</b>	<b>214</b>	4	1.8	Enel
	Intensity of GHG Scope 1 and 3 emissions related to Integrated Power (SBTi) <sup>(9)</sup>	(gCO <sub>2eq</sub> /kWh)	<b>218</b>	<b>203</b>	<b>194</b>	15	7.4	Enel
<b>305-5</b>	<b>Avoided emissions<sup>(10)</sup></b>	(mil t)	<b>81.6</b>	<b>72.8</b>	<b>74.8</b>	8.80	12.1	Enel
<b>305-7</b>	<b>Other atmospheric emissions<sup>(11)</sup></b>							
	SO <sub>2</sub> emissions	(t)	16,602	15,615	20,547	987	6.3	Enel
	NO <sub>x</sub> emissions	(t)	74,225	78,846	76,256	-4,621	-5.9	Enel
	Dust emissions	(t)	1,227	1,099	1,243	128	11.6	Enel
	H <sub>2</sub> S emissions	(t)	5,226	4,772	4,972	454	9.5	Enel
	Hg emissions (thermal and coal)	(t)	0.08	0.05	0.05	0.03	60.0	Enel
	<b>Specific emissions</b>							
	SO <sub>2</sub> emissions	(g/kWh)	0.07	0.07	0.10	-	-	Enel
	NO <sub>x</sub> emissions	(g/kWh)	0.32	0.35	0.36	-0.03	-8.6	Enel



GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	Dust emissions	(g/kWh)	0.005	0.005	0.010	-	-	Enel
<b>305-6</b>	<b>Ozone Depleting Substances emissions</b>							
	<b>Total</b>	(kgCFC-11 <sub>eq</sub> )	<b>43</b>	<b>180</b>	<b>22</b>	-137	-76.1	Enel
<b>2-27</b>	<b>Compliance with environmental laws and regulations<sup>(12)</sup></b>							
	<b>Instances of non-compliance for which monetary and non-monetary sanctions were incurred</b>	(no.)	<b>92</b>	<b>n.d.</b>	<b>n.d.</b>	-	-	Enel
	Instances of non-compliance for which non-monetary sanctions were incurred	(no.)	22	n.d.	n.d.	-	-	Enel
	Instances of non-compliance for which monetary sanctions were incurred	(no.)	70	n.d.	n.d.	-	-	Enel
	Fines for instances of non-compliance with laws and regulations occurred in the current reporting period	(mil euros)	0.01	n.d.	n.d.	-	-	Enel
	Fines for instances of non-compliance with laws and regulations occurred in the previous reporting periods	(mil euros)	0.15	n.d.	n.d.	-	-	Enel
	<b>Environmental disputes</b>							
	Environmental proceedings as defendant	(no.)	168	243	255	-75	-30.9	Enel
	Monetary value	(mil euros)	1.80	5.00	84.71	-3.20	-64.0	Enel
	<b>ENERGY CONSUMPTION</b>							
<b>302-1</b>	<b>Fuel consumption by primary source in TJ</b>							
	<b>from non-renewable sources</b>	(TJ)	<b>1,053,083</b>	<b>1,044,714</b>	<b>949,152</b>	8,369	0.8	Enel
	Coal	(TJ)	206,450	141,528	138,380	64,922	45.9	Enel
	Lignite	(TJ)	-	-	1,353	-	-	Enel
	Fuel oil	(TJ)	35,848	34,787	39,320	1,061	3.0	Enel
	Natural gas	(TJ)	469,425	549,312	457,020	-79,887	-14.5	Enel
	Gas oil	(TJ)	58,486	48,482	39,234	10,004	20.6	Enel
	Uranium	(TJ)	282,872	270,605	273,845	12,267	4.5	Enel
	<b>from renewable resources</b>	(TJ)	<b>54,987</b>	<b>54,588</b>	<b>55,440</b>	399	0.7	Enel
	Biomass, biogas and waste	(TJ)	1,044	1,136	1,936	-92	-8.1	Enel
	Geothermal fluid	(TJ)	53,943	53,452	53,504	491	0.9	Enel
	<b>Total direct consumption</b>	(TJ)	<b>1,108,069</b>	<b>1,099,302</b>	<b>1,004,592</b>	8,767	0.8	Enel
	<b>Fuel consumption by in Mtoe</b>							
	<b>from non-renewable sources</b>	(Mtep)	<b>25.2</b>	<b>25.0</b>	<b>22.5</b>	0.2	0.8	Enel
	Coal	(Mtep)	4.9	3.4	3.3	1.5	44.1	Enel
	Lignite	(Mtep)	-	-	0.03	-	-	Enel
	Fuel oil	(Mtep)	0.9	0.8	0.9	0.1	12.5	Enel
	Natural gas	(Mtep)	11.2	13.1	10.9	-1.9	-14.5	Enel
	Gas oil	(Mtep)	1.4	1.2	0.9	0.2	16.7	Enel
	Uranium	(Mtep)	6.8	6.5	6.5	0.3	4.6	Enel
	<b>from renewable resources</b>	(Mtep)	<b>1.3</b>	<b>1.3</b>	<b>1.4</b>	-	-	Enel
	Biomass, biogas and waste	(Mtep)	0.02	0.03	0.05	-0.01	-33.3	Enel
	Geothermal fluid	(Mtep)	1.3	1.3	1.3	-	-	Enel
	<b>Total direct consumption</b>	(Mtep)	<b>26.5</b>	<b>26.3</b>	<b>23.9</b>	0.2	0.8	Enel
	<b>Incidence of fuel consumption from non-renewable sources</b>							
	Coal	(%)	19.6	11.2	14.6	8.4	-	Enel
	Lignite	(%)	-	-	0.1	-	-	Enel
	Fuel oil	(%)	3.4	2.8	4.1	0.6	-	Enel
	Natural gas	(%)	44.6	43.5	48.2	1.1	-	Enel
	Gas oil	(%)	5.6	3.8	4.1	1.8	-	Enel
	Uranium	(%)	26.9	21.4	28.9	5.5	-	Enel

GRI/ EUS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
<b>302-1</b>	<b>Indirect energy consumption by destination</b>							
	<b>Total energy consumption</b>	(TJ)	<b>11,620</b>	<b>23,878</b>	<b>23,145</b>	-12,258	-51.3	Enel
	<b>RAW MATERIALS</b>							
	<b>Resources used in the production process</b>							
<b>301-1</b>	<b>Consumables</b>							
	Lime	(,000 t)	110.7	61.9	83.9	-22.0	-35.5	Enel
	Ammonia	(,000 t)	37.0	20.4	16.1	16.6	81.4	Enel
	Caustic soda	(,000 t)	47.4	65.0	76.9	-17.6	-27.1	Enel
	Slaked lime	(,000 t)	4.6	3.3	3.8	1.3	39.4	Enel
	Sulfuric/chloride acid	(,000 t)	7.3	8.7	7.5	-1.4	-16.1	Enel
	Other	(,000 t)	34.7	26.8	17.6	7.9	29.5	Enel
	<b>Total</b>	(,000 t)	<b>241.8</b>	<b>186.2</b>	<b>205.8</b>	55.6	29.9	Enel
<b>301-2</b>	<b>Percentage of materials used that derive from recycled material</b>							
	<b>compared to total consumption of each resource</b>							
	Lubricant oil	(%)	3.2	11.9	3.8	-8.7	-	Enel
	Dielectric oil	(%)	53.8	67.0	28.6	-13.2	-	Enel
	Paper for printing	(%)	3.4	2.2	76.0	1.2	-	Enel
	<b>WATER</b>							
	<b>Water withdrawal used by production process</b>							
	By thermoelectric production	(,000 ML )	56.5	52.8	49.1	3.7	7.1	Enel
	By nuclear production	(,000 ML )	19.0	19.6	19.2	-0.6	-3.3	Enel
	By other industrial uses	(,000 ML )	0.5	0.7	0.7	-0.2	-31.7	Enel
	<b>Total water withdrawal</b>	(,000 ML )	<b>76.0</b>	<b>73.1</b>	<b>69.1</b>	2.9	3.9	Enel
	<b>Water requirements by production process<sup>(13)</sup></b>	(l/kWh <sub>eq</sub> )	<b>0.27</b>	<b>0.29</b>	<b>0.29</b>	-0.02	-6.9	Enel
<b>303-3</b>	<b>Water withdrawal by source</b>							
	<b>Withdrawal from scarce source<sup>(14)</sup></b>	(,000 ML )	<b>53.7</b>	<b>56.4</b>	<b>54.4</b>	-2.7	-4.8	Enel
	Surface water (wetlands, lakes, rivers) total	(,000 ML )	37.9	40.5	39.8	-2.6	-6.5	Enel
	- freshwater (≤ 1,000 mg/l Total Dissolved Solids)	(,000 ML )	37.3	40.3	39.5	-3.0	-7.5	Enel
	- other water (> 1,000 mg/l Total Dissolved Solids)	(,000 ML )	0.6	0.2	0.3	0.4	-	Enel
	Ground water (from wells) total	(,000 ML )	9.5	9.9	9.0	-0.4	-3.8	Enel
	- freshwater (≤ 1,000 mg/l Total Dissolved Solids)	(,000 ML )	9.4	9.9	9.0	-0.5	-5.1	Enel
	- other water (> 1,000 mg/l Total Dissolved Solids)	(,000 ML )	0.1	0.0	-	0.1	-	Enel
	Water from aqueduct total	(,000 ML )	6.3	6.0	5.7	0.3	4.2	Enel
	- freshwater (≤ 1,000 mg/l Total Dissolved Solids)	(,000 ML )	6.0	5.3	4.8	0.7	12.7	Enel
	- other water (> 1,000 mg/l Total Dissolved Solids)	(,000 ML )	0.3	0.7	0.9	-0.4	-58.1	Enel
	<b>Withdrawal from non scarce source:</b>	(,000 ML )	<b>22.3</b>	<b>16.7</b>	<b>14.6</b>	5.6	33.4	Enel
	Sea water (used as is and dissalated)	(,000 ML )	22.2	16.6	14.5	5.5	33.2	Enel
	- freshwater (≤ 1,000 mg/l Total Dissolved Solids)	(,000 ML )	5.7	5.0	0.0	0.7	13.6	Enel
	- other water (> 1,000 mg/l Total Dissolved Solids)	(,000 ML )	16.5	11.6	14.5	4.8	41.6	Enel
	from produced water (amount used inside plants)	(,000 ML )	0.1	0.1	0.1	-	-	Enel
	<b>Total withdrawal<sup>(14)</sup></b>	(,000 ML )	<b>76.0</b>	<b>73.1</b>	<b>69.1</b>	2.9	3.9	Enel

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	<b>Percentage of recycled and reused water</b>	(%)	<b>9.4</b>	<b>8.3</b>	<b>8.2</b>	1.1	13.3	Enel
	<b>Water used for once through cooling system</b>							
	<b>Total</b>	(,000 ML )	<b>13,651.7</b>	<b>14,956.3</b>	<b>14,403.8</b>	-1,304.6	-8.7	Enel
	from surface water	(,000 ML )	4,782.6	6,213.0	5,281.3	-1,430.4	-23.0	Enel
	from sea water	(,000 ML )	8,869.2	8,743.3	9,122.5	125.9	1.4	Enel
	<b>Total withdrawals</b>	(,000 ML )	<b>13,727.7</b>	<b>15,011.9</b>	<b>14,455.3</b>	-1,284.2	-8.6	Enel
<b>303-3</b>	<b>Water withdrawal by source in "water stressed" areas<sup>(15)</sup></b>							
	<b>Withdrawal from scarce source</b>	(,000 ML )	<b>12.7</b>	<b>15.5</b>	<b>12.7</b>	-2.8	-17.8	Enel
	Surface water (wetlands, lakes, rivers) total	(,000 ML )	5.8	8.5	7.0	-2.7	-31.6	Enel
	- freshwater (≤ 1,000 mg/l Total Dissolved Solids)	(,000 ML )	5.7	8.5	7.0	-2.8	-32.5	Enel
	- other water (> 1,000 mg/l Total Dissolved Solids)	(,000 ML )	0.1	-	-	-	-	Enel
	Ground water (from wells) total	(,000 ML )	5.8	6.4	4.9	-0.6	-9.7	Enel
	- freshwater (≤ 1,000 mg/l Total Dissolved Solids)	(,000 ML )	5.8	6.4	4.9	-0.6	-9.7	Enel
	- other water (> 1,000 mg/l Total Dissolved Solids)	(,000 ML )	-	-	-	-	-	Enel
	Water from aqueduct total	(,000 ML )	1.1	0.6	0.8	0.5	77.3	Enel
	- freshwater (≤ 1,000 mg/l Total Dissolved Solids)	(,000 ML )	0.8	0.4	0.5	0.4	-	Enel
	- other water (> 1,000 mg/l Total Dissolved Solids)	(,000 ML )	0.3	0.3	0.3	-	-	Enel
	<b>Withdrawal from non scarce source:</b>	(,000 ML )	<b>1.9</b>	<b>1.3</b>	<b>0.8</b>	0.6	43.6	Enel
	Sea water (used as is and dissalated)	(,000 ML )	1.9	1.3	0.8	0.6	43.6	Enel
	- freshwater (≤ 1,000 mg/l Total Dissolved Solids)	(,000 ML )	0.9	0.8	-	0.1	-	Enel
	- other water (> 1,000 mg/l Total Dissolved Solids)	(,000 ML )	1.0	0.5	0.8	0.5	-	Enel
	from produced water (amount used inside plants)	(,000 ML )	-	-	-	-	-	Enel
	<b>Total</b>	(,000 ML )	<b>14.6</b>	<b>16.8</b>	<b>13.5</b>	-2.2	-12.9	Enel
<b>303-4</b>	<b>WATER DISCHARGE</b>							
	<b>Water discharge by destination</b>	(,000 ML )	<b>13,682.4</b>	<b>14,968.0</b>	<b>14,433.7</b>	-1,285.6	-8.6	Enel
	Surface water (wetlands, lakes, rivers)	(,000 ML )	4,785.5	6,189.1	5,275.1	-1,403.7	-22.7	Enel
	Groundwater	(,000 ML )	-	-	1.1	-	-	Enel
	Water in municipal/industrial treatment plants	(,000 ML )	3.0	6.4	8.6	-3.4	-53.5	Enel
	Third party water	(,000 ML )	79.6	89.0	89.0	-9.5	-10.6	Enel
	Seawater	(,000 ML )	8,814.5	8,683.5	9,059.9	131.0	1.5	Enel
<b>303-5</b>	<b>Water consumptions</b>	(,000 ML )	45.2	43.8	37.9	1.4	3.2	Enel
	<b>Consumption in water stresse areas<sup>(15)</sup></b>	(,000 ML )	9.3	10.5	8.3	-1.2	-11.8	Enel
<b>306-3</b>	<b>WASTE PRODUCED</b>							
	Non-hazardous waste <sup>(16)</sup>	(t)	3,300,765	3,008,536	2,268,859	292,229	9.7	Enel
	Hazardous waste	(t)	55,940	64,365	51,816	-8,425	-13.1	Enel
	<b>Total waste produced<sup>(16)</sup></b>	(t)	<b>3,356,705</b>	<b>3,072,901</b>	<b>2,320,675</b>	283,804	9.2	Enel
	of which: ash and gypsum	(t)	1,129,818	744,203	801,726	385,615	51.8	Enel
	of which: oils	(t)	5,273	5,495	8,904	-222	-4.0	Enel
	of which: costruction and demolition waste <sup>(16)</sup>	(t)	1,063,564	1,052,701	627,192	10,863	1.0	Enel
	<b>Total waste sent for recovery<sup>(16)</sup></b>	(%)	<b>84.39</b>	<b>85.30</b>	<b>82.50</b>	-0.9	-	Enel
<b>306-3</b>	<b>Hazardous waste by disposal method<sup>(16)</sup></b>							
	Recycled or sent for recovery	(t)	21,960	38,418	25,183	-16,458	-42.8	Enel
	Landfill	(t)	5,270	7,972	9,348	-2,702	-33.9	Enel
	Incineration with energy recovery	(t)	853	684	1,632	169	24.7	Enel

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	Incineration without energy recovery	(t)	451	752	462	-301	-40.0	Enel
	Other disposal methods	(t)	27,406	16,539	15,191	10,867	65.7	Enel
	<b>Total</b>	(t)	<b>55,940</b>	<b>64,365</b>	<b>51,816</b>	<b>-8,425</b>	<b>-13.1</b>	Enel
	<b>Non-hazardous waste by disposal method<sup>(16)</sup></b>							
	Recovery (including energy recovery)	(t)	2,810,895	2,622,376	1,932,360	188,519	7.2	Enel
	Landfill	(t)	417,728	386,160	336,499	31,568	8.2	Enel
	Incineration with energy recovery	(t)	572	551	459	21	3.8	Enel
	Incineration without energy recovery	(t)	16	103	108	-87	-84.5	Enel
	Other disposal methods	(t)	71,555	39,717	41,532	31,838	80.2	Enel
	<b>Total</b>	(t)	<b>3,300,765</b>	<b>3,008,536</b>	<b>2,268,859</b>	<b>292,229</b>	<b>9.7</b>	Enel
	<b>Mitigation of the impact on the landscape/territory<sup>(17)</sup></b>							
	LV/MV cabling ratio	(%)	60.7	60.5	60.4	0.2	-	Enel
	LV cabling ratio	(%)	82.9	82.9	82.4	-	-	Enel
	MV cabling ratio	(%)	30.1	29.3	29.4	0.8	-	Enel
	<b>Assessment of the biodiversity projects impacts</b>							
	Number of sites used for operational activities	(no.)	1,324	1,283	1,258	41	3.2	Enel
	Total area used for operational activities	(ha)	47,872	34,935	43,958	12,937	37.0	Enel
	<b>Assessment: sites in which it has been conducted biodiversity impact assessments in the past five years</b>							
	Number of sites	(no.)	1,324	1,283	1,258	41	3.2	Enel
	Hectares	(ha)	47,872	34,935	43,958	12,937	37.0	Enel
	<b>Exposure: sites with biodiversity impact assessment in close proximity to critical biodiversity, and total area of these sites</b>							
	Number of sites	(no.)	33	29	20	4	13.8	Enel
	Hectares	(ha)	808	466	336	342	73.4	Enel
	<b>Management Plans: sites with biodiversity impact assessment and located in close proximity to critical areas that have a biodiversity management plan, and total are of these sites</b>							
	Number of sites	(no.)	33	29	20	4	13.8	Enel
	Hectares	(ha)	808	466	336	342	73.4	Enel

- (1) This share includes: CO<sub>2</sub> emissions from the use of diesel in auxiliary engines; CH<sub>4</sub> leak emissions from gas-fired power plants; N<sub>2</sub>O and CH<sub>4</sub> as a result of the combustion of fossil fuels; NF<sub>3</sub>, SF<sub>6</sub> and refrigerant gases expressed as CO<sub>2</sub> equivalent. This share also includes biogenic emissions from hydroelectric basins. The 2020 data has been redetermined following a refinement of the methodology.
- (2) "Scope 2" – Emissions from energy taken from the grid: indirect CO<sub>2</sub> emissions due to the consumption of electricity for moving fuel, electricity distribution, property management and electricity purchased from the grid by energy generation plants are calculated as the product of the electricity consumption multiplied by the respective weighted specific CO<sub>2</sub> emission coefficients of the whole generation mix of the countries where the Enel Group operates (source: Enerdata – <https://www.enerdata.net/> for location-based calculation and <https://www.aib-net.org/facts/european-residual-mix> for market-based calculation). Scope 2 is calculated according to the "location based" method (based on the company's location). It is the result of the calculation of greenhouse gas emissions resulting from electricity generation in the area where the consumption takes place. Scope 2 is calculated according to the "market based" method (based on the market where the company operates). For companies operating in European countries, the reference market is the European one (EU). In the event of supply of energy from renewable sources, the electricity's origin must be certified by "contractual instruments that meet the minimum quality criteria". In Europe, the only way to prove the electricity's origin is the Guarantees of Origin. Companies that use electricity whose origin is not certified by these Guarantees must perform the calculation by referring to the emissions associated with the residual mix (source: Greenhouse Gas Protocol Scope 2 Guidance, 2015). The 2021 and 2020 values were redetermined following a methodological change to the calculation of the indirect emissions (Scope 2) related to the pumping of water for energy generation, in line with the new SBTi certification.
- (3) "Scope 2" – Emissions from energy losses from the network grid: with its business, the Group covers the entire generation and sales chain in Europe (Italy and Spain) and in five South American countries (Argentina, Brazil, Colombia, Chile and Peru). To calculate emissions, it has been assumed that the vertical chain of activities takes place within the country. The emissions caused by the losses were calculated based on the part of energy fed into the grid that exceeds the share produced in the country in question, so as to avoid any double counting of emissions already included in Scope 1. The emissions are calculated according to the dual location and market based view.
- (4) "Scope 3":
  - Indirect CO<sub>2</sub> emissions for the freighting of coal by sea is estimated on the basis of the actual routes taken by the ships. Since 2020, the estimate of the share of emissions for rail freight has no longer been reported as this form of transport is no longer used.
  - Indirect CO<sub>2</sub> emissions from the transportation of consumable materials, fuel oil, diesel, solid biomass, WDF and waste are estimated based on the quantities of raw materials transported, taking into consideration trucks with a capacity of 28 tons, which cover average (round trip) distances of 75 km with a consumption of 1 liter of diesel for every 3 km travelled and an emission coefficient of 3 kg of CO<sub>2</sub> for each liter of diesel consumed.
  - The figure for emissions from coal mining is a rough estimate of the fugitive methane emissions (CH<sub>4</sub>) from coal imported and used by the Enel Group for thermoelectric generation.
  - In terms of the use of the gas sold by end customers, the figure for emissions from the combustion of natural gas is calculated based on the energy amount (TWh) of gas sold multiplied by its emission factor (source: IPCC for CO<sub>2</sub>, N<sub>2</sub>O e CH<sub>4</sub>).
  - To calculate emissions related to electricity purchased for sale to end customers, it has been assumed that the vertical chain of activities takes place within the country. The emissions of the share sold and produced by the company have not been included in the calculation since they already fall under Scope 1. The share for the fraction sold but not produced by country was calculated according to a new calculation methodology by multiplying the energy amount by the specific country-level emission (source: Enerdata). Emissions from network losses are not included in the calculation since they are reported under Scope 2.
  - The emissions from the extraction and transport of natural gas consider the share of gas both used in thermal power plants and sold in the retail market.
  - The emissions from the supply chain consider an intensive value equal to: 889, 968, 969 tCO<sub>2eq</sub>/M€ spent in 2022, 2021, 2020 respectively. The estimate of emissions for the 3 years is based on the average value of the Environmental Product Declaration (EPD) or ISO CFP 14067 certifications received in the three-year period 20–21–22 for more than 60% of the supplies purchased. The remainder was estimated using international databases (Ecoinvent/Exiobase). Emissions from works have been estimated based on data from sustainable construction sites and emissions of services have been estimated using international databases.
- (5) The 2021 and 2020 values have been redetermined following a change in the methodology.
- (6) The specific emissions were calculated considering total direct emissions (Scope 1) in relation to total renewable, nuclear and thermoelectric generation, including the contribution of heat and excluding pumped storage generation. The 2021 figures include a more specific determination thereof.
- (7) The specific emissions were calculated considering total direct emissions of CO<sub>2</sub> in relation to total renewable, nuclear and thermoelectric generation, including the contribution of heat and the pumped storage energy generation.
- (8) KPI corresponding to the new target certified by SBTi in 2022. The specific emissions were calculated considering total direct emissions (Scope 1) related to the generation of electricity (including CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O), in relation to total renewable, nuclear and thermoelectric generation, including the contribution of heat and excluding pumped storage generation.
- (9) KPI corresponding to the new target certified by SBTi in 2022. The specific emissions are calculated considering the combination of total direct emissions (Scope 1) related to electricity generation (including CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O) and the Group's direct GHG emissions (Scope 3) deriving from the generation of electricity purchased and sold to end customers, in relation to total renewable, nuclear and thermoelectric generation, including the contribution of heat and excluding pumped storage generation, and to total purchased electricity.
- (10) Avoided Group emissions are calculated as the sum of the avoided emissions in the various countries. The value is calculated as the product of the generation of electricity obtained from a renewable or nuclear source and the specific CO<sub>2</sub> emissions from the thermoelectric generation of the country in which Enel is present (source: Enerdata, <http://enerdata.net>).
- (11) Mercury emissions in 2021 amounted to 75 kg, associated with thermoelectric generation for Italy, Spain, Russia and Chile, which account for almost 100% of coal-fired thermoelectric generation throughout the Group. This is in addition to the mercury emissions from the geothermal sector, amounting to 394 kg. In Europe, mercury emissions are declared to the competent authorities for registration in the European Pollutant Release and Transfer Register (E-PRTR) in accordance with EU Regulation No 166/2006 and are subject to the relevant checks in terms of completeness, consistency and credibility (Article 2 of Regulation No 166/2006).
- (12) After implementing the new reporting criteria, the value of the indicator is available starting with 2022 reporting.
- (13) Specific water needs are constituted by all the water withdrawal quotas from surface (including recovered rain water) and groundwater sources, by third parties, from the sea and from wastewater (quota for third party procurements) used for processes and for closed-cycle cooling, except the quota of seawater discharged back into sea after the desalination process (brine). This latter item (brine) contributes to the quota of total withdrawals.
- (14) The total value of process and closed-loop cooling water withdrawals for years 2020 and 2021 was recalculated following the refinement conducted in 2022 of the way in which water withdrawn for cooling purposes at certain nuclear power plants in Spain was calculated.
- (15) GRI 303 has defined as "water stressed" areas those in which, on the basis of the classification provided by the WRI Aqueduct Water Risk Atlas, the ratio between the total annual withdrawal of surface water or groundwater for different uses (civil, industrial, agricultural and livestock) and the total annual renewable water supply available ("base water stress", understood, therefore, as the level of competition between all users) is high (40–80%) or extremely high (>80%). This category also includes the thermal plants that use "fresh water". By way of greater environmental protection, Enel has also considered as located in water stressed areas those plants falling in zones classified by the WRI as "arid". The value for years 2020 and 2021 was recalculated following the refinement conducted in 2022 of the way in which water withdrawn for cooling purposes at certain nuclear power plants in Spain was calculated.



(16) The quantity of waste produced by the O&M activities during 2021 and 2020 was recalculated in line with the new 2022 reporting objective, extending it also to the O&M waste produced by contractors who, working on behalf of Enel, generate waste that they manage under the own responsibility as a producer. Waste by significant geographical area is reported below:

	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
<b>Hazardous waste by significant geographical areas</b>								
<b>Italy</b>		(t)	<b>29,061</b>	<b>29,306</b>	<b>28,116</b>	-245	-0.8	Italy
<b>Iberia</b>		(t)	<b>13,857</b>	<b>11,786</b>	<b>11,116</b>	2,071	176	Iberia
<b>South America</b>		(t)	<b>9,089</b>	<b>13,777</b>	<b>7,218</b>	-4,688	-34.0	South America
- Chile		(t)	1,093	741	408	352	475	Chile
- Argentina		(t)	1,111	2,106	1,307	-995	-47.2	Argentina
- Colombia		(t)	1,231	1,364	878	-133	-9.8	Colombia
- Peru		(t)	1,142	905	741	237	26.2	Peru
- Brazil		(t)	4,500	8,658	3,884	-4,158	-48.0	Brazil
- other		(t)	12	3	-	-	-	Other
<b>Europe</b>		(t)	<b>3,733</b>	<b>9,254</b>	<b>5,225</b>	-5,521	-59.7	Europe
Russia		(t)	1,924	7,368	2,660	-5,444	-73.9	Russia
Romania		(t)	1,802	1,859	2,550	-57	-3.1	Romania
Greece		(t)	7	27	14	-20	-74.1	Greece
Bulgaria		(t)	-	-	1	-	-	Bulgaria
<b>Other</b>		(t)	<b>199</b>	<b>243</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>Other</b>
<b>Non-hazardous waste by significant geographical areas</b>								
<b>Italy<sup>(15)</sup></b>		(t)	<b>2,735,469</b>	<b>2,445,104</b>	<b>1,657,160</b>	290,365	11.9	Italy
<b>Iberia<sup>(15)</sup></b>		(t)	<b>201,380</b>	<b>220,506</b>	<b>315,963</b>	-19,126	-8.7	Iberia
<b>South America</b>		(t)	<b>357,387</b>	<b>327,563</b>	<b>279,854</b>	29,824	9.1	South America
- Chile		(t)	97,520	120,645	138,464	-23,125	-19.2	Chile
- Argentina		(t)	2,793	2,629	11,119	164	6.2	Argentina
- Colombia		(t)	100,705	98,182	6,668	2,523	2.6	Colombia
- Peru		(t)	30,039	19,397	33,016	10,642	54.9	Peru
- Brazil		(t)	126,165	86,520	90,588	39,645	45.8	Brazil
- other		(t)	165	189	-	-24	-12.7	Other
<b>Europe</b>		(t)	<b>6,140</b>	<b>14,969</b>	<b>15,567</b>	-8,829	-59.0	Europe
Russia		(t)	1,365	9,828	11,121	-8,463	-86.1	Russia
Romania		(t)	4,775	5,134	4,440	-359	-7.0	Romania
Greece		(t)	-	6	2	-6	-100.0	Greece
Bulgaria		(t)	-	-	3	-	-	Bulgaria
<b>Other</b>		(t)	<b>389</b>	<b>393</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>Other</b>

(17) The cabling ratio is calculated by proportioning the km of cabled lines (both underground and aerial insulated cables) to the total km of lines. The increase in the cabling ratio over the years is due to a general increase, in terms of length, of aerial and underground cable sections at the expense of the bare conductor line. The number of sites does not include nuclear plants. The hectares reported do not include hydroelectric basins. The impact assessment considered the active basins in terms of biodiversity. Compared with last year, KPI mapping and calculation tools were refined, which led to a slight change in the figure compared to 2021.

(18) The number of sites does not include nuclear plants. Hectares reported do not include hydroelectric reservoirs. For the assessment of the impact, the active projects on biodiversity have been considered. Compared to last year, the KPI mapping and calculation tools have been refined, which led to a slight change in the figure compared to 2021.

# Clean electrification

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
EU3	<b>CUSTOMERS</b>							
	<b>Electricity market (Final number of customers)</b>							
	<b>Customers Italy</b>	(no.)	<b>21,382,665</b>	<b>21,824,404</b>	<b>22,612,004</b>	-441,739	-2.0	Italy
	Free market	(no.)	11,879,742	10,200,185	9,478,660	1,679,557	16.5	Italy
	Regulated market	(no.)	9,502,923	11,624,219	13,133,344	-2,121,296	-18.2	Italy
	<b>Customers Iberia</b>	(no.)	<b>10,545,281</b>	<b>10,250,657</b>	<b>10,420,495</b>	294,624	2.9	Iberia
	Free market	(no.)	6,829,138	5,877,494	5,654,659	951,644	16.2	Iberia
	Regulated market	(no.)	3,716,143	4,373,163	4,765,836	-657,020	-15.0	Iberia
	<b>Customers Latin America</b>	(no.)	<b>25,392,600</b>	<b>28,253,787</b>	<b>27,642,485</b>	-2,861,187	-10.1	Latin America
	Free market	(no.)	6,871	6,571	5,047	300	4.6	Latin America
	Regulated market	(no.)	25,385,729	28,247,216	27,637,438	-2,861,487	-10.1	Latin America
	<b>Customers Latin America – Argentina</b>	(no.)	<b>2,600,926</b>	<b>2,548,983</b>	<b>2,507,652</b>	51,943	2.0	Argentina
	Free market	(no.)	-	-	-	-	-	Argentina
	Regulated market	(no.)	2,600,926	2,548,983	2,507,652	51,943	2.0	Argentina
	<b>Customers Latin America – Brazil</b>	(no.)	<b>15,389,166</b>	<b>18,472,098</b>	<b>18,063,146</b>	-3,082,932	-16.7	Brazil
	Free market	(no.)	3,173	2,586	1,488	-	-	Brazil
	Regulated market	(no.)	15,385,993	18,469,512	18,061,658	-3,083,519	-16.7	Brazil
	<b>Customers Latin America – Chile</b>	(no.)	<b>2,081,420</b>	<b>2,039,783</b>	<b>2,008,812</b>	41,637	2.0	Chile
	Free market	(no.)	1,782	1,969	1,567	-	-	Chile
	Regulated market	(no.)	2,079,638	2,037,814	2,007,245	41,824	2.1	Chile
	<b>Customers Latin America – Colombia</b>	(no.)	<b>3,790,236</b>	<b>3,704,919</b>	<b>3,611,245</b>	85,317	2.3	Colombia
	Free market	(no.)	1,221	1,325	1,295	-	-	Colombia
	Regulated market	(no.)	3,789,015	3,703,594	3,609,950	85,421	2.3	Colombia
	<b>Customers Latin America – Peru</b>	(no.)	<b>1,530,852</b>	<b>1,488,004</b>	<b>1,451,630</b>	42,848	2.9	Peru
	Free market	(no.)	695	691	697	4	0.6	Peru
	Regulated market	(no.)	1,530,157	1,487,313	1,450,933	42,844	2.9	Peru
	<b>Customers Romania</b>	(no.)	<b>2,905,352</b>	<b>3,044,844</b>	<b>3,049,476</b>	-139,492	-4.6	Romania
	Free market	(no.)	2,902,732	3,018,759	2,233,037	-116,027	-3.8	Romania
	Regulated market	(no.)	2,620	26,085	816,439	-23,465	-90.0	Romania
	<b>Total Customers Enel</b>	(no.)	<b>60,225,898</b>	<b>63,373,692</b>	<b>63,724,460</b>	-3,147,794	-5.0	Enel
	Total Free market	(no.)	21,618,483	19,103,009	17,371,403	2,515,474	13.2	Enel
	Regulated market	(no.)	38,607,415	44,270,683	46,353,057	-5,663,268	-12.8	Enel
	<b>Gas market (Final number of customers)</b>							
	Customers Italy	(no.)	4,581,245	4,165,317	4,060,646	415,928	10.0	Italy
	Customers Spain	(no.)	1,798,737	1,684,369	1,673,424	114,368	6.8	Iberia
	Customers Romania	(no.)	178,993	119,415	59,379	59,578	49.9	Romania
	Customers Chile	(no.)	9	8	8	-	-	Chile
	Customers Colombia	(no.)	13	17	15	-4	-23.5	Colombia
	<b>Total customers gas market</b>	(no.)	<b>6,558,997</b>	<b>5,969,126</b>	<b>5,793,472</b>	589,871	9.9	Enel
	<b>Total customers Enel electricity and gas</b>	(no.)	<b>66,784,895</b>	<b>69,342,818</b>	<b>69,517,932</b>	-2,557,923	-3.7	Enel
	<b>PUBLIC LIGHTING</b>							
	<b>Customers public lighting</b>	(no.)	<b>2,619</b>	<b>2,792</b>	<b>3,006</b>	-173	-6.2	Italy
	<b>Light sources public lighting</b>	(,000)	<b>3,023</b>	<b>2,821</b>	<b>2,724</b>	202	7.2	Italy

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
<b>ENERGY AVAILABILITY AND RELIABILITY</b>								
<b>EU11</b>	<b>Efficiency thermoelectric generation<sup>(1)</sup></b>							
	<b>Average thermoelectric generation yield without heat component</b>	(%)	42.4	41.7	41.2	0.7	-	Enel
	<b>Average thermoelectric generation yield with heat</b>	(%)	42.8	42.9	42.4	-0.1	-	Enel
	<b>Average yield by technology without heat component</b>							
	Yield coal plants	(%)	33.2	32.6	32.1	0.6	-	Enel
	Yield oil/gas plants	(%)	34.4	35.0	34.3	-0.6	-	Enel
	Yield CCGT plants	(%)	50.4	49.7	49.9	0.7	-	Enel
	<b>Average yield with heat component by technology</b>							
	Yield coal plants	(%)	33.2	32.6	32.1	0.6	-	Enel
	Yield oil/gas plants	(%)	36.6	38.6	38.3	-2.0	-	Enel
	Yield CCGT plants	(%)	50.5	49.9	50.1	0.6	-	Enel
<b>EU30</b>	<b>Availability of thermoelectric generation<sup>(1)</sup></b>	(%)	82.4	86.4	88.4	-4.0	-	Enel
	<b>Availability of thermoelectric generation by source</b>							
	Availability coal plants	(%)	67.7	78.4	84.9	-10.7	-	Enel
	Availability oil/gas plants	(%)	81.5	88.5	90.4	-7.0	-	Enel
	Availability CCGT plants	(%)	88.3	88.8	89.2	-0.5	-	Enel
	<b>Availability of thermoelectric generation by regulatory regime</b>							
	Regulated	(%)	85.9	86.9	89.8	-1.0	-	Enel
	Unregulated	(%)	81.1	86.2	87.7	-5.1	-	Enel
<b>EU28</b>	<b>Service interruptions - frequency (SAIFI)</b>							
	Frequency of interruptions by customer	(no.)	2.6	2.8	n.d.	-0.2	-7.1	Enel
	Frequency of interruptions by customer Italy	(no.)	1.7	1.8	1.7	-0.1	-3.4	Italy
	Frequency of interruptions by customer Romania (Dobrogea)	(no.)	2.9	3.2	3.8	-0.3	-9.4	Romania
	Frequency of interruptions by customer Romania (Muntenia)	(no.)	2.3	2.5	2.9	-0.2	-8.7	Romania
	Frequency of interruptions by customer Romania (Banat)	(no.)	3.0	3.2	3.9	-0.2	-6.3	Romania
	Frequency of interruptions by customer Iberia	(no.)	1.3	1.4	1.4	-0.1	-5.8	Iberia
	Frequency of interruptions by customer Peru	(no.)	2.9	2.3	2.6	0.6	24.5	Peru
	Frequency of interruptions by customer Chile	(no.)	1.6	1.5	1.5	0.1	6.7	Chile
	Frequency of interruptions by customer Argentina	(no.)	5.3	4.8	4.5	0.5	10.4	Argentina
	Frequency of interruptions by customer Brazil (Ampla)	(no.)	4.5	4.6	6.1	-0.1	-3.0	Brazil
	Frequency of interruptions by customer Brazil (Coelce)	(no.)	4.2	4.7	6.0	-0.5	-10.6	Brazil
	Frequency of interruptions by customer Brazil (CELG)	(no.)	7.7	8.4	8.5	-0.7	-8.3	Brazil

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	Frequency of interruptions by customer Brazil (ELPL)	(no.)	3.4	3.4	3.6	-	-	Brazil
	Frequency of interruptions by customer Colombia	(no.)	3.9	5.2	5.6	-1.3	-25.3	Colombia
<b>EU29</b>	<b>Service interruptions - duration (SAIDI)</b>							
	Service continuity index	(min.)	231	243	n.d.	-12.6	-5.2	Enel
	Service continuity index Italy	(min.)	42	43	42	-1	-2.3	Italy
	Service continuity index Romania (Dobrogea)	(min.)	90	111	133	-21	-18.9	Romania
	Service continuity index Romania (Muntenia)	(min.)	77	95	117	-18	-18.9	Romania
	Service continuity index Romania (Banat)	(min.)	117	132	162	-15	-11.4	Romania
	Service continuity index Iberia	(min.)	64	70	75	-6	-8.6	Iberia
	Service continuity index Peru	(min.)	608	414	419	194	46.9	Peru
	Service continuity index Chile	(min.)	159	152	171	7	4.6	Chile
	Service continuity index Argentina	(min.)	892	797	839	95	11.9	Argentina
	Service continuity index Brazil (Ampla)	(min.)	556	556	632	-	-	Brazil
	Service continuity index Brazil (Coelce)	(min.)	589	681	953	-92	-13.5	Brazil
	Service continuity index Brazil (CELG)	(min.)	915	1,088	953	-173	-15.9	Brazil
	Service continuity index Brazil (ELPL)	(min.)	374	396	443	-22	-5.6	Brazil
	Service continuity index Brazil Colombia	(min.)	320	401	467	-81	-20.2	Colombia
<b>EU12</b>	<b>Distribution grid losses</b>							
	Grid losses Italy	(%)	4.7	4.7	4.9	-	-	Italy
	Grid losses Romania (Dobrogea)	(%)	7.6	8.5	8.6	-0.9	-	Romania
	Grid losses Romania (Muntenia)	(%)	8.9	8.9	9.7	-	-	Romania
	Grid losses Romania (Banat)	(%)	9.0	8.7	9.0	0.3	-	Romania
	Grid losses Iberia	(%)	7.0	7.1	7.1	-0.1	-	Iberia
	Grid losses Peru	(%)	8.2	8.5	8.8	-0.3	-	Peru
	Grid losses Chile	(%)	5.1	5.2	5.2	-0.1	-	Chile
	Grid losses Argentina	(%)	17.1	18.0	18.9	-0.9	-	Argentina
	Grid losses Brazil (Ampla)	(%)	19.7	20.5	22.1	-0.8	-	Brazil
	Grid losses Brazil (Coelce)	(%)	15.2	16.1	15.8	-0.9	-	Brazil
	Grid losses Brazil (CELG)	(%)	12.9	11.3	11.4	1.6	-	Brazil
	Grid losses Brazil (ELPL)	(%)	11.0	10.3	10.6	0.7	-	Brazil
	Grid losses Colombia	(%)	7.5	7.5	7.6	-	-	Colombia
	<b>Transmission grid losses</b>							
	Transmission grid losses Brazil (Enel CIEN SA)	(%)	0.09	0.08	0.11	0.01	-	Brazil
<b>2-29</b>	<b>SERVICE QUALITY</b>							
	<b>ELECTRICITY MARKET ITALY</b>							
	<b>Regulated market</b>							
	Frequency of surveys	(no.)	1	1	1	-	-	Italy
	Written complaints and information requests	(,000)	104.0	87.4	88.3	16.6	19.0	Italy
	Response time to written complaints	(gg)	13.0	11.0	25.0	2.0	18.2	Italy
	<b>Free market</b>							

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	Frequency of surveys	(no.)	1	1	1	-	-	Italy
	Written complaints and information requests	(,000)	1170	105.5	113.0	11.5	10.9	Italy
	Response time to written complaints	(gg)	20	18	14.0	2.0	11.1	Italy
<b>ELECTRICITY MARKET ROMANIA</b>								
<b>Regulated market</b>								
	Written complaints and information requests	(,000)	n.d.	108	-	-	-	Romania
	Response time to written complaints	(gg)	n.d.	25	30.0	-	-	Romania
<b>Free market</b>								
	Written complaints and information requests	(,000)	n.d.	563	355.0	-	-	Romania
	Response time to written complaints	(gg)	n.d.	26	30.0	-	-	Romania
<b>ELECTRICITY MARKET IBERIA</b>								
<b>Regulated market (ex TUR market )</b>								
	Written complaints and information requests	(,000)	387.9	416	315.0	-28.1	-6.8	Iberia
	Response time to written complaints	(gg)	20.10	15.7	7.2	4.4	28.0	Iberia
	Commercial complaints	(n./10.000 customers)	212	n.d.	n.d.	-	-	Enel
<b>EU27 ACCESSIBILITY OF ENERGY</b>								
<b>Customers disconnected for non-payment MARKET ITALY</b>								
<b>by time from disconnection to payment - Italy (Regulated market)</b>								
	(no.)	(no.)	<b>208,025</b>	<b>155,390</b>	<b>201,288</b>	52,635	33.9	Italy
	< 48 h	(no.)	108,161	86,401	109,170	21,760	25.2	Italy
	48 h - 1 week	(no.)	50,281	35,347	46,652	14,934	42.2	Italy
	1 week - 1 month	(no.)	49,357	33,534	45,123	15,823	47.2	Italy
	1 month - 1 year	(no.)	225	108	343	117	-	Italy
	> 1 year	(no.)	1	-	-	1	-	Italy
<b>by time from payment to reconnection - Italy (Regulated market)</b>								
	(no.)	(no.)	<b>208,025</b>	<b>155,390</b>	<b>201,288</b>	52,635	33.9	Italy
	< 24 h	(no.)	196,604	144,508	185,090	52,096	36.1	Italy
	24 h - 1 week	(no.)	11,104	10,657	15,799	447	4.2	Italy
	> 1 week	(no.)	317	225	399	92	40.9	Italy
<b>by time from disconnection to payment - Italy (Free market)</b>								
	(no.)	(no.)	<b>285,037</b>	<b>336,381</b>	<b>381,435</b>	-51,344	-15.3	Italy
	< 48 h	(no.)	152,857	175,457	203,228	-22,600	-12.9	Italy
	48 h - 1 week	(no.)	47,455	64,659	74,688	-17,204	-26.6	Italy
	1 week - 1 month	(no.)	77,590	89,645	95,630	-12,055	-13.4	Italy
	1 month - 1 year	(no.)	7,135	6,620	7,889	515	7.8	Italy
	> 1 year	(no.)	-	-	-	-	-	Italy
<b>by time from payment to reconnection - Italy (Free market)</b>								
	(no.)	(no.)	<b>285,037</b>	<b>336,381</b>	<b>381,435</b>	-51,344	-15.3	Italy
	< 24 h	(no.)	279,801	334,081	379,565	-54,280	-16.2	Italy
	24 h - 1 week	(no.)	5,230	2,279	1,855	2,951	-	Italy
	> 1 week	(no.)	6	21	15	-15	-71.4	Italy



GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	<b>by time from disconnection to payment – Italy (Gas market)</b>	(no.)	<b>45,004</b>	<b>55,325</b>	<b>59,923</b>	-10,321	-18.7	Italy
	< 48 h	(no.)	11,239	13,411	14,140	-2,172	-16.2	Italy
	48 h – 1 week	(no.)	13,954	18,597	20,840	-4,643	-25.0	Italy
	1 week – 1 month	(no.)	17,036	20,541	21,579	-3,505	-17.1	Italy
	1 month – 1 year	(no.)	2,775	2,776	3,364	-1	-	Italy
	> 1 year	(no.)	-	-	-	-	-	Italy
	<b>by time from payment to reconnection – Italy (Gas market)</b>	(no.)	<b>45,004</b>	<b>55,325</b>	<b>59,923</b>	-10,321	-18.7	Italy
	< 24 h	(no.)	42,216	51,408	56,425	-9,192	-17.9	Italy
	24 h – 1 week	(no.)	2,763	3,891	3,471	-1,128	-29.0	Italy
	> 1 week	(no.)	25	26	27	-1	-3.8	Italy
	<b>Regulated market – Romania</b>							
	<b>by time from disconnection to payment – Romania (Regulated market)</b>	(no.)	<b>1,746</b>	<b>1,053</b>	<b>4,280</b>	693	65.8	Romania
	< 48 h	(no.)	875	394	1,338	481	-	Romania
	48 h – 1 week	(no.)	341	198	321	143	72.2	Romania
	1 week – 1 month	(no.)	389	318	345	71	22.3	Romania
	1 month – 1 year	(no.)	141	143	1,032	-2	-1.4	Romania
	> 1 year	(no.)	-	-	1,244	-	-	Romania
	<b>by time from payment to reconnection – Romania (Regulated market)</b>	(no.)	<b>874</b>	<b>1,053</b>	<b>3,036</b>	-179	-17.0	Romania
	< 24 h	(no.)	674	1,053	2,286	-379	-36.0	Romania
	24 h – 1 week	(no.)	200	-	685	200	-	Romania
	> 1 week	(no.)	-	-	65	-	-	Romania
	<b>Free market – Romania</b>							
	<b>by time from disconnection to payment – Romania (Free market)</b>	(no.)	<b>16,271</b>	<b>3,285</b>	<b>4,218</b>	12,986	-	Romania
	< 48 h	(no.)	9,327	1,582	2,337	7,745	-	Romania
	48 h – 1 week	(no.)	2,755	625	373	2,130	-	Romania
	1 week – 1 month	(no.)	2,767	818	379	1,949	-	Romania
	1 month – 1 year	(no.)	1,422	260	645	1,162	-	Romania
	> 1 year	(no.)	-	-	484	-	-	Romania
	<b>by time from payment to reconnection – Romania (Free market)</b>	(no.)	<b>15,745</b>	<b>3,285</b>	<b>3,734</b>	12,460	-	Romania
	< 24 h	(no.)	11,446	3,285	3,058	8,161	-	Romania
	24 h – 1 week	(no.)	4,299	-	636	4,299	-	Romania
	> 1 week	(no.)	-	-	40	-	-	Romania
	<b>Regulated market – Iberia</b>							
	<b>by time from disconnection to payment – Iberia (Regulated market)</b>	(no.)	<b>21,779</b>	<b>54,120</b>	<b>10,635</b>	-32,341	-59.8	Iberia
	< 48 h	(no.)	17,564	41,123	8,231	-23,559	-57.3	Iberia
	48 h – 1 week	(no.)	2,326	6,648	1,294	-4,322	-65.0	Iberia
	1 week – 1 month	(no.)	1,405	4,325	814	-2,920	-67.5	Iberia
	1 month – 1 year	(no.)	484	2,024	296	-1,540	-76.1	Iberia
	> 1 year	(no.)	-	-	-	-	-	Iberia
	<b>by time from payment to reconnection – Iberia (Regulated market)</b>	(no.)	<b>21,793</b>	<b>54,110</b>	<b>10,633</b>	-32,317	-59.7	Iberia
	< 24 h	(no.)	21,356	51,759	10,304	-30,403	-58.7	Iberia

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	24 h - 1 week	(no.)	404	2,168	307	-1,764	-81.4	Iberia
	> 1 week	(no.)	33	183	22	-150	-82.0	Iberia
<b>Free market - Iberia</b>								
	<b>by time from disconnection to payment - Iberia (Free market)</b>	(no.)	<b>14,218</b>	<b>51,980</b>	<b>12,346</b>	-37,762	-72.6	Iberia
	< 48 h	(no.)	12,232	43,579	10,090	-31,347	-71.9	Iberia
	48 h - 1 week	(no.)	1,458	5,919	1,443	-4,461	-75.4	Iberia
	1 week - 1 month	(no.)	525	2,385	731	-1,860	-78.0	Iberia
	1 month - 1 year	(no.)	3	97	82	-94	-96.9	Iberia
	> 1 year	(no.)	-	-	-	-	-	Iberia
	<b>by time from payment to reconnection - Iberia (Free market)</b>	(no.)	<b>14,215</b>	<b>51,977</b>	<b>12,345</b>	-37,762	-72.7	Iberia
	< 24 h	(no.)	13,848	49,844	12,000	-35,996	-72.2	Iberia
	24 h - 1 week	(no.)	334	1,969	318	-1,635	-83.0	Iberia
	> 1 week	(no.)	33	164	27	-131	-79.9	Iberia
	<b>by time from disconnection to payment - Iberia (Gas market)</b>	(no.)	<b>1,557</b>	<b>5,453</b>	<b>1,290</b>	-3,896	-71.4	Iberia
	< 48 h	(no.)	855	3,262	762	-2,407	-73.8	Iberia
	48 h - 1 week	(no.)	329	1,217	267	-888	-73.0	Iberia
	1 week - 1 month	(no.)	322	813	134	-491	-60.4	Iberia
	1 month - 1 year	(no.)	51	161	127	-110	-68.3	Iberia
	> 1 year	(no.)	-	-	-	-	-	Iberia
	<b>by time from payment to reconnection - Iberia (Gas market)</b>	(no.)	<b>1,524</b>	<b>5,333</b>	<b>1,273</b>	-3,809	-71.4	Iberia
	< 24 h	(no.)	338	1,023	236	-685	-67.0	Iberia
	24 h - 1 week	(no.)	890	3,331	767	-2,441	-73.3	Iberia
	> 1 week	(no.)	296	979	270	-683	-69.8	Iberia
<b>Regulated market - Latin America</b>								
	<b>by time from disconnection to payment - Latin America (Regulated market)</b>	(no.)	<b>4,211,428</b>	<b>4,336,099</b>	<b>716,328</b>	-124,671	-2.9	Latin America
	< 48 h	(no.)	2,457,160	2,760,105	332,424	-302,945	-11.0	Latin America
	48 h - 1 week	(no.)	537,479	799,817	80,888	-262,338	-32.8	Latin America
	1 week - 1 month	(no.)	541,326	549,701	118,244	-8,375	-1.5	Latin America
	1 month - 1 year	(no.)	647,637	224,389	184,769	423,248	-	Latin America
	> 1 year	(no.)	27,826	2,087	3	25,739	-	Latin America
	<b>by time from payment to reconnection - Latin America (Regulated market)</b>	(no.)	<b>3,459,876</b>	<b>5,389,308</b>	<b>811,756</b>	-1,929,432	-35.8	Latin America
	< 24 h	(no.)	2,797,521	3,931,289	788,338	-1,133,768	-28.8	Latin America
	24 h - 1 week	(no.)	533,766	1,385,738	19,607	-851,972	-61.5	Latin America
	> 1 week	(no.)	128,589	61,281	3,811	67,308	-	Latin America
<b>Disputes with customers</b>								
	Total proceedings	(no.)	136,428	126,692	112,938	9,736	7.7	Enel
	Incidence of proceedings as defendant	(%)	69.1	71.3	62.7	-2.2	-	Enel

(1) Availability was calculated by reducing the causes of internal unavailability. Some 2021 and 2020 figures include a more specific determination of the amounts.

# Empowering Enel people

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
<b>SIZE AND COMPOSITION OF WORKFORCE</b>								
<b>2-7</b>	<b>Size of workforce</b>							
	<b>Total workforce</b>	(no.)	<b>65,124</b>	<b>66,279</b>	<b>66,717</b>	-1,155	-1.7	Enel
	- of which men	(no.)	49,899	51,341	52,346	-1,442	-2.8	Enel
	- of which men (%)	(%)	77	77	78	-	-	
	- of which women	(no.)	15,225	14,938	14,371	287	1.9	Enel
	- of which women (%)	(%)	23	23	22	-	-	
	<b>Average workforce</b>	(no.)	<b>66,475</b>	<b>65,976</b>	<b>67,078</b>	<b>499</b>	<b>0.8</b>	Enel
<b>401-1</b>	<b>Change to size<sup>(1)</sup></b>							
	New recruits	(no.)	6,412	5,401	3,131	1,011	18.7	Enel
	Changes in scope	(no.)	-3,153	23	-971	-3,176	-	Enel
	Terminations	(no.)	4,414	5,862	3,696	-1,448	-24.7	Enel
	<b>Balance</b>	(no.)	<b>-1,155</b>	<b>-438</b>	<b>-1,536</b>	<b>-717</b>	<b>-</b>	Enel
<b>Workforce by geographic area and gender</b>								
	<b>Italy<sup>(2)</sup></b>	(no.)	<b>31,664</b>	<b>30,276</b>	<b>29,800</b>	1,388	4.6	Italy
	- of which men	(no.)	24,943	24,136	23,971	807	3.3	Italy
	- of which women	(no.)	6,721	6,140	5,829	581	9.5	Italy
	<b>Iberia<sup>(3)</sup></b>	(no.)	<b>9,643</b>	<b>9,518</b>	<b>9,781</b>	125	1.3	Iberia
	- of which men	(no.)	7,091	7,084	7,381	7	0.1	Iberia
	- of which women	(no.)	2,552	2,434	2,400	118	4.8	Iberia
	<b>Europe<sup>(4)</sup></b>	(no.)	<b>3,532</b>	<b>4,994</b>	<b>4,966</b>	-1,462	-29.3	Europe
	- of which men	(no.)	2,408	3,478	3,473	-1,070	-30.8	Europe
	- of which women	(no.)	1,124	1,516	1,493	-392	-25.9	Europe
	<b>North America<sup>(5)</sup></b>	(no.)	<b>2,100</b>	<b>1,914</b>	<b>1,639</b>	186	9.7	North America
	- of which men	(no.)	1,475	1,352	1,179	123	9.1	North America
	- of which women	(no.)	625	562	460	63	11.2	North America
	<b>Latin America</b>	(no.)	<b>17,361</b>	<b>18,763</b>	<b>19,838</b>	-1,402	-7.5	Latin America
	- of which men	(no.)	13,412	14,712	15,852	-1,300	-8.8	Latin America
	- of which women	(no.)	3,949	4,051	3,986	-102	-2.5	Latin America
	<b>Africa Sub-Saharan e Asia<sup>(6)</sup></b>	(no.)	<b>824</b>	<b>814</b>	<b>693</b>	10	1.2	Africa, Asia and Oceania
	- of which men	(no.)	570	579	490	-9	-1.6	Africa, Asia and Oceania
	- of which women	(no.)	254	235	203	19	8.1	Africa, Asia and Oceania
<b>405-1</b>	<b>Workforce by level and gender</b>							
	<b>Manager</b>	(no.)	<b>1,366</b>	<b>1,377</b>	<b>1,397</b>	-11	-0.8	Enel
	- of which men	(no.)	1,025	1,052	1,095	-27	-2.6	Enel
		(%)	75.0	76.4	78.4	-1.4	-	Enel
	- of which women	(no.)	341	325	302	16	4.9	Enel
		(%)	25.0	23.6	21.6	1.4	-	Enel

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	<b>Middle Manager</b>	(no.)	<b>12,645</b>	<b>12,242</b>	<b>11,592</b>	403	3.3	Enel
	- of which men	(no.)	8,523	8,403	8,069	120	1.4	Enel
		(%)	67.4	68.6	69.6	-1.4	-	Enel
	- of which women	(no.)	4,122	3,839	3,523	283	7.4	Enel
		(%)	32.6	31.4	30.4	1.2	-	Enel
	<b>White-collar</b>	(no.)	<b>34,634</b>	<b>35,556</b>	<b>35,883</b>	-922	-2.6	Enel
	- of which men	(no.)	24,078	25,138	25,706	-1,060	-4.2	Enel
		(%)	69.5	70.7	71.6	-1.2	-	Enel
	- of which women	(no.)	10,556	10,418	10,177	138	1.3	Enel
		(%)	30.5	29.3	28.4	1.2	-	Enel
	<b>Blue-collar</b>	(no.)	<b>16,478</b>	<b>17,104</b>	<b>17,845</b>	-626	-3.7	Enel
	- of which men	(no.)	16,272	16,748	17,476	-476	-2.8	Enel
		(%)	98.7	97.9	97.9	0.8	-	Enel
	- of which women	(no.)	207	357	369	-150	-42.0	Enel
		(%)	1.3	2.1	2.1	-0.8	-	Enel
	<b>Index of professional qualification</b>							
	Managers	(%)	2.1	2.1	2.1	-	-	Enel
	Middle Managers	(%)	19.4	18.5	17.4	0.9	-	Enel
	White-collar	(%)	53.2	53.6	53.8	-0.4	-	Enel
	Blue-collar	(%)	25.3	25.8	26.7	-0.5	-	Enel
	<b>Percentage of managers by geographical area</b>							
	<b>Italy<sup>(2)</sup></b>	(no.)	<b>31,664</b>	<b>30,276</b>	<b>29,800</b>	1,388	4.6	Italy
	(%) people of total Group people	(%)	48.6	45.7	44.7	2.9	-	Italy
	(%) people of total Group managers	(%)	63.3	60.1	58.3	3.2	-	Italy
	(%) people of total not Group managers	(%)	48.3	45.4	44.4	2.9	-	Italy
	<b>Iberia<sup>(3)</sup></b>	(no.)	<b>9,643</b>	<b>9,518</b>	<b>9,781</b>	125	1.3	Iberia
	(%) people of total Group people	(%)	14.8	14.4	14.7	0.4	-	Iberia
	(%) people of total Group managers	(%)	17.9	20.3	21.3	-2.4	-	Iberia
	(%) people of total not Group managers	(%)	14.7	14.2	14.5	0.5	-	Iberia
	<b>Romania</b>	(no.)	<b>3,265</b>	<b>3,291</b>	<b>3,248</b>	-26	-0.8	Romania
	(%) people of total Group people	(%)	5.0	5.0	4.9	-	-	Romania
	(%) people of total Group managers	(%)	1.8	1.4	1.4	0.4	-	Romania
	(%) people of total not Group managers	(%)	5.1	5.0	4.9	0.1	-	Romania
	<b>Brazil</b>	(no.)	<b>7,510</b>	<b>8,970</b>	<b>10,040</b>	-1,460	-16.3	Brazil
	(%) people of total Group people	(%)	11.5	13.5	15.0	-2.0	-	Brazil
	(%) people of total Group managers	(%)	5.1	4.7	4.2	0.4	-	Brazil
	(%) people of total not Group managers	(%)	8.0	9.8	15.3	-1.8	-	Brazil
	<b>Argentina</b>	(no.)	<b>4,007</b>	<b>4,054</b>	<b>4,048</b>	-47	-1.2	Argentina
	(%) people of total Group people	(%)	6.2	6.1	6.1	0.1	-	Argentina
	(%) people of total Group managers	(%)	2.0	1.7	1.7	0.3	-	Argentina
	(%) people of total not Group managers	(%)	6.2	6.2	6.2	-	-	Argentina
	<b>Chile</b>	(no.)	<b>2,219</b>	<b>2,271</b>	<b>2,281</b>	-52	-2.3	Chile
	(%) people of total Group people	(%)	3.4	3.4	3.4	-	-	Chile
	(%) people of total Group managers	(%)	3.5	4.0	4.4	-0.5	-	Chile
	(%) people of total not Group managers	(%)	3.4	3.4	3.4	-	-	Chile

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	<b>Peru</b>	(no.)	<b>1,075</b>	<b>988</b>	<b>954</b>	87	8.8	Peru
	(%) people of total Group people	(%)	1.7	1.5	1.4	0.2	-	Peru
	(%) people of total Group managers	(%)	1.5	1.4	1.9	0.1	-	Peru
	(%) people of total not Group managers	(%)	1.7	1.5	1.4	0.2	-	Peru
	<b>Colombia</b>	(no.)	<b>2,327</b>	<b>2,256</b>	<b>2,191</b>	71	3.1	Colombia
	(%) people of total Group people	(%)	3.6	3.4	3.3	0.2	-	Colombia
	(%) people of total Group managers	(%)	2.6	2.7	2.6	-0.1	-	Colombia
	(%) people of total not Group managers	(%)	3.6	3.4	3.3	0.2	-	Colombia
	<b>United States</b>	(no.)	<b>1,737</b>	<b>1,534</b>	<b>1,287</b>	203	13.2	United States
	(%) people of total Group people	(%)	2.7	2.3	1.9	0.4	-	United States
	(%) people of total Group managers	(%)	1.3	1.1	1.2	0.2	-	United States
	(%) people of total not Group managers	(%)	2.7	2.3	1.9	0.4	-	United States
<b>405-1</b>	<b>Workforce by age range and level<sup>(7)</sup></b>							
	<b>&lt; 30</b>	(%)	<b>13.1</b>	<b>11.5</b>	<b>10.9</b>	1.6	13.9	Enel
	- of whom Managers	(%)	-	-	-	-	-	Enel
	- of whom Middle Managers	(%)	2.9	2.4	2.2	0.5	-	Enel
	- of whom White-collar	(%)	13.1	10.5	9.7	2.6	-	Enel
	- of whom Blue-collar	(%)	22.2	20.7	19.9	1.5	-	Enel
	<b>30 - 50</b>	(%)	<b>56.5</b>	<b>57.3</b>	<b>54.5</b>	-0.8	-	Enel
	- of whom Managers	(%)	51.4	46.8	46.9	4.6	-	Enel
	- of whom Middle Managers	(%)	65.0	56.9	61.8	8.1	-	Enel
	- of whom White-collar	(%)	53.2	52.1	51.5	1.1	-	Enel
	- of whom Blue-collar	(%)	57.4	58.0	56.4	-0.6	-	Enel
	<b>&gt; 50</b>	(%)	<b>30.4</b>	<b>31.2</b>	<b>34.6</b>	-0.8	-	Enel
	- of whom Managers	(%)	48.6	46.2	53.1	2.4	-	Enel
	- of whom Middle Managers	(%)	32.1	27.4	36.0	4.7	-	Enel
	- of whom White-collar	(%)	33.8	33.1	38.8	0.7	-	Enel
	- of whom Blue-collar	(%)	20.4	21.3	23.7	-0.9	-	Enel
	Average age	(anni)	43.6	43.8	44.1	-0.2	-0.5	Enel
<b>2-7</b>	<b>Workforce by type of contract and gender</b>							
	<b>Permanent contract</b>	(no.)	<b>64,377</b>	<b>65,453</b>	<b>65,822</b>	-1,076	-1.6	Enel
	- of which men	(no.)	49,387	50,803	51,783	-1,416	-2.8	Enel
	- of which women	(no.)	14,989	14,650	14,039	339	2.3	Enel
	<b>Fixed-term contracts</b>	(no.)	<b>747</b>	<b>826</b>	<b>895</b>	-79	-9.6	Enel
	- of which men	(no.)	511	537	563	-26	-4.8	Enel
	- of which women	(no.)	236	289	332	-53	-18.3	Enel
	<b>Total contracts</b>	(no.)	<b>65,124</b>	<b>66,279</b>	<b>66,717</b>	-1,155	-1.7	Enel
	- of which men	(no.)	49,899	51,341	52,346	-1,442	-2.8	Enel
	- of which women	(no.)	15,225	14,938	14,371	287	1.9	Enel
<b>2-8</b>	<b>Use of fixed-term contracts and inclusion/ Centre for Labor Training (CFL) of the total</b>	(%)	<b>1.1</b>	<b>1.2</b>	<b>1.3</b>	-0.1	-	Enel
	<b>Internship and traineeships</b>	(no.)	<b>799</b>	<b>1,083</b>	<b>883</b>	-284	-26.2	Enel
<b>2-7</b>	<b>Workforce by type of contract and geographic area<sup>(3)</sup></b>							
	<b>Italy<sup>(2)</sup></b>	(no.)	<b>31,664</b>	<b>30,276</b>	<b>29,800</b>	1,388	4.6	Italy
	Permanent contract	(no.)	31,662	30,263	29,783	1,399	4.6	Italy
	Fixed-term contracts	(no.)	2	13	17	-11	-84.6	Italy
	<b>Iberia</b>	(no.)	<b>9,643</b>	<b>9,518</b>	<b>9,781</b>	125	1.3	Iberia
	Permanent contract	(no.)	9,423	9,281	9,531	142	1.5	Iberia
	Fixed-term contracts	(no.)	220	237	250	-17	-7.2	Iberia



GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	<b>Latin America</b>	(no.)	<b>17,361</b>	<b>18,763</b>	<b>19,838</b>	-1,402	-7.5	Latin America
	Permanent contract	(no.)	16,893	18,304	19,374	-1,411	-7.7	Latin America
	Fixed-term contracts	(no.)	468	459	464	9	2.0	Latin America
	<b>Europe<sup>(4)</sup></b>	(no.)	<b>3,532</b>	<b>4,994</b>	<b>4,966</b>	-1,462	-29.3	Europe
	Permanent contract	(no.)	3,495	4,883	4,817	-1,388	-28.4	Europe
	Fixed-term contracts	(no.)	37	111	149	-74	-66.7	Europe
	<b>North America</b>	(no.)	<b>2,100</b>	<b>1,914</b>	<b>1,639</b>	186	9.7	North America
	Permanent contract	(no.)	2,086	1,909	1,627	177	9.3	North America
	Fixed-term contracts	(no.)	14	5	12	9	-	North America
	<b>Sub-Saharan Africa and Asia</b>	(no.)	<b>824</b>	<b>814</b>	<b>693</b>	10	1.2	Sub-Saharan Africa and Asia
	Permanent contract	(no.)	818	813	690	5	0.6	Africa, Asia and Oceania
	Fixed-term contracts	(no.)	6	1	3	5	-	Africa, Asia and Oceania
<b>2-7</b>	<b>Workforce by type of contract and gender</b>							
	<b>Full-time contracts</b>	(no.)	<b>64,619</b>	<b>65,689</b>	<b>66,074</b>	-1,070	-1.6	Enel
	- of which men	(no.)	49,801	51,209	52,208	-1,408	-2.7	Enel
	- of which women	(no.)	14,818	14,480	13,866	338	2.3	Enel
	<b>Part-time contracts</b>	(no.)	<b>505</b>	<b>590</b>	<b>643</b>	-85	-14.4	Enel
	- of which men	(no.)	98	130	138	-32	-24.6	Enel
	- of which women	(no.)	407	460	505	-53	-11.5	Enel
	<b>Part Time + Full Time</b>	(no.)	<b>65,124</b>	<b>66,279</b>	<b>66,717</b>	-1,155	-1.7	Enel
	<b>Percentage of part-time</b>	(%)	0.8	0.9	1.0	-0.1	-	Enel
	<b>Workforce by nationality</b>							
<b>DJSI 3.2.3</b>	<b>Total workforce</b>							
	Italy	(%)	48.3	45.4	44.4	2.9	-	Enel
	Brazil	(%)	11.5	13.5	15.0	-2.0	-	Enel
	Spain	(%)	14.4	14.0	14.4	0.4	-	Enel
	Argentina	(%)	6.0	6.0	5.9	-	-	Enel
	Romania	(%)	5.0	4.9	4.8	0.1	-	Enel
	Colombia	(%)	3.6	3.4	3.3	0.2	-	Enel
	Chile	(%)	3.2	3.2	3.3	-	-	Enel
	Other	(%)	8.0	9.4	8.8	-1.4	-	Enel
<b>DJSI 3.2.3</b>	<b>Workforce in management positions (manager and middle manager)</b>							
	Italy	(%)	49	47.8	47.7	0.8	-	Enel
	Brazil	(%)	4.8	5.1	4.8	-0.2	-	Enel
	Spain	(%)	29.7	29.0	29.3	0.6	-	Enel
	Argentina	(%)	2.1	2.1	2.2	-	-	Enel
	Romania	(%)	2.7	2.7	2.7	-	-	Enel
	Colombia	(%)	2.2	2.1	2.1	0.1	-	Enel
	Chile	(%)	2.7	2.9	2.9	-0.2	-	Enel
	Other	(%)	7.1	8.3	8.3	-1.2	-	Enel
<b>401-1</b>	<b>CHANGES TO SIZE</b>							

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
<b>New hires</b>								
	<b>New hires by gender</b>	(no.)	<b>6,412</b>	<b>5,401</b>	<b>3,131</b>	1,011	18.7	Enel
	<b>Hiring rate<sup>(8)</sup></b>	(%)	9.8	8.1	4.7	1.7	-	Enel
	- men	(no.)	4,356	3,764	2,203	592	15.7	Enel
		(%)	62.4	69.7	70.4	-7.3	-	Enel
	- women	(no.)	2,056	1,637	928	419	25.6	Enel
		(%)	32.5	30.3	29.6	2.2	-	Enel
	<b>New hires by age range</b>	(no.)	<b>6,412</b>	<b>5,401</b>	<b>3,131</b>	1,011	18.7	Enel
	up to 30	(no.)	3,359	2,579	1,363	780	30.2	Enel
		(%)	54.2	47.8	43.5	6.4	-	Enel
	from 30 to 50	(no.)	2,905	2,653	1,700	252	9.5	Enel
		(%)	42.5	49.1	54.3	-6.6	-	Enel
	over 50	(no.)	148	169	68	-21	-12.4	Enel
		(%)	2.4	3.1	2.2	-0.7	-	Enel
<b>New hires by geographic area</b>								
	<b>Italy<sup>(2)</sup></b>	(no.)	<b>2,866</b>	<b>1,697</b>	<b>1,044</b>	1,169	68.9	Italy
		(%)	9.1	5.6	33.3	3.5	-	Italy
	<b>Iberia</b>	(no.)	<b>741</b>	<b>694</b>	<b>257</b>	47	6.8	Iberia
		(%)	7.7	7.3	8.2	0.4	-	Iberia
	<b>Europe<sup>(4)</sup></b>	(no.)	<b>443</b>	<b>439</b>	<b>280</b>	4	0.9	Europe
		(%)	12.5	8.8	8.9	3.7	-	Europe
	<b>North America</b>	(no.)	<b>614</b>	<b>636</b>	<b>362</b>	-22	-3.5	North America
		(%)	29.2	33.2	11.6	-4.0	-	North America
	<b>Latin America</b>	(no.)	<b>1,542</b>	<b>1,704</b>	<b>991</b>	-162	-9.5	Latin America
		(%)	8.9	9.1	31.7	-0.2	-	Latin America
	<b>Sub-Saharan Africa and Asia</b>	(no.)	<b>206</b>	<b>232</b>	<b>197</b>	-26	-11.2	Sub-Saharan Africa and Asia
		(%)	25.0	28.5	6.3	-3.5	-	Sub-Saharan Africa and Asia
	<b>Open positions filled by internal candidates</b>	(%)	9.4	9.3	14.0	0.1	-	Enel
	<b>Effect of the changes in scope</b>	(no.)	-3,153	23	-971	-3,176	-	Enel
<b>Terminations</b>								
	<b>Total terminations</b>	(no.)	<b>4,414</b>	<b>5,862</b>	<b>3,696</b>	-1,448	-24.7	Enel
<b>Causes</b>								
	Voluntary terminations	(no.)	1,477	1,271	717	206	16.2	Enel
	Incentive based terminations	(no.)	1,853	3,532	817	-1,679	-47.5	Enel
	Retirements and other	(no.)	1,084	1,060	2,162	24	2.3	Enel
<b>Terminations by gender</b>								
	- men	(no.)	3,391	4,779	3,002	-1,388	-29.0	Enel
		(%)	76.8	81.5	81.2	-4.7	-	Enel
	- women	(no.)	1,023	1,083	694	-60	-5.5	Enel
		(%)	23.2	18.5	18.8	4.7	-	Enel
	<b>Terminations by age range</b>	(no.)	<b>4,414</b>	<b>5,862</b>	<b>3,696</b>	-1,448	-24.7	Enel

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	up to 30	(no.)	655	702	547	-47	-6.7	Enel
		(%)	14.9	12.0	14.8	2.9	-	Enel
	from 30 to 50	(no.)	1,759	2,275	1,273	-516	-22.7	Enel
		(%)	39.8	38.8	34.4	1.0	-	Enel
	over 50	(no.)	2,001	2,885	1,876	-884	-30.6	Enel
		(%)	46.0	49.2	50.8	-3.2	-	Enel
<b>Terminations by Country</b>								
	<b>Italy<sup>(2)</sup></b>	(no.)	<b>1,224</b>	<b>1,249</b>	<b>1,011</b>	-25	-2.0	Italy
		(%)	27.7	4.1	27.4	23.6	-	Italy
	<b>Iberia</b>	(no.)	<b>578</b>	<b>956</b>	<b>599</b>	-378	-39.5	Iberia
		(%)	13.1	10.0	16.2	3.1	-	Iberia
	<b>Europe<sup>(3)</sup></b>	(no.)	<b>454</b>	<b>406</b>	<b>299</b>	48	11.8	Europe
		(%)	10.3	8.1	8.1	2.2	-	Europe
	<b>North America</b>	(no.)	<b>428</b>	<b>361</b>	<b>313</b>	67	18.6	North America
		(%)	9.7	18.9	8.5	-9.2	-	North America
	<b>Latin America</b>	(no.)	<b>1,534</b>	<b>2,779</b>	<b>1,393</b>	-1,245	-44.8	Latin America
		(%)	34.8	14.8	37.7	20.0	-	Latin America
	<b>Sub-Saharan Africa and Asia</b>	(no.)	<b>196</b>	<b>111</b>	<b>81</b>	85	76.6	Sub-Saharan Africa and Asia
		(%)	4.4	13.6	2.2	-9.2	-	Africa, Asia and Oceania
	<b>Turnover rate<sup>(9)</sup></b>	(%)	<b>6.8</b>	<b>8.8</b>	<b>5.6</b>	-2.0	-	Enel
<b>Turnover rate by gender</b>								
	- men	(%)	6.8	9.5	5.7	-2.7	-	Enel
	- women	(%)	6.7	7.5	4.8	-0.8	-	Enel
<b>Turnover rate by age range</b>								
	up to 30	(%)	1.0	9.0	7.5	-8.0	-	Enel
	from 30 to 50	(%)	2.7	6.0	3.5	-3.3	-	Enel
	over 50	(%)	3.1	14.1	8.1	-11.0	-	Enel
	<b>Voluntary turnover rate</b>	(%)	2.3	1.9	1.1	0.8	-	Enel
<b>Voluntary turnover rate by gender</b>								
	- men	(%)	1.6	1.3	0.8	0.3	-	Enel
	- women	(%)	0.7	0.6	0.3	0.3	-	Enel
<b>Voluntary turnover rate by age range</b>								
	up to 30	(%)	0.6	0.5	0.2	0.1	-	Enel
	from 30 to 50	(%)	1.5	1.3	0.7	0.2	-	Enel
	over 50	(%)	0.1	0.1	0.2	-	-	Enel
<b>VALORIZATION</b>								
<b>404-3 Assessment<sup>(10)</sup></b>								

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	<b>Dissemination of assessment</b>	(%)	<b>87.0</b>	<b>89.2</b>	<b>93.8</b>	-2.2	-	Enel
	- men	(%)	86.4	88.6	94.0	-2.2	-	Enel
	- women	(%)	89.0	91.4	93.0	-2.4	-	Enel
	<b>Dissemination of assessment</b>							
	Manager	(%)	<b>97.3</b>	<b>97.2</b>	97.8	0.1	-	Enel
	Middle Manager	(%)	<b>92.6</b>	<b>93.2</b>	93.7	-0.6	-	Enel
	White collar	(%)	<b>88.2</b>	<b>88.6</b>	93.4	-0.4	-	Enel
	Blue collar	(%)	<b>79.3</b>	<b>79.1</b>	94.4	0.2	-	Enel
	<b>Rewarding</b>							
	<b>Dissemination of incentives</b>	(%)	<b>41.5</b>	<b>43.1</b>	<b>43.6</b>	-1.6	-	Enel
	Employees with individual incentives	(no.)	27,050	28,568	22,546	-1,518	-5.3	Enel
	- of whom Managers	(no.)	1,349	1,351	1,006	-2	-0.1	Enel
	- of whom Middle Managers	(no.)	8,224	7,915	3,750	309	3.9	Enel
	- of whom White-collar e Blue collar	(no.)	17,477	19,308	17,790	1,831	-9.5	Enel
	Percentage of sustainability objectives assigned	(%)	25.3	30.0	n.d.	-0.7	-	Enel
<b>404-1</b>	<b>Percentage of sustainability objectives assigned</b>							
	<b>Training hours by employees</b>	(h/per capita)	<b>47.4</b>	<b>44.6</b>	<b>40.9</b>	2.8	6.3	Enel
	<b>by gender:</b>							
	- men	(h/per capita)	48.3	46.5	40.4	1.8	3.9	Enel
	- women	(h/per capita)	44.3	37.7	42.7	6.6	17.5	Enel
	<b>by level:</b>							
	Manager	(h/per capita)	44.1	29.6	31.9	14.5	49.0	Enel
	Middle Manager	(h/per capita)	47.4	41.9	41.4	5.5	13.1	Enel
	White collar	(h/per capita)	43.0	38.4	35.7	4.6	12.0	Enel
	Blue collar	(h/per capita)	57.1	60.3	51.4	-3.2	-5.3	Enel
	<b>Total training hours (distance learning + classroom)</b>	(,000 h)	<b>3,151</b>	<b>2,943</b>	<b>2,744</b>	208	7.1	Enel
	Training hours distance learning	(,000 h)	1,943	513	448	1,430	-	Enel
	- Training hours distance learning	(,000 h)	344	204	94	139	68.2	Enel
	- for specialist training	(,000 h)	1,599	309	354	1,290	-	Enel
	Training hours in the classroom	(,000 h)	1,208	2,430	2,296	-1,222	-50.3	Enel
	- for managerial training	(,000 h)	57	189	170	-132	-69.9	Enel
	- for specialist training	(,000 h)	1,151	2,241	2,126	-1,090	-48.6	Enel
	<b>Incidence of distance learning training</b>	(%)	<b>61.7</b>	<b>17.4</b>	<b>16.3</b>	44.3	-	Enel
	<b>Total training hours by level</b>	(,000 h)	<b>3,151</b>	<b>2,943</b>	<b>2,744</b>	208	7.1	Enel
	Manager	(,000 h)	61	41	45	20	49.1	Enel
	Middle Manager	(,000 h)	593	494	466	99	20.0	Enel
	White collar	(,000 h)	1,532	1,362	1,287	170	12.5	Enel
	Blue collar	(,000 h)	964	1,045	946	-81	-7.8	Enel
	<b>Dissemination of sustainability</b>							
	Training per capita on sustainability	(h/pro-capite)	27.9	26.7	21.7	-13.3	-49.8	Enel

GRI/ EUS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	Training per capita on sustainability	(,000 h)	1,853	1,763	1,457	67	3.8	Enel
	Digitalization	(,000 h)	431	410	342	21	5.2	Enel
	Environment	(,000 h)	28	58	48	-30	-51.8	Enel
	Safety	(,000 h)	1,244	1,188	979	56	4.7	Enel
	Human rights	(,000 h)	7	7	5	-	-	Enel
	Other <sup>(1)</sup>	(,000 h)	128	88	61	40	44.8	Enel
	Code of Ethics	(,000 h)	15	11	22	4	34.8	Enel
<b>205-2</b>	<b>Training on anti-corruption policies and procedures communication</b>	(no.)	30,566	20,074	26,660	10,490	52.3	Enel
		(%)	46.9	30.3	40.0	16.6	-	Enel
	<b>Training on anti-corruption policies and procedures communication by geographic area</b>							
	Italy	(no.)	17,882	10,443	14,224	7,439	71.2	Italy
	Italy	(%)	56.5	34.5	47.7	22.0	-	Italy
	Iberia	(no.)	4,922	3,564	1,977	1,358	38.1	Iberia
	Iberia	(%)	51.0	37.4	20.2	13.6	-	Iberia
	Latin America	(no.)	5,532	3,339	5,326	2,193	65.7	Latin America
	Latin America	(%)	31.9	17.8	26.8	14.1	-	Latin America
	Europe	(no.)	426	1,050	4,006	-624	-59.4	Europe
	Europe	(%)	12.1	21.0	80.7	-8.9	-	Europe
	Asia e Oceania	(no.)	122	225	197	-103	-45.8	Asia e Oceania
	Asia e Oceania	(%)	14.8	27.7	28.4	-12.9	-	Asia e Oceania
	North America	(no.)	1,682	1,453	930	229	15.8	North America
	North America	(%)	80.1	75.9	56.7	4.2	-	North America
	<b>Training on anti-corruption policies and procedures communication by level</b>							
	Manager	(no.)	753	487	407	266	54.6	Enel
		(%)	55.1	35.4	29.1	19.7	-	Enel
	Middle Manager	(no.)	6,133	4,588	3,967	1,545	33.7	Enel
		(%)	48.5	37.5	34.2	11.0	-	Enel
	White collar	(no.)	16,106	11,251	14,856	4,855	43.2	Enel
		(%)	46.5	31.6	41.4	14.9	-	Enel
	Blue collar	(no.)	7,652	3,747	7,430	3,905	-	Enel
		(%)	46.4	21.9	41.6	24.5	-	Enel
<b>201-3</b>	<b>CORPORATE WELFARE</b>							
	Employees covered by pension plan benefit plan)	(no.)	52,497	53,862	53,715	-1,365	-2.5	Enel
	Employees covered by pension plan benefit plan)	(%)	80.6	81.3	80.5	-0.7	-	Enel
<b>EU15</b>	<b>Employees entitled to retire in next 5 to 10 years</b>							
	<b>Pension within 5 years - Enel</b>							
	Manager	(%)	4.4	4.5	3.6	-0.1	-	Enel
	Middle Manager	(%)	5.4	5.0	4.9	0.4	-	Enel
	White collar	(%)	7.8	7.1	6.6	0.7	-	Enel
	Blue collar	(%)	5.1	3.8	4.4	1.3	-	Enel



GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	Average	(%)	6.5	5.7	5.6	0.8	-	Enel
	<b>Pension within 10 years – Enel</b>							
	Manager	(%)	21.8	20.8	17.7	1.0	-	Enel
	Middle Manager	(%)	18.3	17.3	17.0	1.0	-	Enel
	White collar	(%)	24.0	22.9	21.7	1.1	-	Enel
	Blue collar	(%)	14.8	12.6	11.0	2.2	-	Enel
	Average	(%)	20.5	19.1	17.9	1.4	-	Enel
<b>401-3</b>	<b>MATERNITY/PATERNITY-PARENTAL LEAVE</b>							
	<b>Employees entitled to parental leave by gender</b>	(no.)	<b>2,756</b>	<b>2,605</b>	<b>2,734</b>	151	5.8	Enel
	Men	(no.)	1,845	1,694	1,741	151	8.9	Enel
	Women	(no.)	911	911	993	-	-	Enel
	<b>Parental leave by gender</b>	(no.)	<b>2,604</b>	<b>2,605</b>	<b>2,734</b>	-1	-	Enel
	Men	(no.)	1,725	1,694	1,741	31	1.8	Enel
	Women	(no.)	879	911	993	-32	-3.5	Enel
	<b>Return to work rate of employees that took parental leave by gender</b>	(%)	<b>95.7</b>	<b>95.0</b>	<b>95.6</b>	0.7	-	Enel
	Men	(%)	95.9	96.3	96.1	-0.4	-	Enel
	Women	(%)	95.4	92.7	94.7	2.7	-	Enel
	<b>Retention rate by gender<sup>(12)</sup></b>	(%)	<b>89.7</b>	<b>97.0</b>	<b>96.3</b>	-7.3	-	Enel
	Men	(%)	91.2	95.3	97.2	-4.1	-	Enel
	Women	(%)	87.0	100	97.7	-13.2	-	Enel
	<b>EQUAL OPPORTUNITIES</b>							
	<b>Level of female staff<sup>(13)</sup></b>	(%)	<b>39.3</b>	<b>30.6</b>	<b>29.4</b>	8.7	-	Enel
<b>405-2</b>	<b>Ratio of basic salary/remuneration Women/Men</b>							
	<b>Ratio of basic salary Women/Men</b>	(%)	<b>104.7</b>	<b>104.8</b>	<b>108.1</b>	-0.1	-	Enel
	Manager	(%)	83.9	84.6	86.7	-0.7	-	Enel
	Middle Manager	(%)	92.8	94.2	96.5	-1.4	-	Enel
	White collar	(%)	88.8	88.4	90.2	0.4	-	Enel
	Blue collar	(%)	125.0	111.2	77.0	13.8	-	Enel
	<b>Ratio of remuneration Women/Men</b>	(%)	<b>105.4</b>	<b>105.1</b>	<b>108.3</b>	0.3	-	Enel
	Manager	(%)	80.7	81.1	83.3	-0.4	-	Enel
	Middle Manager	(%)	91.9	93.2	95.7	-1.3	-	Enel
	White collar	(%)	89.3	88.4	90.3	0.9	-	Enel
	Blue collar	(%)	125.4	112.0	77.8	13.4	-	Enel
<b>405-1</b>	<b>Disability</b>							
	<b>Disabled or belonging to protected categories by gender</b>	(no.)	<b>2,129</b>	<b>2,152</b>	<b>2,199</b>	-23	-1.1	Enel
	- of which men	(no.)	1,471	1,480	1,532	-9	-0.6	Enel
	- of which women	(no.)	658	672	667	-14	-2.1	Enel
	<b>Incidence of disabled or belonging to protected categories by gender</b>	(%)	<b>3.3</b>	<b>3.2</b>	<b>3.3</b>	0.1	-	Enel
	- of which men	(%)	69.1	68.8	2.3	0.3	-	Enel
	- of which women	(%)	30.9	31.2	1.0	-0.3	-	Enel
	<b>Disabled or belonging to protected categories by age range</b>	(no.)	<b>2,129</b>	<b>2,152</b>	<b>2,199</b>	-23	-1.1	Enel
	- up to 30	(no.)	40	44	49	-4	-9.1	Enel
	- from 30 to 50	(no.)	982	985	933	-3	-0.3	Enel
	- over 50	(no.)	1,107	1,123	1,217	-16	-1.4	Enel
	<b>Incidence of disabled or belonging to protected categories by age range</b>	(%)	<b>3.3</b>	<b>3.2</b>	<b>3.3</b>	0.1	-	Enel

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	- up to 30	(%)	0.5	0.1	0.1	0.4	-	Enel
	- from 30 to 50	(%)	2.7	1.5	1.4	1.2	-	Enel
	- over 50	(%)	5.6	1.7	1.8	3.9	-	Enel
<b>Disabled or belonging to protected categories by level</b>								
	Manager	(no.)	4	3	3	1	33.3	Enel
	Middle Manager	(no.)	201	167	157	34	20.4	Enel
	White collar	(no.)	1,766	1,814	1,880	-48	-2.6	Enel
	Blue collar	(no.)	158	168	159	-10	-6.0	Enel
<b>Incidence of disabled or belonging to protected categories by level</b>								
	Manager	(%)	0.3	-	-	-	-	Enel
	Middle Manager	(%)	1.6	0.3	0.2	1	-	Enel
	White collar	(%)	5.1	2.7	2.8	2	-	Enel
	Blue collar	(%)	1.0	0.3	0.2	1	-	Enel
<b>Smartworking</b>								
	Actual users of smartworking	(no.)	36,473	38,403	36,334	-1,930	-5.0	Enel
	Potential users of smartworking	(no.)	36,707	39,115	37,305	-2,408	-6.2	Enel
	Incidence of Smartworking	(%)	99.4	98.2	97.4	1.2	-	Enel
<b>2-30 RELATIONS WITH UNIONS</b>								
	<b>Union membership in the electricity sector</b>	(%)	<b>46.9</b>	<b>48.9</b>	<b>50.7</b>	-2.0	-	Enel
<b>Employees covered by collective agreements, by geographic area</b>								
	<b>Total Enel</b>	(no.)	<b>59,256</b>	<b>59,582</b>	<b>60,571</b>	-326	-0.5	Enel
		(%)	91.0	89.9	90.8	1.1	-	Enel
	<b>Italy</b>	(no.)	<b>31,643</b>	<b>30,148</b>	<b>29,710</b>	1,495	5.0	Italy
		(%)	99.9	99.6	99.7	0.3	-	Italy
	<b>Iberia</b>	(no.)	<b>8,213</b>	<b>8,687</b>	<b>8,685</b>	-474	-5.5	Iberia
		(%)	85.2	91.3	88.8	-2.4	-	Iberia
	<b>Europe</b>	(no.)	<b>3,252</b>	<b>4,391</b>	<b>4,380</b>	-1,139	-25.9	Europe
		(%)	92.1	87.9	88.2	4.2	-	Europe
	<b>Latin America</b>	(no.)	<b>16,089</b>	<b>16,317</b>	<b>17,771</b>	-228	-1.4	Latin America
		(%)	92.7	87.0	89.6	5.7	-	Latin America
	<b>North America</b>	(no.)	<b>59</b>	<b>39</b>	<b>25</b>	20	51.3	North America
		(%)	2.8	2.0	-	0.8	-	North America
	<b>Sub-Saharan Africa and Asia</b>	(no.)	-	-	-	-	-	Sub-Saharan Africa and Asia
		(%)	-	-	-	-	-	Sub-Saharan Africa and Asia
<b>Dispute with employees</b>								
	<b>Total proceedings<sup>(14)</sup></b>	(no.)	<b>7,786</b>	<b>9,384</b>	<b>9,028.0</b>	-1,598	-17.0	Enel
	<b>Incidence of proceedings as defendant</b>	(%)	<b>98.7</b>	<b>98.9</b>	<b>98.9</b>	-0.2	-	Enel

(1) In 2022, there was a change in scope due to the sale of the companies: Teploprogress, LLC Enel Rus Wind Azov, LLC Enel Rus Wind Kola and Enel Russia in Russia; Enel Geração Fortaleza SA, CELG Distribuição SA CE and Gridspertise Latam SA in Brazil; Enel Transmisión SA in Chile; Gridspertise Iberia SL in Spain; Paytipper SpA, CityPoste Payment SpA, PayTipper Network Srl, FlagPay Srl and Gridspertise Srl in Italy. There was also the purchase of the companies Melita

Italy Srl and Enel Hydro Appennino Centrale Srl in Italy.

- (2) Include Branch Enel Trading (Singapore) and the Dutch financial companies.
- (3) Includes International Endesa BV (IEBV).
- (4) The following Countries are considered within this scope: Romania, Russia, Greece, France, Germany, Turkey, United Kingdom, Ireland, Norway, Poland and Switzerland.
- (5) Countries considered within the scope: USA, Canada and Mexico.
- (6) The following countries are considered within the scope: India, Kenya, South Africa, Zambia, Australia, Morocco, Singapore, Japan, Taiwan, New Zealand, China and South Korea, Vietnam.
- (7) The 2021 and 2020 figures include a more specific determination.
- (8)  $\text{Hiring rate} = \text{Total new recruits} / \text{Total workforce}$ .
- (9)  $\text{Turnover rate} = \text{Total terminations} / \text{Total workforce}$ .
- (10) It should be noted that for GRI KPI 404-3, the calculation of the assessed percentage considers all Headcounts and not just those eligible by process for the denominator.
- (11) Includes training relating to privacy, anti-bribery, community relations and diversity.
- (12) Retention rate = loyalty index expressing the percentage of employees who remain in the organization over a given timeframe.
- (13)  $\text{Classification index} = \text{female managers} + \text{middle managers} / \text{total managers} + \text{middle managers}$ .
- (14) The 2022, 2021 and 2020 figures only includes the procedures relating to Enel and retired staff, and not the procedures relating to third parties.

# Sustainable supply chain

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
<b>NATURE OF SUPPLIERS</b>								
	<b>Number of new contracts signed during the year</b>	(no.)	<b>13,671</b>	<b>12,272</b>	<b>13,051</b>	1,399	11.4	Enel
	<b>Number of suppliers with which a new contract was signed in the year</b>	(no.)	<b>6,213</b>	<b>6,066</b>	<b>6,051</b>	147	2.4	Enel
	<b>Workforce of contracting and subcontracting companies<sup>(1)</sup></b>	(no.)	<b>172,854</b>	<b>170,397</b>	<b>157,940</b>	2,433	1.4	Enel
	<b>Days worked by employees of contractors and subcontractors</b>	(,000 g)	<b>36,118</b>	<b>37,493</b>	<b>34,747</b>	-1,375	-3.7	Enel
	Construction activity	(,000 g)	10,217	14,499	10,519	-4,282	-29.5	Enel
	Operating and maintenance activity	(,000 g)	26,662	22,993	24,228	3,669	16	Enel
	- of which operating activity	(,000 g)	6,340	6,898	7,268	-558	-8.1	Enel
	- of which maintenance activity	(,000 g)	12,836	16,095	16,959	-3,259	-20.2	Enel
<b>204-1</b>	<b>Local suppliers of materials and services<sup>(2)</sup></b>							
	Local suppliers with contracts > 1 mil euros	(no.)	1,684	1,566	1,326	118	7.5	Enel
	Foreign suppliers with contracts > 1 mil euros	(no.)	225	165	182	21	12.7	Enel
	Spending on local suppliers with contracts > 1 mil euros	(mil euros)	17,411	14,484	10,130	2,927	20.2	Enel
	Spending on foreign suppliers with contracts > 1 mil euros	(mil euros)	2,837	2,381	1,657	456	19.2	Enel
	Concentration of spending on local suppliers <sup>(3)</sup>	(%)	86%	86%	86%	-	-	Enel
	Concentration of spending on foreign suppliers <sup>(3)</sup>	(%)	14%	14%	14%	-	-	Enel
<b>Purchases and fuel</b>								
	<b>Purchases of materials and services</b>	(mil euros)	<b>22,099</b>	<b>17,030</b>	<b>14,070</b>	5,069	29.8	Enel
	Supplies	(mil euros)	7,820	6,510	5,480	1,310	20.1	Enel
	Works	(mil euros)	4,492	3,776	3,625	716	18.9	Enel
	Services	(mil euros)	9,788	6,744	4,965	3,044	45.1	Enel
<b>Management instruments</b>								
	<b>Active qualified companies<sup>(4)</sup></b>	(no.)	<b>9,427</b>	<b>6,717</b>	<b>4,821</b>	2,710	40.3	Enel
	<b>Online tenders as percentage of all tenders</b>	(%)	<b>95.4</b>	<b>83.5</b>	<b>74.8</b>	11.9	-	Enel
	<b>Online purchases as percentage of all purchases</b>	(%)	<b>91.8</b>	<b>70.3</b>	<b>67.5</b>	21.5	-	Enel
	<b>Use of prescription</b>	(%)	<b>32.4</b>	<b>16.0</b>	<b>19.1</b>	16.4	-	Enel
<b>Disputes involving suppliers</b>								
	<b>Total proceedings</b>	(no.)	<b>508</b>	<b>785</b>	<b>703</b>	-277	-35.3	Enel
	<b>Incidence of proceedings as defendant</b>	(%)	<b>63.9</b>	<b>68.7</b>	<b>69.3</b>	-4.8	-	Enel
<b>301-1</b>	<b>Fuel consumption for thermoelectric production</b>							
<b>from non-renewable sources</b>								
	Coal	(,000 t)	8,522	5,958	5,893	2,564	43.0	Enel
	Lignite	(,000 t)	-	-	105	-	-	Enel
	Fuel oil	(,000 t)	889	863	975	26	3.0	Enel
	Natural gas	(Mm <sup>3</sup> )	13,214	15,682	13,075	-2,468	-15.7	Enel
	Gas oil	(,000 t)	1,262	1,033	906	229	22.2	Enel
<b>from renewable resources</b>								
	Biomass and waste for thermoelectric production	(,000 t)	65	71	89	-6	-8.5	Enel
	Biogas	(Mm <sup>3</sup> )	1.2	0.7	0.1	0.5	71.4	Enel
	Geothermal steam used for electricity production	(,000 t)	49,947	350,160	350,090	-300,213	-85.7	Enel

(1) Calculated in FTE (Full Time Equivalent).

(2) "Local suppliers" are defined as suppliers with their registered office in the country where the supply contract was issued.

(3) The figure for 2021 reflects a more accurate calculation.

(4) The 2021 and 2020 figures changed due to a more specific reclassification between global qualifications and local qualifications.

# Engaging communities

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022- 2021	%	Scope
<b>203-1</b>	<b>INITIATIVES IN FAVOR OF THE COMMUNITY</b>							
	<b>Contributions to communities - LBG method</b>							
	Charitable donations <sup>(1)</sup>	(mil euros)	14.5	9.8	56.1	4.7	47.8	Enel
	Investments in communities <sup>(2)</sup>	(mil euros)	77.2	56.2	56.1	21.0	37.4	Enel
	Commercial initiatives with a social impact	(mil euros)	28.3	25.2	17.5	3.1	12.4	Enel
	<b>Total (expense + investments)</b>	(mil euros)	<b>120.0</b>	<b>91.1</b>	<b>129.7</b>	28.8	31.6	Enel
	<b>Initiatives in favor of communities by type of contribution</b>							
	Cash contribution	(mil euros)	103.4	81.7	119.4	21.7	26.6	Enel
	Employee volunteerism	(mil euros)	0.8	0.4	0.1	0.4	91.0	Enel
	Donations in kind (goods/services/projects)	(mil euros)	7.5	2.5	4.9	5.0	-	Enel
	Management overheads	(mil euros)	8.3	6.6	5.3	1.7	20.5	Enel
	<b>Total</b>	(mil euros)	<b>120.0</b>	<b>91.1</b>	<b>129.7</b>	28.8	31.6	Enel
<b>EU25</b>	<b>SAFETY FOR COMMUNITIES</b>							
	<b>Third-party injuries</b>							
	<b>Severe and fatal third-party injuries</b>	(no.)	<b>168</b>	<b>250</b>	<b>221</b>	-82	-32.8	Enel
	- fatal	(no.)	67	77	89	-10	-13.0	Enel
	- severe	(no.)	101	173	132	-72	-41.6	Enel
	<b>Third-party injuries by type</b>							
	Electricity injuries	(%)	93.6	92.0	89.6	1.6	-	Enel
	Road accidents against Group infrastructure	(%)	3.5	5.2	6.3	-1.7	-	Enel
	Accidents for other reasons (slipping, falling from height, crash-crush-cut)	(%)	2.9	2.8	4.1	0.1	-	Enel
	<b>Causes of electricity accident</b>							
	Construction activities near power lines	(%)	52.0	64.8	55.6	-12.8	-	Enel
	Attempted theft	(%)	25.4	12.8	9.6	12.6	-	Enel
	Other <sup>(3)</sup>	(%)	28.9	14.4	34.8	14.5	-	Enel

(1) The increase in donations with respect to 2021 is due mainly to the activities carried out in Brazil and Chile.

(2) The increase in community investments with respect to 2021 is due mainly to the activities carried out in Brazil, Chile and Colombia.

(3) Mainly due to accidental contact with metal wires, agricultural work and plant cutting activities, among other things.



# Innovation

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
DMA EU	Research and innovation							
	Technological innovation <sup>(1)</sup>	(mil euros)	104.5	130.4	110.5	-25.9	-19.9	Enel
	Research personnel	(no.)	576.0	558.0	520.0	18.0	3.2	Enel
	End users (final)	(no.)	72,655,170	75,178,777	74,303,931	-2,523,607	-3.4	Enel
	Active clients with smart meters <sup>(2)</sup>	(no.)	45,824,963	45,169,318	44,292,794	655,645	1.5	Enel
	Active clients with smart meters/End users (final)	%	63.1	59.8	60.0	3.3	-	Enel

(1) Around 40% of investment in Innovation concerned the Global Power Generation Line, while 26% was for the Infrastructure and Networks Line. The rest concerned the other Group Business Lines.

(2) 2022 share for smart meter 2.0, amounting to 5.4 million.

# Occupational health and safety

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	<b>SAFETY</b>							
	<b>Enel people</b>							
403-9	<b>Number of fatal accidents and frequency rate<sup>(1)</sup></b>							
	<b>Number of fatal accidents</b>	(no.)	<b>1</b>	<b>3</b>	<b>1</b>	-2	-66.7	Enel
	<b>Fatal accidents by geographical area</b>							
	Italy	(no.)	-	2	-	-2	-100.0	Italy
	Iberia	(no.)	-	-	-	-	-	Iberia
	Latin America	(no.)	-	1	1	-1	-100.0	Latin America
	North America	(no.)	-	-	-	-	-	North America
	Europe	(no.)	1	-	-	1	100.0	Europe e Nord Africa
	Africa, Asia and Oceania	(no.)	-	-	-	-	-	Africa, Asia and Oceania
	<b>Fatal accidents frequency rate</b>	(i)	<b>0.008</b>	<b>0.024</b>	<b>0.008</b>	-0.016	-66.7	Enel
	<b>Fatal accidents frequency rate by geographical area</b>							
	Italy	(i)	-	0.035	-	-0.035	-100.0	Italy
	Iberia	(i)	-	-	-	-	-	Iberia
	Latin America	(i)	-	0.028	0.026	-0.028	-100.0	Latin America
	North America	(i)	-	-	-	-	-	North America
	Europe	(i)	0.129	-	-	0.129	100.0	Europe e Nord Africa
	Africa, Asia and Oceania	(i)	-	-	-	-	-	Africa, Asia and Oceania
	<b>Number of Life Changing Accidents (LCA and frequency rate)<sup>(2)</sup></b>							
	<b>Number of Life Changing Accidents (LCA)</b>	(no.)	<b>-</b>	<b>1</b>	<b>-</b>	<b>-1</b>	<b>-100.0</b>	Enel
	<b>Number of Life Changing Accidents by geographical area</b>							
	Italy	(no.)	-	-	-	-	-	Italy
	Iberia	(no.)	-	-	-	-	-	Iberia
	Latin America	(no.)	-	1	-	-1	-100.0	Latin America
	North America	(no.)	-	-	-	-	-	North America
	Europe	(no.)	-	-	-	-	-	Europe e Nord Africa
	Africa, Asia and Oceania	(no.)	-	-	-	-	-	Africa, Asia and Oceania
	<b>Life Changing Accidents frequency rate (LCA FR)</b>	(i)	<b>-</b>	<b>0.008</b>	<b>-</b>	<b>-0.008</b>	<b>-100.0</b>	Enel
	<b>Life Changing Accidents frequency rate by geographical area</b>							
	Italy	(i)	-	-	-	-	-	Italy
	Iberia	(i)	-	-	-	-	-	Iberia

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	Latin America	(i)	-	0.028	-	-0.028	-100.0	Latin America
	North America	(i)	-	-	-	-	-	North America
	Europe	(i)	-	-	-	-	-	Europe e Nord Africa
	Africa, Asia and Oceania	(i)	-	-	-	-	-	Africa, Asia and Oceania
<b>High Potential Accident (HPO) and frequency rate<sup>(3)</sup></b>								
	High Potential Accident (HPO)	(no.)	7	8	10	-1	-12.5	Enel
<b>Number of High Potential accidents (HPO) by geographical area</b>								
	Italy	(no.)	7	5	4	2	40.0	Italy
	Iberia	(no.)	-	1	1	-1	-100.0	Iberia
	Latin America	(no.)	-	1	3	-1	-100.0	Latin America
	North America	(no.)	-	-	-	-	-	North America
	Europe	(no.)	-	1	2	-1	-100.0	Europe e Nord Africa
	Africa, Asia and Oceania	(no.)	-	-	-	-	-	Africa, Asia and Oceania
	<b>High Potential accidents frequency rate (HPO FR)</b>	(i)	<b>0.057</b>	<b>0.065</b>	<b>0.080</b>	-0.008	-12.3	Enel
<b>High Potential accidents frequency rate by geographical area</b>								
	Italy	(i)	0.120	0.089	0.072	0.031	34.8	Italy
	Iberia	(i)	-	0.061	0.059	-0.061	-100.0	Iberia
	Latin America	(i)	-	0.028	0.079	-0.028	-100.0	Latin America
	North America	(i)	-	-	-	-	-	North America
	Europe	(i)	-	0.106	0.196	-0.106	-100.0	Europe e Nord Africa
	Africa, Asia and Oceania	(i)	-	-	-	-	-	Africa, Asia and Oceania
<b>Number of accidents with absence of work greater than 3 days and frequency rate</b>								
	<b>Number of accidents with absence from work for more than 3 days</b>	(no.)	<b>59</b>	<b>61</b>	<b>72</b>	-2	-3.3	Enel
<b>Number of accidents with absence from work for more than 3 days by geographical area</b>								
	Italy	(no.)	37	41	41	-4	-9.8	Italy
	Iberia	(no.)	2	2	2	-	-	Iberia
	Latin America	(no.)	18	18	25	-	-	Latin America
	North America	(no.)	-	-	-	-	-	North America
	Europe	(no.)	2	-	4	2	-	Europe e Nord Africa
	Africa, Asia and Oceania	(no.)	-	-	-	-	-	Africa, Asia and Oceania
	<b>Accidents with absence from work for more than 3 days frequency rate</b>	(i)	<b>0.477</b>	<b>0.494</b>	<b>0.575</b>	-0.017	-3.4	Enel

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	<b>Accidents with absence from work for more than 3 days frequency rate by geographical area</b>							
	Italy	(i)	0.632	0.726	0.734	-0.094	-12.9	Italy
	Iberia	(i)	0.121	0.122	0.117	-0.001	-0.8	Iberia
	Latin America	(i)	0.508	0.498	0.662	0.010	2.0	Latin America
	North America	(i)	-	-	-	-	-	North America
	Europe	(i)	0.258	-	0.393	0.258	-	Europe e Nord Africa
	Africa, Asia and Oceania	(i)	-	-	-	-	-	Africa, Asia and Oceania
	<b>Number of Lost Time Injury (LTI) and frequency rate<sup>(4)</sup></b>							
	<b>Number of LTI</b>	(no.)	<b>69</b>	<b>83</b>	<b>75</b>	-14	-16.9	Enel
	<b>Accidents with absence from work by geographical area</b>							
	Italy	(no.)	40	53	42	-13	-24.5	Italy
	Iberia	(no.)	2	2	2	-	-	Iberia
	Latin America	(no.)	25	28	26	-3	-10.7	Latin America
	North America	(no.)	-	-	-	-	-	North America
	Europe	(no.)	2	1	5	1	100.0	Europe e Nord Africa
	Africa, Asia and Oceania	(no.)	-	-	-	-	-	Africa, Asia and Oceania
	<b>Accidents with absence from work frequency rate (LTI FR)</b>	(i)	<b>0.56</b>	<b>0.68</b>	<b>0.60</b>	-0.121	-17.8	Enel
	<b>Accidents with absence from work frequency rate by geographical area</b>							
	Italy	(i)	0.68	0.94	0.75	-0.259	-27.6	Italy
	Iberia	(i)	0.12	0.12	0.12	-0.002	-1.6	Iberia
	Latin America	(i)	0.71	0.78	0.69	-0.065	-8.4	Latin America
	North America	(i)	-	-	-	-	-	North America
	Europe	(i)	0.26	0.11	0.49	0.154	145.3	Europe e Nord Africa
	Africa, Asia and Oceania	(i)	-	-	-	-	-	Africa, Asia and Oceania
	<b>Worked hours</b>	(no.)	<b>123,624,403</b>	<b>123,421,139</b>	<b>125,263,914</b>	203,264	0.2	Enel
	<b>Number of Total Recordable Injury (TRI) and frequency rate<sup>(5)</sup></b>							
	<b>Number of TRI by geographical area</b>	(no.)	<b>153</b>	<b>157</b>	<b>196</b>	-4	-2.5	Enel
	Italy	(no.)	41	57	51	-16	-28.1	Italy
	Iberia	(no.)	24	26	24	-2	-7.7	Iberia
	Latin America	(no.)	51	50	97	1	2.0	Latin America
	North America	(no.)	30	20	9	10	50.0	North America
	Europe	(no.)	6	3	9	3	100.0	Europe e Nord Africa
	Africa, Asia and Oceania	(no.)	1	1	6	-	-	Africa, Asia and Oceania

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	<b>TRI frequency rate by geographical area</b>	(i)	<b>1.24</b>	<b>1.27</b>	<b>1.56</b>	-0.032	-2.5	Enel
	Italy	(i)	0.70	1.01	0.91	-0.309	-30.6	Italy
	Iberia	(i)	1.46	1.58	1.40	-0.120	-7.6	Iberia
	Latin America	(i)	1.44	1.38	2.57	0.057	4.1	Latin America
	North America	(i)	7.78	5.85	2.87	1.928	32.9	North America
	Europe	(i)	0.77	0.32	0.88	0.453	142.9	Europe e Nord Africa
	Africa, Asia and Oceania	(i)	0.64	0.67	4.93	-0.031	-4.6	Africa, Asia and Oceania
<b>403-9 Contractors</b>								
	<b>Number of fatal accidents and frequency rate<sup>(1)</sup></b>							
	<b>Number of fatal accidents</b>	(no.)	<b>5</b>	<b>6</b>	<b>8</b>	-1	-16.7	Enel
	<b>Fatal accidents by geographical area</b>							
	Italy	(no.)	1	1	1	-	-	Italy
	Iberia	(no.)	-	1	1	-1	-100.0	Iberia
	Latin America	(no.)	4	4	6	-	-	Latin America
	North America	(no.)	-	-	-	-	-	North America
	Europe	(no.)	-	-	-	-	-	Europe
	Africa, Asia and Oceania	(no.)	-	-	-	-	-	Africa, Asia and Oceania
	<b>Fatal accidents frequency rate</b>	(i)	<b>0.016</b>	<b>0.020</b>	<b>0.029</b>	-0.004	-20.0	Enel
	<b>Fatal accidents frequency rate by geographical area</b>							
	Italy	(i)	0.018	0.019	0.022	-0.001	-5.3	Italy
	Iberia	(i)	-	0.025	0.027	-0.025	-100.0	Iberia
	Latin America	(i)	0.021	0.022	0.036	-0.001	-4.5	Latin America
	North America	(i)	-	-	-	-	-	Nord America
	Europe	(i)	-	-	-	-	-	Europe
	Africa, Asia and Oceania	(i)	-	-	-	-	-	Africa, Asia and Oceania
	<b>Number of Life Changing Accidents (LCA) and frequency rate<sup>(2)</sup></b>							
	<b>Number of Life Changing Accidents (LCA)</b>	(no.)	<b>2</b>	<b>3</b>	<b>-</b>	-1	-33.3	Enel
	<b>Number of Life Changing Accidents by geographical area</b>							
	Italy	(no.)	-	-	-	-	-	Italy
	Iberia	(no.)	-	1	-	-1	-100.0	Iberia
	Latin America	(no.)	2	2	-	-	-	Latin America
	North America	(no.)	-	-	-	-	-	North America
	Europe	(no.)	-	-	-	-	-	Europe e Nord Africa
	Africa, Asia and Oceania	(no.)	-	-	-	-	-	Africa, Asia and Oceania



GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	<b>Life Changing Accidents frequency rate (LCA FR)</b>	(i)	<b>0.007</b>	<b>0.010</b>	-	-0.003	-30.0	Enel
	<b>Life Changing Accidents frequency rate by geographical area</b>	(i)						
	Italy	(i)	-	-	-	-	-	Italy
	Iberia	(i)	-	0.025	-	-0.025	-100.0	Iberia
	Latin America	(i)	0.011	0.011	-	-	-	Latin America
	North America	(i)	-	-	-	-	-	North America
	Europe	(i)	-	-	-	-	-	Europe e Nord Africa
	Africa, Asia and Oceania	(i)	-	-	-	-	-	Africa, Asia and Oceania
	<b>Number of High Potential accidents (HPO) and frequency rate<sup>(3)</sup></b>							
	<b>Number of High Potential accidents (HPO)</b>	(no.)	<b>24</b>	<b>32</b>	<b>40</b>	-8	-25.0	Enel
	<b>Number of High Potential accidents (HPO) by geographical area</b>							
	Italy	(no.)	9	2	9	7	350.0	Italy
	Iberia	(no.)	5	9	4	-4	-44.4	Iberia
	Latin America	(no.)	10	19	27	-9	-47.4	Latin America
	North America	(no.)	-	1	-	-1	-100.0	North America
	Europe	(no.)	-	-	-	-	-	Europe e Nord Africa
	Africa, Asia and Oceania	(no.)	-	1	-	-1	-100.0	Africa, Asia and Oceania
	<b>High Potential accidents frequency rate (HPO FR)</b>	(i)	<b>0.079</b>	<b>0.107</b>	<b>0.144</b>	-0.028	-26.2	Enel
	<b>High Potential accidents frequency rate by geographical area</b>							
	Italy	(i)	0.160	0.038	0.194	0.122	321.1	Italy
	Iberia	(i)	0.116	0.227	0.108	-0.111	-48.9	Iberia
	Latin America	(i)	0.054	0.105	0.160	-0.051	-48.6	Latin America
	North America	(i)	-	0.158	-	-0.158	-100.0	North America
	Europe	(i)	-	-	-	-	-	Europe e Nord Africa
	Africa, Asia and Oceania	(i)	-	0.104	-	-0.104	-100.0	Africa, Asia and Oceania
	<b>Number of accidents with absence of work greater than 3 days and frequency rate</b>							
	<b>Number of accidents with absence from work for more than 3 days</b>	(no.)	<b>93</b>	<b>119</b>	<b>115</b>	-26	-21.8	Enel
	<b>Number of accidents with absence from work for more than 3 days by geographical area</b>							
	Italy	(no.)	39	37	38	2	5.4	Italy
	Iberia	(no.)	17	28	17	-11	-39.3	Iberia
	Latin America	(no.)	35	49	59	-14	-28.6	Latin America
	North America	(no.)	1	3	1	-2	-66.7	North America

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	Europe	(no.)	-	1	-	-1	-100.0	Europe e Nord Africa
	Africa, Asia and Oceania	(no.)	1	1	-	-	-	Africa, Asia and Oceania
	<b>Accidents with absence from work for more than 3 days frequency rate</b>	(i)	<b>0.31</b>	<b>0.40</b>	<b>0.41</b>	-0.087	-21.9	Enel
	<b>Accidents with absence from work for more than 3 days frequency rate by geographical area</b>							
	Italy	(i)	0.69	0.71	0.82	-0.015	-2.1	Italy
	Iberia	(i)	0.39	0.71	0.46	-0.315	-44.7	Iberia
	Latin America	(i)	0.19	0.27	0.35	-0.081	-29.9	Latin America
	North America	(i)	0.16	0.48	0.16	-0.315	-66.3	North America
	Europe	(i)	-	0.09	-	-0.092	-100.0	Europe e Nord Africa
	Africa, Asia and Oceania	(i)	0.15	0.10	-	0.046	44.2	Africa, Asia and Oceania
<b>Number of Lost Time Injury (LTI) and frequency rate<sup>(4)</sup></b>								
	<b>Number of LTI<sup>(5)</sup></b>	(no.)	<b>146</b>	<b>191</b>	<b>135</b>	-45	-23.6	Enel
	<b>Accidents with absence from work by geographical area</b>							
	Italy	(no.)	47	38	39	9	23.7	Italy
	Iberia	(no.)	18	29	18	-11	-37.9	Iberia
	Latin America <sup>(5)</sup>	(no.)	76	118	77	-42	-35.6	Latin America
	North America	(no.)	4	3	1	1	33.3	North America
	Europe	(no.)	-	2	-	-2	-100.0	Europe
	Africa, Asia and Oceania	(no.)	1	1	-	-	-	Africa, Asia and Oceania
	<b>Accidents with absence from work frequency rate (LTI FR)</b>	(i)	<b>0.48</b>	<b>0.64</b>	<b>0.49</b>	-0.157	-24.6	Enel
	<b>Accidents with absence from work frequency rate by geographical area</b>							
	Italy	(i)	0.84	0.72	0.84	0.116	16.0	Italy
	Iberia	(i)	0.42	0.73	0.49	-0.310	-42.5	Iberia
	Latin America	(i)	0.41	0.65	0.46	-0.242	-37.1	Latin America
	North America	(i)	0.64	0.48	0.16	0.165	34.7	North America
	Europe	(i)	-	0.18	-	-0.184	-100.0	Europe
	Africa, Asia and Oceania	(i)	0.15	0.10	-	0.046	44.2	Africa, Asia and Oceania
	<b>Worked hours</b>	(no.)	<b>304,222,701</b>	<b>299,940,403</b>	<b>278,069,115</b>	4,282,298	1.4	Enel
<b>Number of Total Recordable Injury (TRI) and frequency rate<sup>(6)</sup></b>								
	<b>Numero di Total Recordable Injury<sup>(6)</sup></b>	(no.)	<b>809</b>	<b>1,055</b>	<b>1,112</b>	-246	-23.3	Enel
	<b>Number of TRI by geographical area</b>							
	Italy	(no.)	50	38	45	12	31.6	Italy
	Iberia	(no.)	107	109	75	-2	-1.8	Iberia

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	Latin America <sup>(5)</sup>	(no.)	534	711	861	-177	-24.9	Latin America
	North America	(no.)	105	164	112	-59	-36.0	North America
	Europe	(no.)	2	7	6	-5	-71.4	Europe e Nord Africa
	Africa, Asia and Oceania	(no.)	11	26	13	-15	-57.7	Africa, Asia and Oceania
	<b>TRI frequency rate</b>	(i)	<b>2.66</b>	<b>3.52</b>	<b>4.00</b>	-0.857	-24.4	Enel
	<b>TRI frequency rate</b>							
	Italy	(i)	0.89	0.72	0.97	0.166	22.9	Italy
	Iberia	(i)	2.48	2.75	2.02	-0.265	-9.7	Iberia
	Latin America <sup>(5)</sup>	(i)	2.86	3.93	5.11	-1.068	-27.2	Latin America
	North America	(i)	16.77	25.95	18.15	-9.181	-35.4	North America
	Europe	(i)	0.38	0.64	0.42	-0.264	-41.0	Europe e Nord Africa
	Africa, Asia and Oceania	(i)	1.63	2.71	2.24	-1.083	-39.9	Africa, Asia and Oceania

- (1) All Frequency Rates (FRs) are calculated by providing a ratio of the number of events per million hours worked.
- (2) Life Changing Accidents (LCAs) are injuries that caused consequences to health that permanently changed a person's life (for example, amputation of limbs, paralysis, neurological damage, etc.).
- (3) High Potential Accidents (HPOs) are injuries that, given their dynamics, have the potential to cause a Life-Changing or fatal event.
- (4) Lost Time Injury (LTI) includes all the accident events that have resulted in at least one day of absence from work excluding the day the event occurred.
- (5) The 2021 figures changed due to a reclassification of an event from the contractor to Enel.
- (6) Total Recordable Injuries include fatalities, LCAs, LTIs and all other injuries that have required medical treatment.

# Sound governance

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
<b>2-1</b>	<b>SHAREHOLDERS</b>							
	<b>Composition of shareholdings</b>							
	<b>Investors<sup>(1)</sup></b>							
	Ministry of Economy and Finance	(%)	23.6	23.6	23.6	-	-	Enel SpA
	Institutional investors	(%)	56.7	59.4	62.3	-2.7	-	Enel SpA
	Retail shareholders	(%)	19.7	17.0	14.1	2.7	-	Enel SpA
	<b>Location of institutional investors</b>							
	Italy	(%)	7.3	6.7	6.7	0.6	-	Enel SpA
	UK	(%)	14.2	12.1	13.3	2.1	-	Enel SpA
	Rest of Europe	(%)	27.3	29.0	27.2	-1.7	-	Enel SpA
	North America	(%)	43.0	44.8	46.4	-1.8	-	Enel SpA
	Rest of the world	(%)	8.2	7.4	6.4	0.8	-	Enel SpA
	<b>Concentration index (Top 50)</b>	(%)	<b>37.2</b>	<b>39.7</b>	<b>42.3</b>	-2.5	-	Enel SpA
	<b>Investment style of institutional investors</b>							
	Long Only	(%)	69.6	70.1	71.2	-0.5	-	Enel SpA
	Index	(%)	13.3	13.5	12.7	-0.2	-	Enel SpA
	Hedge	(%)	0.2	0.4	0.3	-0.2	-	Enel SpA
	Other	(%)	16.2	16.0	15.8	0.2	-	Enel SpA
	<b>Socially Responsible Investors (SRI)</b>							
	<b>Presence of SRI</b>	(no.)	<b>245</b>	<b>252</b>	<b>244</b>	-7	-2.8	Enel SpA
	<b>Enel shares held by SRI funds</b>	(mil)	<b>1,510</b>	<b>1,484</b>	<b>1,482</b>	26	1.8	Enel SpA
	<b>Weight of SRI funds in institutional shareholdings<sup>(2)</sup></b>	(%)	<b>26.2</b>	<b>24.6</b>	<b>23.4</b>	1.6	-	Enel SpA
	<b>Location of SRI investors<sup>(3)</sup></b>							
	Italy	(%)	16.4	16.7	14.5	-0.3	-	Enel SpA
	UK	(%)	11.9	9.7	11.7	2.2	-	Enel SpA
	Rest of Europe	(%)	41.3	43.6	40.9	-2.3	-	Enel SpA
	North America	(%)	24.4	26.0	26.6	-1.6	-	Enel SpA
	Rest of the world	(%)	6.0	4.0	6.2	2.0	-	Enel SpA
	<b>Share price performance</b>							
	<b>Financial performance of the share<sup>(4)</sup></b>							
	Enel	(%)	-28.6	-14.9	17.0	-13.7	-	Enel SpA
	FTSEMib	(%)	-13.3	23.0	-5.4	-36.3	-	Enel SpA
	Endesa	(%)	-12.7	-9.6	-6.1	-3.1	-	Endesa
	Enel Américas (ex Enersis)	(%)	22.0	-19.8	-30.5	41.8	-	Enel Américas
	Enel Chile	(%)	30.8	-46.0	-21.7	76.8	-	Enel Chile
	Ibex 35	(%)	-5.6	7.9	-15.5	-13.5	-	Enel SpA
	MICEX	(%)	-	15.1	8.0	-15.1	-	Enel SpA
	IPSA	(%)	22.1	3.1	-10.5	19.0	-	Enel SpA
	<b>Return for the shareholder</b>							
	<b>DPS</b>	(cent euro)	0.40	0.38	0.36	0.02	5.3	Enel SpA
	<b>TSR (Total Shareholder Return) from IPO (accumulated)</b>	(%)	158.6	239.1	281.2	-80.5	-	Enel SpA
	<b>TSR from IPO (annualized)</b>	(%)	4.2	5.7	6.5	-1.5	-	Enel SpA
	<b>TSR last 2 years (accumulated)</b>	(%)	-32.2	8.4	79.4	-40.6	-	Enel SpA

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	TSR last 2 years (annualized)	(%)	-176	4.1	33.9	-21.7	-	Enel SpA
	<b>Communication to shareholders</b>							
	Information requests from retail shareholders <sup>(5)</sup>	(no.)	51.0	56.0	40.0	-5.0	-8.9	Enel SpA
	<b>LENDERS</b>							
	<b>Debt</b>							
	Total debt	(mil euros)	<b>60,068</b>	<b>51,693</b>	<b>45,415</b>	8,375	16.2	Enel
	Debt to Equity	(i)	1.4	1.2	1.1	0.2	17.2	Enel
	Rating							
	<b>S&amp;P</b>	(i)	<b>BBB+</b>	<b>BBB+</b>	<b>BBB+</b>	-	-	Enel
	Outlook	(i)	Negative	Stable Outlook	Stable Outlook	-	-	Enel
	<b>Moody's</b>	(i)	<b>Baa1</b>	<b>Baa1</b>	<b>Baa2</b>	-	-	Enel
	Outlook	(i)	Negative	Positive	Positive	-	-	Enel
	<b>Fitch</b>	(i)	<b>BBB+</b>	<b>A-</b>	<b>A-</b>	-	-	Enel
	Outlook	(i)	Stable Outlook	Stable Outlook	Stable Outlook	-	-	Enel
<b>405-1</b>	<b>CORPORATE GOVERNANCE</b>							
	<b>Board of Directors (BoD)</b>							
	Members of BoD by type	(no.)	<b>9</b>	<b>9</b>	<b>9</b>	-	-	Enel SpA
	Executive members	(no.)	1	1	1	-	-	Enel SpA
	Non-executive members	(no.)	8	8	8	-	-	Enel SpA
	- of whom independent <sup>(6)</sup>	(no.)	8	8	7	-	-	Enel SpA
	<b>Women on BoD of the Group:</b>							
	Women on the BoD of Enel SpA	(no.)	4	4	4	-	-	Enel SpA
	Women on the BoD of Group companies	(no.)	76	247	208	-171	-69.2	Enel
	<b>Members of the BoD by age group</b>							
	Under 30 years old	(%)	-	-	-	-	-	Enel SpA
	30 - 50 years old	(%)	11	11	22	-	-	Enel SpA
	Over 50 years old	(%)	89	89	78	-	-	Enel SpA
	<b>BoD meetings<sup>(7)</sup></b>	(no.)	<b>16</b>	<b>16</b>	<b>16</b>	-	-	Enel SpA
<b>2-26</b>	<b>Implementation of the Code of Ethics<sup>(8)</sup></b>							
	Reports received by type of stakeholder:	(no.)	<b>172</b>	<b>153</b>	<b>151</b>	19	12.4	Enel
	Internal stakeholders	(no.)	22	27	25	-5	-18.5	Enel
	External stakeholders	(no.)	19	24	22	-5	-20.8	Enel
	Anonymous	(no.)	131	102	104	29	28.4	Enel
	Reports received for harmed or potentially harmed stakeholder:	(no.)	<b>172</b>	<b>153</b>	<b>151</b>	19	12.4	Enel
	Shareholder	(no.)	48	67	55	-19	-28.4	Enel
	Customer	(no.)	12	7	3	5	71.4	Enel
	Employee	(no.)	74	51	64	23	45.1	Enel
	General public	(no.)	4	5	5	-1	-20.0	Enel
	Suppliers	(no.)	34	23	24	11	47.8	Enel
	Reports received by status:	(no.)	<b>172</b>	<b>153</b>	<b>151</b>	19	12.4	Enel
	Reports being assessed	(no.)	15	-	-	15	-	Enel
	Reports for which a violation has not been confirmed	(no.)	128	109	125	19	17.4	Enel
	Reports for which a violation has been confirmed	(no.)	29	44	26	-15	-34.1	Enel
	Reports related to:	(no.)	<b>172</b>	<b>153</b>	<b>151</b>	19	12.4	Enel
	Conflict of interests/Bribery/Corruption	(no.)	30	32	25	-2	-6.3	Enel



GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	Misappropriation	(no.)	20	31	29	-11	-35.5	Enel
	Work practices	(no.)	96	71	79	25	35.2	Enel
	Community and society	(no.)	1	3	4	-2	-66.7	Enel
	Other reasons	(no.)	25	16	14	9	56.3	Enel
	<b>Violations confirmed by type of harmed stakeholder:</b>	(no.)	<b>29</b>	<b>44</b>	<b>26</b>	-15	-34.1	Enel
	Shareholder	(no.)	14	19	17	-5	-26.3	Enel
	Customer	(no.)	1	-	-	1	-	Enel
	Employee	(no.)	11	14	5	-3	-21.4	Enel
	General public	(no.)	-	1	1	-1	-100.0	Enel
	Suppliers	(no.)	3	10	3	-7	-70.0	Enel
<b>406-1</b>	<b>Violations related to incidents of:</b>	(no.)	<b>29</b>	<b>44</b>	<b>26</b>	-15	-34.1	Enel
	Conflict of interests/Bribery/Corruption <sup>(9)</sup>	(no.)	9	8	2	1	12.5	Enel
	Misappropriation	(no.)	4	5	14	-1	-20.0	Enel
	Work practices	(no.)	11	27	9	-16	-59.3	Enel
	Community and society	(no.)	-	1	-	-1	-100.0	Enel
	Other reasons	(no.)	5	3	1	2	66.7	Enel
	<b>Violations regarding incidents of conflict of interest/corruption, by country:</b>	(no.)	<b>9</b>	<b>8</b>	<b>2</b>	1	12.5	Enel
	Argentina	(no.)	-	-	-	-	-	Argentina
	Brazil	(no.)	2	-	2	2	-	Brazil
	Chile	(no.)	2	-	-	2	-	Chile
	Colombia	(no.)	1	4	-	-3	-75.0	Colombia
	Italy	(no.)	1	1	-	-	-	Italy
	Peru	(no.)	-	-	-	-	-	Peru
	Romania	(no.)	-	-	-	-	-	Romania
	Russia	(no.)	-	2	-	-2	-100.0	Russia
	Spain	(no.)	-	1	-	-1	-100.0	Spain
	India	(no.)	1	-	-	1	100.0	India
	United States	(no.)	1	-	-	1	100.0	United States
	Panama	(no.)	1	-	-	1	100.0	Panama
	<b>Actions taken in response to incidents of conflict of interest/corruption</b>	(no.)	<b>9</b>	<b>10</b>	<b>2</b>	-1	-10.0	Enel
	of which: actions taken against employees in response to cases of conflict of interest/corruption	(no.)	6	7	2	-1	-14.3	Enel
	of which: actions taken against contractors in response to cases of conflict of interest/corruption	(no.)	3	3	-	-	-	Enel
<b>INSTITUTIONAL RELATIONS</b>								
<b>201-4</b>	<b>Grants</b>							
	<b>Grants supplied in the period by geographic area</b>	(mil euros)	<b>7.4</b>	<b>43.5</b>	<b>7.8</b>	-36.1	-83.0	Enel
	Italy	(mil euros)	5.0	37.1	4.9	-32.1	-86.6	Italy
	Romania	(mil euros)	-	-	-	-	-	Romania
	Spain	(mil euros)	2.1	1.7	1.4	0.4	23.1	Spain
	Brazil	(mil euros)	-	4.1	-	-	-	Brazil
	Colombia	(mil euros)	0.37	-	1.0	0.4	-	Colombia
	Chile	(mil euros)	-	0.5	0.5	-	-	Chile
	Energy networks	(%)	60.9	55.7	49.7	5.2	9.5	Enel
	R&D	(%)	38.6	17.2	35.8	21.4	-	Enel

GRI/ EUSS	KPI	UM	December 2022	December 2021	December 2020	2022-2021	%	Scope
	Renewable	(%)	-	20.9	12.3	-20.9	-	Enel
	Training	(%)	-	5.8	-	-	-	Enel
	Other	(%)	0.5	0.3	2.3	0.2	40.2	Enel
	<b>Number of projects which received grants</b>	(no.)	<b>37</b>	<b>100</b>	<b>48</b>	-63.0	-63.0	Enel
<b>Loans granted by the EIB and others</b>								
	<b>Remaining debt on loans from EIB and others by geographic area</b>	(mil euros)	<b>8,219</b>	<b>6,692</b>	<b>6,314</b>	1,527	22.8	Enel
	- Italy	(mil euros)	3,912	3,761	3,735	150.9	4.0	Italy
	- Iberia	(mil euros)	2,556	1,889	-	667.2	35.3	Iberia
	- Latin America	(mil euros)	1,209	823	-	386.0	46.9	Latin America
	- Europe and North Africa	(mil euros)	-	100	-	-100.3	-100.0	Europe and North Africa
	- Africa, Asia and Oceania	(mil euros)	-	-	-	-	-	Africa Sub-Saharan and Asia
	- North America	(mil euros)	542	132	-	410.0	-	North America
	<b>Remaining debt on loans from EIB and others by destination<sup>(9)</sup></b>							
	Energy networks	(%)	52.0	60.4	62.9	-8.4	-13.9	Enel
	R&D	(%)	0.0	0.1	0.1	-0.1	-	Enel
	Renewable	(%)	41.0	37.0	34.5	4.0	10.8	Enel
	Training	(%)	-	-	-	-	-	Enel
	Other	(%)	7.0	2.5	2.6	4.5	-	Enel
	<b>Number of projects in progress approved with loans from EIB and others</b>	(no.)	<b>212</b>	<b>147</b>	<b>138</b>	65.0	44.2	Enel
<b>Policy influence</b>								
	Lobbying, interest representation or similar	(euro)	-	-	-	-	-	Enel
	Local, regional or national political campaigns / organizations / candidates	(euro)	-	-	-	-	-	Enel
	Trade associations or tax-exempt groups (e.g. think tanks)	(euro)	9,595,575.0	8,424,797	8,356,353	1,170,778.0	13.9	Enel
	Other (e.g. spending related to ballot measures or referendums)	(euro)	-	-	-	-	-	Enel
	Total contributions and other spending	(euro)	9,595,575.0	8,424,797	8,356,353	1,170,778.0	13.9	Enel

- (1) The institutional investor is an entity that, under a specific mandate or on their own account, undertakes equity and/or property investment on a continuous and professional basis. The category includes: mutual funds, pension funds, hedge funds, investment and merchant banks, insurance companies.
- (2) Calculated comparing the number of shares held by identified Socially Responsible Investors (SRIs) with the number of shares held by identified institutional investors.
- (3) SRIs are investors who state that they include environmental, social and governance (ESG) factors in their traditional financial analyses in order to guide their investment decisions (inclusion of at least one ESG criterion and adhesion to the main international principles approved by organizations such as UNPRI, UKSIF, EUROSIF are among the key factors in order to classify an investor as an SRI).
- (4) Calculated as the difference between the valuation on the last open market day of the year and the valuation of the previous year.
- (5) Only requests received have been considered, not the responses provided.
- (6) Directors qualified as independent pursuant to the Single Financial Act and the Italian Corporate Governance Code (Edition 2020)
- (7) Of these, 12 meetings were held in 2022 on sustainability issues.
- (8) During the year, the verification of all the reports received in 2021 was completed: the number of confirmed violations for 2021 was therefore revised from 41 to 44. The three additional violations are to be ascribed to a case of conflict of interest and two cases of inappropriate behavior related to labor practices.
- (9) Corruption consists of the abuse of power with the goal of private gain and can be instigated by individuals in the public or private sector. It is interpreted here as including corrupt practices such as bribery, fraud, extortion, collusion, conflicts of interest and money laundering.

# GRI Content Index

<b>Statement of use</b>	Enel SpA has reported in accordance with the GRI Standards for the period 1 January 2022 – 31 December 2022
<b>GRI 1 used</b>	GRI 1: Foundation 2021
<b>Applicable GRI Sector Standard(s)</b>	Electric Utilities Disclosure 2013

		Location		Omissions	
GRI Standards	Disclosure			Part Omitted	Reason Explanation
GRI 2: General Disclosures 2021					
GRI 2: General Disclosures 2021	The organization and its reporting practices				
	2-1	Organizational details	Pg. 12-13; 390; 448; Sustainability Statement sec. Sound governance		
	2-2	Entities included in the organization's sustainability reporting	Pg. 448; 454		
	2-3	Reporting period, frequency and contact point	Pg. 448; 454		
	2-4	Restatements of information	Pg. 448; 454		
	2-5	External assurance	Pg. 558-562		
	Activities and workers				
	2-6	Activities, value chain and other business relationships	Pg. 12-13; 164-165; 239; 248; 454		
	2-7	Employees	Pg. 212-213; Sustainability Statement sec. Empowering Enel people		
	2-8	Workers who are not employees	Sustainability Statement sec. Empowering Enel people		
	Governance				
	2-9	Governance structure and composition	Pg. 29-30; 111-113; 309; 390-394; Sustainability Statement sec. Sound governance		
	2-10	Nomination and selection of the highest governance body	Pg. 30-31; 394		
	2-11	Chair of the highest governance body	Pg. 392-394		
	2-12	Role of the highest governance body in overseeing the management of impacts	Pg. 29-31; 48; 111-114; 309-311; 351-354; 394; 396-398		
	2-13	Delegation of responsibility for managing impacts	Pg. 29-31; 111-114; 309-312; 392-394		
	2-14	Role of the highest governance body in sustainability reporting	Pg. 29-31; 392-394		
	2-15	Conflicts of interest	Pg. 396-397; 411-413		
	2-16	Communication of critical concerns	Pg. 394; 411-413		
	2-17	Collective knowledge of the highest governance body	Pg. 30-31; 390-391; 394		
	2-18	Evaluation of the performance of the highest governance body	Pg. 30-31; 390-391; 394		
	2-19	Remuneration policies	Pg. 111-114; 394-395		
	2-20	Process to determine remuneration	Pg. 111-114; 394-395		
	2-21	Annual total compensation ratio	Pg. 111-114; 394-395		

<b>GRI 2: General Disclosures 2021</b>	<b>Strategy, policies and practices</b>		
	2-22	Statement on sustainable development strategy	Pg. 8-9
	2-23	Policy commitments	Pg. 351-356; 411-413
	2-24	Embedding policy commitments	Pg. 29-31; 111-114; 189-207; 212-214; 252-254; 309-312; 351-353; 378-381
	2-25	Processes to remediate negative impacts	Pg. 174; 189-207; 364-372
	2-26	Mechanisms for seeking advice and raising concerns	Pg. 174; 189-207; 364-372
	2-27	Compliance with laws and regulations	Pg. 346; Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital
	2-28	Membership associations	Pg. 31-33; 103-110
	<b>Stakeholder engagement</b>		
	2-29	Approach to stakeholder engagement	Pg. 48-51; 52-58; 173-174; 220; 262-254; 360-362; 390-391
	2-30	Collective bargaining agreements	Pg. 233-234; Sustainability Statement sec. Empowering Enel people
<b>Material Topics</b>			
<b>GRI 3: Material Topics 2021</b>	3-1	Process to determine material topics	Pg. 34; 48-51; 52-56; 57-58; 59-60; 448-449; 452
	3-2	List of material topics	Pg. 34; 57-58; 59-60; 448-449; 452
	3-3	Management of material topics	Pg. 34; 48-51; 59-60; 452
<b>Material Topics</b>			
<b>200 series (Economic Topics)</b>			
<b>Economic Performance</b>			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 17; 48; 94; 115; 130; 133; 396
<b>GRI 201: Economic Performance 2016</b>	201-1	Direct economic value generated and distributed	Pg. 17; Sustainability Statement sec. We empower sustainable progress
	201-2	Financial implications and other risks and opportunities due to climate change	Pg. 48; 94; 115; 130; 133; 396
	201-3	Defined benefit plan obligations and other retirement plans	Sustainability Statement sec. Empowering Enel people
	201-4	Financial assistance received from government	Sustainability Statement sec. Sound governance
<b>Indirect Economic Impacts</b>			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 256
<b>GRI 203: Indirect Economic Impacts 2016</b>	203-1	Investments in infrastructure and supported services	Pg. 256; Sustainability Statement sec. Engaging communities

Procurement Practices			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 239-240
<b>GRI 204: Procurement Practices 2016</b>	204-1	Proportion of spending on local suppliers	Sustainability Statement sec. Sustainable supply chain
Anti-corruption			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 411-413
<b>GRI 205: Anticorruption 2016</b>	205-1	Operations assessed for risks related to corruption	Pg. 411-413
	205-2	Communication and training about anticorruption policies and procedures	Pg. 411-413; Sustainability Statement sec. Empowering Enel people
	205-3	Confirmed incidents of corruption and actions taken	Pg. 411-413; Sustainability Statement sec. Sound governance
Anti-competitive Behavior			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 411-413
<b>GRI 206: Anticompetitive Behavior 2016</b>	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	13 legal actions have been recorded in 2022 (10 in Italy and 3 in Iberia)
Tax			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 416-417
<b>GRI 207: Tax 2019</b>	207-1	Approach to tax	Pg. 416-417
	207-2	Tax governance, control, and risk management due to climate change	Pg. 416-417; 419-421
	207-3	Stakeholder engagement and management of concerns related to tax	Pg. 416-417; 421-422
	207-4	Country-by-country reporting	Pg. 423-444
300 series (Environmental Topics)			
Materials			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 248; 293-295
<b>GRI 301: Materials 2016</b>	301-1	Materials used by weight or volume	Pg. 248; Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital; Sustainable supply chain
	301-2	Recycled input materials used	Pg. 293-295; Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital
Energy			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 345-346
<b>GRI 302: Energy 2016</b>	302-1	Energy consumption within the organization	Pg. 345-346; Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital
	302-3	Energy intensity	Pg. 345-346



Water and effluents			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 155; 334-338
<b>GRI 303: Water and Effluents 2018</b>	303-1	Interactions with water as a shared resource	Pg. 334-338
	303-2	Management of water discharge-related impacts	Pg. 334-338
	303-3	Water withdrawal	Pg. 155; 334-338; Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital
	303-4	Water discharge	Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital
	303-5	Water consumption	Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital
Biodiversity			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 319-332
<b>GRI 304: Biodiversity 2016</b>	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Pg. 319-332
	304-2	Significant impacts of activities, products, and services on biodiversity	Pg. 319-332
	304-3	Habitats protected or restored	Pg. 319-332
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	Pg. 319-332
Emissions			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 148-151; 332-333

<b>GRI 305: Emissions 2016</b>	305-1	Direct (Scope 1) GHG emissions	Pg. 148-151; Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital
	305-2	Energy indirect (Scope 2) GHG emissions	Pg. 148-151; Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital
	305-3	Other indirect (Scope 3) GHG emissions	Pg. 148-151; Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital
	305-4	GHG emissions intensity	Pg. 148-151; Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital
	305-5	Reduction of GHG emissions	Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital
	305-6	Emissions of ozone-depleting substances (ODS)	Pg. 148-151; Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	Pg. 332-333; Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital
<b>Waste</b>			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 339-342
<b>GRI 306: Waste 2020</b>	306-1	Waste generation and significant wasterelated impacts	Pg. 339-342
	306-2	Management of significant wasterelated impacts	Pg. 339-342
	306-3	Waste generated	Pg. 339-342; Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital
	306-4	Waste diverted from disposal	Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital
	306-5	Waste directed to disposal	Sustainability Statement sec. Zero emissions ambition, Conservation of natural capital
<b>Supplier Environmental Assessment</b>			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 239-242
<b>GRI 308: Supplier Environmental Assessment 2016</b>	308-1	New suppliers that were screened using environmental criteria	Pg. 239-242

400 series (SocialTopics)			
Employment			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 12-15; 212-213; 230-232
<b>GRI 401: Employment 2016</b>	401-1	New employee hires and employee turnover	Pg. 12-15; 212-213; Sustainability Statement sec. Empowering Enel people
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Pg. 230-232
	401-3	Parental leave	Sustainability Statement sec. Empowering Enel people
Labor/Management Relations			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 233-234
<b>GRI 402: Labor/Management Relations 2016</b>	402-1	Minimum notice periods regarding operational changes	Pg. 233-234
Occupational Health and Safety			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 378-387
<b>GRI 403: Occupational Health and Safety 2018</b>	403-1	Occupational health and safety management system	Pg. 378-383
	403-2	Hazard identification, risk assessment, and incident investigation	Pg. 378-383
	403-3	Occupational health services	Pg. 383-384
	403-4	Worker participation, consultation, and communication on occupational health and safety	Pg. 387
	403-5	Worker training on occupational health and safety	Pg. 384-385
	403-6	Promotion of worker health	Pg. 378-387
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Pg. 378-387
	403-9	Work-related injuries	Pg. 378-387; Sustainability Statement sec. Occupational health and safety
Training and Education			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 12-15; 212-213; 216-219
<b>GRI 404: Training and Education 2016</b>	404-1	Average hours of training per year per employee	Pg. 12-15; 212-213; 216-219; Sustainability Statement sec. Empowering Enel people
	404-2	Programs for upgrading employee skills and transition assistance programs	Pg. 216-219
	404-3	Percentage of employees receiving regular performance and career development reviews	Pg. 216-219
Diversity and Equal Opportunity			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 12-15; 212-213; 220-227

<b>GRI 405: Diversity and Equal Opportunity 2016</b>	405-1	Diversity of governance bodies and employees	Pg. 12-15; 212-213; 220-223; Sustainability Statement sec. Empowering Enel people
	405-2	Ratio of basic salary and remuneration of women to men	Pg. 224-227; Sustainability Statement sec. Empowering Enel people
<b>Non-discrimination</b>			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 411-413
<b>GRI 406: Nondiscrimination 2016</b>	406-1	Incidents of discrimination and corrective actions taken	Pg. 411-413; Sustainability Statement sec. Sound governance
<b>Freedom of Association and Collective Bargaining</b>			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 239-240; 351
<b>GRI 407: Freedom of Association and Collective Bargaining 2016</b>	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Pg. 239-240; 351
<b>Child Labor</b>			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 239-240; 351; 411-413
<b>GRI 408: Child Labor 2016</b>	408-1	Operations and suppliers at significant risk for incidents of child labor	Pg. 239-240; 351; 411-413
<b>Forced or Compulsory Labor</b>			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 239-240; 351; 411-413
<b>GRI 409: Forced or Compulsory Labor 2016</b>	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Pg. 239-240; 351; 411-413
<b>Security Practices</b>			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 351; 354
<b>GRI 410: Security Practices 2016</b>	410-1	Security personnel trained in human rights policies or procedures	All Enel people are involved in training about sustainability issues, of which human rights are a fundamental element. All suppliers sign specific clauses concerning human rights and commit to complying with the associated policy
<b>Rights of Indigenous Peoples</b>			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 252-254; 351; 365-372
<b>GRI 411: Rights of Indigenous Peoples 2016</b>	411-1	Incidents of violations involving rights of indigenous peoples	No violations of the rights of indigenous peoples have been reported
<b>Local Communities</b>			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 252-254; 351; 365-372; 411-413

<b>GRI 413: Local Communities 2016</b>	413-1	Operations with local community engagement, impact assessments, and development programs	Pg. 252-254; 351; 365-372; 411-413 The assets of the generation park in thermoelectric and renewable operation are managed using sustainable plant and design and construction site models
	413-2	Operations with significant actual and potential negative impacts on local communities	Pg. 252-254; 351; 365-372; 411-413
<b>Supplier Social Assessment</b>			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 239-242
<b>GRI 414: Supplier Social Assessment 2016</b>	414-1	New suppliers that were screened using social criteria	Pg. 239-242
<b>Public Policy</b>			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 411-413
<b>GRI 415: Public Policy 2016</b>	415-1	Political contributions	Enel does not have direct relations with political parties and does not provide financing of any kind, as explicitly established at point 2.2 of the Zero Tolerance of Corruption Plan and at point 3.26 of the Group's Code of Ethics. Some exceptions can be found in some countries following the local law and subject to analysis by the due bodies
<b>Customer Health and Safety</b>			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 386
<b>GRI 416: Customer Health and Safety 2016</b>	416-1	Assessment of the health and safety impacts of product and service categories	Pg. 386 New products and services are assessed in terms of potential impact on health and safety throughout the value chain, in order to minimize that impact, as confirmed by point 2.2.2 of the Human Rights Policy
<b>Marketing and Labeling</b>			
<b>GRI 3: Material Topics 2021</b>	3-3	Management of material topics	Pg. 173-175



GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	All the Group sale companies comply with the transparency obligations envisaged by various national and supranational regulations regarding the source of the electricity sold. Energy bills must specify the mix of energy sources used and the source of the energy
	417-3	Incidents of non-compliance concerning marketing communications	In 2022 there were no cases of non compliance with regulations or voluntary codes relating to the Enel Group marketing activities
Customer Privacy			
GRI 3: Material Topics 2021	3-3	Management of material topics	Pg. 351; 413
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Pg. 351; 413
General standard disclosures for the electric utility sector			
General standard disclosures for the electric utility sector			
		Page number(s)/URL/ Direct answer	
EU1	Pg. 12-15; 153; 168; Sustainability Statement sec. We empower sustainable progress		
EU2	Pg. 12-15; 153; 168; Sustainability Statement sec. We empower sustainable progress		
EU3	Pg. 153; 164-165; 172; Sustainability Statement sec. Clean electrification		
EU4	Pg. 153; 164-165; 170; Sustainability Statement sec. We empower sustainable progress		
Specific standard disclosures for the electric utility sector			
Category: economic			
	MATERIAL ASPECT: DEMAND SIDE MANAGEMENT		
DMA	Pg. 170		
	MATERIAL ASPECT: RESEARCH AND DEVELOPMENT		
DMA	Pg. 267; Sustainability Statement sec. Innovation		
	MATERIAL ASPECT: SYSTEM EFFICIENCY		
EU11	Pg. 153; Sustainability Statement sec. Clean electrification		
EU12	Sustainability Statement sec. Clean electrification		
Category: social			
Sub-category: labor practices and decent work			
Material aspect: employment			

<b>DMA</b>	Pg. 216–219
<b>DMA</b>	Pg. 384–385
<b>EU15</b>	Sustainability Statement sec. Empowering Enel people
<b>EU18</b>	Pg. 384–385
<b>Sub-category: society</b>	
<b>Material aspect: local communities</b>	
<b>DMA</b>	Pg. 365–372
<b>EU22</b>	Pg. 365–372
<b>Material aspect: disaster/emergency planning and response</b>	
<b>DMA</b>	Pg. 386
<b>Sub-category: product responsibility</b>	
<b>Material aspect: customer health and safety</b>	
<b>EU25</b>	Pg. 386; Sustainability Statement sec. Occupational health and safety
<b>Material aspect: access</b>	
<b>DMA</b>	Pg. 172
<b>EU26</b>	Italy: 0% Spain: 0% Argentina: 0.7% Brazil: 0% Chile: 0.8% Colombia: 0.1% Peru: 4.1%
<b>EU27</b>	Sustainability Statement sec. Clean electrification
<b>EU28</b>	Sustainability Statement sec. Clean electrification
<b>EU29</b>	Sustainability Statement sec. Clean electrification
<b>EU30</b>	Pg. 153; Sustainability Statement sec. Clean electrification
<b>Material aspect: provision of information</b>	
<b>DMA</b>	Pg. 174–176

# SASB Content Index

The following table shows the main indicators required by the Value Reporting Foundation – SASB standard in relation to the primary sector of reference for Enel: “Electric Utilities & Power Generators Sector”.

The table shows, where present, the reference to the GRI indicator with which the disclosure required by the SASB was covered, as well as references to the chapters of the 2022 Sustainability Report.

SECTOR: ELECTRIC UTILITIES & POWER GENERATORS SECTOR							
			Reference				
Topic	Code	Accounting Metric	2022	2021	2020	Variation	GRI
Greenhouse Gas Emissions & Energy Resource Planning	IF-EU-110a.1	(1) Gross global Scope 1 emissions (MtCO <sub>2eq</sub> )	53.1	51.6	45.6	1.5	305-1
		(2) Percentage covered under emissions-limiting regulations (%)**	75.8	61.5	53.0	14.3	
		(3) Percentage covered under emissions-reporting regulations (%)	100.0	100.0	100.0	-	
	IF-EU-110a.2	Greenhouse gas (GHG) emissions associated with power deliveries (Mt) CO <sub>2</sub> -e***	80.5	74.7	68	5.8	305-3
	IF-EU-110a.3	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Sustainability Report 2022, chapter “Zero emissions ambition”				201-2
	IF-EU-110a.4	(1) Number of customers served in markets subject to renewable portfolio standards (RPS)	N/A US regulation not applicable				
(2) percentage fulfillment of RPS target by market							
Air Quality	IF-EU-120a.1	Air emissions of the following pollutants: (1) NO <sub>x</sub> (excluding N <sub>2</sub> O), (t)	74,225	78,846	76,257	-4,621	305-7
		(2) SO <sub>x</sub>	16,602	15,615	20,547	987	
		(3) particulate matter (PM10, related to thermal generation) (t)	1,227	1,099	1,242	128	
		(4) lead (Pb)	N/A	N/A	N/A	-	
		(5) mercury (Hg from coal plants) (t)	0,08	0,05	0,05	0,03	
		(6) percentage of each in or near areas of dense population	N/A				
Water Management	IF-EU-140a.1	(1) Total water withdrawn (Mm³)	76.0	73.1	69.1	2.9	303-3 a
		(2) total water consumed (Mm³)	45.2	43.8	37.9	1.4	303-5 a
		3) percentage of each in regions with High or Extremely High Baseline Water Stress**** (%)	19.3	23.0	19.5	-3.7	303-3
			20.6	24.0	21.9	-3.5	303-5
	IF-EU-140a.2	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	5	9	N/A	-4	303-4 d
	IF-EU-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	Sustainability Report 2022, chapter “Conservation of natural capital”				303-1 303-2
Coal Ash Management	IF-EU-150a.1	1) Amount of coal combustion residuals (CCR) generated (Mt)	1.18	0.79	0.78	0.39	306-3
		2) percentage recycled (%)	82.0	70.0	71.0	12.0	306-4
	IF-EU-150a.2	Total number of coal combustion residual (CCR) impoundments, broken down by hazard potential classification and structural integrity assessment	N/A EPA methodology not applicable				

**SECTOR: ELECTRIC UTILITIES & POWER GENERATORS SECTOR**

Topic	Code	Accounting Metric	Reference				GRI
			2022	2021	2020	Variation	
Energy Affordability	IF-EU-240a.1	Average electric rate for customers (R)	N/A				
	IF-EU-240a.2	Typical monthly electric bill for residential customers for (1) 500 kWh and (2) 1,000 kWh of electricity delivered per month	Consumption rates not representative for European market				
	IF-EU-240a.3	1) Number of residential customer electric disconnections for non-payment (u)***** 2) percentage reconnected within 30 days	3,709,777 91.9	2,373,491 N/A	1,330,504 N/A	1,336,286 -	EU27
	IF-EU-240a.4	Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory	Sustainability Report 2022, chapter "Clean electrification"				DMA EU (former EU7) DMA EU (former EU23) 3-3 102-43 102-44
Workforce Health & Safety	IF-EU-320a.1	(1) Total recordable incident rate (TRIR),	0.52	2.86	3.243	-2.34	
		(2) fatality rate	-	0.024	0.008	-0.024	403-9
		(3) near miss frequency rate (NMFR)	4.887	4.286	4.918	0.601	
End-Use Efficiency & Demand	F-EU-420a.1	Percentage of electric utility revenues from rate structures that (1) are decoupled and (2) contain a lost revenue adjustment mechanism (LRAM)	N/A US regulation				
	F-EU-420a.2	Percentage of electric load served by smart grid technology*****	70.3	70.4	N/A	-0.1	
	F-EU-420a.3	Customer electricity savings from efficiency measures, by market (megawatt hours)	N/A Available from 2023 reporting cycle				
Nuclear Safety & Emergency Management	IF-EU-540a.1	(1) Total number of nuclear power units that are owned and/or operated	4	4	4	-	
		(2) Total number of nuclear power units, broken down by U.S. Nuclear Regulatory Commission (NRC) Action Matrix Column	N/A US regulation				
	IF-EU-540a.2	Description of efforts to manage nuclear safety and emergency preparedness	Sustainability Report 2022, chapter "Occupational health and safety"				DMA EU former EU21
Grid Resiliency	F-EU-550a.1	Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations	-		15	0	EU29
	IF-EU-550a.2	(1) System Average Interruption Duration Index (SAIDI),	230.7	243.3	N/A	-12.6	
		(2) System Average Interruption Frequency Index (SAIFI)	2.6	2.8	N/A	-0.2	EU28
		(3) Customer Average Interruption Duration Index (CAIDI), inclusive of major event days	89	N/A	N/A	-	

**SECTOR: ELECTRIC UTILITIES & POWER GENERATORS SECTOR**

Topic	Code	Accounting Metric	Reference			Variation	GRI
			2022	2021	2020		
	IF-EU-000.A	Number of: (1) residential, (2) commercial, and (3) industrial customers served	66,784,895	69,342,818	69,517,932	-2,557,923	EU3
	IF-EU-000.B	Total electricity delivered to: (1) residential	113,533	N/A	N/A	-	
		Total electricity delivered to: (2) industrial and commercial	158,932	N/A	N/A	-	
		Total electricity delivered to: (4) all other retail customers,	N/A	N/A	N/A	-	
		Total electricity delivered to: (5) wholesale customers	N/A	N/A	N/A	-	
	IF-EU-000.C	Length of transmission and distribution lines (km)	2,024,038	2,233,368	2,232,022	-209,330	EU4
	IF-EU-000.D	(1) Total electricity generated (GW)	227,767	222,605	207,108	5,161,59	
		(2) Percentage by major energy source - coal	8.7	N/A	N/A	-	
		(2) Percentage by major energy source - oil	2.2	N/A	N/A	-	
		(2) Percentage by major energy source - gas	4.2	N/A	N/A	-	
		(2) Percentage by major energy source - nuclear	11.6	N/A	N/A	-	
		(2) Percentage by major energy source - hydro	22.7	N/A	N/A	-	
		(2) Percentage by major energy source - solar	5.0	N/A	N/A	-	
		(2) Percentage by major energy source - wind	19.0	N/A	N/A	-	
		(2) Percentage by major energy source - geothermal	2.7	N/A	N/A	-	
		(2) Percentage by major energy source - biomass	-	N/A	N/A	-	
		(3) percentage in regulated markets	N/A	N/A	N/A	-	
	IF-EU-000.E	Total wholesale electricity purchased***** (MWh)	84,659,900	70,934,310	47,506,376,44	13,725,590	EU2

**Key**

N/A: Not applicable.

N/A: Not available.

\* Unaudited for indicators not corresponding to GRI Standards.

\*\* The 2022 value also includes CO<sub>2</sub> emissions from thermal power plants in Chile as they are covered by the "green tax system" (*Sistema de Impuestos Verdes*).

\*\*\* The value considers direct emissions from the generation of electricity in proprietary plants and also indirect emissions from the purchase of electricity and sales to the end customer.

\*\*\*\* In water stressed areas are included plants located in areas classified as "arid" from WRI.

\*\*\*\*\* For full details see the chapter "Clean electrification" - "Sustainability Statement".

\*\*\*\*\* Data available starting from 2021 reporting cycle. The value is calculated as: total energy billed with Smart Meters / total energy billed.

\*\*\*\*\* The value considers wholesale electricity purchased from the Global Trading Business Line.



# TCFD Content Index

Reflecting the Group's commitment to climate change related disclosures, the following table shows the alignment of Enel's disclosure with respect to the Task force on Climate-related Financial Disclosures (TCFD) of the Financial Stability Board, which published specific recommendations for the voluntary reporting of the financial impact of climate risks in June 2017.

RECOMMENDATIONS OF THE TCFD (TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES)		Zero emissions ambition (LINK: Sustainability Report)
Governance	Disclosure a) Disclosure b)	<b>Enel's governance model to face climate change</b> Competences of corporate bodies Enel's organizational model Incentive system
	Disclosure c)	<b>Climate change and long-term scenarios</b> Energy transition scenarios The physical climate scenario
Strategy	Disclosure b) Disclosure c)	<b>The strategy to tackle climate change</b> Medium and long-term strategy Short-term strategy - Investment Plan 2023-2025
	Disclosure a)	<b>Risks and opportunities connected with climate change</b> Transition phenomena: business effects, risks and opportunities Physical phenomena: Identification, assessment and management of risks and opportunities
Risk Management	Disclosure a) Disclosure b) Disclosure c)	
Metrics & Targets	Disclosure a) Disclosure b) Disclosure c)	<b>Enel's performance in fighting against climate change</b> Our carbon footprint Financial, operational and environmental metrics Financial and operational targets
		<b>Enel's roadmap to decarbonization and electrification</b>




# European Commission Guidelines on reporting climate-related information – Content Index



Reflecting the Group's commitment to climate change related disclosures, the following table shows the alignment of Enel's disclosure with respect to "Guidelines on reporting climate-related information" published by the European Commission in June 2019.

EUROPEAN COMMISSION GUIDELINES ON REPORTING CLIMATE-RELATED INFORMATION	ZERO EMISSIONS AMBITION (LINK: Sustainability Report)
<b>Business model</b>	<p><b>Enel's impact on climate change</b></p> <hr/> <p><b>Climate change and long-term scenarios</b> Energy transition scenarios The physical climate scenario</p> <hr/> <p><b>The strategy to tackle climate change</b> Medium and long-term strategy Short-term strategy – Investment Plan 2023-2025</p>
	<p><b>Advocacy about climate change policies</b> Enel's commitment to fight against climate change through associations and organizations</p> <hr/> <p><b>Enel's governance model to face climate change</b> Competences of corporate bodies Enel's organizational model Incentive system</p>
<b>Outcomes</b>	<p><b>Zero emissions ambition</b> Enel's roadmap to decarbonization and electrification</p>
<b>Principal Risks and their management</b>	<p><b>Risks and opportunities connected with climate change</b> Transition phenomena: business effects, risks and opportunities Physical phenomena: identification, assessment and management of risks and opportunities</p>
<b>Key Performance Indicators</b>	<p><b>Enel's performance in fighting against climate change</b> Our carbon footprint Financial, operational and environmental metrics Financial and operational targets</p>

# WEF Content Index

The International Business Council (IBC) of the World Economic Forum published, in 2020, a report, called 'Measuring Stakeholder Capitalism: Towards Common Metrics and Consistent Reporting of Sustainable Value Creation' (<https://www.weforum.org/reports/measuring-stakeholdercapitalism-towards-common-metrics-andconsistent-reporting-of-sustainable-valuecreation>), with the aim of defining shared common metrics to measure, report and compare the levels of sustainability, in other words the effectiveness of its actions in pursuing the sustainable development goals indicated by the UN (SDG), in the business model adopted to create value for stakeholders. The metrics are based on existing standards and aim to increase convergence and comparability between the various parameters used in sustainability reports. The following table provides information on the 21 primary indicators ("core") indicated in the report and references to the chapters of the 2022 Sustainability Report.

			Sustainability Report 2022				Ref. chapters/paragraphs for 21 Core KPIs WEF
Pillar	Theme	Core KPIs	21 Core KPIs WEF	2022	2021	Variation	
 Principles of Governance	Governing purpose	Setting purpose					"We empower sustainable progress"
	Quality of governing body	Governance body composition	Women on Board of Directors (no.)	4	4	-	"Sound governance"
	Stakeholder engagement	Material topics impacting stakeholders					"We empower sustainable progress"
	Ethical behavior	Anti-corruption	Employees who received training about anti-corruption policies and procedures (%)	47.0	30.3	16.7	"Sound governance"
			Ascertained violations related to conflict of interest/corruption (no.)	9	8	1	
		Protected ethics advice and reporting mechanisms	Reports received related to violations of the Code of Ethics	172	153	19	
	Risk and opportunity oversight	Integrating risk and opportunity into business process					"Sound governance"
 Planet	Climate change	Greenhouse Gas (GHG) emissions	Direct greenhouse gas emissions- Scope 1 (mil t <sub>eq</sub> )	53.1	51.6	1.5	"Zero emissions ambition"
			Indirect greenhouse gas emissions- Scope 2 - Purchased electricity from the grid (location based) (mil t <sub>eq</sub> )	4.0	3.8	0.2	
			Indirect greenhouse gas emissions - Scope 2 - Purchased electricity from the grid (market based) (mil t <sub>eq</sub> )	6.1	6.1	-	
			Indirect greenhouse gas emissions - Scope 3 (mil t <sub>eq</sub> )	75.8	70.5	5.3	
		TCFD implementation					
	Nature loss	Land use and ecological sensitivity	Hectares restored (ha)	9,452	9,092	360	"Conservation of natural capital"
	Freshwater availability	Water consumption and withdrawal in water-stressed areas	Water withdrawal (m³)	76.0	73.1	2.9	"Conservation of natural capital"; "Sustainability Statement"
			Water withdrawal in "water stressed" areas (%)	19.3	23.0	-3.7	
			Total water consumption (mil m³)	45.2	43.8	1.4	
			Water consumption in "water stressed" areas (%)	20.6	24.0	-3.4	

Pillar	Theme	Core KPIs	21 Core KPIs WEF	2022	2021	Variation	Ref. chapters/paragraphs for 21 Core KPIs WEF
 <b>People</b>	Dignity and equality	Diversity and inclusion	Women incidence on total employees (%)	23.4	22.5	0.9	"Empowering Enel people"; "Sustainability Statement"
		Pay equality	Equal Remuneration Ratio (%)	80.7	81.1	-0.4	
		Wage level	CEO Pay Ratio (%) <sup>(1)</sup>	60.0	90.0	-30.0	"Report on Remuneration Policy"
		Risk for incidents of child, forced or compulsory labor	Evaluation among the supply chain of child labour defense and of compulsory or forced work prohibition				"Sound governance"; "Sustainable supply chain"
	Health and well-being	Health and safety	Fatal accidents - Enel (no.)	1	3	-2	"Occupational health and safety"; "Sustainability Statement"
			Fatalities frequency rate - Enel (i)	0.008	0.024	-0.016	
			"Life Changing" injuries - Enel (no.)	-	1	-1	
			"Life Changing" injuries frequency rate - Enel (i)	-	0.008	-0.008	
	Skills for the future	Training provided	Average hours of training per employee (h/per cap)	47.4	44.6	2.8	"Empowering Enel people"; "Sustainability Statement"
			Employees training cost (mil euros)	30	23	7	
 <b>Prosperity</b>	Employment and wealth generation	Absolute number and rate of employment	People hired (no.)	6,412	5,401	1,011	"Empowering Enel people"; "Sustainability Statement"
			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	Financial investment contribution	Total investments (mil euros)	14,347	12,997	1,350	"Sustainability Statement"
			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	Investments in research and development (mil euros)	105	130	-25	"Innovation"; "Sustainability Statement"
	Community and social vitality	Total tax paid	Total tax paid (mil euros) <sup>(2)</sup>	4,778	4,082	696	"Tax transparency"

(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.

# Sustainable Finance Disclosure Regulation (PAI) Content Index

PAI (Principal Adverse Impact) indicators, according to the “Sustainable Finance Disclosure Regulation”, Regulation (EU) 2019/2088

ISSUE	INDICATORS	2022 VALUE	2021 VALUE	CHAPTER REFERENCE
GREENHOUSE GAS EMISSIONS	<b>Scope 1 – Total direct emissions, mil t<sub>eq</sub></b>	53,07	51,57	For further information, see the “Zero emissions ambition” chapter
	<b>Scope 2, location-based – Total indirect emissions, mil t<sub>eq</sub></b>	4,02	3,77	For further information, see the “Zero emissions ambition” chapter
	<b>Scope 2, market-based – Total indirect issues, mil t<sub>eq</sub></b>	6,06	6,11	For further information, see the “Zero emissions ambition” chapter
	<b>Scope 3 – Total indirect emissions, mil t<sub>eq</sub></b>	75,80	70,46	For further information, see the “Zero emissions ambition” chapter
	<b>2. Carbon footprint</b>	Indicator not directly applicable to Enel, because it is calculated by the investor on the basis of the above data.		
	<b>3. GHG intensity of investee companies</b>	Indicator not directly applicable to Enel, because it is calculated by the investor on the basis of the above data.		
	<b>4. Exposure to companies active in the fossil fuel sector</b>	Indicator not applicable to Enel.		
	<b>5. Share of non-renewable energy consumption and production</b>	For 2022, total non-renewable energy consumption amounted to 1,053,083 TJ (2021 figure of 1,044,714 TJ) while generation from non-renewable sources amounted to 115,318 GWh (2021 figure of 113,789 GWh). In any case, note that the final indicator requested cannot be directly communicated by Enel, as it is calculated by the investor.		For information on the substantive data used to calculate the indicator, please refer to the Sustainability Statement, “Zero emissions ambition” section for details on Fuel consumption by primary source (TJ) and “We empower sustainable progress” for data relating to energy generation.
	<b>6. Energy consumption intensity per high impact climate sector</b>	For 2022, total non-renewable energy consumption amounted to 1,108,069 TJ (2021 figure of 1,099,302 TJ). In any case, note that the final indicator requested cannot be directly communicated by Enel, as it is calculated by the investor.		For information on the substantive data used to calculate the indicator, please refer to the Sustainability Statement, “Zero emissions ambition” section for details on Fuel consumption by primary source (TJ)
<b>BIODIVERSITY</b>	<b>7. Activities negatively affecting biodiversity-sensitive areas</b>	In 2022, 4 new power generation plants were built in areas of high biodiversity value (biodiversity-sensitive areas), 2 fewer than in 2021, including 3 in critical habitats and 1 area containing species at risk of extinction, for which action plans were developed to restore habitats and protect species. Of these, note the project to improve habitats for reptiles, amphibians and other wildlife groups at a photovoltaic plant in Torrecilla, Spain.		For further information, please refer to the “Conservation of natural capital”, “The biodiversity action plan” section
<b>WATER</b>	<b>8. Emissions to water</b>	Indicator not applicable to Enel.		
<b>WASTE</b>	<b>9. Hazardous waste ratio</b>	For 2022, the total amount of hazardous waste was 55,940 t (2021 figure of 64,365 t). In any case, note that the final indicator requested cannot be directly communicated by Enel, as it is calculated by the investor.		For further information, please refer to the “Conservation of natural capital” chapter and to the Sustainability Statement, “Zero emissions ambition” section



SOCIAL AND EMPLOYEE MATTERS	<b>10. Violations of UN Global Compact principles and Organisation for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises</b>	<p>In 2022, 20 cases of violations were recorded as attributable to the principles enshrined in the Group's Policy on Human Rights, drawn up in compliance with the main United Nations international standards of reference and with the OECD guidelines for multinational companies. Specifically:</p> <ul style="list-style-type: none"> <li>• 9 violations relating to "Conflict of interest/corruption" for the pursuit of personal interests or interests that harm the company;</li> <li>• 11 violations connected to inappropriate behavior by individual employees that is detrimental to respect for diversity and non-discrimination and the failure to comply with the internal procedures on health and safety issues.</li> </ul>		For further information, please refer to the "Sound governance" chapter – "Values and pillars of corporate ethics" and "Stakeholder reports" sections
	<b>11. Lack of processes and compliance mechanisms to monitor compliance with UN Global Compact principles and OECD Guidelines for Multinational Enterprises</b>	<p>The implementation and monitoring of the commitments expressed in the human rights policy adopted by the Enel Group are governed by a process, which, as required by the UN Guidelines and the OECD Due Diligence Guidance for Responsible Business Conduct, aims to evaluate our procedures and operational processes and define, if necessary, an improvement plan to strengthen the systems that protect the principles set out in the Policy on Human Rights. This process is codified in a globally applicable internal procedure and involves "identifying, preventing, mitigating and reporting" adverse effects potentially caused by the business. Specifically, it is divided into the following phases:</p> <ol style="list-style-type: none"> <li>1. assessment of the risk perceived by key stakeholders, at country level with reference to labor rights, local communities and the environment;</li> <li>2. gap analysis aimed at analyzing organizational and control systems to protect risks and identify any shortcomings;</li> <li>3. development of actions for the improvement plan aimed at addressing the gaps identified in the previous phase;</li> <li>4. Monitoring progress in the adoption of remedies.</li> </ol> <p>The improvement actions highlighted by the process are included in the Group's Sustainability Plan and disclosure of the results of the analysis of perceived risk and gaps is provided annually in the Group's Sustainability Report, together with the progress made in the improvement plans.</p>		For further information, please refer to the "Managing human rights" chapter, especially the "Access to remedies" section and the "Human Rights Content Index".
	<b>12. Unadjusted gender pay gap</b>	For 2022, the Women/Men Basic Salary Ratio is 104.7% (2021 figure of 104.8%) and the Women/Men Remuneration Ratio is 105.4% (2021 figure of 105.1%)		For further information, please refer to the "Empowering Enel people" chapter and to the Sustainability Statement, "Empowering Enel people" section
	<b>13. Board gender diversity, %</b>	44,4%	44,4%	For further details, please refer to the "Sound governance" chapter.
	<b>14. Exposure to controversial weapons (antipersonnel mines, cluster munitions, chemical weapons and biological weapons)</b>	Indicator not applicable to Enel.		

ISSUE	ADDITIONAL INDICATORS	2022 VALUE	2021 VALUE	CHAPTER REFERENCE
EMISSIONS	<b>1. Emissions of inorganic pollutants</b>	Indicator not applicable to Enel.		
	<b>2. Emissions of air pollutants</b>	For 2022, "SO <sub>2</sub> emissions" amounted to 16,602 t (2021 figure of 15,615 t), "NO <sub>x</sub> emissions" amounted to 74,225 t (2021 figure of 78,846 t), "Dust emissions" (PM10) were 1,227 t (2021: 1,099 t) and "Hg emissions" were 0.08 t (2021: 0.05 t). In any case, note that the final indicator requested cannot be directly communicated by Enel, as it is calculated by the investor.		
	<b>3. Emissions of ozone depletion substances</b>	For 2022, "emissions of ozone-depleting substances" were 43 kgCFC-11 <sub>eq</sub> (2021 figure of 180 kgCFC-11 <sub>eq</sub> ). In any case, note that the final indicator requested cannot be directly communicated by Enel, as it is calculated by the investor.		
	<b>4. Investments in companies without carbon emission reduction initiatives</b>	Indicator not applicable to Enel.		
ENERGY PERFORMANCE	<b>5. Breakdown of energy consumption by type of non-renewable sources of energy (TJ)</b>	-	-	Please refer to the Sustainability Statement, "Zero emissions ambition" section, and for further qualitative information, to the "Conservation of natural capital" chapter
	<b>from non-renewable sources (TJ)</b>	1.053.083	1.044.714	Please refer to the Sustainability Statement, "Zero emissions ambition" section, and for further qualitative information, to the "Conservation of natural capital" chapter
	<b>Coal (TJ)</b>	206.450	141.528	Please refer to the Sustainability Statement, "Zero emissions ambition" section, and for further qualitative information, to the "Conservation of natural capital" chapter
	<b>Fuel oil (TJ)</b>	35.848	34.787	Please refer to the Sustainability Statement, "Zero emissions ambition" section, and for further qualitative information, to the "Conservation of natural capital" chapter
	<b>Natural gas (TJ)</b>	469.425	549.312	Please refer to the Sustainability Statement, "Zero emissions ambition" section, and for further qualitative information, to the "Conservation of natural capital" chapter
	<b>Diesel (TJ)</b>	58.486	48.482	Please refer to the Sustainability Statement, "Zero emissions ambition" section, and for further qualitative information, to the "Conservation of natural capital" chapter
	<b>Uranium (TJ)</b>	282.872	270.605	Please refer to the Sustainability Statement, "Zero emissions ambition" section, and for further qualitative information, to the "Conservation of natural capital" chapter

WATER, WASTE AND MATERIAL EMISSIONS	<b>6. Water usage and recycling</b>	For 2022, total “water withdrawals” amounted to 76.0 megaliters (2021 figure of 73.1 megaliters), while the total “percentage of recycled and reused water” was 0.15% (2021: 0.12%). In any case, note that the final indicator requested cannot be directly communicated by Enel, as it is calculated by the investor.	For further information, please refer to the Sustainability Statement, “Zero emissions ambition” section, and to the “Conservation of natural capital” chapter
	<b>7. Investments in companies without water management policies</b>	Enel is constantly committed to progressively reducing the specific need for water for its plants and assets, through the efficient use of water in existing thermal plants, the evolution of the energy mix towards renewables, and the progressive reduction of generation from fossil fuels. Starting this year, Enel has renewed and relaunched its commitment to conserving water resources by adopting a new target aimed at reducing specific withdrawal of fresh water.	Please refer to the “Conservation of natural capital” chapter, “Responsible use of water” section
	<b>8. Exposure to areas of high water stress</b>	Enel also pays particular attention to the vulnerability of the resource, by mapping and constantly monitoring all generation sites located in areas classified as water-stressed areas. Among the sites mapped, those defined as “critical” are those positioned in water-stressed areas which procure significant volumes of fresh water. For these sites, which are specifically thermoelectric and nuclear plants that use water resources for process and closed-cycle cooling needs, water management methods and their process performance are constantly monitored, in order to minimize consumption and favor withdrawals from sources of lower quality or which are non-scarce (wastewater, industrial or sea water).	Please refer to the “Conservation of natural capital” chapter, “Responsible use of water” section
	<b>9. Investments in companies producing chemicals</b>	Indicator not applicable to Enel.	
	<b>10. Land degradation, desertification, soil sealing</b>	Enel is promoting a circular approach to land management, in particular through the reuse and redevelopment of brownfield sites, as well as the repowering and lifetime extension of wind farms, in order to limit the use of soil.	Please refer to the “Conservation of natural capital” chapter
	<b>11. Investments in companies without sustainable land/agriculture practices</b>	Indicator not applicable to Enel.	
	<b>12. Investments in companies without sustainable oceans/seas practices</b>	Indicator not applicable to Enel.	
	<b>13. Non-recycled waste ratio</b>	For 2022, the “% of total waste sent for recovery” was 84.39% (2021 figure of 85.30%). In any case, note that the final indicator requested cannot be directly communicated by Enel, as it is calculated by the investor.	For further details, please refer to the “Conservation of natural capital” chapter and to the Sustainability Statement, “Zero emissions ambition” section
	<b>14. Natural species and protected areas</b>	Protection of biodiversity is one of the strategic objectives of the “Enel Environmental Policy” and is regulated by a specific policy adopted by Enel in 2015, the “Enel Biodiversity Policy”, renewed in 2023 following COP15. The policy defines the guidelines for all the Group’s biodiversity protection initiatives and the principles according to which they operate, aligned with the Kunming-Montreal GBF.	Please refer to the “Conservation of natural capital” chapter
	<b>15. Deforestation</b>	Enel is committed to conserving forests and, if deforestation cannot be avoided, will reforest areas of equivalent value in line with the principle of “No Net Deforestation”.	Please refer to the “Conservation of natural capital” chapter
GREEN SECURITIES	<b>16. Share of securities not certified as green under a future EU legal act setting up an EU Green Bond Standard</b>	Indicator not applicable to Enel.	



SOCIAL AND EMPLOYEE MATTERS	<b>1. Investments in companies without workplace accident prevention policies</b>	Our Group's commitment in terms of health, safety and work is set out in two documents (both signed by the CEO): "Declaration of Commitment to Health and Safety" and "Stop Work Policy". The former is based on several principles including compliance with the law, adoption of the best standards; implementation and continuous improvement of the Workers' Health and Safety Management System in compliance with the international standard ISO 45001; promotion of information initiatives to spread and consolidate the culture of health, safety and organizational well-being. The latter, the "Stop Work Policy", provides that both employees and contractors are required to intervene promptly and stop any activity that may put their own or others' health and safety at risk. In any case, note that the final indicator requested cannot be directly communicated by Enel, as it is calculated by the investor.	For further details, please refer to the "Occupational health and safety" chapter
	<b>2. Rate of accidents</b>	For 2022, Total Recordable Injuries amounted to 809 (2021 figure of 1,055). For full disclosure of the types of injuries reported by Enel (for Enel people and subcontractors), please see the "Chapter reference" column. In any case, note that the final indicator requested cannot be directly communicated by Enel, as it is calculated by the investor based on the information provided in the balance sheet.	For further details, please refer to the "Occupational health and safety" chapter and to the Sustainability Statement, "Occupational health and safety" section.
	<b>3. Number of days lost to injuries, accidents, fatalities or illness</b>	For 2022, the total days lost due to workplace injuries was 7,492 (of which 1,968 to Enel people and 5,524 to subcontractors). The figure does not take into account days lost to occupational diseases. In any case, note that the final indicator requested cannot be directly communicated by Enel, as it is calculated by the investor.	For further details, please refer to the "Occupational health and safety" chapter.
	<b>4. Lack of a supplier code of conduct</b>	Our purchasing processes are based on pre-contractual and contractual conduct geared towards mutual loyalty, transparency and collaboration. The basis of our procurement processes is loyalty, transparency and collaboration, and we ask our suppliers not only to guarantee the quality standards required, but also to commit to adopting best practices in terms of human rights and of the impact of their activity on the environment. Indeed, there are clear and specific references in terms of codes of conduct, including our Policy on Human Rights, Code of Ethics, Zero Tolerance of Corruption Plan, and global compliance programs.	For further information, please refer to the "Sustainable supply chain" chapter and to "Sound governance – Values and pillars of corporate ethics"
	<b>5. Lack of grievance/ complaints handling mechanism related to employee matters</b>	In line with the third pillar of the United Nations Guiding Principles, Enel has established multiple access channels for reporting by people inside or outside the company, including: <ul style="list-style-type: none"> <li>a whistleblowing channel, available to internal and external stakeholders, accessible via: <ul style="list-style-type: none"> <li>web or toll-free number as indicated on the Enel Code of Ethics webpage;</li> <li>by letter to the address: Enel S.p.A. – Audit Function – Code of Ethics. Via Dalmazia, 15 – 00198 Rome, ITALY;</li> </ul> </li> <li>various processes and tools available to communities in the area of influence of our activities;</li> <li>customer complaints or information channels (via email, website, toll-free number).</li> </ul>	For further information, please refer to the "Sound governance" chapter – "Values and pillars of corporate ethics" section
	<b>6. Insufficient whistleblower protection</b>	The whistleblowing management process is regulated by the "Management of anonymous and non-anonymous whistleblowing" Policy, which guarantees anonymity and protection against any form of retaliation.	For further information, please refer to the "Sound governance" chapter, in particular to the "Code of Ethics" and "Stakeholder reports" sections, and to the "Human Rights Content Index"
	<b>7. Incidents of discrimination (no.)</b>	In 2022, 4 violations were recorded relating to cases of discrimination at the workplace, in particular cases of harassment.	For further information, please refer to the "Sound governance" chapter, in particular to the "Code of Ethics" and "Stakeholder reports" sections, and to the "Human Rights Content Index"
	<b>8. Excessive CEO pay ratio (%)</b>	For 2022, the CEO pay ratio at Enel was 60% (2021 figure: 90%). In any case, note that the final indicator requested cannot be directly communicated by Enel, as it is calculated by the investor.	For further information, please refer to the WEF Content Index – "Dignity and equality section", and to the "Sound governance" chapter, "Remuneration policy" section.











HUMAN RIGHTS	<b>9. Lack of a human rights policy</b>	Since 2013, Enel has adopted a Policy on Human Rights, approved by the Board of Directors and updated in 2021 to take into account changes in international frameworks and our operational, organizational and management processes. The policy leverages the commitments set out in the various codes of conduct such as the Code of Ethics (adopted in 2002), the Zero Tolerance Plan for Corruption and global compliance models, by strengthening and expanding on their content. The policy sets out 12 principles, divided into two broad themes: practices in the workplace and relations with communities and society.	For further information, please refer to the "Managing human rights" chapter, in particular to the "Our public commitment: the Policy on Human Rights" section and the "Human Rights Content Index".
	<b>10. Lack of due diligence</b>	As required by the UN Guidelines and by the OECD Due Diligence Guidance for Responsible Business Conduct, we have set up a process – codified in an internal procedure applicable at global level – that, with reference to the entire value chain in the various countries where we operate, aims to evaluate our procedures and operational processes and define, if necessary, an improvement plan to strengthen the systems that protect the principles set out in the Policy on Human Rights.	For further information, please refer to the "Managing human rights" chapter, in particular to the "Our Due Diligence process" section and the "Human Rights Content Index".
	<b>11. Lack of processes and measures for preventing trafficking in human beings</b>	Since 2013, our commitment against all forms of human trafficking has been formally set out in principle 2.1.1, "Rejection of forced or compulsory labor and child labor" of our Policy on Human Rights.	For further information, please refer to the "Managing human rights" chapter, and to the "Policy on Human Rights", available on the corporate website.
	<b>12. Operations and suppliers at significant risk of incidents of child labor</b>	Since 2013, our commitment against all forms of slavery and child labor has been formally set out in principle 2.1.1, "Rejection of forced or compulsory labor and child labor" of our Policy on Human Rights. We believe that children and underage workers are a risk category, which is why we pay close attention to respecting their rights throughout the value chain of our activities. We reject the use of child labor, as defined by the legislation in force in the country where the activities are carried out. In any case, our workers are never younger than the minimum age laid down in ILO Convention No. 138. Human resources management systems and procedures therefore guarantee the absence of minors in the workforce.	For further information, please refer to the "Managing human rights" chapter, and to the "Policy on Human Rights", available on the corporate website.
	<b>13. Operations and suppliers at significant risk of incidents of forced or compulsory labor</b>	Since 2013, our commitment against the use of any kind of forced or compulsory labor has been formally set out in principle 2.1.1, "Rejection of forced or compulsory labor and child labor" of our Policy on Human Rights. The contracts considered overall regulate labor conditions, clearly defining workers' rights (working hours, remuneration, overtime, indemnity, benefits). Each worker is guaranteed a translated employment contract in his/her native language.	For further information, please refer to the "Managing human rights" chapter, and to the "Policy on Human Rights", available on the corporate website.
ANTI-CORRUPTION AND ANTI-BRIBERY	<b>14. Number of identified cases of severe human rights issues and incidents</b>	In 2022, no serious human rights violations were recorded through the Group's whistleblowing channel.	For further information, please refer to the "Sound governance" chapter – "Values and pillars of corporate ethics" and "Stakeholder reports" sections
	<b>15. Lack of anti-corruption and anti-bribery policies</b>	In compliance with the 10th Global Compact principle, according to which "companies are committed to combating corruption in all its forms, including extortion and bribery", Enel intends to pursue its commitment to fighting corruption in all its forms – whether direct or indirect – by applying the principles expressed in the pillars of its Anti-Bribery Management System. Enel's Anti-Bribery Management System (ABMS) is based on the Group's commitment to fighting corruption by applying the criteria of transparency and conduct as set out in the Zero Tolerance of Corruption Plan (ZTC Plan) and confirmed in the Anti-Bribery Policy adopted in compliance with international standard ISO 37001:2016 (on anti-bribery management systems).	For further information, please refer to the "Sound governance" chapter – "Values and pillars of corporate ethics" and "Active and passive fight against corruption"
	<b>16. Cases of insufficient action taken to address breaches of standards of anti-corruption and anti-bribery</b>	Ascertained violations relating to reports received through the Ethics Channel are subject to disciplinary measures and/or sanctions against the people responsible. In addition to reports relating to the Code of Ethics, no other events were reported.	Please refer to the "Sound governance" chapter – "Values and pillars of corporate ethics" and "Stakeholder reports" sections
	<b>17. Number of convictions and amount of fines for violation of anti-corruption and anti-bribery laws</b>	On the basis of the reports to the Ethical Channel received in 2022, no violations led to convictions or financial penalties for the people involved. In addition to reports relating to the Code of Ethics, no other events were reported.	Please refer to the "Sound governance" chapter – "Values and pillars of corporate ethics" and "Stakeholder reports" sections



# Human Rights Content Index



Our pledge to respect human rights is the guiding principle that permeates all our activities and it is fully integrated into our corporate purpose and values, since we belong to the territory, and we are an essential element in the lives of people, businesses, and society at large. With our commitment we are striving for sustainable progress, to make our company and the communities in which we operate more prosperous, more inclusive and more resilient, without leaving anyone behind.

ISSUE	PRINCIPLE	DESCRIPTION	SDG	INTERNATIONAL REFERENCE STANDARDS	SUSTAINABILITY REPORT 2022: CHAPTERS/PARGRAPHS
<b>Employment practices</b>	Rejection of forced or compulsory labor and child labor	Reject of the use of any form of forced or compulsory labor, of any form of slavery and human trafficking and of child labor	 	<ul style="list-style-type: none"> <li>United Nations Guiding Principles on Business and human rights</li> <li>OECD guidelines for multinational enterprises</li> <li>ILO Convention 29</li> <li>United Nations Global Compact principles</li> </ul>	Our strategy for sustainable progress Materiality analysis process and results for 2022 Our commitment to continuous improvement Zero emissions ambition Our commitment to a just transition: leaving no one behind Empowering Enel people Sustainable supply chain Circular economy Innovation Digitalization Sound governance Managing human rights
	Respect for diversity and non-discrimination	Diversity, inclusion, equal treatment and opportunity, working conditions respectful of personal dignity, creation of a working environment where people are treated fairly, valued for their uniqueness and not discriminated or subject to harassment, commitment to a just energy transition for everyone and attention to clients requests	   	<ul style="list-style-type: none"> <li>United Nations Guiding Principles on Business and human rights</li> <li>OECD guidelines for multinational enterprises</li> <li>ILO Conventions 100, 111, 190</li> <li>United Nations Global Compact principles</li> </ul>	Materiality analysis process and results for 2022 Our strategy for sustainable progress Our commitment to continuous improvement Zero emissions ambition Clean electrification Empowering Enel people Sustainable supply chain Engaging communities
	Freedom of association and collective bargaining	Freedom to form or take part in organizations aimed at defending and promoting the rights of people, respect of their right to be represented by unions or other forms of representation, collective bargaining as the favored instrument for setting contractual conditions and regulating relations between management and unions		<ul style="list-style-type: none"> <li>United Nations Guiding Principles on Business and human rights</li> <li>OECD guidelines for multinational enterprises</li> <li>ILO Conventions 87, 98, 154</li> <li>United Nations Global Compact principles</li> </ul>	Materiality analysis process and results for 2022 Our strategy for sustainable progress Our commitment to continuous improvement Zero emissions ambition Our commitment to a just transition: leaving no one behind Empowering Enel people Sustainable supply chain Engaging communities

ISSUE	PRINCIPLE	DESCRIPTION	SDG	INTERNATIONAL REFERENCE STANDARDS	SUSTAINABILITY REPORT 2022: CHAPTERS/PARGRAPHS
<b>Employment practices</b>	Health, safety, and well-being	Protection of health, safety and psychological, relational, and physical well-being of individuals; dissemination of such culture to ensure that workplaces are hazard-free and to promote behaviors oriented towards work-life integration	 	<ul style="list-style-type: none"> <li>United Nations Guiding Principles on Business and human rights</li> <li>OECD guidelines for multinational enterprises</li> <li>ILO Conventions 155, 156, 187</li> <li>United Nations Global Compact principles</li> </ul>	<p>Materiality analysis process and results for 2022</p> <p>Our strategy for sustainable progress</p> <p>Our commitment to a just transition: leaving no one behind</p> <p>Our commitment to continuous improvement</p> <p>Empowering Enel people</p> <p>Sustainable supply chain</p> <p>Engaging communities</p> <p>Occupational health and safety</p>
	Just and favourable working conditions	Protection of the right to conditions that respect the health, safety, well-being and dignity of individuals, maximum working hours, daily and weekly rest periods and annual period of paid leave, and fair remuneration as well as equal pay for equal work for men and women, minimum compensation, and professional orientation and training	  	<ul style="list-style-type: none"> <li>United Nations Guiding Principles on Business and human rights</li> <li>OECD guidelines for multinational enterprises</li> <li>ILO Conventions 100, 132, 155, 156, 187</li> <li>United Nations Global Compact principles</li> </ul>	<p>Materiality analysis process and results for 2022</p> <p>Our strategy for sustainable progress</p> <p>Our commitment to continuous improvement</p> <p>Zero emissions ambition</p> <p>Our commitment to a just transition: leaving no one behind</p> <p>Empowering Enel people</p> <p>Sustainable supply chain</p> <p>Engaging communities</p>
<b>Communities and society</b>	Environment	Protection of the environment and biodiversity, climate action, and contribution to a sustainable economic development	    	<ul style="list-style-type: none"> <li>United Nations Guiding Principles on Business and human rights</li> <li>OECD guidelines for multinational enterprises</li> <li>United Nations Global Compact principles</li> </ul>	<p>Materiality analysis process and results for 2022</p> <p>Our strategy for sustainable progress</p> <p>Our commitment to continuous improvement</p> <p>Zero emissions ambition</p> <p>Our commitment to a just transition: leaving no one behind</p> <p>Conservation of natural capital</p> <p>Empowering Enel people</p> <p>Sustainable supply chain</p> <p>Engaging communities</p> <p>Circular economy</p> <p>Innovation</p>

ISSUE	PRINCIPLE	DESCRIPTION	SDG	INTERNATIONAL REFERENCE STANDARDS	SUSTAINABILITY REPORT 2022: CHAPTERS/PARAGRAPHS
<b>Communities and society</b>	Respecting the rights of communities	Responsible community relations based on the assumption that individual conditions, economic and social development, and general well-being of collectivity are strictly connected. This includes conducting capital expenditure in a sustainable manner, promoting cultural, social and economic initiatives for affected local and national communities to advance social inclusion through education, training and access to energy. Commitment to ensure that products and services are designed to be accessible for all.	           	<ul style="list-style-type: none"> <li>United Nations Guiding Principles on Business and human rights</li> <li>OECD guidelines for multinational enterprises</li> <li>ILO Convention 169</li> <li>United Nations Global Compact principles</li> </ul>	<p>Materiality analysis process and results for 2022</p> <p>Our strategy for sustainable progress</p> <p>Our commitment to continuous improvement</p> <p>Zero emissions ambition</p> <p>Our commitment to a just transition: leaving no one behind</p> <p>Clean electrification</p> <p>Empowering Enel people</p> <p>Sustainable supply chain</p> <p>Engaging communities</p> <p>Conservation of natural capital</p> <p>Circular economy</p>
	Respecting the rights of local communities	<p>Commitment to respecting the rights of local communities and to contribute to their economic and social growth also through collaborations with suppliers, contractors and partners that contribute to the social and economic development of the communities where we operate.</p> <p>This goes also through: promoting free, prior, and informed consultation activities and implementing social inclusion actions (local manpower, health and safety training, development of local projects – also in partnership with local organizations); taking into due account the environmental and social impact in the designing and construction of our infrastructure projects; requiring that private security forces protecting Group's personnel and assets in operating areas act consistently with the applicable national law and regulation and international standards.</p>			
	Respecting the rights of indigenous and tribal people	Specific commitment to pay particular attention to the most vulnerable communities, such as indigenous and tribal peoples, in case of developing new projects and to respect the United Nations Declaration of the rights of Indigenous Peoples.			

ISSUE	PRINCIPLE	DESCRIPTION	SDG	INTERNATIONAL REFERENCE STANDARDS	SUSTAINABILITY REPORT 2022: CHAPTERS/PARGRAPHS
Communities and society	Integrity: zero tolerance of corruption	Reject of corruption in all its forms, both direct and indirect, since it is one of the factors undermining institutions and democracy, ethical values and justice, as well as the well-being and development of society.		<ul style="list-style-type: none"> <li>United Nations Guiding Principles on Business and human rights</li> <li>OECD guidelines for multinational enterprises</li> <li>United Nations Global Compact principles</li> </ul>	<p>Materiality analysis process and results for 2022</p> <p>Our strategy for sustainable progress</p> <p>Our commitment to continuous improvement</p> <p>Sound governance</p>
	Privacy	Respect of the confidentiality and right to privacy of our stakeholders and to use correctly information and data relating to the people working in our organization, to our customers and to any other stakeholder; processing of data in compliance with the fundamental rights and the rights and principles recognized in law, notably respect for private and family life, home location details and communications, personal data protection, freedom of thought, conscience and religion, freedom of expression and information		<ul style="list-style-type: none"> <li>United Nations Guiding Principles on Business and human rights</li> <li>OECD guidelines for multinational enterprises</li> <li>ILO Recommendation on "Protection of workers' personal data"</li> <li>United Nations Global Compact principles</li> </ul>	<p>Materiality analysis process and results for 2022</p> <p>Our strategy for sustainable progress</p> <p>Our commitment to continuous improvement</p> <p>Clean electrification</p> <p>Empowering Enel people</p> <p>Sustainable supply chain</p> <p>Sound governance</p>
	Communication	Commitment to ensure that institutional and commercial communications are non-discriminatory and are respectful of different cultures, while also not adversely affecting the most vulnerable audiences, such as children and the elderly.		<ul style="list-style-type: none"> <li>United Nations Guiding Principles on Business and human rights</li> <li>OECD guidelines for multinational enterprises</li> <li>United Nations Global Compact principles</li> </ul>	<p>Materiality analysis process and results for 2022</p> <p>Our strategy for sustainable progress</p> <p>Our commitment to continuous improvement</p> <p>Clean electrification</p> <p>Sustainable supply chain</p> <p>Engaging communities</p>

ISSUE	PRINCIPLE	DESCRIPTION	SDG	INTERNATIONAL REFERENCE STANDARDS	SUSTAINABILITY REPORT 2022: CHAPTERS/PARAGRAPHS
Human rights governance	Public commitment	Adoption of a human rights policy		<ul style="list-style-type: none"> <li>United Nations Guiding Principles on Business and human rights</li> <li>OECD guidelines for multinational enterprises</li> <li>United Nations Global Compact principles</li> </ul>	Our governance of sustainability Managing human rights
	Due diligence of the management system	Identification, prevention and mitigation of the potential negative effects caused by business operations  Reporting to Control and Risk Committee and to Corporate Governance and Sustainability Committee about the implementation of the due diligence process	 	<ul style="list-style-type: none"> <li>United Nations Guiding Principles on Business and human rights</li> <li>OECD guidelines for multinational enterprises</li> <li>OECD Due diligence Guidance for Responsible Business Conduct</li> </ul>	Our governance of sustainability Managing human rights
	Access to remedy	Access to specific grievance channels also at local level		<ul style="list-style-type: none"> <li>United Nations Guiding Principles on Business and human rights</li> <li>OECD guidelines for multinational enterprises</li> <li>OECD Due diligence Guidance for Responsible Business Conduct</li> <li>United Nations Global Compact principles</li> </ul>	Our governance of sustainability Sound governance Managing human rights
	Transparency	Annual reporting, within the Sustainability Report, of the performance on the commitments undertaken through the human rights policy	 	<ul style="list-style-type: none"> <li>United Nations Guiding Principles on Business and human rights</li> <li>OECD guidelines for multinational enterprises</li> <li>OECD Due diligence Guidance for Responsible Business Conduct</li> </ul>	Our governance of sustainability Sound governance Managing human rights



# Our position on and commitment to the European Taxonomy

**Enel welcomes the development of the EU Taxonomy Regulation**, as it provides a standardized, science-based classification system to identify environmentally sustainable economic activities. The EU Taxonomy Regulation acts as an important enabler to promote sustainable investments and accelerate the decarbonization of the European economy, while at the same time creating reliability and transparency for investors and supporting companies in planning the Net-Zero transition.

**We are committed to reporting on the implementation of Article 8 of the European Taxonomy Regulation 852/2020** and of the Delegated Act which further specifies the content, methodology and presentation of information to be disclosed by both financial and non-financial companies.

**Concerning the Climate Delegated Act, which lays out the criteria for verifying the contribution to climate mitigation and adaptation, we welcome the different thresholds defined in the EU Taxonomy Regulation on the basis of climate and environmental sciences**, such as the specific emission limit of 100 gCO<sub>2eq</sub>/kWh (taking the whole life cycle into consideration) to measure the substantial contribution to achieving the climate change mitigation objectives established for most power generation technologies, in that it stems from a solid process based on a robust scientific foundation.

However, there are some activities that, although not covered under the EU Taxonomy Regulation, are critical to promoting the well-being of citizens, especially in the short and medium term, while contributing to the sustainable development the long term.

As regards the energy industry, there are some important sustainability-related issues that the European Commission did not consider when developing the technical screening criteria, as they were outside the main scope of

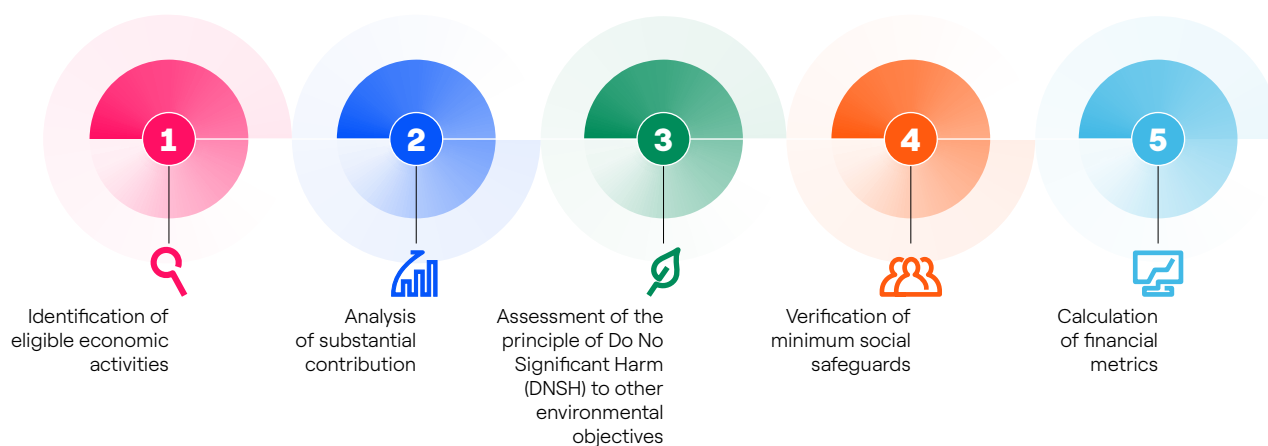
the EU Taxonomy Regulation. These included energy security, grid reliability and the energy transition, all of which are critical to Europe's well-being but which are appropriately addressed by other policies, funds and regulations at EU and Member State level.

The EU Taxonomy Regulation is still in a developmental stage, and a number of important Delegated Acts are still being finalized at the time of publication of this Sustainability Report. These include acts that will detail the criteria for the remaining four objectives (sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control and protection and restoration of biodiversity and ecosystems), as well as those that will identify economic activities that do not have a significant harmful impact on environmental sustainability and those that do. **Completion of the entire regulatory process should ensure that all globally recognized economic activities are considered, thereby reducing current uncertainties regarding implementation of the process itself.**

Going beyond the disclosure requirements of the Taxonomy, Enel has included the **Capex alignment** percentage as one of the key performance indicators of the **Sustainability-Linked Financing Framework** used to define the Company's sustainable financial instruments. With this important move forward, Enel reinforces the role of the Taxonomy as a driver to promote sustainable investment decisions and show how sustainability can be fully integrated into the financial landscape.

Enel holds its annual Capital Markets Day to align its capital allocation with the EU Taxonomy set out in its Business Plan. In particular, in 2022 Enel announced **a target in excess of 80% Capex alignment for the period 2023-2025** as part of its contribution to climate mitigation.

# Our implementation process



By means of a process overseen by the CEO and Top Management, involving the relevant Functions at corporate and country level, as well as all Business Lines, we initiated a process, articulated in five steps, to analyze the applicability of the EU Taxonomy Regulation throughout the entire value chain and in all countries where we operate.

**1. Identification of eligible economic activities:** we have identified all activities within the Group's portfolio that have been included both in the Climate Delegated Act and the Complementary Delegated Act. The process was conducted by taking into consideration the climate change mitigation objective only, which is our most material objective among the six objectives identified in the EU Taxonomy Regulation, also due to the lack of reliable financial data in our accounting and reporting systems to carry out a comprehensive analysis of Enel's contribution to climate adaptation objective. However, climate adaptation has been analyzed from the do no significant harm perspective, while further information on Enel's climate adaptation measures can be found in the "Zero emission ambition" chapter.

**2. Analysis of substantial contribution:** eligible activities identified in the previous stage were analyzed in detail for their compliance with the specific technical screening criteria established with regard to their substantial contribution to climate change mitigation. The analysis was carried out following the criteria both in the Climate Delegated Act and Complementary Delegated Act, namely:

**a. Technological analysis for power generation activities.** The threshold of 100 gCO<sub>2eq</sub>/kWh measured on a life cycle basis was met according to the following technological approach:

- **coal and liquid fossil fuels:** technology excluded from the EU Taxonomy Regulation;

- **gas and nuclear:** during July 2022, the EU Parliament and Council have approved the EU Commission's proposal for including **nuclear and gas in the EU Taxonomy**, allowing investments in these energy sources to qualify as sustainable, under a set of strict criteria defined by the Commission previously. Based on the Complementary Delegated Act (CDA), our approach is the following:

- **gas:** the potential compliance with the threshold of 100 gCO<sub>2</sub>/kWh that applies also for this technology has been analyzed in all of our gas power plants, while we have also checked the potential compliance with the alternative criteria set out in the delegated act for electricity production from gas;

- **nuclear:** we have analyzed the eligibility of the three different activities related to electricity production from nuclear identified in the delegated act according to our nuclear business in Spain;

- **wind, solar and battery storage:** these are exempt from the carbon intensity threshold verification due to their substantial contribution to climate change mitigation;

- **hydroelectric power:** the carbon intensity threshold was verified only in power plants with a power density below 5 W/m<sup>2</sup>. All power plants with a power density above 5 W/m<sup>2</sup>, as well as flowing water plants and pumped storage plants, are exempt from the threshold verification;

- **geothermal:** the threshold was verified by carrying out life cycle assessments certified by independent third parties.

- b. Analysis at country, region and system level for the transmission and distribution of electricity.** Compli-

ance with the following technical screening criteria was analyzed in all eight countries where Enel distributes electricity:

- the Distribution System Operator (DSO) is part of the European interconnected system; or
- non-European DSOs belong to countries with more than 67% of newly enabled generation capacity in the system is below the generation threshold value of 100 gCO<sub>2eq</sub>/kWh measured on a life cycle basis in accordance with electricity generation criteria, over period 2016–2020 (data made available by national authorities over a rolling five-year period prior to the preparation of the 2021 Sustainability Report); or
- the average emission factor of the non-European DSO network is below the threshold value of 100 gCO<sub>2eq</sub>/kWh measured on a life cycle basis in accordance with electricity generation criteria, in the period 2017–2021.

Infrastructure dedicated to creating a direct connection or expanding an existing direct connection between a substation or network and a power production plant that is more greenhouse gas intensive than 100 gCO<sub>2eq</sub>/kWh measured on a life cycle basis has been identified and excluded from the eligible aligned DSOs activities.

**c. Product cluster level analysis for Enel X Global Retail (Business Line).** A comprehensive analysis of the portfolio was performed, classifying eligible activities into the sectors identified in the Climate Delegated Act, such as construction and real estate, transportation, or professional, scientific and technical activities.

**d. Sourcing analysis for power retail activities.** Power retail activity is currently not explicitly considered in the Climate Delegated Act, hence it has not been included in the taxonomy alignment calculation. However, considering the key role that this activity plays in the energy transition towards a zero emission economy, particularly when it is developed by integrated utilities such as Enel, we have carried out an additional analysis to determine its positive impact on the overall results if this activity would be correctly represented in the Climate Delegated Act.

**3. Assessment of the principle of Do No Significant Harm (DNSH) to other objectives:** an analysis of existing environmental procedures was carried out to verify compliance with the DNSH quality criteria for each type of technology (for power generation), region (for transmission and distribution) and product cluster level (for activities of the Enel X Global Retail Business Line), adapted to the specific requirements set out for each of the

following environmental objectives:

- **adaptation to climate change:** analysis of global procedures (including emerging and restoration procedures), assessment of physical climate risks and solutions and adaptation plans in place covering all applicable activities related to power generation, transmission and networks and Enel X Business Line;
- **sustainable use and protection of waters and marine resources:** analysis of water-related procedures, authorizations, environmental impact assessments, national regulations and water management plans. The analysis was limited to power generation activities, as it is not applicable to other Business Lines;
- **transition to a circular economy:** analysis of waste management plans, procurement requirements and circular economy projects and plans covering all activities applicable to the generation, transmission and distribution of electricity and to the products of the Enel X Business Line;
- **pollution prevention and control:** analysis of global procedures and national regulations concerning all applicable activities from power generation, transmission and networks. In addition, specific pollutants were further analyzed, including electromagnetic radiation and PCBs for transmission and networks, and emissions from power generation activities for air quality;
- **protection and restoration of biodiversity and eco-systems:** analysis of global procedures and national regulations covering all applicable activities from power generation, transmission and distribution.

**4. Assessment of the minimum social safeguards:** it has been verified that the Group's human rights due diligence process covers the entire perimeter of Enel.

Our commitment to respect human rights is grounded in the United Nations framework "Protect, Respect and Remedy", set out in the guiding principles on business and human rights, and in the OECD Guidelines for Multinational Enterprises.

Since 2013, we have adopted a specific human rights policy reflecting our commitment, which was updated in 2021 to take into account the evolving international frameworks of reference and our operating, organizational and managerial processes. The content of the policy refers to internationally recognized human rights – understood, at a minimum, as those expressed in the International Bill of Human Rights and the principles concerning the fundamental rights set out in the International Labour Organization conventions underlying the Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy.

For our approach to human rights, phases in the due diligence process, and communication of findings and (possible) remediation plans, please see the chapter

[“Managing human rights”](#).

The following table illustrates our approach to the minimum safeguards criteria.

#### Minimum safeguards criteria

Human rights	<ul style="list-style-type: none"> <li>The main reference international standards underpinning our commitment are the United Nations “Protect, Respect and Remedy” framework outlined in its Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises. Our commitment is transparently reflected in a specific Policy on Human Rights developed and adopted as early as 2013 and refreshed in 2021.</li> <li>We have committed to monitor the implementation of the policy through a specific due diligence<sup>(1)</sup> process defined based on the UN Guidelines and by the OECD Due Diligence Guidance for Responsible Business Conduct. For more details refer to the section “Managing human rights”.</li> </ul>
Corruption	<ul style="list-style-type: none"> <li>As reflected in our Policy on Human Rights, we reject corruption in all its forms, both direct and indirect, since we believe it is one of the factors undermining institutions and democracy, ethical values and justice, and the wellbeing and development of society.</li> <li>To this end, we reiterate our commitment to fight corruption through a plan called “Zero Tolerance of Corruption” which is one of the pillars on which our Anti-bribery Management System is grounded and in our Group Code of Ethics.</li> </ul>
Taxation	<ul style="list-style-type: none"> <li>We have set out a tax strategy at Group level to ensure a fair, responsible and transparent taxation, with the aim of guaranteeing consistent and uniform tax management across all entities belonging to the Group. Our tax management activity is based on the concurrent objectives of:               <ol style="list-style-type: none"> <li>the correct and timely calculation and payment of due taxes, and fulfilment of the related obligations;</li> <li>the mitigation of tax risk, defined as the risk of violating tax laws, or of abusing the principles and purposes of tax regulations. For additional details, please refer to the chapter “Tax transparency”.</li> </ol> </li> </ul>
Fair competition	<ul style="list-style-type: none"> <li>We promote the principle of fair competition and refrain from collusive or predatory conduct and abuses of a dominant position, as reflected in our Group Code of Ethics.</li> </ul>

**5. Calculation of financial metrics:** the corresponding financial metrics were associated with each economic activity according to the classification made in steps 1–4, collecting the relevant financial information from the Group’s accounting system. In addition, some prox-

ies have been performed for specific activities when financial information was not available in the accounting system (described in the section on the calculation of financial metrics).

(1) In the context of the Guiding Principles on Business and Human Rights (Principles 17–21), this term refers to a continuously evolving management system implemented by a company, in accordance with the sector in which it works, its operating contexts, its organizational structure, to ensure it is not involved in human rights violations. This implies “identifying, preventing, mitigating and reporting” potential negative impacts deriving from the Company’s business activities.

Through this process, Enel classified all economic activities along its value chain according to the following three cat-

egories: taxonomy eligible and aligned, taxonomy eligible but not aligned, and taxonomy not eligible.

### 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

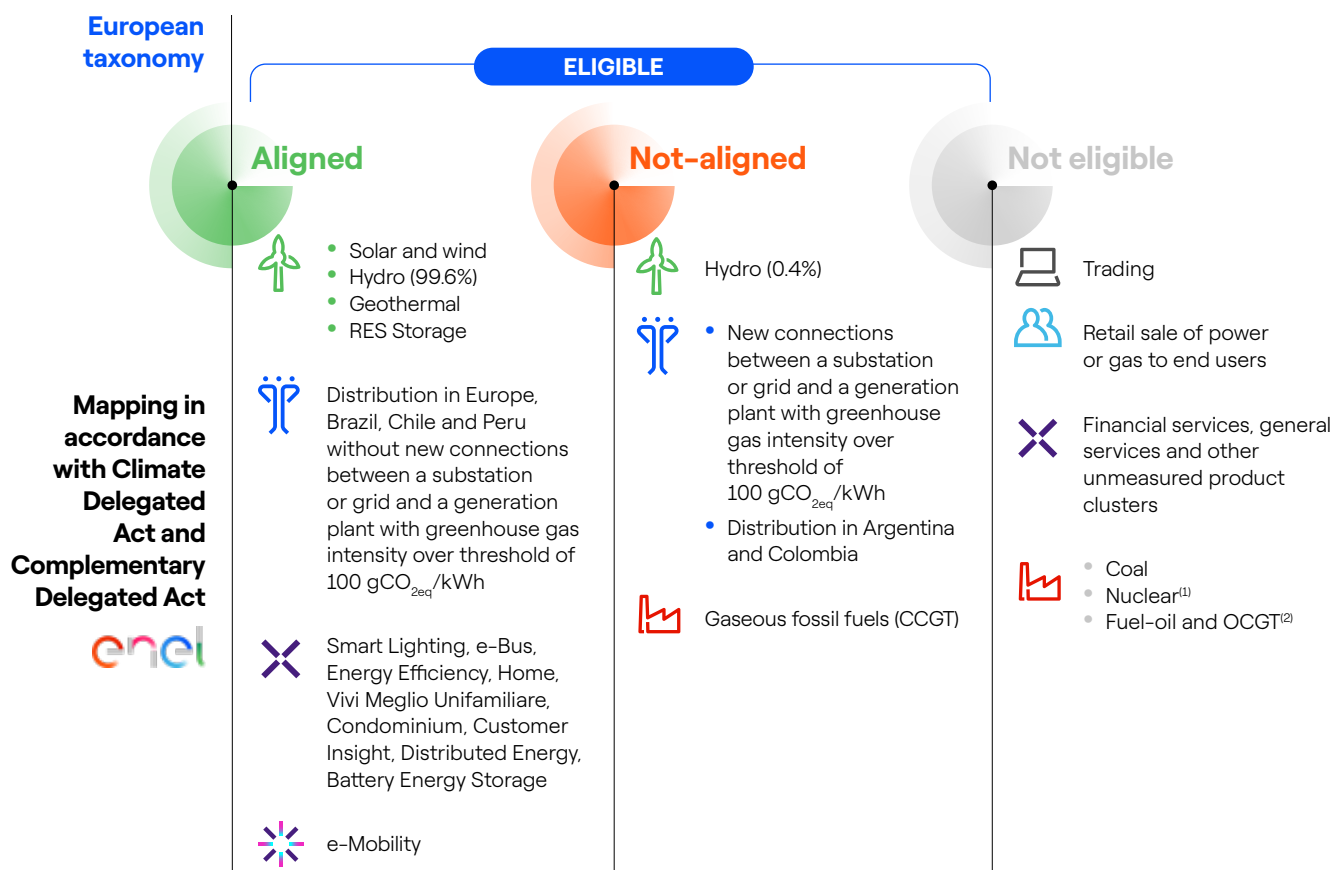
**Not eligible:** refers to an economic activity that has not been identified by the EU Taxonomy Regulation as a substantial contributor to climate change mitigation and for which no criteria have therefore been developed. The logic of the European Commission is that these activities might:

- 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.

Consequently, the existence of the third category “not eligible” makes it impossible to achieve a business model that is fully aligned with the criteria of the EU Taxonomy

Regulation, even though these not eligible activities might not cause any harm to the EU’s environmental objectives.








- (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.



In 2022, we updated our eligibility analysis according to 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 Jour-

nal of the European Union in December 2021, while also the Complementary Delegated Act publishes in the Official Journal of the European Union in July 2022. The following three tables summarize the results of this analysis.




## Eligible-aligned activities

Business Line	Activity	Description of the activity (according to the EU Taxonomy Regulation)	Condition aligned with requirements
 <b>Power generation</b>	Electricity generation from wind power	(4.3) - Construction or operation of electricity generation facilities that produce electricity from wind power.	100% of the installed capacity is eligible and aligned because: <ul style="list-style-type: none"> <li>it makes a substantial contribution to climate change mitigation as no specific technical screening criteria are required;</li> <li>it complies overall with DNSH criteria for the following applicable objectives: adaptation, circular economy and biodiversity;</li> <li>it complies overall with minimum social safeguards.</li> </ul>
	Electricity generation using solar photovoltaic technology	(4.1) - Construction or operation of electricity generation facilities that produce electricity using solar photovoltaic (PV) technology.	100% of the installed capacity is eligible and aligned because: <ul style="list-style-type: none"> <li>it makes a substantial contribution to climate change mitigation as no specific technical screening criteria are required;</li> <li>it complies overall with DNSH criteria for the following applicable objectives: adaptation, circular economy and biodiversity;</li> <li>it complies overall with minimum social safeguards.</li> </ul>
	Electricity generation from hydropower	(4.5) - Construction or operation of electricity generation facilities that produce electricity from hydropower.	99.3% of the installed capacity is eligible and aligned because: <ul style="list-style-type: none"> <li>it makes a substantial contribution to climate change mitigation, since it includes all flowing water plants, all pumped storage plants, all reservoir plants with a power density above 5 W/m<sup>2</sup> and all reservoir plants below 5 W/m<sup>2</sup> with a life cycle greenhouse gas intensity below 100 gCO<sub>2eq</sub>/kWh as certified by G-RES;</li> <li>it complies overall with DNSH criteria for the following applicable objectives: adaptation, water and biodiversity;</li> <li>it complies overall with minimum social safeguards.</li> </ul>
	Electricity generation from geothermal energy	(4.6) - Construction or operation of electricity generation facilities that produce electricity from geothermal energy.	100% of the installed capacity is eligible and aligned because: <ul style="list-style-type: none"> <li>it makes a substantial contribution to climate change mitigation, as all power plants have a life cycle GHG emission intensity of less than 100 gCO<sub>2eq</sub>/kWh, as verified by an independent third party;</li> <li>it complies overall with DNSH criteria for the following applicable objectives: adaptation, water, pollution and biodiversity;</li> <li>it complies overall with minimum social safeguards.</li> </ul>
	Storage of electricity (batteries)	(4.10) - Construction and operation of facilities that store electricity.	100% of the installed capacity is eligible and aligned because: <ul style="list-style-type: none"> <li>it makes a substantial contribution to climate change mitigation as no specific technical screening criteria are required;</li> <li>it complies overall with DNSH criteria for the following applicable objectives: adaptation, circular economy, water and biodiversity;</li> <li>it complies overall with minimum social safeguards.</li> </ul>





Business Line	Activity	Description of the activity (according to the EU Taxonomy Regulation)	Condition aligned with requirements
 Enel Grids	Transmission and distribution of electricity	(4.9) – Construction and operation of transmission systems that transport the electricity on the extra high-voltage and high-voltage interconnected system. Construction and operation of distribution systems that transport electricity on high-voltage, medium-voltage and low-voltage distribution systems.	<p>The DSOs in Italy, Romania, Spain, Brazil, Chile and Peru are aligned in that:</p> <ul style="list-style-type: none"> <li>they make a substantial contribution to climate change mitigation, in particular: <ul style="list-style-type: none"> <li>the DSOs in Italy, Romania and Spain are part of the European interconnected system;</li> <li>the DSOs in Brazil, Chile and Peru belong to electricity systems where more than 67% of newly installed capacity in the last five years has a life cycle GHG intensity of less than 100 gCO<sub>2eq</sub>/kWh, according to the latest data available from national authorities;</li> </ul> </li> <li>they comply overall with DNSH criteria for the following applicable objectives: adaptation, circular economy, pollution and biodiversity.</li> </ul> <p>Some infrastructures have been excluded from these DSOs (refer to eligible but not aligned activities).</p>
	Smart Lighting (City)	Installation, maintenance and repair of energy efficiency equipment (7.3) – Installation and replacement of energy efficient light sources (7.3 d).	<p>The whole activity is aligned with the requirements because:</p> <ul style="list-style-type: none"> <li>it makes a substantial contribution to climate change mitigation as no specific technical screening criteria are required;</li> <li>it complies overall with DNSH criteria for the adaptation and pollution goals;</li> <li>it complies overall with minimum social safeguards.</li> </ul>
	e-Bus (City)	Urban and suburban transport, road passenger transport (6.3) – The activity provides urban or suburban passenger transport and its direct (tailpipe) CO <sub>2</sub> emissions are zero (6.3 a).	<p>The whole activity is aligned with the requirements because:</p> <ul style="list-style-type: none"> <li>it makes a substantial contribution to climate change mitigation as no specific technical screening criteria are required;</li> <li>it complies overall with DNSH criteria for the applicable objectives: adaptation, circular economy and pollution;</li> <li>it complies overall with minimum social safeguards.</li> </ul>
 Enel X			
	Energy efficiency (City)	Installation, maintenance and repair of energy efficiency equipment (7.3) – Addition of insulation to existing envelope components, such as external walls (including green walls), roofs (including green roofs), lofts, basements and ground floors (including measures to ensure air-tightness, measures to reduce the effects of thermal bridges and scaffolding) and products for the application of the insulation to the building envelope (including mechanical fixings and adhesive) (7.3 a) – Replacement of existing windows with new energy efficient windows (7.3 b) – Replacement of existing external doors with new energy efficient doors (7.3 c) – Installation and replacement of energy efficient light sources (7.3 d) – Installation, replacement, maintenance and repair of heating, ventilation and air-conditioning (HVAC) and water heating systems, including equipment related to district heating services, with highly efficient technologies (7.3 e).	<p>The whole activity is aligned with the requirements because:</p> <ul style="list-style-type: none"> <li>it makes a substantial contribution to climate change mitigation as no specific technical screening criteria are required;</li> <li>it complies overall with DNSH criteria for the adaptation goal;</li> <li>it complies overall with minimum social safeguards.</li> </ul>

Business Line	Activity	Description of the activity (according to the EU Taxonomy Regulation)	Condition aligned with requirements
 Enel X	Home	Installation, maintenance and repair of energy efficiency equipment (7.3) (7.3 a-e). For the detail, see the points already discussed above.	<p>The whole activity is aligned with the requirements because:</p> <ul style="list-style-type: none"> <li>• it makes a substantial contribution to climate change mitigation as no specific technical screening criteria are required;</li> <li>• it complies overall with DNSH criteria for the adaptation and pollution goals;</li> <li>• it complies overall with minimum social safeguards.</li> </ul>
	Vivi Meglio Unifamiliare (Home)	Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings (7.5) - Installation, maintenance and repair of zoned thermostats, smart thermostat systems and sensing equipment, including, motion and day light control (7.5 a).	
	Condominium	Installation, maintenance and repair of renewable energy technologies (7.6) - Installation, maintenance and repair of solar photovoltaic systems and the ancillary technical equipment (7.6 a).	
	Customer Insight (Industry)	Professional services related to energy performance of buildings (9.3).	<p>The whole activity is aligned with the requirements because:</p> <ul style="list-style-type: none"> <li>• it makes a substantial contribution to climate change mitigation as no specific technical screening criteria are required;</li> <li>• it complies overall with DNSH criteria for the adaptation goal;</li> <li>• it complies overall with minimum social safeguards.</li> </ul>
	Distributed energy (Industry)	Installation, maintenance and repair of energy efficiency equipment (7.3) - Installation and replacement of energy efficient light sources (7.3 d) - Installation, replacement, maintenance and repair of heating, ventilation and air-conditioning (HVAC) and water heating systems, including equipment related to district heating services, with highly efficient technologies (7.3 e) - Installation, maintenance and repair of renewable energy technologies (7.6) - Installation, maintenance and repair of solar photovoltaic systems and the ancillary technical equipment (7.6 a).	
 e-Mobility	Battery energy storage (Industry)	Installation, maintenance and repair of renewable energy technologies (7.6) - Installation, maintenance and repair of thermal or electric energy storage units and the ancillary technical equipment (7.6 f).	<p>The whole activity is aligned with the requirements because:</p> <ul style="list-style-type: none"> <li>• it makes a substantial contribution to climate change mitigation as no specific technical screening criteria are required;</li> <li>• it complies overall with DNSH criteria for the adaptation goal;</li> <li>• it complies overall with minimum social safeguards.</li> </ul>
	Electric mobility	Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) (7.4) - Infrastructure for personal mobility, cycle logistics (6.13).	

## Eligible-not aligned activities

Business Line	Activity	Description of the activity (according to the EU Taxonomy Regulation)	Eligible but not aligned condition
 <b>Power Generation</b>	Electricity generation from hydropower	(4.5) – Construction or operation of electricity generation facilities that produce electricity from hydropower.	0.7% of installed capacity is eligible but not aligned because it was not possible to verify the technical screening criteria related to power density and thus to the life cycle greenhouse gas intensity.
	 Electricity generation from fossil gaseous fuels	(4.29) – Construction or operation of electricity generation facilities that produce electricity from fossil gaseous fuels.  It refers to thermal power plants with CCGT technology.	100% of installed capacity is eligible but not aligned because all power plants exceed the threshold of 100 gCO <sub>2eq</sub> /kWh measured on life cycle basis, while also the alternative criteria are not satisfied.
 <b>Enel Grids</b>	Transmission and distribution of electricity	Transmission and distribution of electricity (4.9) – Construction and operation of transmission systems that transport the electricity on the extra high-voltage and high-voltage interconnected system. Construction and operation of distribution systems that transport electricity on high-voltage, medium voltage and low-voltage distribution systems.	Infrastructures built during the year and dedicated to the realization of a direct connection or the expansion of an existing direct connection between a substation or grid and a power plant with a greenhouse gas intensity exceeding the threshold of 100 gCO <sub>2eq</sub> /kWh measured on a life cycle basis.  The DSOs in Argentina and Colombia have a GHG intensity in excess of 100 gCO <sub>2eq</sub> /kWh, and belong to electrical systems where less than 67% of newly installed capacity in the last five years has a life cycle GHG intensity of less than 100 gCO <sub>2eq</sub> /kWh, according to the latest data available from national authorities.

## Not eligible activities

Business Line	Activity	Description of the activity	Not eligible condition
 <b>Power generation</b>	Generation of electricity from coal and liquid fossil fuels	Construction and operation of coal-fired and liquid fossil fuel power plants.  It refers to thermal power plants that combine fuel-oil and gas (OCGT) technologies, for which a further breakdown is not feasible.	The activity has been excluded from the EU Taxonomy Regulation as it is considered very harmful.
	Electricity generated by nuclear power plants	Construction and operation of nuclear power plants.	The business activity performed by Enel in its nuclear power plants in Spain has not been explicitly mentioned in the Complementary Delegated Act, and it does not fit within the three specific nuclear-related activities identified in such delegated act.
 <b>Trading</b>	Energy sales (wholesale)	Wholesale of power and related activities.	This activity is not considered in the Climate Delegated Act.
 <b>Market</b>	Electricity and gas sales (end customers)	Retail sales of electricity and gas by Group companies.	This activity is not considered in the Climate Delegated Act.
 <b>Enel X</b>	Other activities	Financial services, hardware and software, insurance policies and other general services.	These activities are not considered in the Climate Delegated Act.



# Process for calculating the financial metrics

During the process of calculating the financial metrics, the following criteria were adopted and the following considerations made.

- The three financial metrics required by the EU Taxonomy Regulation (turnover, capital expenditure – Capex – and operating expenditure – Opex) were calculated according to the eligibility analysis described in the previous section.
- Although not expressly required, Enel also performed an assessment in terms of the ordinary gross operating profit (EBITDA) believing that this metric represents the actual financial performance of integrated utilities such as Enel. A metric that considers only turnover is strongly influenced by the business activities with a high volume of revenues (such as the wholesale market – trading) that do not contribute proportionally to growth in the ordinary gross operating profit to the same extent as other business activities.
- The financial information was gathered from the digital accounting system used by the Enel Group, or from the management systems in use by the Company's Business Lines. However, some proxies were delegated to provide a more detailed representation of the figures or to exclude specific activities from the overall calculation of eligible alignment (such as not aligned hydroelectric power generation or infrastructure considered eligible but not aligned among eligible and aligned distribution network systems). For example, the following proxies were used:
  - hydroelectric: eligible-not aligned hydroelectric power plants were excluded by considering their output multiplied by the average turnover per unit in the years 2021 and 2022. This approach was also extended to Capex, Opex and EBITDA;
  - distribution: new connections between a substation or grid and a power plant with a greenhouse gas intensity above the threshold of 100 gCO<sub>2eq</sub>/kWh were excluded considering their capacity (in MW) multiplied by the average turnover per unit (k€/ MW) for the years 2021 and 2022. This approach was only applied to turnover and Capex.
- Aggregate financial data in the report refer to the "sector" level and include items related to third parties and inter sectorial exchanges.
- Financial metrics were represented by considering all electricity and gas sales as "not eligible". An additional analysis has been performed in the last section of the chapter to provide a view of the results if part of this business activity would be considered aligned to the EU Taxonomy.
- The figures for 2021 have been restated to integrate the following methodological changes:
  - **Electricity generation from fossil gaseous fuels:** it has been considered as eligible-not aligned after applying the criteria set out in the Complementary Delegated Act (previously represented as not eligible).
  - **Transmission and distribution of electricity:** it has been performed a reassessment of the eligibility status of the distribution activity in Colombia to take into account updated data from the national electricity system concerning the new renewable capacity built in the last five years, causing a change in the status from eligible-aligned to eligible not-aligned. In addition, there have been implemented minor adjustments on the criteria to identify the infrastructure dedicated to creating a direct connection or expanding an existing direct connection between a substation or network and a power production plant that is more greenhouse gas intensive than 100 gCO<sub>2eq</sub>/kWh measured on a life cycle basis.
  - **Electricity retail:** it is now considered not eligible (previously represented as eligible) as it has not been explicitly mentioned in the Climate Delegated Act.
  - **Enel X Global Retail:** cogeneration from fossil gaseous fuels (CHP), within the distributed energy solutions, is now considered eligible-not aligned after applying the criteria set out in the Complementary Delegated Act (previously considered as not eligible).
  - **Capex:** they now cover costs that are accounted based on IFRS 16 Leases, paragraph 53, point (h), as requested by the Commission Delegated Regulation (EU) 2021/2178.

- Absolute turnover/Capex/Opex/EBITDA correspond to the turnover/Capex/Opex/EBITDA (measured in euros) of each specific activity. The share of individual KPIs corresponds to each individual economic activity in the total turnover/Capex/EBITDA of the Group (except for Opex, the total of which refers only to the type of costs required by the taxonomy). The share of turnover/Capex/

Opex/EBITDA of each individual economic activity contributes to achieving climate change mitigation targets. This is the only objective of the EU Taxonomy Regulation alignment analysis shown in the tables due to lack of comprehensive financial information in Enel's accounting system, while the criteria for the other four environmental objectives are not yet available.

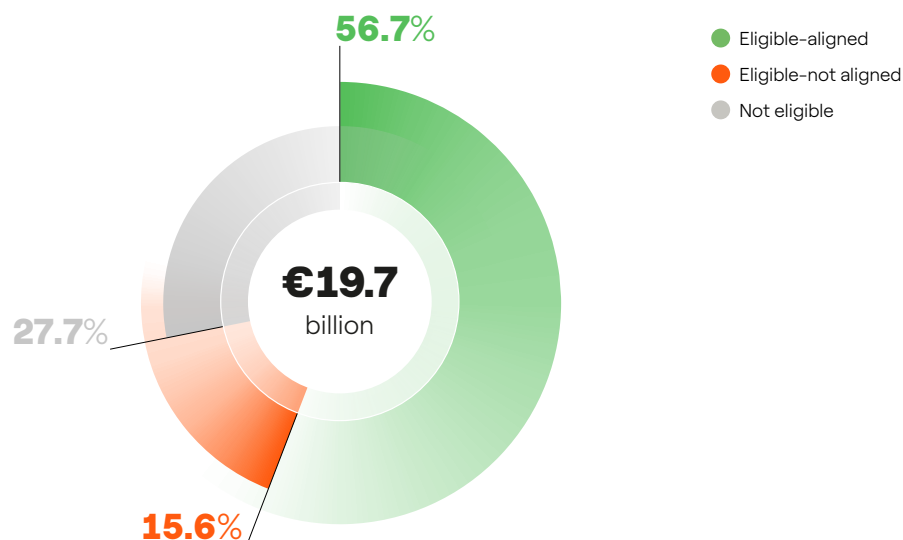
## Statement on the alignment of Enel's business to the EU Taxonomy Regulation

### Overall results

The high level of alignment of our economic activities with the EU Taxonomy Regulation in 2022, made possible by their substantial contribution to the climate change mitigation objective while respecting the principle of Do No Significant Harm (DNSH) to other environmental objective and observing the minimum social safeguards, is shown below.

- 56.7% of the ordinary gross operating profit (**EBITDA**) in 2022 relates to business activities aligned with the EU Taxonomy Regulation, compared to 63.9% in 2021.<sup>(2)</sup> The EBITDA percentage of taxonomy eligible and aligned businesses decreased in 2022 compared to 2021, primarily due to changes in revenue (see details below).

#### EBITDA (ordinary) 2022



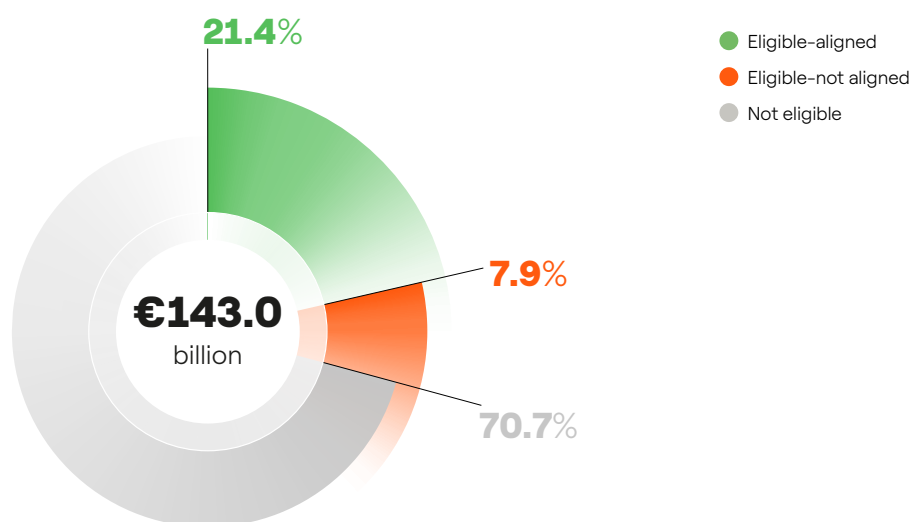
(2) 2021 figure has been restated based on methodological changes mentioned in the section "Process for calculating the financial metrics".

- 21.4% of turnover in 2022 relates to business activities aligned with the EU Taxonomy Regulation, compared to 33.9% in 2021.<sup>(3)</sup>

There is a high increase in absolute terms in turnover in the year 2022 compared to the year 2021. This increase has been experienced more in non-aligned activities such

as power generation from gaseous fuels and non-eligible activities such as trading and power and gas commercialization and electricity generation from coal, mainly due to the market situation with high prices and higher thermal production. So, the turnover aligned decrease 12%.

## Turnover 2022

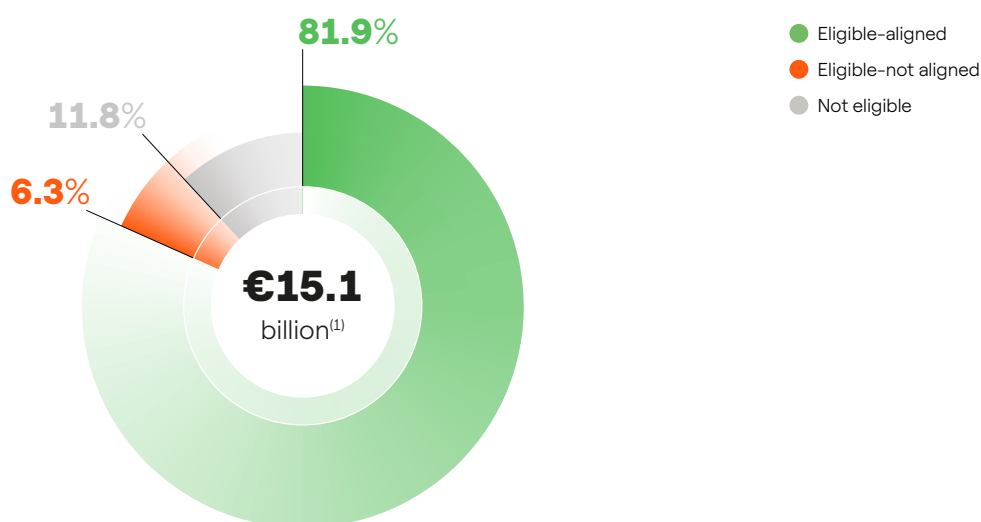


- 81.9% of capital expenditure (**Capex**) in 2022 relates to business activities aligned with the EU Taxonomy Regulation, compared to 82.0% in 2021.<sup>(3)</sup>

The actual 2022 Capex for eligible-aligned activities is 4.5% higher than the Capex planned for 2022 in the 2022-2024 Strategic Plan for the same activities, mainly due to higher

investments in absolute terms in eligible-aligned activities than planned (more than 0.5 billion euros), and also to the adjustments made in the EU taxonomy accounting process such as the addition of the costs accounted based on IFRS 16 Leases, paragraph 53, point (h), which were not considered in the 2022-2024 Strategic Plan.

## Capex 2022



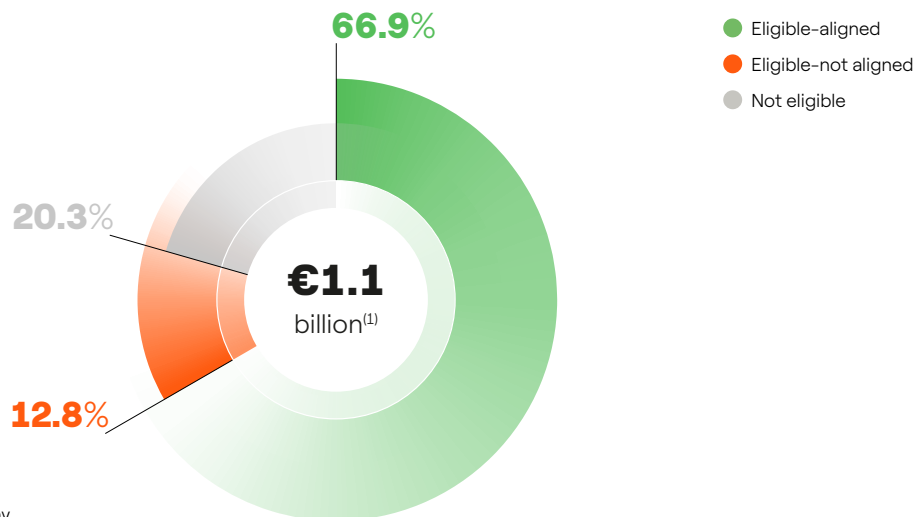
(1) Also includes the increases in assets deriving from leasing operations (for 0.6 billion euros).

(3) 2021 figure has been restated based on methodological changes mentioned in the section "Process for calculating the financial metrics".

- 66.9% of operating expenses (**Opex**) in 2022 relates to business activities aligned with the EU Taxonomy Regulation, compared to 60.8% in 2021.<sup>(4)</sup>

The percentage of Opex of taxonomy eligible and aligned activities increases in 2022 compared to 2021, primarily due to higher maintenance costs incurred in renewable energy production and taxonomy-aligned distribution activities.

#### Opex (ordinary) 2022



(1) Only expenses required by the taxonomy.

(4) 2021 figure has been restated based on methodological changes mentioned in the section "Process for calculating the financial metrics".

## Overall results with power retail activities view

The EU Taxonomy Climate Delegated Act has not explicitly included the segment referred to retail power sales (with NACE code D35.1.4), deducting that it does not provide a substantial contribution to climate change mitigation. Nevertheless, retail power constitutes a fundamental segment of the power value chain. The exclusion of such activity from the definition of a sustainable power system hinders the key role of the EU market liberalization and ultimately the efforts and value of a decarbonized end use energy consumption.

Furthermore, electrification, powered by renewable energy, is the most efficient and cost-effective solution to tackle climate change as it is clean, affordable, and high performing, as well as being the only path for a truly clean energy system. Nevertheless, sustainable electrification of end energy uses requires not only clean technologies in power generation, but also power retail companies to offer renewable electricity to end customers to satisfy their energy demand.

For the reasons stated above, Enel is convinced that **the EU Taxonomy should explicitly consider retail power activity as an eligible activity for which alignment should rely on the same criteria available for electricity production ac-**

**tivities.** In this way, power sales to end customers would be linked to the production source, promoting retailers to sell power from sustainable sources. This fact is even more relevant in integrated utilities that, even though operate in the power production and power retail segments with different companies within the same Group, the business model is run following a comprehensive and unique view of the whole power value chain.

Therefore, we present here an additional view of the overall results considering the power retail activity as eligible and determining its alignment by applying the same criteria that exist for power production. To this end, we have relied on the Guarantees of Origin instruments available in Italy and Spain, since they provide transparency to consumers about the proportion of electricity that retailers source from renewable generation, thus it meets the existing EU Taxonomy criteria referred to power production activities. Consequently, turnover from power sales was calculated considering the quantity of power sold at retail level by Group companies in Italy and Spain using Guarantees of Origin (based on data from national authorities), applying the average turnover per unit. This approach has also been adopted for Capex, Opex and ordinary gross operating profit (EBITDA). To avoid double counting, the eligible turnover per sector is net of inter-sectorial exchanges (relations between Enel Green Power, Enel Grids and Retail).

Overall results with power retail view	Unit	2022	2021
<b>Ordinary gross operating margin (EBITDA)</b>			
- Eligible-aligned	%	57.6	67.0
- Eligible-not aligned	%	19.2	18.5
- Not eligible	%	23.2	14.5
<b>Total</b>	millions of euro	<b>19,683</b>	<b>19,210</b>
<b>Turnover "Revenue"</b>			
- Eligible-aligned	%	30.2	40.4
- Eligible-not aligned	%	34.2	35.5
- Not eligible	%	35.6	24.1
<b>Total</b>	millions of euro	<b>143,009</b>	<b>88,006</b>
<b>Capital expenses (Capex) "Investments"</b>			
- Eligible-aligned	%	83.0	82.7
- Eligible-not aligned	%	9.2	9.6
- Not eligible	%	7.8	7.7
<b>Total</b>	millions of euro	<b>15,088</b>	<b>13,831</b>
<b>Operating expenses (Opex)</b>			
- Eligible-aligned	%	66.9	61.1
- Eligible-not aligned	%	14.2	15.7
- Not eligible	%	18.9	23.2
<b>Total</b>	millions of euro	<b>1,050</b>	<b>1,029</b>



## Detailed results

The following tables are represented according to what is required by Article 8 of EU Regulation 852/2020, therefore considering the activity of electricity sales as “not eligible”.

### EBITDA (ordinary)

Economic activities	Tax- onomy Code	Substantial contribution criteria										DNSH criteria ("Do No Significant Harm")								Category <sup>(8)</sup>	
		Ordinary gross operating profit (EBITDA) <sup>(1)</sup> 2022 millions of euro	Proportion of ordinary gross operating profit (EBITDA) <sup>(2)</sup> 2022 %	Climate change mitigation <sup>(3)</sup> %	Climate change adaptation <sup>(4)</sup> %	Water and marine resources <sup>(4)</sup> %	Circular economy <sup>(4)</sup> %	Pollution <sup>(4)</sup> %	Biodiversity and ecosystems <sup>(4)</sup> %	Climate change mitigation <sup>(5)</sup> Y/N	Climate change adaptation <sup>(5)</sup> Y/N	Water and marine resources <sup>(5)</sup> Y/N	Circular economy <sup>(5)</sup> Y/N	Pollution <sup>(5)</sup> Y/N	Biodiversity and ecosystems <sup>(5)</sup> Y/N	Minimum safeguards <sup>(6)</sup> Y/N	Taxonomy-aligned proportion of ordinary gross operating profit (EBITDA) <sup>(7)</sup> 2022 %	Taxonomy-aligned proportion of ordinary gross operating profit (EBITDA) <sup>(7)</sup> 2021 %	Enabling activity E	Transitional activity 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			

Economic activities	Taxonomy Code	Substantial contribution criteria										DNSH criteria ("Do No Significant Harm")								Category <sup>(8)</sup>	
		Ordinary gross operating profit (EBITDA) <sup>(1)</sup> 2022	Proportion of ordinary gross operating profit (EBITDA) <sup>(2)</sup> 2022	Climate change mitigation <sup>(3)</sup>	Climate change adaptation <sup>(4)</sup>	Water and marine resources <sup>(5)</sup>	Circular economy <sup>(6)</sup>	Pollution <sup>(4)</sup>	Biodiversity and ecosystems <sup>(6)</sup>	Climate change mitigation <sup>(3)</sup>	Climate change adaptation <sup>(4)</sup>	Water and marine resources <sup>(5)</sup>	Circular economy <sup>(6)</sup>	Pollution <sup>(4)</sup>	Biodiversity and ecosystems <sup>(6)</sup>	Minimum safeguards <sup>(2)</sup>	Taxonomy-aligned proportion of ordinary gross operating profit (EBITDA) <sup>(2)</sup> 2022	Taxonomy-aligned proportion of ordinary gross operating profit (EBITDA) <sup>(2)</sup> 2021	Enabling activity	Transitional activity	
																					millions of euro
73 Installation, maintenance and repair of energy efficiency equipment 76 Installation, maintenance and repair of renewable energy technologies (Enel X - Distributed Energy)	73 d, e; 76 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)	76 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 74 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) (e-Mobility)	6.13; 74	-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			

<b>A.2 Taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned activities)</b>																				
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 <sub>2eq</sub> /kWh)	4.9	576	2.9														2.9	2.0		
Electricity generation from fossil gaseous fuels (CCGT) <sup>(9)</sup>	4.29	2,492	12.7														12.7	6.1		
<b>Ordinary EBITDA of taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned activities) (A.2)</b>		<b>3,061</b>	<b>15.6</b>														<b>15.6</b>	<b>8.2</b>		
<b>Total (A.1 + A.2)</b>		<b>14,226</b>	<b>72.3</b>														<b>72.3</b>	<b>72.1</b>		

Economic activities	Tax- onomy Code	Ordinary gross operating profit (EBITDA) <sup>(1)</sup> 2022 millions of euro	Proportion of ordinary gross operating profit (EBITDA) <sup>(2)</sup> 2022 %	Substantial contribution criteria							DNSH criteria ("Do No Significant Harm")							Category <sup>(8)</sup>	
				Climate change mitigation <sup>(3)</sup> %	Climate change adaptation <sup>(4)</sup> %	Water and marine resources <sup>(5)</sup> %	Circular economy <sup>(6)</sup> %	Pollution <sup>(4)</sup> %	Biodiversity and ecosystems <sup>(4)</sup> %	Climate change mitigation <sup>(3)</sup> Y/N	Climate change adaptation <sup>(3)</sup> Y/N	Water and marine resources <sup>(5)</sup> Y/N	Circular economy <sup>(6)</sup> Y/N	Pollution <sup>(4)</sup> Y/N	Biodiversity and ecosystems <sup>(4)</sup> Y/N	Minimum safeguards <sup>(7)</sup> Y/N	Taxonomy-aligned proportion of ordinary gross operating profit (EBITDA) <sup>(2)</sup> 2022 %	Taxonomy-aligned proportion of ordinary gross operating profit (EBITDA) <sup>(2)</sup> 2021 %	Enabling activity E
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 <sup>(10)</sup>	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.

## Turnover

Economic activities	Tax- onomy Code	Substantial contribution criteria										DNSH criteria ("Do No Significant Harm")							Category <sup>(8)</sup>			
		Absolute Turnover "revenue" <sup>(1)</sup> 2022	Proportion of Turnover "revenue" <sup>(2)</sup> 2022	Climate change mitigation <sup>(3)</sup>	Climate change adaptation <sup>(4)</sup>	Water and marine resources <sup>(5)</sup>	Circular economy <sup>(6)</sup>	Pollution <sup>(6)</sup>	Biodiversity and ecosystems <sup>(6)</sup>	Climate change mitigation <sup>(7)</sup>	Climate change adaptation <sup>(8)</sup>	Water and marine resources <sup>(8)</sup>	Circular economy <sup>(8)</sup>	Pollution <sup>(8)</sup>	Biodiversity and ecosystems <sup>(8)</sup>	Minimum safeguards <sup>(9)</sup>	Taxonomy-aligned proportion of Turnover "revenue" <sup>(10)</sup> 2022	Taxonomy-aligned proportion of Turnover "revenue" <sup>(10)</sup> 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				
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				

## A.1. TAXONOMY ELIGIBLE-AIGNED ACTIVITIES

Economic activities	Taxonomy Code	Substantial contribution criteria										DNSH criteria ("Do No Significant Harm")								Category <sup>(8)</sup>	
		Absolute Turnover "revenue" <sup>(1)</sup> 2022  millions of euro	Proportion of Turnover "revenue" <sup>(2)</sup> 2022  %	Climate change mitigation <sup>(3)</sup>  %	Climate change adaptation <sup>(4)</sup>  %	Water and marine resources <sup>(5)</sup>  %	Circular economy <sup>(6)</sup>  %	Pollution <sup>(7)</sup>  %	Biodiversity and ecosystems <sup>(8)</sup>  %	Climate change mitigation <sup>(9)</sup>  Y/N	Climate change adaptation <sup>(10)</sup>  Y/N	Water and marine resources <sup>(11)</sup>  Y/N	Circular economy <sup>(12)</sup>  Y/N	Pollution <sup>(13)</sup>  Y/N	Biodiversity and ecosystems <sup>(14)</sup>  Y/N	Minimum safeguards <sup>(15)</sup>  Y/N	Taxonomy-aligned proportion of Turnover "revenue" <sup>(16)</sup> 2022  %	Taxonomy-aligned proportion of Turnover "revenue" <sup>(17)</sup> 2021  %	Enabling activity  E	Transitional activity  T	
73 Installation, maintenance and repair of energy efficiency equipment 76 Installation, maintenance and repair of renewable energy technologies (Enel X - Distributed Energy)	73 d, e; 76 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)	76 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 74 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) (e-Mobility)	6.13; 74	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

<b>A.2 Taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned activities)</b>																				
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 <sub>2eq</sub> /kWh)	4.9	1,754	1.3														1.3	1.5		
Electricity generation from fossil gaseous fuels (CCGT) <sup>(9)</sup>	4.29	9,506	6.6														6.6	5.9		
<b>Turnover of taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned activities) (A.2)</b>		<b>11,280</b>	<b>7.9</b>														<b>7.9</b>	<b>7.4</b>		
<b>Total (A.1 + A.2)</b>		<b>41,916</b>	<b>29.3</b>														<b>29.3</b>	<b>41.3</b>		



Economic activities	Taxonomy Code	Substantial contribution criteria								DNSH criteria ("Do No Significant Harm")								Category <sup>(8)</sup>		
		Absolute Turnover "revenue" <sup>(1)</sup> 2022 millions of euro	Proportion of Turnover "revenue" <sup>(2)</sup> 2022 %	Climate change mitigation <sup>(3)</sup> %	Climate change adaptation <sup>(4)</sup> %	Water and marine resources <sup>(5)</sup> %	Circular economy <sup>(6)</sup> %	Pollution <sup>(6)</sup> %	Biodiversity and ecosystems <sup>(6)</sup> %	Climate change mitigation <sup>(3)</sup> Y/N	Climate change adaptation <sup>(3)</sup> Y/N	Water and marine resources <sup>(5)</sup> Y/N	Circular economy <sup>(6)</sup> Y/N	Pollution <sup>(6)</sup> Y/N	Biodiversity and ecosystems <sup>(6)</sup> Y/N	Minimum safeguards <sup>(7)</sup> Y/N	Taxonomy-aligned proportion of Turnover "revenue" <sup>(2)</sup> 2022 %	Taxonomy-aligned proportion of Turnover "revenue" <sup>(2)</sup> 2021 %	Enabling activity E	Transitional activity 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 <sup>(10)</sup>	n.a.	2,162	1.5																	
Enel X (only activities non eligible)	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.

Economic activities	Taxonomy Code	Substantial contribution criteria										DNSH criteria ("Do No Significant Harm")								Category <sup>(8)</sup>	
		Absolute Capex "capital expenditure" <sup>(1)</sup> 2022 millions of euro	Proportion of Capex "capital expenditure" <sup>(2)</sup> 2022 %	Climate change mitigation <sup>(3)</sup> %	Climate change adaptation <sup>(4)</sup> %	Water and marine resources <sup>(5)</sup> %	Circular economy <sup>(6)</sup> %	Pollution <sup>(7)</sup> %	Biodiversity and ecosystems <sup>(8)</sup> %	Climate change mitigation <sup>(3)</sup> Y/N	Climate change adaptation <sup>(4)</sup> Y/N	Water and marine resources <sup>(5)</sup> Y/N	Circular economy <sup>(6)</sup> Y/N	Pollution <sup>(7)</sup> Y/N	Biodiversity and ecosystems <sup>(8)</sup> Y/N	Minimum safeguards <sup>(9)</sup> Y/N	Taxonomy-aligned proportion of Capex "capital expenditure" <sup>(2)</sup> 2022 %	Taxonomy-aligned proportion of Capex "capital expenditure" <sup>(2)</sup> 2021 %	Enabling activity E	Transitional activity 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			

Economic activities	Taxonomy Code	Substantial contribution criteria										DNSH criteria ("Do No Significant Harm")								Category <sup>(8)</sup>	
		Absolute Capex "capital expenditure" <sup>(1)</sup> 2022	Proportion of Capex "capital expenditure" <sup>(2)</sup> 2022	Climate change mitigation <sup>(3)</sup>	Climate change adaptation <sup>(4)</sup>	Water and marine resources <sup>(5)</sup>	Circular economy <sup>(6)</sup>	Pollution <sup>(7)</sup>	Biodiversity and ecosystems <sup>(8)</sup>	Climate change mitigation <sup>(3)</sup>	Climate change adaptation <sup>(4)</sup>	Water and marine resources <sup>(5)</sup>	Circular economy <sup>(6)</sup>	Pollution <sup>(7)</sup>	Biodiversity and ecosystems <sup>(8)</sup>	Minimum safeguards <sup>(9)</sup>	Taxonomy-aligned proportion of Capex "capital expenditure" <sup>(2)</sup> 2022	Taxonomy-aligned proportion of Capex "capital expenditure" <sup>(2)</sup> 2021	Enabling activity	Transitional activity	
		millions of euro	%	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
73 Installation, maintenance and repair of energy efficiency equipment 76 Installation, maintenance and repair of renewable energy technologies (Enel X – Distributed Energy)	73 d, e; 76 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)	76 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 74 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) (e-Mobility)	6.13; 74	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 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 <sub>2eq</sub> /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			

Economic activities	Taxonomy Code	Substantial contribution criteria										DNSH criteria ("Do No Significant Harm")							Category <sup>(8)</sup>	
		Absolute Capex "capital expenditure" <sup>(1)</sup> 2022	Proportion of Capex "capital expenditure" <sup>(2)</sup> 2022	Climate change mitigation <sup>(3)</sup>	Climate change adaptation <sup>(4)</sup>	Water and marine resources <sup>(4)</sup>	Circular economy <sup>(4)</sup>	Pollution <sup>(4)</sup>	Biodiversity and ecosystems <sup>(4)</sup>	Climate change mitigation <sup>(5)</sup>	Climate change adaptation <sup>(5)</sup>	Water and marine resources <sup>(5)</sup>	Circular economy <sup>(5)</sup>	Pollution <sup>(5)</sup>	Biodiversity and ecosystems <sup>(5)</sup>	Minimum safeguards <sup>(7)</sup>	Taxonomy-aligned proportion of Capex "capital expenditure" <sup>(2)</sup> 2022	Taxonomy-aligned proportion of Capex "capital expenditure" <sup>(2)</sup> 2021	Enabling activity	Transitional activity
		millions of euro	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
<b>B. Taxonomy-not-eligible activities</b>																				
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 <sup>(9)</sup>	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																	
<b>Capex of taxonomy not eligible activities (B)</b>		<b>1,781</b>	<b>11.8</b>																	
<b>Total (A + B)</b>		<b>15,088</b>	<b>100.0</b>																	

- (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.

## Opex (ordinary)

Economic activities	Taxonomy Code	Substantial contribution criteria										DNSH criteria ("Do No Significant Harm")							Category <sup>(8)</sup>	
		Absolute Opex <sup>(1)</sup> 2022	Proportion of Opex <sup>(2)</sup> 2022	Climate change mitigation <sup>(3)</sup>	Climate change adaptation <sup>(4)</sup>	Water and marine resources <sup>(5)</sup>	Circular economy <sup>(6)</sup>	Pollution <sup>(7)</sup>	Biodiversity and ecosystems <sup>(8)</sup>	Climate change mitigation <sup>(9)</sup>	Climate change adaptation <sup>(10)</sup>	Water and marine resources <sup>(11)</sup>	Circular economy <sup>(12)</sup>	Pollution <sup>(13)</sup>	Biodiversity and ecosystems <sup>(14)</sup>	Minimum safeguards <sup>(15)</sup>	Taxonomy-aligned proportion of Opex <sup>(2)</sup> 2022	Taxonomy-aligned proportion of Opex <sup>(2)</sup> 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	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)	73 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)	73 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		
73 Installation, maintenance and repair of energy efficiency equipment 75 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings 76 Installation, maintenance and repair of renewable energy technologies (Enel X - Home/Vivi Meglio Unifamiliare)	73 a-e; 75 a; 76 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.2. TAXONOMY ELIGIBLE-NOT  
ALIGNED ACTIVITIES

A.1. TAXONOMY ELIGIBLE-ALIGNED ACTIVITIES

Economic activities		Taxonomy Code	Substantial contribution criteria										DNSH criteria ("Do No Significant Harm")							Category <sup>(8)</sup>	
			Absolute Opex <sup>(1)</sup> 2022	Proportion of Opex <sup>(2)</sup> 2022	Climate change mitigation <sup>(3)</sup>	Climate change adaptation <sup>(4)</sup>	Water and marine resources <sup>(5)</sup>	Circular economy <sup>(6)</sup>	Pollution <sup>(4)</sup>	Biodiversity and ecosystems <sup>(4)</sup>	Climate change mitigation <sup>(3)</sup>	Climate change adaptation <sup>(3)</sup>	Water and marine resources <sup>(5)</sup>	Circular economy <sup>(6)</sup>	Pollution <sup>(8)</sup>	Biodiversity and ecosystems <sup>(8)</sup>	Minimum safeguards <sup>(7)</sup>	Taxonomy-aligned proportion of Opex <sup>(2)</sup> 2022	Taxonomy-aligned proportion of Opex <sup>(2)</sup> 2021	Enabling activity	Transitional activity
			millions of euro	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
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.	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.	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 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 <sub>2eq</sub> /kWh)		4.9	41	3.9														3.9	3.9		
Electricity generation from fossil gaseous fuels (CCGT) <sup>(9)</sup>		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	Substantial contribution criteria										DNSH criteria ("Do No Significant Harm")						Category <sup>(8)</sup>			
		Absolute Opex <sup>(1)</sup> 2022 millions of euro	Proportion of Opex <sup>(2)</sup> 2022 %	Climate change mitigation <sup>(3)</sup> %	Climate change adaptation <sup>(4)</sup> %	Water and marine resources <sup>(4)</sup> %	Circular economy <sup>(4)</sup> %	Pollution <sup>(4)</sup> %	Biodiversity and ecosystems <sup>(4)</sup> %	Climate change mitigation <sup>(5)</sup> Y/N	Climate change adaptation <sup>(5)</sup> Y/N	Water and marine resources <sup>(5)</sup> Y/N	Circular economy <sup>(5)</sup> Y/N	Pollution <sup>(5)</sup> Y/N	Biodiversity and ecosystems <sup>(5)</sup> Y/N	Minimum safeguards <sup>(7)</sup> Y/N	Taxonomy-aligned proportion of Opex <sup>(2)</sup> 2022 %	Taxonomy-aligned proportion of Opex <sup>(2)</sup> 2021 %	Enabling activity E	Transitional activity 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 <sup>(10)</sup>	n.a.	21	2.0																		
Enel X (only activities non eligible)	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-eligible 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.

## Additional information on electricity generation from nuclear and gas activities

The following figures are reported in accordance with the 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 as regards specific public disclosures for 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 stated in the above table, the only applicable activities for Enel are the safe operation of existing nuclear installations and the operation of electricity generation facilities that produce electricity using fossil gaseous fuels. The first one is 100% not eligible while the second is 100% eligible-not aligned. Consequently, the following tables refer to the templates number 4 and 5 included in the annex-

es of the Complementary Delegated Act. The remaining templates included in such delegated act are not applicable according to Enel's business model. Furthermore, the information refers to the climate change mitigation objective exclusively due to the lack of sufficient data to complete the analysis of the compliance with the climate change adaptation objective.

## Template 4 – Taxonomy-eligible but not taxonomy-aligned economic activities

### EBITDA (ordinary)

Economic activities	Climate mitigation	
	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
<b>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</b>	<b>569</b>	<b>2.9</b>
<b>Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI</b>	<b>3,061</b>	<b>15.6</b>

### Turnover

Economic activities	Climate mitigation	
	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
<b>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</b>	<b>1,774</b>	<b>1.2</b>
<b>Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI</b>	<b>11,280</b>	<b>7.8</b>

### Capex

Economic activities	Climate mitigation	
	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
<b>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</b>	<b>563</b>	<b>3.7</b>
<b>Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI</b>	<b>956</b>	<b>6.3</b>

### Opex (ordinary)

Economic activities	Climate mitigation	
	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
<b>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</b>	<b>42</b>	<b>4.0</b>
<b>Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI</b>	<b>135</b>	<b>12.9</b>

## Template 5 – Taxonomy non-eligible economic activities

### EBITDA (ordinary)

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
<b>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</b>	<b>4,806</b>	<b>24.4</b>
<b>Total amount and proportion of taxonomy-not-eligible economic activities in the denominator of the applicable KPI</b>	<b>5,457</b>	<b>27.7</b>

### Turnover

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	1,572	1.1
<b>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</b>	<b>99,521</b>	<b>69.6</b>
<b>Total amount and proportion of taxonomy-not-eligible economic activities in the denominator of the applicable KPI</b>	<b>101,093</b>	<b>70.7</b>

### Capex

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
<b>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</b>	<b>1,639</b>	<b>10.9</b>
<b>Total amount and proportion of taxonomy-not-eligible economic activities in the denominator of the applicable KPI</b>	<b>1,781</b>	<b>11.8</b>

### Opex (ordinary)

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
<b>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</b>	<b>126</b>	<b>12.0</b>
<b>Total amount and proportion of taxonomy-not-eligible economic activities in the denominator of the applicable KPI</b>	<b>213</b>	<b>20.3</b>



# Independent auditors' report



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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 on the consolidated non-financial statement pursuant to article 3.10 of Legislative decree no. 254 of 30 December 2016 and article 5 of the Consob Regulation adopted with Resolution no. 20267 of 18 January 2018**

*To the board of directors of  
Enel S.p.A.*

Pursuant to article 3.10 of Legislative decree no. 254 of 30 December 2016 (the "decree") and article 5.2 of the Consob (the Italian Commission for listed companies and the stock exchange) Regulation adopted with Resolution no. 20267 of 18 January 2018 (the "regulation"), we have been engaged to perform the engagement specified below on the 2022 consolidated non-financial statement of Enel S.p.A. (the "parent") and its subsidiaries (together, the "group") prepared in accordance with article 4 of the decree and approved by the board of directors on 6 February 2023 (the "NFS"):

- a) a limited assurance engagement on the information included in the NFS other than that specified in point b) (the "information subjected to limited assurance");
- b) a reasonable assurance engagement on certain selected indicators (the "selected indicators") presented in the NFS, identified in the "Drafting and assurance" section of the NFS and set out in paragraph "B. Report on the information subjected to reasonable assurance" of the "Auditors' responsibility section" of this report (the "information subjected to reasonable assurance").

Our procedures did not cover the information set out in the "Our position on and commitment to the European Taxonomy" section of the NFS required by article 8 of Regulation (EU) 2020/852.

### ***Responsibilities of the parent's directors and board of statutory auditors ("Collegio Sindacale") for the NFS***

The directors are responsible for the preparation of an NFS in accordance with articles 3 and 4 of the decree and the "Global Reporting Initiative Sustainability Reporting Standards" issued by GRI - Global Reporting Initiative (the "GRI Standards").

The directors are also responsible, within the terms established by the Italian law, for such internal control as they determine is necessary to enable the preparation of an NFS that is free from material misstatement, whether due to fraud or error.



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Moreover, the directors are responsible for the identification of the content of the NFS, considering the aspects indicated in article 3.1 of the decree and the group's business and characteristics, to the extent necessary to enable an understanding of the group's business, performance, results and the impacts it generates.

The directors' responsibility also includes the design of an internal model for the management and organisation of the group's activities, as well as, with reference to the aspects identified and disclosed in the NFS, the group's policies and the identification and management of the risks generated or borne.

The *Collegio Sindacale* is responsible for overseeing, within the terms established by the Italian law, compliance with the decree's provisions.

### ***Auditors' independence and quality control***

We are independent in compliance with the independence and all other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Our company applies International Standard on Quality Control 1 (ISQC Italia 1) and, accordingly, maintains a system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### ***Auditors' responsibility***

#### ***A. Limited assurance report on the NFS***

Our responsibility is to express a conclusion, based on the procedures performed, about the compliance of the information subjected to limited assurance with the requirements of the decree and the GRI Standards. We carried out our work in accordance with the criteria established by "International Standard on Assurance Engagements 3000 (revised) - Assurance Engagements other than Audits or Reviews of Historical Financial Information" ("ISAE 3000 revised"), issued by the International Auditing and Assurance Standards Board applicable to limited assurance engagements. This standard requires that we plan and perform the engagement to obtain limited assurance about whether the information subjected to limited assurance is free from material misstatement. A limited assurance engagement is less in scope than a reasonable assurance engagement carried out in accordance with ISAE 3000 revised, and consequently does not enable us to obtain assurance that we would become aware of all significant matters and events that might be identified in a reasonable assurance engagement.

The procedures we performed on the information subjected to limited assurance are based on our professional judgement and include inquiries, primarily of the company's personnel responsible for the preparation of the information subjected to limited assurance, documental analyses, recalculations and other evidence gathering procedures, as appropriate.

Specifically, we performed the following:

- 1 analysing the material aspects based on the group's business and characteristics disclosed in the information subjected to limited assurance, in order to assess the reasonableness of the identification process adopted on the basis of the provisions of article 3 of the decree and taking into account the reporting standards applied;
- 2 analysing and assessing the identification criteria for the reporting scope, in order to check their compliance with the decree.
- 3 comparing the financial disclosures presented in the information subjected to limited assurance with those included in the group's consolidated financial statements;





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4 gaining an understanding of the following:

- the group's business management and organisational model, with reference to the management of the aspects set out in article 3 of the decree;
- the entity's policies in connection with the aspects set out in article 3 of the decree, the achieved results and the related key performance indicators;
- the main risks generated or borne in connection with the aspects set out in article 3 of the decree.

Moreover, we checked the above against the information subjected to limited assurance presented in the NFS and carried out the procedures described in point 5.a).

5 understanding the processes underlying the generation, recording and management of the significant qualitative and quantitative information subjected to limited assurance disclosed in the NFS.

- Specifically, we held interviews and discussions with the parent's management personnel and personnel of Endesa S.A. and Enel Cile S.A.. We also performed selected procedures on documentation to gather information on the processes and procedures used to gather, combine, process and transmit non-financial data and information to the office that prepares the information subjected to limited assurance.
- Furthermore, with respect to the significant information subjected to limited assurance, considering the group's business and characteristics:
  - at parent level
    - a. we held interviews and obtained supporting documentation to check the qualitative information presented in the NFS and, specifically, the business model, the policies applied and main risks for consistency with available evidence,
    - b. we carried out analytical and limited procedures to check, on a sample basis, the correct aggregation of data in the quantitative information;
  - we visited, including remotely, Endesa SA, Enel Chile SA and Enel Produzione S.p.A., which we have selected on the basis of their business, contribution to the key performance indicators at consolidated level and location, to meet their management and obtain documentary evidence supporting the correct application of the procedures and methods used to calculate the indicators.

**B. Reasonable assurance report on the selected indicators**

Our responsibility is to express an opinion, based on the procedures performed, about the compliance of the information subjected to reasonable assurance with the requirements of the Decree and the GRI Standards. We carried out our work in accordance with the criteria established by ISAE 3000 revised applicable to reasonable assurance engagements. This standard requires that we plan and perform the engagement to obtain reasonable assurance about whether the information subjected to reasonable assurance is free from material misstatement. A reasonable assurance engagement involves performing procedures to obtain evidence supporting the data and information subjected to such engagement. The procedures selected depend on our judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the preparation of the information subjected to reasonable assurance in order to design procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the group's internal controls.

The selected indicators subjected to our reasonable assurance engagement are as follows:

1. number of fatalities – Enel;



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2. number of fatalities – contractors;
3. fatality frequency rate – Enel;
4. fatality frequency rate – contractors;
5. injury frequency rate for injuries with more than three days' absence – Enel;
6. injury frequency rate for injuries with more than three days' absence – contractors;
7. injury frequency rate with absence from work - Enel;
8. injury frequency rate with absence from work - contractors;
9. high potential injury frequency rate – Enel;
10. high potential injury frequency rate – contractors;
11. total injury frequency rate - Enel;
12. total injury frequency rate - contractors;
13. life changing injury frequency rate – Enel;
14. life changing injury frequency rate – contractors;
15. SAIDI - system average interruption duration index;
16. SAIFI - system average interruption frequency index;
17. scope 1 direct emissions;
18. CO<sub>2</sub>eq specific emissions – scope 1;
19. scope 2 emissions - market based;
20. scope 2 emissions - location based;
21. scope 3 emissions;
22. scope 1 GHG emissions intensity relating to power generation (gCO<sub>2</sub>eq/kWh);
23. scopes 1 and 3 GHG emissions intensity relating to integrated power (gCO<sub>2</sub>eq/kWh);
24. absolute scope 3 GHG emissions relating to gas retail (MtCO<sub>2</sub>eq);
25. percentage of female managers and middle managers;
26. percentage of women in management and senior management succession plans;
27. qualified suppliers rated on social aspects (including human rights and H&S);
28. qualified suppliers rated on environmental aspects;
29. current income tax rate;
30. climate governance;
31. climate strategy;
32. climate risk management;
33. percentage of women in total workforce;
34. confirmed violations of the code of ethics by type, stakeholder and country;
35. business complaints at group level;





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36. number of cyber security incidents handled by CERT classified with a severity level of 2, 3 or 4.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Conclusion and opinion**

As required by article 3.10 of the decree and article 5.2 of the regulation and based on the approaches referred to in the first paragraph hereof, we set out below our conclusion and opinion on the compliance of the information presented in the NFS with the requirements of articles 3 and 4 of the decree and the GRI Standards:

#### **"A. Conclusion on the information subjected to limited assurance"**

Based on the procedures performed, nothing has come to our attention that causes us to believe that the information subjected to limited assurance presented in the 2022 NFS of the Enel Group has not been prepared, in all material respects, in accordance with the requirements of articles 3 and 4 of the decree and the GRI Standards.

#### **"B. Opinion on the information subjected to reasonable assurance"**

In our opinion, the information subjected to reasonable assurance presented in 2022 NFS of the Enel Group, identified in the "Drafting and assurance" section of the NFS and in paragraph "B. Report on the information subjected to reasonable assurance" of this report has been prepared, in all material respects, in accordance with the GRI standards.

Our conclusion and opinion set out above do not cover the information set out in the "Our position on and commitment to the European Taxonomy" section of the NFS required by article 8 of Regulation (EU) 2020/852.

Rome, 6 April 2023

KPMG S.p.A.

(signed on the original)

Marco Maffei  
Director of Audit

# Green Bond Report 2022 – supporting notes

## Introduction and reporting criteria

Enel Finance International NV, the Group's financial company controlled by Enel SpA, placed three green bonds on the European market in January 2017 (1.25 billion euros), 2018 (1.25 billion euros) and 2019 (1 billion euros) for a total of 3.50 billion euros. The green bonds are for institutional investors and are guaranteed by Enel SpA. The net issuance proceeds – carried out under the medium-term bond issue program of Enel and Enel Finance International (Euro Medium-Term Notes Program – EMTN) – were used to finance eligible projects according to the "Green Bond Principles" categories, published by the ICMA (International Capital Market Association). In particular, the proceeds were used to finance:

- new projects for the development, construction and re-powering of generation plants from renewable sources (green bond emission in 2017 and 2019);
- new projects for the development, construction, re-powering and refinancing of generation plants from renewable sources as well as projects for transmission, networks and smart grids (green bond emission in 2018).

In order to facilitate the transparency and quality of the green bonds issued, the Enel Group has prepared and published specific "Green Bond Frameworks" for each year of emission, whose compliance with the reference principles has been confirmed by an external advisor, Vigeo Eiris, who issued the so-called "second party opinion". Within the frameworks, the categories relating to eligible projects are aligned with the Sustainable Development Goals of the United Nations (UN SDG), in particular Goals 7, 9, 11 and 13<sup>(1)</sup>.

The reference documents for the three emissions are available on the Enel Group's website (<https://www.enel.com/investors/investing/sustainable-finance/green-bonds>).

The Enel Group is among the first companies in the world having set up a "Green Bond Committee" with the aim of selecting projects and monitoring the progress of their development. The reporting document hereof, published

for the sixth time in 2022, meets Enel's commitment undertaken at the time of the bond issuance to report annually on the use of proceeds, on the environmental benefits deriving from the projects financed and on further ESG metrics linked to these projects.

The indicators were determined in accordance with the "Green Bond Framework" (December 2016, December 2017 and November 2018) principles and shown in the table based on the type of project and the specific year of emission of the green bonds. Furthermore, all of the plant technologies as well as Grids activities in Italy for which the proceeds of the green bonds issued in 2017, 2018 and 2019 were allocated are to be considered eligible and aligned activities according to European taxonomy (European Regulation 2020/852).

In order to improve transparency and facilitate understanding of reporting over the years, the report also provides the following information:

- **2017 green bond reporting** with evidence of projects relating to renewable plants. Seven plants also contribute toward the allocation of the proceeds of the 2019 green bond following new investments (Capex) that were made;
- **2018 green bond reporting** with evidence of projects related to:
  - renewable plants, three of which that contribute toward the allocation of the proceeds of the 2019 green bond due to new investments (Capex) that were made;
  - "refinancing" of renewable plants due to the replacement of previous credit lines;
  - investment activities relating to the business area "Enel Grids";
- **2019 green bond reporting** with evidence of the projects relating to renewable plants, 10 of which were also subject to reporting for the 2017 and 2018 green bonds, as described previously.

(1) SDG 7 "Affordable and clean energy"; SDG 9 "Industry, innovation and infrastructure"; SDG 11 "Sustainable cities and communities"; SDG 13 "Climate action".

Finally, in agreement with what is required by the cited Green Bond Framework, this document consists of the following indicated below.

- **Summary table of 2017, 2018 and 2019 emissions** with indication of the installed capacity and the cumulative CO<sub>2</sub> avoided for all years of Green Bond reporting.
- **Table A “Financial indicators”**, which reports:
  - the capacity and amount of the “foreign currency investment” approved by the Board of Directors and/or the Investment Committee, and communicated to the financial market through specific press releases;
  - the value of the “investment in euros”, calculated by considering the average exchange rate for the years 2017-2019 (for projects defined in 2017), the average exchange rate for the years 2018-2020 (for projects defined in 2018) and/or the average exchange rate for the years 2019-2021 (for projects defined in 2019) of Enel’s Industrial Plan;
  - the share of the green bond proceeds allocated to the project as the difference between the total capitalized costs as at December 31, 2017, December 31, 2018 and/or December 31, 2019 and the amount of third-party financing associated to the specific project<sup>(2)</sup>. The amounts of proceeds allocated to the projects in 2017, 2018 and 2019 respectively were used in the same years;
  - the date of entry into operation corresponding to the time when the plant produced the first kWh. In this regard, it should be noted that all of the plants associated with the three green bonds have entered into operation<sup>(3)</sup>.
- **Table B “ESG indicators”** which shows the environmental benefit in terms of actual CO<sub>2</sub> avoided. In particular, with reference to:

*renewable projects:*

- the quantity of effective generation (with the exception of the repowering plants whose share of generation cannot be separated from the rest of the plant);
- the quantity of actual CO<sub>2</sub> avoided, determined by multiplying the effective generation by the emission factor linked to the specific thermoelectric energy generation of the country in which the plant is located (emission factors source: Enerdata – March 8, 2023 release);

- the cumulative value of effective generation and the relative CO<sub>2</sub> avoided for the entire years of Green Bond reporting;

*Enel Grids projects, the following indicators are also provided:*

- the cabling ratio, determined by the ratio between the length of the cable lines and the total length of the lines. The increase in this index over time is due to an increase in the length of the overhead and underground cable line to the detriment of bare conductors; in particular, the main environmental benefits concern the containment of plant cutting activities and a drastic reduction in the risk of electrocution and collision for birds;
- network automation, which corresponds to the ratio between RCP (Remote Controlled Point) and medium/low-voltage equipment;
- technical network losses, mainly related to the characteristics/functions of the network. These losses are usually calculated using statistical models or benchmarks. A reduction in technical network losses results in a reduction in the energy to be generated and a consequent reduction in emissions and consumption of raw materials;
- the elimination of oil equipment with PCB reduces the risk of contamination of a compound no longer in production since the 1980s and classified as ecotoxic and bioaccumulable;
- energy savings is represented in terms of “energy saved” in MWh in place of the CO<sub>2</sub> avoided (t) to specifically report the improvement in efficiency obtained thanks to the use of so-called “in ecodesign” transformers and the optimization of MV grids as the difference between losses detected before and after these interventions.

- **Table C “Further ESG indicators”** which shows, where possible and appropriate<sup>(4)</sup>, as envisaged in the “second party opinion”<sup>(5)</sup>, the following indicators for the renewable projects:
  - water consumption related to data reported for the plants in only the period following their entry into operation (from the moment there are no plants financed by the green bonds with the “under construction” status);
  - projects for protecting biodiversity promoted by Enel in connection to the operation of the plant;

(2) If the same company is involved with the implementation of several projects, proceeds are allocated to the specific project based on the capacity.

(3) During 2022, the status of 19 MW of installed residual capacity that refers to the Italian hydroelectric repowering plants Isola Serafini I and II, Mucone I and II changed to “in operation”. In particular, there was a variation in the method of calculating the repowering capacity of Isola Serafini. In fact, the final capacity of the plant considered is limited by the power of the alternator with respect to what could have been obtained considering the maximum power of the turbine.

(4) Projects relating to renewable plants with a capacity of more than 20 MW are considered to be relevant.

(5) The indicator “Material reused/recycled after revamping” is not applicable, as the proceeds of the green bond were not used to finance revamping projects in 2017, 2018 and 2019.

- the cases in which the site stopped its operations (plant shutdown) due to environmental management issues and their impact;
- fatalities or high consequence (“Life Changing”<sup>(6)</sup>) injuries to Enel people;
- activities and projects carried out to support local communities in the areas surrounding the plant. The indicator related to the number of beneficiaries of these projects refers to the people involved by such activity or project.

The above indicators in Table C, with the exception of water consumption and plant shutdown due to environmental issues, also refer to Enel Grids projects.

- **Table D “Overall information”** which provides the criteria, indicators, overall information and approach chosen by Enel to develop the projects financed through the proceeds of the bond.

The data have been thoroughly calculated on the basis of the results of Enel’s accounting, non-accounting and other information systems, and validated by the persons responsible in each case. The data determined through the use of estimates and related calculation method has been expressly indicated.

#### SUMMARY TABLE OF 2017, 2018 AND 2019 EMISSIONS WITH INDICATION OF THE INSTALLED CAPACITY AND THE CO<sub>2</sub> AVOIDED

Green Bond (GB) emission	Area of investment	GB proceeds allocated (mil €)	Installed capacity (MW)	Cumulative CO <sub>2</sub> avoided <sup>(1)</sup> (t)
<b>2017</b>	Renewables	<b>1,238</b>	<b>3,355</b>	<b>25,875,420</b>
<b>2018</b>		<b>1,240</b>		
of which new renewable projects	Renewables	575	1,878	10,857,053
of which new Enel Grids projects	Grids	665		– <sup>(1)</sup>
<b>2019</b>		<b>986</b>	<b>631</b>	<b>2,524,576</b>
of which new projects identified in 2019	Renewables	65	631	2,524,576
of which new Capex for 2018 projects	Renewables	342	n.a.	–
of which new Capex for 2017 projects	Renewables	579	n.a.	–

(1) For Enel Grids projects, energy savings are represented in terms of “Energy saved” (MWh) in place of the CO<sub>2</sub> avoided (t) to specifically report the improvement in efficiency obtained thanks to the use of so-called “in ecodesign” transformers and the optimization of MV grids as the difference between losses detected before and after these interventions. In 2022 this amounts to 2,963 MWh of saved energy.

(6) These are injuries that caused consequences to health that permanently changed a person’s life (for example, amputation of limbs, paralysis, neurological damage, etc.).

Table A – Financial indicators

Country	Project name	Technology	Status	Capacity (MW)	Commercial operation date	Investments (value in currency)		Value in currency (mil)	Equivalent in euro (mil) <sup>(1)</sup>	GB proceeds allocated in 2017 (mil euros)	GB proceeds allocated in 2019 (mil euros) <sup>(2)</sup>
						Currency					
USA	Red Dirt	Wind	In Operation	300	Nov-17	USD		420	378	77	-
USA	Thunder Ranch	Wind	In Operation	298	Nov-17	USD		435	392	132	-
USA	Hilltopper	Wind	In Operation	185	Nov-18	USD		325	293	166	-
USA	Stillwater Solar II	Solar	In Operation	27	May-18	USD		40	36	48	-
USA	Woods Hill	Solar	In Operation	25	Dec-17	USD		44	41	36	-
USA	Rattlesnake Creek	Wind	In Operation	320	Dec-18	USD		430	387	204	-
USA	Rock Creek	Wind	In Operation	300	Oct-17	USD		500	450	73	-
BRAZIL	Horizonte MP	Solar	In Operation	103	Feb-18	USD		110	99	43	-
BRAZIL	Delfina	Wind	In Operation	209	Aug-17	USD		440	364	33	-
CHILE	Cerro Pabellón	Geothermal	In Operation	81	Aug-17	USD		420	347	57	-
CHILE	Sierra Gorda	Wind	In Operation	112	Dec-16	USD		215	194	17	-
PERU	Wayra	Wind	In Operation	132	Mar-18	USD		165	149	82	-
PERU	Rubi	Solar	In Operation	180	Nov-17	USD		170	153	68	-
ITALY	Various projects <sup>(3)</sup>	Geothermal/ Hydroelectric	In Operation	34	-	EUR		113	113	66	-
CANADA	Riverview	Wind	In Operation	105	Apr-20	CAD				8	81
CANADA	Castel Rock Ridge 2	Wind	In Operation	29	Mar-20	CAD		210	187	2	23
MEXICO	Magdalena 2	Solar	In Operation	220	Sept-19	USD		165	136	9	112
MEXICO	Amistad II	Wind	In Operation	100	Dec-19	USD		115	97	22	55
MEXICO	Amistad III	Wind	In Operation	108	Feb-20	USD				11	59
MEXICO	Amistad IV	Wind	In Operation	162	Dec-20	USD		305	269	18	57
MEXICO	Dolores	Wind	In Operation	274	May-20	USD		290	255	36	192
PANAMA	Estrella Solar	Solar	In Operation	8	Aug-18	USD		8	7	5	-
ZAMBIA	Ngonye	Solar	In Operation	34	Mar-19	USD		40	34	10	-
ITALY	Various projects <sup>(4)</sup>	Geothermal/ Hydroelectric		8	-	EUR		43	43	14	-
<b>TOTAL</b>										<b>1,238</b>	<b>579</b>

(1) Indicative value in euros (EUR), although the investment in US dollars (USD) applies where present. The exchange rate used for projects allocated in the 2017 green bond is 1.11 USD/EUR, for projects allocated in the 2018 green bond it is 1.19 USD/EUR whereas for projects whose investment value has been updated – including those with the new Capex identified in GB 2019 – the exchange rate is 1.21.

(2) Additional proceeds were allocated for some renewable projects that were already identified in the 2017 and 2018 green bond, for which new capitalized costs emerged.

(3) Aggregate data related to 24 small sized Italian projects. The technologies involved are geothermal and hydroelectric.

(4) Aggregate data related to 8 small sized Italian projects. The technologies involved are geothermal and hydroelectric.



Table B – ESG indicators

Country	Project name	2022 generation (GWh)	CO <sub>2</sub> avoided 2022 (t)	2017-2022 generation (GWh)	2017-2022 CO <sub>2</sub> avoided (t)
USA	Red Dirt	1,013	624,620	5,147	3,253,855
USA	Thunder Ranch	852	525,450	5,210	3,305,419
USA	Hilltopper	621	382,546	2,326	1,445,543
USA	Stillwater Solar II	24	14,572	97	61,905
USA	Woods Hill	31	18,821	135	84,554
USA	Rattlesnake Creek	1,165	718,195	4,519	2,802,047
USA	Rock Creek	1,160	715,099	5,544	3,504,193
BRAZIL	Horizonte MP	125	73,500	781	441,993
BRAZIL	Delfina	805	472,285	4,408	2,479,669
CHILE	Cerro Pabellón	264	219,675	1,223	939,254
CHILE	Sierra Gorda	338	280,819	2,056	1,574,334
PERU	Wayra	618	293,973	2,905	1,424,938
PERU	Rubi	452	214,836	2,174	1,067,162
ITALY	Various projects <sup>(1)</sup>	173	78,057	582	278,954
CANADA	Riverview	347	224,157	923	604,297
CANADA	Castel Rock Ridge 2	101	65,486	279	183,033
MEXICO	Magdalena 2	518	293,793	1,500	837,394
MEXICO	Amistad II	15	8,590	192	103,391
MEXICO	Amistad III	-	3	168	90,060
MEXICO	Amistad IV	40	22,627	128	69,730
MEXICO	Dolores	816	462,740	1,917	1,069,643
PANAMA	Estrella Solar	9	8,336	40	31,370
ZAMBIA	Ngonye	58	60,958	210	216,547
ITALY	Various projects <sup>(2)</sup>	-	62	12	6,136

(1) Aggregate data related to 24 small sized Italian projects. The technologies involved are geothermal and hydroelectric. The share of generation for only re-powering cannot be separated from the rest of the plant because it is not possible to precisely determine the share of energy fed to the network only due to the increase in power.

(2) Aggregate data related to 8 small sized Italian projects. The technologies involved are geothermal and hydroelectric. The share of generation for only re-powering cannot be separated from the rest of the plant because it is not possible to precisely determine the share of energy fed to the network only due to the increase in power.

**Table C – Further ESG indicators**

Country	Project name	Water consumption m <sup>3</sup> (1)	Actions to protect/restore biodiversity (no.)	Plant shutdown or site stop due to environmental issues (no.)	Injuries (fatalities and “Life Changing”) (no.)	Social projects (no.)	Beneficiaries of social projects (no.)
USA	Red Dirt	-	-	-	-	1	20
USA	Thunder Ranch	-	-	-	-	1	20
USA	Hilltopper	-	-	-	-	1	38,000
USA	Stillwater Solar II	-	-	-	-	-	-
USA	Woods Hill	-	-	-	-	2	400
USA	Rattlesnake Creek	-	-	-	-	-	-
USA	Rock Creek	-	-	-	-	-	-
BRAZIL	Horizonte MP	658	2	-	-	3	918
BRAZIL	Delfina	-	2	-	-	4	719
CHILE	Cerro Pabellón	6,289	-	-	-	1	25
CHILE	Sierra Gorda	-	1	-	-	1	35
PERU	Wayra	-	1	-	-	7	3,725
PERU	Rubi	-	-	-	-	9	4,584
ITALY	Various projects <sup>(2)</sup>	-	1	-	-	4	139
CANADA	Riverview	-	-	-	-	3	114
CANADA	Castel Rock Ridge 2	-	-	-	-	1	80
MEXICO	Magdalena 2	2,759	-	-	-	4	198
MEXICO	Amistad II	-	-	-	-	2	51
MEXICO	Amistad III	-	-	-	-	3	98
MEXICO	Amistad IV	-	-	-	-	4	121
MEXICO	Dolores	-	2	-	-	6	157
PANAMA	Estrella Solar	28	-	-	-	1	40
ZAMBIA	Ngonye	-	-	-	-	1	594
ITALY	Various projects <sup>(3)</sup>	-	-	-	-	2	6

(1) Industrial water consumption related to water extraction data for plant.

(2) Aggregate data related to 24 small sized Italian projects. The technologies involved are geothermal and hydroelectric.

(3) Aggregate data related to 8 small sized Italian projects. The technologies involved are geothermal and hydroelectric.

Table A – Financial indicators

Country	Project name	Technology	Status	Capacity (MW)	Commercial operation date	Investments (value in currency)			GB proceeds allocated in 2018 (mil euros)	GB proceeds allocated in 2019 (mil euros) <sup>(2)</sup>
						Currency	Value in currency (mil)	Equivalent in euro (mil) <sup>(1)</sup>		
USA	Diamond Vista	Wind	In Operation	300	Dec-18	USD	400	336	100	-
USA	Fenner Repowering	Wind	In Operation	29	Dec-18	USD	29	24	21	-
USA	High Lonesome I+II	Wind	In Operation	500	Dec-19	USD	720	595	81	75
USA	Roadrunner	Solar	In Operation	497	Jun-20	USD	436	366	30	141
GERMANY	Cremzow	Other	In Operation	22	Feb-19	USD	17	17	9	-
GREECE	Kafireas	Wind	In Operation	154	Oct-19	EUR	300	300	64	126
COLOMBIA	El Paso	Solar	In Operation	86	Oct-19	USD	70	59	54	-
USA	Aurora	Solar	In Operation	150	Jun-17	USD	290	244	181	-
USA	Little Elk	Wind	In Operation	74	Dec-15	USD	130	107	5	-
USA	Chisholm View II	Wind	In Operation	65	Dec-16	USD	90	76	29	-
<b>TOTAL</b>									<b>575</b>	<b>342</b>

(1) Indicative value in euros (EUR), although the investment in US dollars (USD) applies where present. The exchange rate used for projects allocated in the 2017 green bond is 1.11 USD/EUR, for projects allocated in the 2018 green bond it is 1.19 USD/EUR whereas for projects whose investment value has been updated – including those with the new Capex identified in GB 2019 – the exchange rate is 1.21.

(2) Additional proceeds were allocated for some renewable projects that were already identified in the 2017 and 2018 green bond, for which new capitalized costs emerged.

Table B – ESG indicators

Country	Project name	2022 generation (GWh)	CO <sub>2</sub> avoided 2022 (t)	2018–2022 generation (GWh)	2018–2022 CO <sub>2</sub> avoided (t)
USA	Diamond Vista	1,224.42	754,741.17	4,673.23	2,897,937.43
USA	Fenner Repowering <sup>(1)</sup>	86.70	53,440.59	248.05	151,040.18
USA	High Lonesome I+II	1,192.22	734,890.56	4,044.08	2,453,745.97
USA	Roadrunner	1,009.42	622,211.80	2,847.63	1,729,630.29
GERMANY	Cremzow	-	-	-	-
GREECE	Kafireas	468.40	272,164.73	1,377.09	909,700.22
COLOMBIA	El Paso	149.96	94,583.63	415.16	324,880.79
USA	Aurora	308.50	190,161.16	1,039.08	654,277.10
USA	Little Elk	307.89	189,782.69	1,626.10	1,028,123.22
USA	Chisholm View II	240.66	148,344.45	1,119.87	707,717.34

(1) Unlike other repowering plants, the service life of the Fenner plant was extended and its capacity (MW) was not increased, therefore the capacity and generation data refer to the plant in its entirety.

**Table C – Further ESG indicators**

Country	Project name	Water consumption m <sup>3(1)</sup>	Actions to protect/restore biodiversity (no.)	Plant shutdown or site stop due to environmental issues (no.)	Injuries (fatalities and “Life Changing”) (no.)	Social projects (no.)	Beneficiaries of social projects (no.)
USA	Diamond Vista	-	-	-	-	2	505
USA	Fenner Repowering	-	-	-	-	1	150
USA	High Lonesome I+II	-	-	-	-	-	-
USA	Roadrunner	-	-	-	-	-	-
GERMANY	Cremzow	-	-	-	-	-	-
GREECE	Kafireas	-	-	-	-	4	332
COLOMBIA	El Paso	-	-	-	-	3	1,448
USA	Aurora	-	-	-	-	2	100
USA	Little Elk	-	-	-	-	-	-
USA	Chisholm View II	-	-	-	-	-	-

(1) Industrial water consumption related to water extraction data for plant.

Table A – Financial indicators

Country	Project cluster	Cluster	Status	Investments in currency (mil)	Green bond proceeds allocated to the project in 2018 (mil euros)
ITALY	Smart meter	Asset Development	(1)	–	46
ITALY	Smart grid	Asset Development	(2)	–	21
ITALY	Quality&Efficiency	Asset Development	(2)	–	305
ITALY	Other ICT Investment	Asset Development	(2)	–	52
<b>Total Asset Development</b>				<b>824</b>	<b>424</b>
ITALY	Maintenance	Asset Management	(2)	–	242
<b>Total Asset Management</b>				<b>452</b>	<b>242</b>
<b>Total Asset Development and Asset Management Country Italy</b>				<b>1,276</b>	<b>666</b>

(1) As at December 31, 2018 the final figures of the project consisted of approximately 420 million euros of meters and concentrators entered into operation in the same month as the installation and about 26 million euros for the central remote management system and related software.

(2) The final figures are composed of a very large number of interventions that include activities started in previous years and concluded in the current year, activities started in the current year and concluded in the same year and activities started in the year and not yet completed at December 31, 2018.

Table B – ESG indicators

COUNTRY - ITALY	Cabling (%)	Network automation (%)	Oil equipment with PCB removed (no.)	End users with active smart meters (mil)	Renewable generation units connected to network (no.)	New "users" connected to network (no.)	Technical network losses (%)	Energy saved (MWh) <sup>(1)</sup>
<b>Total Asset Development</b>	–	–	–	31.56	203,919	10,584	–	2,963
<b>Total Asset Management</b>	75.9	–	147	–	–	–	3.35	–

(1) For Enel Grids projects, energy savings are represented in terms of "energy saved" in MWh in place of the CO<sub>2</sub> avoided (t) to specifically report the improvement in efficiency obtained thanks to the use of so-called "in ecodesign" transformers and the optimization of MV grids as the difference between losses detected before and after these interventions.

Table C – Further ESG indicators

Country	Injuries (fatalities and "Life Changing") (no.)	Social projects (no.)	Beneficiaries of social projects (no.)	Biodiversity projects (no.) <sup>(1)</sup>
ITALY	–	351	383,801	12

(1) The reduction in the number of biodiversity projects as compared to 2021 is due to the change in the reporting criteria that involved the combination of multiple projects.



Table A – Financial indicators

Country	Project name	Technology	Status	Capacity (MW)	Commercial operation date	Investments (value in currency)			GB proceeds allocated in 2017 (mil euros)	GB proceeds allocated in 2018 (mil euros)	GB proceeds allocated in 2019 (mil euros) <sup>(2)</sup>
						Currency	Value in currency (mil)	Equivalent in euro (mil) <sup>(1)</sup>			
USA	Whitney Hill	Wind	In Operation	66	Dec-19	USD	281	232	-	-	10
USA	Aurora Wind	Wind	In Operation	299	Dec-20	USD	450	401	-	-	10
USA	Cimarron Bend 3 phase I	Wind	In Operation	199	Dec-20	USD	281	248	-	-	4
AUSTRALIA	Cohuna	Solar	In Operation	34	Jun-20	USD	42	37	-	-	31
ITALY	Various projects <sup>(3)</sup>	Hydroelectric	In Operation	33	-	EUR	55	55	-	-	10
CANADA	Riverview	Wind	In Operation	105	Apr-20	CAD	210	187	8	-	81
CANADA	Castel Rock Ridge 2	Wind	In Operation	29	Mar-20	CAD			2	-	23
MEXICO	Magdalena 2	Solar	In Operation	220	Sep-19	USD	165	136	9	-	112
MEXICO	Amistad II	Wind	In Operation	100	Dec-19	USD	115	97	22	-	55
MEXICO	Amistad III	Wind	In Operation	108	Feb-20	USD	305	269	11	-	59
MEXICO	Amistad IV	Wind	In Operation	162	Dec-20	USD			18	-	57
MEXICO	Dolores	Wind	In Operation	274	May-20	USD	290	255	36	-	192
USA	High Lonesome I+II	Wind	In Operation	500	Dec-19	USD	720	595	-	81	75
USA	Roadrunner	Solar	In Operation	497	Jun-20	USD	436	366	-	30	141
GREECE	Kafireas	Wind	In Operation	154	Oct-19	USD	300	300	-	64	126
<b>TOTAL</b>											<b>986</b>

(1) Indicative value in euros (EUR), although the investment in US dollars (USD) applies where present. The exchange rate used for projects allocated in the 2017 green bond is 1.11 USD/EUR, for projects allocated in the 2018 green bond it is 1.19 USD/EUR whereas for projects whose investment value has been updated – including those with the new Capex identified in GB 2019 – the exchange rate is 1.21.

(2) Additional proceeds were allocated for some renewable projects that were already identified in the 2017 and 2018 green bond, for which new capitalized costs emerged.

(3) Aggregate data related to 8 small sized Italian projects. The concerned technology is hydroelectric.

Table B – ESG indicators

Country	Project name <sup>(1)</sup>	2022 generation (GWh)	CO <sub>2</sub> avoided 2022 (t)	2019-2022 generation (GWh)	2019-2022 CO <sub>2</sub> avoided (t)
USA	Whitney Hill	207.54	127,926.68	601.23	365,286.19
USA	Aurora Wind	1,184.80	730,314.75	1,914.90	1,159,927.41
USA	Cimarron Bend 3 phase I	811.92	500,470.84	1,615.94	973,575.45
AUSTRALIA	Cohuna	18.44	16,567.70	29.10	25,786.78
ITALY	Various projects <sup>(2)</sup>	-	-	-	-

(1) For projects for which new Capex were allocated in 2019, in addition to what was allocated in the 2017 and 2018 green bond, for the ESG indicators refer to the 2017 and 2018 tables.

(2) Aggregate data related to 8 small sized Italian projects. The concerned technology is hydroelectric. The share of generation for only repowering cannot be separated from the rest of the plant because it is not possible to precisely determine the share of energy fed to the network only due to the increase in power.

**Table C – Further ESG indicators**

Country	Project name <sup>(1)</sup>	Water consumption m <sup>3</sup> (2)	Actions to protect/restore biodiversity (no.)	Plant shutdown or site stop due to environmental issues (no.)	Injuries (fatalities and "Life Changing") (no.)	Social projects (no.)	Beneficiaries of social projects (no.)
USA	Whitney Hill	-	-	-	-	-	-
USA	Aurora Wind	-	-	-	-	-	-
USA	Cimarron Bend 3 phase I	-	-	-	-	-	-
AUSTRALIA	Cohuna	-	-	-	-	7	268
ITALY	Various projects <sup>(3)</sup>	-	-	-	-	1	500

(1) For projects for which new Capex were allocated in 2019, in addition to what was allocated in the 2017 and 2018 green bond, for the ESG indicators refer to the 2017 and 2018 tables.

(2) Industrial water consumption related to water extraction data for plant.

(3) Aggregate data related to 8 small sized Italian projects. The concerned technology is hydroelectric.

## Table D – Overall information

CRITERION	INDICATOR	GB 2022 DATA/APPROACH
<b>Respect for human rights standards and prevention of breaches</b>	Number and description of the reports identified through the Enel monitoring system	Five reports were received for presumed violations of the principle of respect for diversity and non-discrimination. Of the five reports, three ended as a non-violation and two as a violation with inappropriate behavior by individual employees regarding projects financed with GB proceeds. Suitable corrective actions were implemented for the two violations.
	Results of risk analysis on human rights at country level	The risk analysis conducted on a country level in the Group's areas of presence highlighted an average risk perceived as "to be monitored" and "high priority" <sup>(1)</sup> . Group human rights practices and policies were subsequently assessed as "robust" <sup>(2)</sup> . However, specific action plans have been developed for each country of presence as well as a centrally managed improvement plan to harmonize and integrate processes and policies defined at the global level and applied at the local level.
<b>Respect for labor rights</b>	Number and description of the reports identified through the Enel monitoring system	No reports regarding projects financed with proceeds from the GB.
	Results of risk analysis on human rights at country level	The risk analysis conducted on a country level in the in the Group's areas of presence highlighted an average risk perceived as "to be monitored" <sup>(1)</sup> . Group human rights practices and policies were subsequently assessed as "robust" <sup>(2)</sup> . However, specific action plans have been developed for each country of presence as well as a centrally managed improvement plan to harmonize and integrate processes and policies defined at the global level and applied at the local level.
<b>Working conditions (employment relationships, training, health and safety conditions, respect for working hours)</b>	Number and description of the reports identified through the Enel monitoring system	No reports regarding projects financed with proceeds from the GB.
	Number of injuries (fatalities and "Life Changing")	No fatality or "Life Changing" injury was recorded for projects financed with proceeds from the GB.
<b>Integration of environmental and social factors into the supply chain – Responsible purchasing</b>	Ethical clauses in contracts with suppliers	Through the General Contract Conditions, Enel requires its contractors and subcontractors, among other things, to comply with the ten principles of the United Nations Global Compact, respect for and protection of internationally recognized human rights, as well as respect for ethical and social obligations regarding the fight against child labor and protection of women, equal treatment, prohibition of discrimination, freedom of association and representation, forced labor, safety and environmental protection, sanitary conditions and also regulatory conditions, retribution, contributions, insurance and tax.
<b>Business ethics (prevention of corruption and money laundering, fraud, anticompetitive practices)</b>	Number and description of the reports identified through the Enel monitoring system	Three reports were received related to conflicts of interest/corruption for the pursuit of personal interests and/or interests that harm the company. Of the three reports, two are being analyzed as of the date of the non-financial disclosure and one ended as a non-violation.
<b>Audit and internal control</b>	% of area/country processes covered by internal audit activities	The average annual coverage level of the processes through internal audit activities is equal to 53% for Renewables and 90% for Grids in Italy.

(1) Average perceived risk: average of perceived risk levels identified in the countries being analyzed. Reference scale of risks: 1. High risk; 2. High priority risk; 3. Risk to be monitored; 4. Acceptable risk.

(2) Reference scale of performance values: Robust (75%-100%); Good (50%-75%); Sufficient (25%-50%); Needs improvement (0%-25%).



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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 on the Green Bond Report

*To the board of directors of  
Enel S.p.A.*

We have been engaged to perform a limited assurance engagement on the 2021 [?2022] Green Bond Report (the "report") of Enel S.p.A. (the "company"), which comprises the summary table of emissions, table A "Financial indicators", table B "ESG indicators", table C "Further ESG indicators", table D "Overall information" and notes thereto and has been prepared on the basis of the Enel Group's green bond framework (the "framework"). This report is included in the Enel Group's 2022 sustainability report.

### **Responsibilities of the company's directors and board of statutory auditors ("Collegio Sindacale") for the Report**

The directors are responsible for the preparation of the report in accordance with the framework described in the "Introduction and reporting criteria" note to the report.

They are also responsible for such internal control as they determine is necessary to enable the preparation of a report that is free from material misstatement, whether due to fraud or error.

Moreover, the directors are responsible for identifying the content of the report, selecting and applying policies and making judgements and estimates that are reasonable in the circumstances.

### **Auditors' independence and quality control**

We are independent in compliance with the independence and all other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Our company applies International Standard on Quality Control 1 (ISQC Italia 1) and, accordingly, maintains a system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

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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**Enel Group**  
*Independent auditors' report*  
31 December 2022

### ***Auditors' responsibility***

Our responsibility is to express a conclusion, based on the procedures performed, about the compliance of the report with the frameworks described in the "Introduction and reporting criteria" note to the report. We carried out our work in accordance with the criteria established by "International Standard on Assurance Engagements 3000 (revised) - Assurance Engagements other than Audits or Reviews of Historical Financial Information" ("ISAE 3000 revised"), issued by the International Auditing and Assurance Standards Board applicable to limited assurance engagements. This standard requires that we plan and perform the engagement to obtain limited assurance about whether the report is free from material misstatement. A limited assurance engagement is less in scope than a reasonable assurance engagement carried out in accordance with ISAE 3000 revised, and consequently does not enable us to obtain assurance that we would become aware of all significant matters and events that might be identified in a reasonable assurance engagement.

The procedures we performed on the report are based on our professional judgement and include inquiries, primarily of the parent's personnel responsible for the preparation of the information presented in the report, documental analyses, recalculations and other evidence gathering procedures, as appropriate.

Specifically, we performed the following procedures:

- 1 obtaining and reading the second party opinion;
- 2 interviewing relevant staff at corporate and business level responsible for the 2022 Green Bond management and reporting;
- 3 understanding the processes underlying the generation, recording and management of the qualitative and quantitative information disclosed in the report;
- 4 holding interviews and discussions with the company's management personnel to obtain information on the processes and procedures used to gather, combine, process and transmit data and information to the office that prepares the report;
- 5 performing sample-based documental analysis and analytical procedures to check the indicators included in the report.

### ***Conclusion***

Based on the procedures performed, nothing has come to our attention that causes us to believe that the 2022 Green Bond Report of Enel S.p.A. has not been prepared, in all material respects, in accordance with the frameworks described in the "Introduction and reporting criteria" note to the report.

### ***Other matters***

Other auditors performed a limited assurance engagement on the 2017, 2018 and 2019 figures presented in the 2022 Green Bond Report and expressed their unqualified conclusions on 10 May 2018, 7 May 2019 and 8 April 2020, respectively.

Rome, 6 April 2023

KPMG S.p.A.

(signed on the original)

Marco Maffei  
Director of Audit





# STATEMENT

DNV Business Assurance (DNV) has been commissioned by the management of ENEL SpA to carry out an independent verification of its Greenhouse Gas (GHG) emissions relative to the 2022 calendar year.

ENEL SpA has sole responsibility for preparation of the data and external report. DNV, in performing our assurance work, is responsible to the management of ENEL SpA. Our assurance statement, however, represents our independent opinion and is intended to inform all stakeholders including ENEL SpA..

## Verified GHG Emissions

Greenhouse Gas Emissions	t CO <sub>2</sub> -eq
Direct (Scope 1) GHG Emissions (*)	53 066 418
Energy Indirect (Scope 2) GHG Emission (Located Based)	4 023 258
Energy Indirect (Scope 2) GHG Emission (Market Based)	6 058 887
Other Indirect (Scope 3) GHG Emissions	75 802 921
of which use of natural gas sold in the retail market	22 900 783
CO <sub>2</sub> biogenic from biomass combustion (**)	114 838

(\*) it includes CH<sub>4</sub> and N<sub>2</sub>O biogenic emissions from combustion

(\*\*) direct CO<sub>2</sub> biogenic emissions are reported separately as per §4 of The GHG Protocol

## Assurance Opinion

Based on the verification process conducted by DNV as explained in the annex of this statement:

- we provide a reasonable assurance of Scope 1, Scope 2 and the Scope 3 GHG emissions associated to use of natural gas sold in the retail market of ENEL GHG Inventory as DNV found to be
  - materially correct;
  - a fair representation of GHG emissions information; and
  - in accordance with the Verification Criteria
- we provide a limited assurance of the remaining Scope 3 GHG Emissions of ENEL GHG Inventory as no evidence was found showing to be
  - not materially correct;
  - not a fair representation of GHG emissions information; and
  - not in accordance with the Verification Criteria

DNV Business Assurance USA, Inc.

XX April 2023

Lead Verifier  
Francisco Zamarron

Technical Reviewer  
Piergiorgio Moretti

Approver  
David Tellez









# Sustainability-Linked Financing Report

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## 1. Introduction

In line with the Sustainability-Linked Financing Framework published by Enel on its website<sup>(1)</sup>, Enel issues and executes financial instruments and agreements linked to predetermined Sustainability Performance Targets (SPTs). Enel and/or its subsidiaries issue sustainability-linked bonds, SDG Commercial Papers and underwrite sustainability-linked loans, sustainability-linked foreign exchange derivatives, sustainability-linked rates derivatives and sus-

tainability-linked guarantees linked to SPTs related to five KPIs, which contribute to SDG 7 (Ensure access to affordable, reliable, sustainable and modern energy for all) and SDG 13 (Take urgent action to combat climate change and its impacts), as well as the environmental targets defined by the European Union in the EU Taxonomy Regulation, with particular attention to the climate mitigation objective.

#### KPIs and Sustainability Performance Targets (SPT) summary

KPI	Actual values	Sustainability Performance Targets (SPT)					
	2022	2022	2023	2024	2025	2030	2040
<b>KPI #1</b> Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh) <sup>(2)</sup>	229		148	140	130	72	0
<b>KPI #2</b> Scope 1 and 3 GHG emissions Intensity relating to Integrated Power (gCO <sub>2eq</sub> /kWh)	218				135	73	0
<b>KPI #3</b> Absolute Scope 3 GHG emissions relating to Gas Retail (MtCO <sub>2eq</sub> )	22.9				20.9	11.4	0
<b>KPI #4</b> Renewable Installed Capacity Percentage (%) <sup>(3)</sup>	63.1	60% 	65%	66%	76%	85%	100%
<b>KPI #5</b> Proportion of Capex aligned with the EU Taxonomy (%)	81.9%				>80% 		

Target:  Outdated

(1) Enel - Sustainability-Linked Financing Framework - February 2023.

(2) In the previous versions of Enel's Sustainability-Linked Financing Framework and in the documentation for the financial instruments issued in compliance with these versions, KPI #1 "Scope 1 GHG emissions Intensity relating to Power Generation (gCO<sub>2eq</sub>/kWh)" was defined as "Direct Greenhouse Gas Emissions Amount (Scope 1)".

(3) Excluded from the calculation are 531.1 MW of acquired capacity, deriving from power plants acquired by the Group, according to what is indicated by the contractual documentation of the individual instruments.

## 2. List of outstanding sustainability-linked bond issued by Enel

ISIN	Issuer	Issuance date	Amount issued	Amount outstanding	Maturity	KPI	SPT	Date or period of reference	Target achievement as of 2021 and 2022
US29278GAL23	Enel Finance International NV ("EFI")	10/09/2019	1,500,000,000 \$	1,500,000,000 \$	10/09/2024	Renewable Installed Capacity Percentage (%)	55%	2021	🔄
XS2066706818	EFI	17/10/2019	1,000,000,000 €	1,000,000,000 €	17/06/2024	Renewable Installed Capacity Percentage (%)	55%	2021	🔄
XS2066706909	EFI	17/10/2019	1,000,000,000 €	1,000,000,000 €	17/06/2027	Renewable Installed Capacity Percentage (%)	55%	2021	🔄
XS2066706735	EFI	17/10/2019	500,000,000 €	500,000,000 €	17/10/2034	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	125 gCO <sub>2eq</sub> /kWh	2030	
XS2244418609	EFI	20/10/2020	500,000,000 £	500,000,000 £	20/10/2027	Renewable Installed Capacity Percentage (%)	60%	2022	🔄
XS2353182020	EFI	17/06/2021	1,000,000,000 €	1,000,000,000 €	17/06/2027	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	148 gCO <sub>2eq</sub> /kWh	2023	
XS2353182293	EFI	17/06/2021	1,250,000,000 €	1,250,000,000 €	17/06/2030	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	148 gCO <sub>2eq</sub> /kWh	2023	
XS2353182376	EFI	17/06/2021	1,000,000,000 €	1,000,000,000 €	17/06/2036	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	82 gCO <sub>2eq</sub> /kWh	2030	
US29278GAM06	EFI	12/07/2021	1,250,000,000 \$	1,250,000,000 \$	12/07/2026	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	148 gCO <sub>2eq</sub> /kWh	2023	
US29278GAN88	EFI	12/07/2021	1,000,000,000 \$	1,000,000,000 \$	12/07/2028	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	148 gCO <sub>2eq</sub> /kWh	2023	
US29278GAP37	EFI	12/07/2021	1,000,000,000 \$	1,000,000,000 \$	12/07/2031	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	148 gCO <sub>2eq</sub> /kWh	2023	
US29280HAB87	Enel Finance America, LLC ("EFA")	12/07/2021	750,000,000 \$	750,000,000 \$	12/07/2041	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	82 gCO <sub>2eq</sub> /kWh	2030	

ISIN	Issuer	Issuance date	Amount issued	Amount outstanding	Maturity	KPI	SPT	Date or period of reference	Target achievement as of 2021 and 2022
XS2390400633	EFI	28/09/2021	1,250,000,000 €	1,250,000,000 €	28/05/2026	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	148 gCO <sub>2eq</sub> /kWh	2023	
XS2390400716	EFI	28/09/2021	1,000,000,000 €	1,000,000,000 €	28/05/2029	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	148 gCO <sub>2eq</sub> /kWh	2023	
XS2390400807	EFI	28/09/2021	1,250,000,000 €	1,250,000,000 €	28/09/2034	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	82 gCO <sub>2eq</sub> /kWh	2030	
XS2432293673	EFI	17/01/2022	1,250,000,000 €	1,250,000,000 €	17/11/2025	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	148 gCO <sub>2eq</sub> /kWh	2023	
XS2432293756	EFI	17/01/2022	750,000,000 €	750,000,000 €	17/01/2031	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	140 gCO <sub>2eq</sub> /kWh	2024	
XS2432293913	EFI	17/01/2022	750,000,000 €	750,000,000 €	17/01/2035	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	82 gCO <sub>2eq</sub> /kWh	2030	
XS2466363202	EFI	11/04/2022	750,000,000 £	750,000,000 £	11/04/2029	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	140 gCO <sub>2eq</sub> /kWh	2024	
USN30707AN87	EFI	15/06/2022	750,000,000 \$	750,000,000 \$	15/06/2025	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	148 gCO <sub>2eq</sub> /kWh	2023	
US29278GAW87	EFI	15/06/2022	750,000,000 \$	750,000,000 \$	15/06/2027	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	140 gCO <sub>2eq</sub> /kWh	2024	
US29278GAX60	EFI	15/06/2022	1,000,000,000 \$	1,000,000,000 \$	15/06/2032	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	82 gCO <sub>2eq</sub> /kWh	2030	
US29278GAY44	EFI	15/06/2022	1,000,000,000 \$	1,000,000,000 \$	15/06/2052	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	0 gCO <sub>2eq</sub> /kWh	2040	



ISIN	Issuer	Issuance date	Amount issued	Amount outstanding	Maturity	KPI	SPT	Date or period of reference	Target achievement as of 2021 and 2022
XS2531420656	EFI	09/09/2022	1,000,000,000 €	1,000,000,000 €	09/03/2029	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	140 gCO <sub>2eq</sub> /kWh	2024	
US29278GAZ19	EFI	14/10/2022	750,000,000 \$	750,000,000 \$	14/10/2025	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	148 gCO <sub>2eq</sub> /kWh	2023	
US29280HAA05	EFA	14/10/2022	1,000,000,000 \$	1,000,000,000 \$	14/10/2027	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	140 gCO <sub>2eq</sub> /kWh	2024	
US29278GBA58	EFI	14/10/2022	1,250,000,000 \$	1,250,000,000 \$	14/10/2032	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	82 gCO <sub>2eq</sub> /kWh	2030	
US29278GBB32	EFI	14/10/2022	1,000,000,000 \$	1,000,000,000 \$	14/10/2052	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	0 gCO <sub>2eq</sub> /kWh	2040	
XS2589260723	EFI	20/02/2023	750,000,000 €	750,000,000 €	20/02/2031	Scope 1 GHG emissions Intensity relating to Power Generation (gCO <sub>2eq</sub> /kWh)	130 gCO <sub>2eq</sub> /kWh	2025	
						Proportion of Capex aligned with the EU Taxonomy (%)	>80%	2023–2025	
XS2589260996	EFI	20/02/2023	750,000,000 €	750,000,000 €	20/02/2043	Scope 1 and 3 GHG emissions Intensity relating to Integrated Power (gCO <sub>2eq</sub> /kWh)	0 gCO <sub>2eq</sub> /kWh	2040	
						Absolute Scope 3 GHG emissions relating to Gas Retail (MtCO <sub>2eq</sub> )	0 MtCO <sub>2eq</sub>	2040	
<b>Total</b>			<b>28,055,744,969 €<sup>(4)</sup></b>	<b>28,055,744,969 €<sup>(5)</sup></b>					

(4) Calculated with the following exchange rates: EUR/USD FX and EUR/GBP FX at December 30, 2022.

(5) Calculated with the following exchange rates: EUR/USD FX and EUR/GBP FX at December 30, 2022.

### 3. Enel's KPI performance

#### a. KPI #1: Scope 1 GHG emissions Intensity relating to Power Generation (gCO<sub>2eq</sub>/kWh)



##### KPI #1: Scope 1 GHG emissions Intensity relating to Power Generation (gCO<sub>2eq</sub>/kWh)<sup>(6)</sup>

Group Scope 1 greenhouse gas emissions (GHG) intensity (gCO<sub>2eq</sub>/kWh)

- **Definition/Methodology:** Group Scope 1 greenhouse gas emissions (including CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) deriving from the generation of energy and measured in grams of CO<sub>2eq</sub> per kWh, as defined and detailed in the documentation for sustainability-linked transactions and in line with the GHG Protocol<sup>(7)</sup>.
- **Rationale:** the KPI measures Enel's performance with respect to the decarbonization strategy of its energy generation mix, which will be fully reached by 2040, while mitigating at the same time the direct emissions from its most relevant Scope 1 source, which represents more than 99% of total Scope 1 emissions.
- **Materiality:** in 2022, KPI #1 Scope 1 GHG emissions Intensity relating to Power Generation represents 39.2% of Enel's total carbon footprint and is equivalent to 52.1 MtCO<sub>2eq</sub>.
- **Intermediate and long-term goals:** since 2015 Enel has defined a series of goals for reducing the direct greenhouse gas emissions deriving from its energy generation activities, increasing the level of ambition in every update made to align it with the most ambitious climatic scenario available.  
Also in 2015, Enel defined its first science-based target aligned with the scenario "well below 2 degrees", targeted toward reducing the carbon intensity by 25% as compared to 2007 (reaching 350 gCO<sub>2eq</sub>/kWh).  
In 2019, Enel, having reached the 2020 goal a year in advance, announced a new science-based objective for 2030 aligned with the "well below 2 degrees" scenario, increasing the percentage of emissions reduction from 70% to 80% as compared to 2017 (from 125 gCO<sub>2eq</sub>/kWh to 82 gCO<sub>2eq</sub>/kWh), how aligned with the 1.5 °C scenario.  
In 2021, Enel announced to have brought forward the achievement of the objective of complete decarbonization by 10 years, from 2050 to 2040. This goal was certified by SBTi in 2022 together with the update to the 2030 goal, which decreased from 82 gCO<sub>2eq</sub>/kWh to 72 gCO<sub>2eq</sub>/kWh, which also increased the level of ambition in this case.  
Since 2020, Enel has also defined annual short-term goals to make its pathway toward full decarbonization more visible. These goals were set in different updates of the Strategic Plan and have the following thresholds: 148 gCO<sub>2eq</sub>/kWh at 2023, 140 gCO<sub>2eq</sub>/kWh at 2024 and 130 gCO<sub>2eq</sub>/kWh at 2025.
- **Contribution to the EU environmental goal:** Climate Change Mitigation.
- **Contribution to the UN Sustainable Development Goals:** SDG 13: Take urgent action to combat climate change and its impacts.

##### Enel's KPI #1 and relative SPT performance

	2020 (actual)	2021 (actual)	2022 (actual)	2023 (target)	2024 (target)	2025 (target)	2030 (target)	2040 (target)
<b>KPI #1 Performance</b>	214	225	229	148	140	130	72	0
<b>Gap vs 2023</b>	66	77	81					
<b>Gap vs 2024</b>	74	85	89	8				
<b>Gap vs 2025</b>	84	95	99	18	10			
<b>Gap vs 2030</b>	132	143	147	76	68	58		
<b>Gap vs 2040</b>	214	225	229	148	140	130	72	

(6) In the previous versions of Enel's Sustainability-Linked Financing Framework and in the documentation for the financial instruments issued in compliance with these versions, KPI #1 "Scope 1 GHG emissions Intensity relating to Power Generation (gCO<sub>2eq</sub>/kWh)" was defined as "Direct Greenhouse Gas Emissions Amount (Scope 1)".

(7) The GHG Protocol provides the greenhouse gas accounting standards (<https://ghgprotocol.org/>).

## b. KPI #2: Scope 1 and 3 GHG emissions Intensity relating to Integrated Power (gCO<sub>2eq</sub>/kWh)



### KPI #2: Scope 1 and 3 GHG emissions Intensity relating to Integrated Power (gCO<sub>2eq</sub>/kWh)

Group's combined greenhouse gas emissions, Scope 1 (including CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) deriving from power generation and Scope 3 deriving from the generation of electricity purchased and sold to end customers, measured in grams of CO<sub>2eq</sub> per kWh.

- **Definition/Methodology:** Intensity metric calculated as the combination of Group Scope 1 greenhouse gas emissions (including CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) (measured in gCO<sub>2eq</sub>) and Group Scope 3 greenhouse gas emissions from the generation of purchased electricity that is sold to end customers (measured in gCO<sub>2eq</sub>) (which represents an element of subcategory "3-Fuels and activities connected to power" of the "GHG Protocol-Scope 3 standard"), divided into power generation (measured in kWh) and purchased electricity (measured in kWh). The methodology is defined and detailed in the documentation for pertinent sustainability-linked transactions and in line with the GHG Protocol.
- **Rationale:** KPI #2 covers all electricity sold by Enel to its end customers, obtained both from Enel's own generation and from electricity purchased from third parties.
- **Materiality:** in 2022, KPI #2 Scope 1 and 3 GHG emissions Intensity relating to Integrated Power represented 60.6% of Enel's total carbon footprint, equivalent to 80.6 MtCO<sub>2eq</sub>, of which Group Scope 1 CO<sub>2eq</sub> emissions from power generation represented 39.2%, equivalent to 52.1 MtCO<sub>2eq</sub>, and Group Scope 3 CO<sub>2</sub> emissions from the generation of electricity purchased and sold to end customers represented 21.4%, equivalent to 28.5 MtCO<sub>2eq</sub>.
- **Intermediate and long-term goals:** in November 2022 Enel announced its goal of reducing the emissions of the above KPI to 135 gCO<sub>2eq</sub>/kWh by 2025. In December 2022, SBTi validated the following 2030 and 2040 goals as in line with the "1.5 °C climate goal" scenario: reduce 100% of direct greenhouse gas emissions (Scope 1) deriving from the production of electricity and of indirect greenhouse gas emissions (Scope 3) deriving from fuels and activities connected to power, covering all electricity sold per kWh by 2040 as compared to 2017 (332 gCO<sub>2eq</sub>/kWh), with a medium-term goal of a 78% reduction by 2030 (73 gCO<sub>2eq</sub>/kWh).
- **Contribution to the EU environmental goal:** Climate Change Mitigation.
- **Contribution to the UN Sustainable Development Goals:** SDG 13: Take urgent action to combat climate change and its impacts.

### Enel's KPI #2 and relative SPT performance

	2020 (actual)	2021 (actual)	2022 (actual)	2025 (target)	2030 (target)	2040 (target)
KPI #2 Performance	194	203	218	135	73	0
Gap vs 2025	59	68	83			
Gap vs 2030	121	130	145	62		
Gap vs 2040	194	203	218	135	73	

### c. KPI #3: Absolute Scope 3 GHG emissions relating to Gas Retail (MtCO<sub>2eq</sub>)



#### KPI #3: Absolute Scope 3 GHG emissions relating to Gas Retail (MtCO<sub>2eq</sub>)

Group absolute greenhouse emissions (GHG – Scope 3) deriving from the use of gas sold by the Enel Group to its end customers (measured in MtCO<sub>2eq</sub>).

- **Definition/Methodology:** Group Absolute Scope 3 CO<sub>2</sub> equivalent emissions from use of sold gas by the Group to its end customers, as defined and detailed in the documentation of the relevant Sustainability-Linked transactions and in line with the GHG Protocol.
- **Rationale:** KPI #3 supports Enel's goal of full decarbonization, including the value chain of the Gas Retail business.
- **Materiality:** in 2022, KPI #3 Absolute GHG Scope 3 emissions related to Gas Retail represented 17.2% of Enel's total carbon footprint, equivalent to 22.9 MtCO<sub>2eq</sub>.
- **Intermediate and long-term goals:** in November 2022 Enel announced its goal of reducing the emissions of KPI #3 Absolute GHG Scope 3 emissions related to Gas Retail, reaching 20.9 MtCO<sub>2</sub> by 2025 and 11.4 MtCO<sub>2</sub> by 2030. In December 2022 SBTi validated the following 2030 and 2040 goals, in line with the "1.5 °C climate goal" scenario: 100% reduction of emissions by 2040 and 55% by 2030, with respect to the 2017 value (25.3 MtCO<sub>2eq</sub>).
- **Contribution to the EU environmental goal:** Climate Change Mitigation.
- **Contribution to the UN Sustainable Development Goals:** SDG 13: Take urgent action to combat climate change and its impacts.

#### Enel's KPI #3 and relative SPT performance

	2020 (actual)	2021 (actual)	2022 (actual)	2025 (target)	2030 (target)	2040 (target)
KPI #3 Performance	21.9	22.3	22.9	20.9	11.4	0
Gap vs 2025	1.0	1.4	2.9			
Gap vs 2030	10.5	10.9	11.5	9.5		
Gap vs 2040	21.9	22.3	22.9	20.9	11.4	

#### d. KPI #4: Renewable Installed Capacity Percentage (%)

##### KPI #4: Renewable Installed Capacity Percentage (%)



Percentage of renewable energy installed capacity with respect to total installed capacity (expressed as a percentage).

• **Definition/Methodology:**

	Calculation method
Renewable energy installed capacity	(a) MW
Total installed capacity	(b) MW
Renewable installed capacity percentage	(a) / (b) %

Terms referring to KPI #4 and SPT #4 are detailed in the documentation of the relevant sustainability-linked operations.

- **Rationale:** KPI #4 supports Enel's target of complete decarbonization of its technological mix by 2040.
- **Materiality:** KPI #4 provides a global representation of the decarbonization process of the Group's technological mix, towards the complete adoption of renewable energy by 2040.
- **Intermediate and long-term goals:** in November 2022, Enel reinforced its objective to reach 76% of total net efficient installed capacity from renewable sources by the end of 2025. The Group plans on adding approximately +21 GW to its installed capacity during 2023-2025, in line with reaching the decarbonization objectives aligned with the Paris Agreement. It is expected that in 2025 consolidated renewable capacity will amount to ~61 GW, equal to 76% of the Group's total consolidated generation, with consolidated renewable generation that should reach 70%. By 2030, the percentage of the Group's consolidated renewable capacity will be equal to 85% and 100% by 2040.
- **Contribution to the EU environmental goal:** Climate Change Mitigation.
- **Contribution to the UN Sustainable Development Goals:** SDG 7: Ensure access to affordable, reliable, sustainable, and modern energy for all.

##### Enel's KPI #4 and relative SPT performance

	2020 (actual)	2021 (actual)	2022 (actual)	2023 (target)	2024 (target)	2025 (target)	2030 (target)	2040 (target)
<b>KPI #4 Performance</b>	53.6%	57.5%	63.1%	65.0%	66.0%	76.0%	85.0%	100.0%
<b>Gap vs 2021</b>	3.9%							
<b>Gap vs 2022</b>	9.5%	5.6%						
<b>Gap vs 2023</b>	11.4%	7.5%	1.9%					
<b>Gap vs 2024</b>	12.4%	8.5%	2.9%	1.0%				
<b>Gap vs 2025</b>	22.4%	18.5%	12.9%	11.0%	10.0%			
<b>Gap vs 2030</b>	31.4%	27.5%	21.9%	20.0%	19.0%	9.0%		
<b>Gap vs 2040</b>	46.4%	42.5%	36.9%	35.0%	34.0%	24.0%	15.0%	



## e. KPI #5: Proportion of Capex aligned with the EU Taxonomy (%)



### KPI #5: Proportion of Capex aligned with the EU Taxonomy (%)

Proportion of the Capital Expenditure (from now Capex), during a certain period, in activities that are qualified as sustainable from an environmental point of view based on the criteria specified in article 3 of the regulation on EU Taxonomy (2020/852) (expressed as a percentage).

- Definition/Methodology:**

Capex aligned with the EU Taxonomy

Total Capex according to the requirements

of article 8 of the regulation on EU Taxonomy (2020/852)

Proportion of Capex aligned with the EU Taxonomy

#### Calculation method

(a) EURbn

(b) EURbn

(a) / (b) %

Terms referring to KPI #5 and TSS #5 are detailed in the documentation of the relevant sustainability-linked operations and in the consolidated non-financial reports/annual report.

- **Rationale:** KPI #5 supports Enel's target of complete decarbonization of its technological mix by 2040.
- **Materiality:** the passage to zero greenhouse gas emissions by 2040 will require Enel to make huge investments over the next two decades. The share of Enel investments in capital expenses aligned with EU Taxonomy shows to what extent Enel is investing in a carbon-free business model.
- **Intermediate and long-term goals:** in November 2022 Enel announced its goal of aligning at least 80% of its investments in capital expenses during 2023-2025 with EU Taxonomy.
- **Contribution to the EU environmental goal:** all six of the environmental goals defined in the regulation on EU Taxonomy, with particular attention to the Climate Change Mitigation.
- **Contribution to the UN Sustainable Development Goals:** SDG 13: Take urgent action to combat climate change and its impacts.

### Enel's KPI #5 and relative SPT performance

	2020 (actual)	2021 (actual)	2022 (actual)	2023-2025 (target)
KPI #5 Performance	-	82.0%	81.9%	>80%

## 4. Verification on Enel's KPI performance

### I. KPI #1 performance

At December 31, 2022, the amount of KPI #1 emissions Scope 1 GHG emissions Intensity relating to Power Generation ( $\text{gCO}_{2\text{eq}}/\text{kWh}$ ) is equal to [229]  $\text{gCO}_{2\text{eq}}/\text{kWh}$ .  
The Assurance Report of [KPMG], as the external verifier of

Enel, of KPI #1 Scope 1 GHG emissions Intensity relating to Power Generation ( $\text{gCO}_{2\text{eq}}/\text{kWh}$ ) is available at pages 558–562 of the present Report.

### II. KPI #2 performance

At December 31, 2022, the amount of KPI #2 emissions Scope 1 and 3 GHG emissions Intensity relating to Integrated Power ( $\text{gCO}_{2\text{eq}}/\text{kWh}$ ) is equal to [218]  $\text{gCO}_{2\text{eq}}/\text{kWh}$ .

The Assurance Report of [KPMG], as the external verifier of Enel, of KPI #2 Scope 1 and 3 GHG emissions Intensity relating to Integrated Power ( $\text{gCO}_{2\text{eq}}/\text{kWh}$ ) is available at pages 558–562 of the present Report.

### III. KPI #3 performance

At 31 December, 2022, the amount of KPI #3 emissions Absolute Scope 3 GHG emissions relating to Gas Retail ( $\text{MtCO}_{2\text{eq}}$ ) is equal to [22.9]  $\text{MtCO}_{2\text{eq}}$ .

Enel, of KPI #3 Absolute Scope 3 GHG emissions relating to Gas Retail ( $\text{MtCO}_{2\text{eq}}$ ) is available at pages 558–562 of the present Report.

The Assurance Report of [KPMG], as the external verifier of

### IV. KPI #4 performance

The percentage value of KPI #4 Renewable Installed Capacity Percentage (%) at December 31, 2022, is equal to 63.1%<sup>(8)</sup>.

Renewable energy installed capacity  
Total installed capacity  
Renewable installed capacity percentage

#### Calculation method

(a) 53.030 MW  
(b) 84.047 MW  
(a) / (b) 63.1%

As a consequence of the calculation above, Enel has satisfied the Sustainability Performance Targets (SPTs) in the context of all instruments linked to a renewable installed capacity percentage equal to or greater than 60% as of December 31, 2022.

The Assurance Report of KPMG, as Enel's external verifier, of KPI #4 Renewable Installed Capacity Percentage (%) is available at the following link: <https://www.enel.com/investors/investing/sustainable-finance/sustainability-linked-finance>.

(8) For more details, please see Enel Statement on the Renewable Installed Capacity Percentage published on Enel's website and available at the following link: <https://www.enel.com/investors/investing/sustainable-finance/sustainability-linked-finance>.

## V. KPI #5 performance

The percentage value of KPI #5 Proportion of Capex aligned to the EU Taxonomy (%) at December 31, 2022 is equal to [81.9]%.

Capex aligned with the EU Taxonomy  
Total Capex according to the requirements of article 8  
of the regulation on EU Taxonomy (2020/852)  
Proportion of Capex aligned with the EU Taxonomy

### Calculation method

(a) [12,351.0] mil euros

(b) [15,088.0] mil euros

(a) / (b) [81.9] %

The Assurance Report of KPMG, as Enel's external verifier, of KPI #5 Proportion of Capex aligned to the EU Taxonomy is available at the following link: <https://www.enel.com/it/investitori/sostenibilita>.



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