

CONSERVATION

OF NATURAL CAPITAL

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1. Objectives

Enel reinforces its **commitment to sustainable development** by actively promoting the **protection of Natural Capital** through the definition of strategic pathways aimed at reducing environmental impacts, restoring habitats, and equitably sharing opportunities and benefits derived from ecosystem services with the communities it engages with.

The Thematic Report on the Conservation of Natural Capital voluntarily presents the **Enel Group's consolidated environmental performance** and key performance indicators (KPIs) for Fiscal Year **2025**. Its purpose is to provide investors and financial stakeholders with a clear, decision-useful overview of the Group's environmental positioning and risk profile. These additional disclosures address the information needs of capital markets and support Enel's assessment within leading ESG ratings and benchmarks, as well as investor-driven ESG questionnaires and due diligence processes.

The initial chapters outline Enel Group's **environmental strategy, governance framework, and internal policies**, and describe the methodologies applied to identify and assess nature-related impacts, dependencies, risks, and opportunities across the value chain. Subsequent chapters focus on specific environmental topics, presenting **metrics, action plans, best practices, and flagship environmental projects** implemented throughout the Group's operations.

These case studies demonstrate how Enel translates its strategic commitments into concrete operational actions, mitigating environmental risks, strengthening asset resilience, and generating long-term value, while contributing to the conservation of natural capital, the protection of biodiversity, and the resilience of ecosystems.



2. Strategy, Impacts, Risks and Opportunities on Nature

2.1. The Enel Group double-materiality process

Directive (EU) 2022/2464 on Corporate Sustainability Reporting (CSRD), together with its implementing European Sustainability Reporting Standards (ESRS), requires companies within its scope to identify, assess, and transparently disclose the environmental, social, and governance (ESG) issues – referred to as “sustainability issues” – that are relevant to their activities, value chain, and stakeholders.

To identify the sustainability issues to be disclosed, the Enel Group conducted a double materiality assessment in full alignment with regulatory requirements. The methodology applied and the outcomes of the assessment are described in detail in the Integrated Annual Report. The analysis was carried out across the Group’s main countries of operation, involving the principal legal entities in each geography and incorporating stakeholder engagement at multiple stages of the process. Stakeholders were engaged both in the analysis of the external context and in the evaluation of impacts, risks, and opportunities (IROs).

In accordance with ESRS 1 – General Requirements, Enel’s double materiality assessment covered the entire value chain, including both upstream and downstream activities. The objective of the process was to identify sustainability issues that meet the criteria for impact materiality, financial materiality, or both. Specifically:

- **Impact materiality** refers to sustainability issues associated with the Group’s significant actual or potential positive or negative impacts on people or the environment over the short, medium, and long term.
- **Financial materiality** refers to sustainability issues that may influence the Group’s financial performance, position, or future prospects, with particular attention to how related risks and opportunities could affect economic performance over the short, medium, and long term.

Building on the results of the double materiality assessment, this Thematic Report on the Conservation of Natural Capital provides detailed disclosure of the policies, action plans, metrics, and targets adopted by the Enel Group in relation to the nature-related sustainability issues identified as material.

These disclosures refer to the following ESRS material topics and subtopics:

- **Business Conduct:** Political engagement and lobbying activities,
- **Pollution:** Air pollution,
- **Water and Marine Resources:** Water withdrawals,
- **Biodiversity and Ecosystems:** Biodiversity loss and state of species,
- **Circular Economy and Waste Management:** Non-hazardous waste.

2.2. Governance model for Nature

Subtopic	Description of IRO	Type	Target/Action plan
POLITICAL ENGAGEMENT AND LOBBYING ACTIVITIES	Improvement of environmental and climate performance in all the Group’s sites through the adoption of robust environmental governance, guaranteed by a widespread network of HSEQ professionals and certified environmental management systems, aimed at promptly adopting regulatory developments, participating in their preparation, meeting the expectations of stakeholders and promoting an environmental consciousness among employees, suppliers and customers.	Positive impact	<ul style="list-style-type: none"> • Maintaining and constantly monitoring activities of environmental relevance through the organization. • Application of ISO 14001 certified Environmental Management Systems (EMS) is one of the main tools for implementing the Group’s Environmental Policy.

Environmental protection and biodiversity conservation are strategic priorities for Enel, embedded throughout its value chain and across all its industrial activities, as well as integrated into corporate decision-making processes

through a strong governance system, based on sustainability and long-term value creation. Sustainability issues – that include, among others, nature-related issues – are adequately considered in all relevant corporate decision-making processes, according

to a system of functions and responsibilities reaching up to Enel S.p.A.'s main corporate governance bodies⁴. In particular, when assessing sustainability issues, the **Board of Directors** is supported by the **Corporate Governance and Sustainability Committee** and the **Control and Risk Committee**, in accordance with their respective areas of responsibility².

In this context, the Corporate Governance and Sustainability Committee – chaired by the President of the Board of Directors – has the task, among others, of assisting the Board of Directors in the assessments and decisions relating to sustainability, also examining the guidelines of the Sustainability Plan. The Sustainability Plan – which defines the Group's priorities and targets on Environmental, Social and Governance matters – is embedded within Enel's Industrial Plan, which is submitted for approval to the Board of Directors of Enel S.p.A.

During 2025, the Corporate Governance and Sustainability Committee held six meetings; two of these meetings dealt with nature-related issues. In particular, during 2025, the aforementioned Committee examined sustainability-related issues in connection with, among other things, the review of (i) the consolidated sustainability statement for 2024 financial year, expressing, within the scope of its responsibilities, favorable opinion on the general approach, the organization of the relative contents, as well as the compliance of the information provided in such document

2.2.1. The HSEQ structure

The Group ensures constant oversight and monitoring of environmentally relevant activities through a granular and harmonized organization at the level of central structures, for the coordination and direction of activities, and at the country level, for the management of specific and operational aspects at the Group's various sites. Delegated powers are also granted in the areas of the environment and occupational health and safety, accompanied by the necessary decision-making and spending powers.

The organizational and governance model adopted by Enel makes use of a widespread **Health, Safety, Environment and Quality** ("HSEQ") structure. Roles and responsibilities on HSEQ issues are defined and reported in the company organization charts, while delegations of function with power of attorney are issued in both

with the reference regulatory framework and the sustainability reporting standards adopted; (ii) the process and the outcomes of the double materiality and the stakeholder engagement activities; (iii) the activities of the Group concerning the Just transition, with particular reference to climate, nature, and human rights, as well as the inclusion of Enel in the main sustainability indexes; (iv) the contents of a proposal to update the "ethics-related" documents of the Group (i.e., the Code of Ethics, the Human Rights Policy, the Zero Tolerance of Corruption Plan, the Enel Global Compliance Program), as well as the Organizational and Management Model pursuant to Legislative Decree No. 231/2001³.

In line with the CSRD framework, the ESRS and the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD), Enel adopts a structured approach to the identification, assessment and management of nature-related dependencies, impacts, risks and opportunities. Thanks to the progressive application of the **TNFD LEAP approach** (Locate, Evaluate, Assess and Prepare), biodiversity protection and the responsible management of natural capital are recognized as strategic drivers of long-term resilience and value creation, ensuring alignment also with industrial development and evolving regulatory and stakeholder expectations across the entire value chain.

environmental and workplace safety matters, with assignment of necessary related decision-making and spending powers. Specifically:

- **at Group (Holding) level**, there is a central HSEQ Function with responsibility for guidance, coordination and definition of environmental policy and all other specific guidance policies. Within the HSEQ Function, the SHE Factory is a unit dedicated to specialized training for internal personnel in Safety, Health and Environment issues;
- **at Business Line level**, there are HSEQ Functions whose role is to coordinate the management of the respective environmental issues, the monitoring of environmental performances, ensuring the necessary specialist support in keeping with the Holding's guidelines;

1. For further information about how sustainability issues are adequately considered in all relevant corporate decision-making processes, please refer to the report on corporate governance and ownership structure of Enel S.p.A. for year 2025, published on Enel's website (www.enel.com).

2. For further details on the responsibilities of the Control and Risk Committee and the Corporate Governance and Sustainability Committee, please refer to their respective organizational regulations, available on the Enel website (www.enel.com).

3. For further information about the activities carried out by the Corporate Governance and Sustainability Committee in 2025, please refer to the report on corporate governance and ownership structure of Enel S.p.A. for year 2025, published on Enel's website (www.enel.com).

- **at Country level**, there are Staff and Business Line structures as well as managers and contact people identified in the individual operating units that manage the specific aspects of the various industrial sites.

This organization ensures the definition and management of operational procedures on these topics, in conformity with country regulations, as well as the compliance of the Integrated Health, Safety and Environment Management System with the requirements of international standards **ISO 14001:2015** and **ISO 45001:2018**.

2.3. The Environmental Policy

Enel's Environmental Policy defines the **Group's commitment to protecting natural capital and fighting climate change**, ensuring that operations are carried out in accordance with the legal requirements of the different countries of presence, as well as defining voluntary commitments. It also provides guidelines to support the development of action plans and specific targets for the management of environmental issues found to be material and their associated IROs (climate change, atmospheric pollution, water resource management, biodiversity and waste). The Policy, adopted in 1996 and updated in 2018, 2022 and 2024, was **approved by the**

Board of Directors and signed by the Chief Executive Officer and consequently disseminated and applied at Group level as a guiding tool for defining specific processes and instructions. The Policy further stipulates that management roles and responsibilities for implementing environmental management processes are identified at the organization level.

To complement the Group Environmental Policy, specific policies have been developed for the management of material issues and IROs, which are reported in dedicated sections of the document.

ENVIROMENTAL MANAGEMENT POLICY	
MAIN CONTENTS	<ul style="list-style-type: none"> • Reduce environmental impacts through the application of the best available technologies and best practices at all stages of the value chain. • Promote the fight against climate change in line with limiting global temperature to 1.5 °C compared to the pre-industrial era, accelerating the energy transition to zero emissions and increasing the resilience of business activities. • Preserve water, air and soil and optimize resource management. • Build plants and infrastructure while protecting the land and biodiversity. • Optimize waste management • Promote the circular economy approach and initiatives. • Develop innovative technologies for the environment.
SCOPE	<ul style="list-style-type: none"> • Assets under Enel's operational control and entire value chain.
IROS COVERED AND REFERENCES	<ul style="list-style-type: none"> • Mitigation, adaptation and energy consumption, in "Climate change". • Reducing emissions into the air (excluding CO₂) in "Pollution". • Withdrawal of water resources in "Water and marine resources". • Changes in land, fresh water and sea usage in "Biodiversity and ecosystems". • Population size of a species, in "Biodiversity and ecosystems". • Non-hazardous waste from Operation and Maintenance activities, in "Resource use and the circular economy".
STAKEHOLDERS INVOLVED IN THE DEFINITION	<ul style="list-style-type: none"> • Promote corporate sustainability practices among suppliers, contractors, customers and partners. • Communicate Enel's environmental performance to the public, institutions, Group employees and other relevant stakeholders.
DIFFUSION	<ul style="list-style-type: none"> • Public policy available at the link: https://www.enel.com/content/dam/enel-com/documenti/investitori/sostenibilita/enel-group-environmental-policy.pdf

2.4. Policies relevant to environmental management

At Group level, Enel has adopted a comprehensive set of processes enabling guidance, monitoring and management. Specifically:

- **Environmental and Social Impact Assessment (ESIA) Policy:** this policy provides guidelines for integrated management of impacts in new projects, in line with international standards, promoting risk mitigation, transparency and stakeholder engagement, starting with local communities.
- **Policy for Assessment of Risks and Opportunities Related to Environmental Impacts:** this Policy is compliant with ISO 14001:2015 and applies a single model for assessing environmental risks and opportunities at all operational sites utilizing the Environmental Risk Analysis (ERA) tool.
- **Emergency Management Policy:** this Policy defines criteria for preventing and managing emergencies at Enel sites, ensuring safety, environmental protection and business continuity, in coordination with local authorities.
- **Group Policy for the Classification and Analysis of Environmental Incidents:** this policy classifies environmental events by type (e.g., incidents related to biodiversity impacts, effluents pollution, fires, as well as administrative fines, litigations and reputational

criticalities) and significance of impact on the environment and the organization; it defines procedures for analyzing causes and monitoring corrective actions.

- **Policy for Extra Checking on Site (ECoS):** this policy regulates the planning and conduct of audit at operational sites to identify improvement plans and share best practices.
- **Policies for HSE Contractors management:** dedicated policies, procedures and contract clauses define the HSE qualification and contractor management processes adopted to assess suppliers, check their performances on site through inspection or audits and define consequence management actions. Rules for HSE assessment and contractors' management are defined based on the HSE risk of their activities.
- **Stop Work Policy:** this policy recognizes the right and duty of each employee and contractor to actively protect health, safety and the environment by reporting critical situations and immediately stopping any work that may pose risks to people or the environment.

Moreover, thematic guidelines (water, biodiversity, waste) are reported in the following chapters.

2.5. General principles for the environmental management of plants and infrastructure

Enel's Environmental Policy commitments, implemented through the recommendations set out in the related complementary policies, provide the Group with a robust governance and procedural framework to minimize potential environmental impacts and risks arising from Enel's assets management across all life cycle phases, including planning and construction, operation, and decommissioning. In particular:

- During the **Development and Construction** phase, Environmental Impact Assessments are conducted to identify potential effects on biodiversity, land use, water resources and local communities. Site selection criteria, technical design optimization and stakeholder engagement processes are applied to avoid and reduce environmental disturbances. Construction activities are managed through environmental management plans addressing soil protection, waste management, emissions control, noise mitigation and responsible sourcing of materials.
- Throughout the **Operation** phase, the Company monitors environmental performance and implements mitigation measures to limit impacts on ecosystems,

landscape, water bodies and air quality. Preventive maintenance programs, digital monitoring systems and compliance controls are adopted to ensure efficiency, reduce resource consumption and manage environmental risks associated with electricity production and distribution.

- In the **Decommissioning** phase, structured phase out, dismantling and site restoration plans are implemented to minimize residual impacts. Materials are prioritized for reuse and recycling where feasible; hazardous substances are managed in accordance with applicable regulations, and land is rehabilitated to restore environmental conditions or enable alternative sustainable uses.

Through these measures, Enel seeks to ensure that the development and management of renewable generation capacity and grid infrastructure are aligned with environmental protection principles - regarding biodiversity, land use, water resources, circular economy objectives and long-term ecosystem resilience, integrating risk assessment outcomes into its business strategy.

2.6. ISO 14001 certified Environmental Management Systems

The application of **ISO 14001 certified Environmental Management Systems (EMS)** is one of the main tools for implementing the Group's Environmental Policy. 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. At the end of 2025, **coverage is fully achieved (100%) across all industrial sites within the Group**, considering as industrial sites the generation plant in operation, the distribution assets, the ports terminal and the activities of retail generating industrial environmental impact.

Within the framework of the EMS, periodic **internal and external audits** are performed to ensure regulatory compliance and the consistent implementation of Group policies and procedures in the local management of all significant environmental aspects, including water, air emissions, and waste. The audits also evaluate the

effective execution of continuous improvement initiatives and, at relevant sites, the adoption and implementation of **Biodiversity Action Plans (BAP)**. 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. Enel also has the global digital dashboards *She.metrics* and *She.start* for monitoring environmental accidents and improvement actions, which are defined during assessments, Extra Checking on Site or analysis of environmental events.

Finally, Enel has also promoted the extension of the principles of Environment and Safety to its partners for **new stewardships**, with the aim of defining measures for managing environmental impacts and risks, as well as commitments to the protection and conservation of natural habitats.

2.7. Training and communication to employees and suppliers

Training represents one of the strategic objectives of the Group's policy and constitutes an integral component of the Environmental Management System (EMS). In 2025, approximately **29,500 hours** of training related to environmental and nature-related topics were delivered (a 3% increase compared to 28,600 hours in 2024) to more than 15,000 employees, covering all geographies and business lines within the Group.

The training programs addressed a wide range of subjects, with particular focus on **waste, water, and biodiversity management**. For these areas, both specialized courses and awareness campaigns targeting the entire Enel workforce were developed and

coordinated by the central SHE Factory unit of the holding. In addition, training initiatives on **environmental management systems** were provided, primarily concerning ISO 14001 and ISO 50001 standards, for environmental and energy efficiency management, respectively.

There are also multiple specific initiatives on awareness, training, and induction for **Enel contractors** across all businesses and geographies on environmental topics, aimed at informing them about the processes, regulations, and environmental clauses that must be respected during activities.

2.8. Political influence and lobbying activities

2.8.1. Direct Advocacy – Positioning on environmental policies

During 2025, the Group continued its participation in global and European initiatives and in multilateral dialogue to promote energy transition and innovation in the sector. At European level, Enel supported the work of EU institutions leading to the publication of new regulations in the environmental field, taking part in discussions regarding the development of the **European Water Resilience Strategy**, the upcoming **Circular Economy**

Act, the **Green Claims Directive**, the **European Plan on Climate Adaptation** and the **Environmental Omnibus Package**, among others. In particular

- Enel welcomed the publication of the **European Water Resilience Strategy** in June 2025, as the water-energy-climate nexus is becoming increasingly evident and critical. The company participated in the Commission's call for evidence and questionnaire

consultations held in early 2025. Enel's position highlights the opportunities that a resilient use of water in the EU offers to enhance the value of hydroelectric plants as tools for climate change adaptation, risks and impacts mitigation along the water cycle, and flexible and reliable energy supply, while maximizing carbon-free electricity production. Enel played an active advocacy role on the matter, for instance by participating in the EU Water Forum organized by the European Commission in December 2025 and through its membership in the EU Hydropower Alliance. In addition, the company followed with interest the adoption of the first-of-its-kind directive on EU soil monitoring and resilience, considering it a pivotal starting point to improve soil status across Europe.

- Enel participated in the call for evidence on the **Circular Economy Act** launched in the 2nd half of 2025. Enel welcomed the Commission initiative to develop an EU Circular Economy Act as a key element for a sustainable energy transition, recognizing its central role in accelerating the transition to a more sustainable, resilient, and competitive European economic model. Enel's position highlights how large amounts of waste coming from the first generation of clean technologies deployed in Europe – including PV panels, wind turbines and li-ion batteries – will soon require processing after the end of their useful life. However, recycling clean tech waste streams in the EU remains economically challenging at the moment. To overcome this and other barriers, Enel recommends promoting common standards and harmonized definitions for waste and secondary materials, encourage recovery practices, and ease the economic burden on reuse activities. Innovation in advanced recycling should be highlighted, recognizing companies that innovate in circular and sustainable waste management – an area where Enel is already contributing through pioneering European initiatives such as DeremCo, PHOTORAMA, the New Life program, and PIONEER.
- Back in 2023, Enel welcomed the objective of the proposed **Green Claims Directive** to ensure that environmental and sustainability related commercial materials and labelling schemes are solid, transparent, and reliable across the EU, as they should allow for a competitive advantage for best performing companies. To increase effectiveness of the proposed

scheme and reduce the burden for companies and public entities – and based in the company's experience in the field –, Enel suggested to consider implementing a “process certification” for products belonging to a specific family or group of products with the same purpose. In 2025, Enel monitored with attention the evolution of interinstitutional negotiations among EU co-legislators, which unexpectedly led to the current halt status.

- Enel participated in the European Commission's public consultation for the **European Plan on Climate Adaptation** that ran from late 2025 to early 2026. Enel's position highlights that accelerating climate impacts demand a structured, science-based adaptation strategy that strengthens the resilience of critical energy infrastructure and ensures continuity of essential services. The company stresses the need for high-resolution climate data, clear and stable regulatory frameworks, and dedicated financing—including grant-based mechanisms—to close the adaptation investment gap. Enel also calls for integrating resilience across energy, water, urban planning, and supply-chain policies, supported by digitalization, automation, advanced materials, and public-private collaboration. Finally, Enel emphasizes that systemic risks require coordinated EU-level action, incentive-based approaches, and reinforced governance to enable effective, scalable climate adaptation across Europe.
- Enel has been following with attention the **Environmental Omnibus Package** with the Commission's proposal to simplify administrative burdens in environmental legislation, as an opportunity to make environmental compliance and reporting obligations more efficient thanks to digitalization, automated reporting and enhanced skilling of all parties participating in environmental legislation implementation, among other tools. Particularly, the proposal to speed up environmental assessments shall help Member States to improve permitting processes of critical clean technologies for the transition such as renewables. Nevertheless, Enel fully agrees that the negotiations on the proposals made should not make any trade-offs in terms of EU environmental protection standards, as improvements should be instead entirely based on optimization of the current legislative framework.

2.8.2. Partnership with associations and organizations for sustainable development

Enel continues its commitment to sustainable development by promoting the protection of Natural Capital and the fight against Climate Change, of through the definition of specific targets for reducing impacts, conserving ecosystems and biodiversity, and sharing the opportunities and benefits of ecosystem services with the communities it interacts with, in line with the Environmental Policy and the Biodiversity Policy.

In particular, Enel played an active role in major sustainability networks such as:

- participating in the **“Nature Action Program”** promoted by the **World Business Council for Sustainable Development (WBCSD)**, in which Enel actively contributed with specific inputs related to the energy sector;
- participating in the Working Group for piloting “GRI 101 – Biodiversity” promoting by the Global Reporting Initiative (GRI), which led to the publication in 2025 of **“Early adopters of the GRI Biodiversity Standard offer practical guidance”**;
- the partnership with the Taskforce on Nature-related Financial Disclosures (TNFD) launched in 2021 and continued through 2025, including Enel’s collaboration with TNFD and GRI on the initiative **“GRI and TNFD advance nature reporting through practical guidance.”** Enel has also declared itself an **Early Adopter** starting from FY 2025;
- joining since 2021 the **Science Based Targets Network (SBTN) Corporate Engagement Program** for the development of methods and tools providing companies with guidance to set science-based goals for nature, including freshwater, land and biodiversity;
- participation as a member of the Coalition Linking Energy And Nature for action (CLEANaction), promoted by WWF, which involves electrical companies and sector associations with the objective of assessing and mitigating the impacts and potential risks that new renewable energy generation projects could have on biodiversity and nature;
- participation to the **“Responsible Renewables Infrastructure”** initiative, promoted by World Economic Forum, to manage the impact of renewable growth for ensuring a rapid, sustainable and equitable energy transition for all, by mainstreaming responsible deployment practices to benefit communities and nature.



3. Process to identify and manage relevant Environmental Impacts, Risks and Opportunities

Enel has adopted a structured process to identify, assess and manage Impacts, Risks and Opportunities related to material environmental aspects for the organization, based on recommendations developed for the utility sector by leading international frameworks, including, primarily, the *Taskforce on Nature-related Financial Disclosure* (TNFD), in which Enel actively participates and was an “Early Adopter” in 2025, the *World Business Council for Sustainable Development* (WBCSD), for which Enel was selected as a pilot case for the utility sector, and, for applicable recommendations, the *Science Based Targets Network* (SBTN).

The analysis of relevant natural impacts and dependencies is essential for understanding the **organization's interactions with the environment and**

their future evolution, for defining the Group's strategies and action plans, in line with its commitment to pursuing the objectives of the Kunming-Montreal Global Biodiversity Framework, which aims at halting and reversing biodiversity loss by 2030.

In order to consolidate the defined process, in 2025 Enel adopted a **Group guideline for the analysis of environmental IROs** according to the *LEAP* (*Locate, Evaluate, Assess, Prepare*) methodology proposed by the TNFD, accompanied by operational assessment procedures and metrics at the business line level, aimed at considering the specific interactions with nature and local communities specific to each electricity production and distribution technology.

3.1. Identification of impacts and dependencies relevant to Enel technologies

The identification of potential Impact, Risk and Opportunities, included in the Group double materiality analysis, was conducted starting from the **definition of significant impact drivers and dependencies** for the various technologies relevant to the Group, ranging from renewable (Hydro, Solar, Wind, Geothermal, energy storage – BESS), thermal (Coal, Oil&Gas) and nuclear electricity production, to electricity distribution, commercial energy services. Impacts and dependencies for each technology have been collected in the *Technology Hotmaps*, developed starting from the indications of the *ENCORE* (*Exploring Natural Capital Opportunities, Risks and Exposure*) tool applied to the utility sector and revised according to the specific construction and operational solutions adopted by Enel in compliance with industry guidelines. The scores assigned to each technology within the Hotmaps serve two purposes: on one hand, they contribute to defining the IROs to be included in the Group's double materiality assessment; on the other, they represent the starting point for conducting the LEAP analysis at priority sites (hotspots).

Where appropriate, impact factors relevant to *Operation & Maintenance* activities have been distinguished from *Construction & Demolition* activities, the latter referring only to the main construction or repowering sites of generation plants.

The **impact drivers (or pressures)** identified as potentially relevant fall into the following categories:

- Biodiversity: Use of terrestrial and freshwater ecosystems;
- Resource use: Water withdrawals;
- Climate change: Greenhouse gas emissions (GHG);
- Pollution: Air, Water and Soil pollutants;
- Circularity: Waste generation and recovery;
- Biodiversity: Disturbance factors (electrocution, noise, smell, visual impact, ..).

The potentially relevant dependencies, linked to the ecosystem services required for the operation of plants and infrastructure, include:

- Climate regulation;
- Protection from floods and extreme weather events;
- Availability of freshwater (surface and groundwater);
- Soil stabilization and erosion control;
- Conservation of the water cycle.

The results of the relevance assessment are compiled in tabular form in the Impact and Dependency Maps by Technology (Hotmaps).

The **main impacts on nature and biodiversity** are linked to climate change, water consumption and pollutant emissions – primarily associated with fossil fuel-based technologies – as well as land use and the transformation of natural habitats, mainly linked to new renewable technologies, primarily wind and solar power. As described in this report, Enel is committed to drastically reducing the former through the ongoing phase-out of

coal-fired plants and the energy transition to the Net-zero, mitigating at the same time renewable plants' impacts since their siting and design phases.

Dependencies on ecosystem services appear to be primarily attributable to climate regulation and thus, prospectively, to the effects of climate change, both chronic and acute. Indeed, the preservation of the water cycle, with the risk of unavailability or heating of the resource in some countries and regions, is a potentially

critical factor for the proper operation of hydroelectric, thermal and nuclear power plants. In addition to this, the increased frequency of extreme weather and climate events, in conjunction with local conditions of hydrogeological disruption due to soil instability or natural degradation, constitute additional factors of dependence on essential ecosystem services, which are also capable of jeopardizing the integrity and operation of facilities, especially wind and solar.

Technology hotmaps										
	Hydro	Solar	Wind	Geothermal	Coal	Oil&Gas	Nuclear	Grids	Enel X	Storage
Impact factors										
Use of terrestrial ecosystems	↗	↗ ☹	↗	↗	↗ ☹	↗ ☹	↗ ☹	↗ ☹	↗ ☹	↗ ☹
Use of freshwater ecosystems	↗ ☹									
Water withdrawal	☹			↗	☹	☹	☹			
Greenhouse gas emissions (GHG)	↗ ☹				↗ ☹	↗ ☹	↗			
Air pollutants (non-GHG)				☹	☹					
Water pollutants							☹			
Soil pollutants				↗	☹			☹		
Solid waste	↗				↗ ☹		↗ ☹	↗ ☹		
Disturbance factors	↗ ☹	↗	↗ ☹	↗			↗ ☹	↗ ☹		
Dependencies										
Climate regulation	↗ ☹	↗ ☹	↗ ☹					↗ ☹	↗ ☹	↗ ☹
Flood and storm protection	↗ ☹	↗ ☹	↗ ☹	↗ ☹				↗ ☹	↗ ☹	↗ ☹
Use of surface water	↗ ☹			↗ ☹	↗ ☹	↗ ☹	↗ ☹			
Use of groundwater					↗ ☹		↗ ☹			
Soil stabilization and erosion control	↗ ☹	↗ ☹	↗ ☹					↗ ☹	↗ ☹	↗ ☹
Conservation of the water cycle	↗ ☹			↗ ☹	↗ ☹	↗ ☹	↗ ☹			

3.1.1. Evaluation of Impact, Risk and Opportunity with reference to the entire value chain

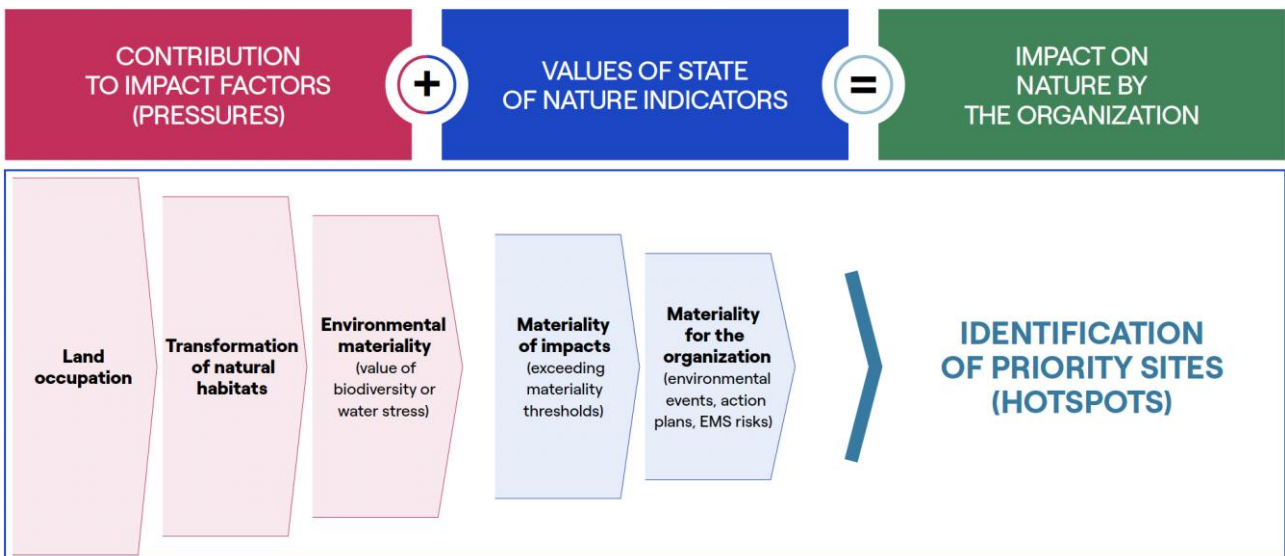
The **assessment of environmental Impact, Risk and Opportunity** was performed on the entire **value chain** adopting a combined and diversified approach, considering separately the **operation & maintenance** activities in operating assets from the **design and on-site construction** of new assets and the decommissioning of end-of-life assets. Also included within these activities are those contracted by Enel to third-party companies to

operate at its sites and operating assets (works and services). Finally, an additional phase of investigation involved Impact, Risk and Opportunity analysis related to **upstream activities** of equipment, component and commodity procurement, which are considered of priority for the utilities sector in terms of potential impacts compared to downstream activities (customer management).

3.1.2. Impact, Risk and Opportunity evaluation for existing operating assets

As regards Enel’s consolidated **operating assets**, the analysis included the identification of **hotspots** at which to perform the IRO assessment according to the **TNFD-LEAP** methodology. For this purpose, the **geographical**

localization of assets in the different countries where the Group is present⁴ and their **prioritization** on the basis of local natural conditions and the intensity of the impacts peculiar to the applied technology were carried out.



Local natural conditions were assessed by considering indicators of **natural area transformation**, the presence of **biodiversity-significant habitats** (protected areas, endangered species and critical habitats, for which see the “Biodiversity and ecosystems” section for details) and areas subject to **water stress** conditions (assessed through the Aqueduct tool Water Ratio Index - WRI). Conversely, the **significance of impact factors** was estimated by introducing threshold values for the main relevant technology indicators, chosen from the

correspondent Hotmaps. Technology impact factors are reported in the following Table.

Additional assets, considered relevant to the organization, were added to the above based on the occurrence of significant or severe environmental events, improvement action opportunities emerged from internal inspections / audits, and environmental risk analysis results provided by annual revision of Environmental Management Systems (EMS) ISO 14001.

4. Italy, Spain, Chile, Colombia, Brazil and United States.

TECHNOLOGY	KPI	RATIONALE
Onshore Wind	Combined index on birdlife fatal collisions' number & severity	Birds and bats' fatal collisions with blades represent the potentially most significant technological impact and a proxy for potential habitat fragmentation and interference with wildlife migration areas or corridors.
Hydropower	Combined index on reservoir size, siltation degree and water body quality	Watersheds with decades of hydropower activity are well integrated into natural habitats. Many of them are now protected areas and provide multiple ecosystem services. Main potential impacts relate to sediment management and eutrophication, potentially impacting water quality.
Solar PV (BESS and Energy Services)	Natural land occupation and transformation	Natural land occupation represents for greenfield assets the most significant potential impacts on habitat transformation / fragmentation also relating to the relevance of disturbance effect.
Geothermal	Air pollutants emission	Disturbances resulting from stack polluting emissions (even if not directly produced by the geothermal process) occasionally cause critical issues among communities and local authorities.
Thermal Power (Coal, CCGT, Nuclear)	Freshwater withdrawal for electricity production	Main operational impacts refer to freshwater withdrawal and consumption due to cooling needs, potentially leading to significant water abstraction, especially in water stressed areas.
Distribution	Naked overhead conductors index (1/cablings ratio)	The main potential impacts are related to the presence of overhead naked conductors, due to potential electrocution events, the wider right of way and, in general, the older age of these assets (which is linked to accidental oil spills).

3.1.3. Potential impacts management in operating assets

The prevention and mitigation of the potential impacts highlighted through the technology Hotmaps - particularly those selected as drivers in the prioritization process - are consistently addressed as part of a well-established operational solution and management processes applied to operating assets. These are detailed in the following paragraphs describing the Group's

environmental performance with respect to each significant environmental topic (emissions, water, biodiversity, resources and waste). The following example (see [BOX 1](#)) illustrates the environmental management of most relevant potential Impact, Risk and Opportunity in operating electricity distribution assets.

BOX 1 – Distribution networks: Mitigation of impacts on operating infrastructure

During the operational phase of distribution networks, Enel implements a structured set of measures aimed at minimizing environmental impacts and preserving biodiversity, with a specific focus on bird protection and responsible habitat management.

In existing networks, the company installs and maintains **bird-protection devices** - including anticollision devices on conductors - to reduce the risks of both collision and electrocution. These interventions are prioritized in areas identified as environmentally sensitive or characterized by high bird-migration activity. Enel also carries out progressive **insulation** of overhead lines and poles, upgrading existing assets where necessary to enhance protection against electrocution. In parallel, where feasible, the company adopts the replacement of overhead sections with **underground cables**, reducing visual and ecological impacts and limiting potential interference with avifauna. To further reduce operational impacts and ensure full compliance with local regulations, Enel implements **vegetation management practices** designed to minimize interference with power lines while promoting the natural regeneration of native plant species and supporting the overall stability of local ecosystems. Moreover, the company conducts systematic **monitoring** activities to evaluate the effectiveness of installed bird-protection systems and other mitigation measures. The analysis of recorded events, together with the adoption of innovative technologies, supports continuous improvement in environmental performance across global distribution networks. In addition, in some South American Countries, Enel undertakes replanting and habitat restoration activities to **compensate** for residual impacts associated with maintenance operations, thus contributing to the long-term conservation of natural habitats and ecosystem services in agreement with local requirements.

3.1.4. LEAP analysis on priority sites (hotspots)

Within TNFD framework, the LEAP analysis is proposed for the structured analysis of nature-related impacts, dependencies, risks, and opportunities across the specific local contexts in which the company operates, integrating the results into corporate decision-making processes. It is structured into four phases:

- **Locate:** Identification of corporate assets and activities with significant interactions with nature;
- **Evaluate:** Assessment of dependencies on ecosystem services and impacts on nature;
- **Assess:** Analysis of risks and opportunities for the organization arising from interactions with nature;
- **Prepare:** Definition, where appropriate, of targets and action plans to mitigate negative impacts, reduce risks, and seize opportunities for the organization.

This methodology was applied by Enel for the analysis of the **priority sites**, starting in 2024 and completing the

assessment in 2025, with the analysis of potential and residual Impact, Risk and Opportunity in the specific local contexts, introducing qualitative metrics for estimating their **magnitude** and **likelihood** based on the current **level of control** (monitoring and action plans), including also the evaluation of relationships with **local stakeholders and communities**. Their engagement takes place both in the initial stages of authorization and in the subsequent stages of asset operation, through the definition and constant updating of action plans, controls, projects and improvement objectives, both mandatory and voluntary, the outcomes of which are periodically communicated externally through public and press initiatives.

The main types of impacts, economic risks and opportunities found to be relevant to the LEAP analysis are summarized in the table below.

IMPACTS (change in environmental conditions)	RISKS (increased expenses)	OPPORTUNITIES (increased revenue)
<ul style="list-style-type: none"> • transformation/land degradation • habitat loss/fragmentation • decrease in the richness/abundance of endangered species (flora, fauna) • reduction in water resource availability • reduction of ecosystem services (e.g. protection from natural hazards) • depletion of soil quality/soil sealing 	<ul style="list-style-type: none"> • potential regulatory changes • delays in obtaining permits • greater operational obligations • reduction/shutdown of power generation capacity • restoration/repair of assets • adaptation/technological innovation • additional insurance fees • loss of competitiveness • reputational damage 	<ul style="list-style-type: none"> • Reputational and competitive advantage resulting from improved environmental and sustainability performance (e.g. more efficient use of resources, habitat protection and restoration initiatives) • Development of new businesses (offer of "nature-positive" energy products and services; new sustainable innovation partnerships; access to green funding)

























From a quantitative point of view, the asset-level prioritization criteria surveys yielded the following results:

- **54 priority assets (hotspots)** were identified, **37** of them being electricity production sites and **17** electricity distribution assets (see Figure below). They represent a very small fraction of the overall geographic footprint of Group activities (less than 5% of occupied land). No hotspots were identified for some of the technologies under consideration, including nuclear technology, whose facilities are subject to strict regulation at every stage of their lifecycle;
- **all hotspots were analyzed** during 2024 (Wave1) and 2025 (Wave2) in alignment with the LEAP methodology. In general, **low levels of risk** were identified for all the Impact, Risk and Opportunity examined (a total of approximately 600 Impact, Risk and Opportunity were analyzed), confirming that the

potential risks of environmental impact on nature or economic impact on the organization are always managed and mitigated through appropriate procedures and action plans. Only 8 Risks referred to 5 power generation sites have been temporarily set as medium or medium-high levels site-specific risks; these risks will be reassessed following the completion of all action plans already underway at the sites, without the need for further management or mitigation actions.

The environmental medium and medium-high risks resulting from the LEAP analysis of priority assets were well below the thresholds based on the **economic and financial** criteria and metrics used to assess risk for the Enel Group.

Analysis results

No. of assets	Prioritization of assets based on site-specific criteria			Hotspots	Stage 1	Stage 2	Risks	Action plan
(baseline) ⁽¹⁾					2024	2025	L M H	
 282	Technological impact indicators <ul style="list-style-type: none"> WIND: Collisions with birds 	Biodiversity indicators (all technologies) <ul style="list-style-type: none"> Land occupation (BIO1) Transformation of natural habitats (BIO3) Significance for biodiversity (protected areas, protected areas, protected species IUCN I-IV or critical habitats) (BIO4) 	Stakeholder indicators <ul style="list-style-type: none"> Significant or severe environmental events: Accidents Adverse media events Administrative proceedings Environmental Analysis EMS ISO 14001 Corporate Social Responsibility (CSR) and Biodiversity projects 	 8	 2	 6	77	Not necessary
 634	<ul style="list-style-type: none"> HYDRO: Siting and quality of water bodies 			 16	 2	 14	248 4 3	Adopted/ In progress
 40	<ul style="list-style-type: none"> GEOT: Atmospheric emissions (Hg/H₂S) 			 4	 2	 2	57	Not necessary
 178	<ul style="list-style-type: none"> SOLAR: Land occupation 			 5	 2	 3	48 1	Adopted/ In progress
 58	<ul style="list-style-type: none"> THERMAL: Freshwater withdrawal in water-stressed areas 			 4	 2	 2	29	Not necessary
 ⁽²⁾ 12,817	<ul style="list-style-type: none"> GRID: Aerial conductors ratio (L/cabling ratio) 			 17	 8	 9	120	Not necessary
				54	Total 18	36		

L: low M: medium H: high

(1) Core countries.

(2) Municipality Technical District.

3.1.5. Impact, Risk and Opportunity assessment for new plant and infrastructures design and implementation

The identification and management of the Impact, Risk and Opportunity related to the siting, authorization and construction of new assets are specific objectives of the **ESIA Policy**, for the analysis of potential Environmental and Social Impacts, and of the **Biodiversity Management Policy**, which provide the guidelines to be followed for the management of the authorization process and the definition of the Group's objectives, with reference to international standards and directives. In particular, the following recommendations are adopted to minimize impacts and risks:

New capacity installation

In accordance with the above policies and Enel's commitments to protecting biodiversity, responsible site selection and environmental impact assessment of new investment projects in electricity additional renewable capacity (hydro, wind, solar, geothermal, BESS) include (see also [BOX 2](#) for further details):

- Identifying project-specific priority biodiversity features (natural habitats and priority species) and assessing the associated potential impacts and risks, preferring modified and brownfield sites instead of natural greenfield locations;

- Applying the Mitigation Hierarchy to avoid, minimize, restore and compensate for biodiversity impacts related to the project;
- Identifying and engaging with relevant environmental stakeholders and indigenous communities;
- Developing a Biodiversity Action Plan (BAP) when required, and where appropriate, identifying additional conservation actions to compensate for residual biodiversity impacts;
- Establishing a monitoring and evaluation program capable of tracking progress toward achieving the Enel target of No Net Loss (NNL) of biodiversity.

BOX 2 – Sustainable Infrastructure Model

The Sustainable Infrastructure model adopted by Enel in generation activities, in line with its business model, consists of **integrating environmental, social and economic sustainability principles and criteria into all stages of the value chain**: Supply Chain, Business Development (identification and development of investment opportunities), Engineering & Construction (design and construction of plants), Operation & Maintenance (operation and maintenance throughout the plant's life), and Repurposing (end-of-life management of the plant). This creates new opportunities for the company, communities and the environment. Best sustainability practices have been disseminated throughout Enel with the aim of making our way of operating increasingly open to communities, focused on enhancing local areas, respectful of environmental and cultural heritage, leveraging innovation and the circular economy. The approach is based on technical assessments and analyses of environmental and social contexts, with the **aim of reducing or mitigating impacts and generating value for local areas**. Through the active involvement of local communities and stakeholders, sustainable practices are identified and implemented, supported by **innovative engineering solutions** aimed at protecting the environment and improving the overall performance of plants.

Also, for distribution activities, the **“sustainable infrastructure” model** has been adopted in the development of new primary substations, aiming to reduce the environmental impact of network assets. This approach relies on **circular economy's solutions and the reduction of carbon footprint** during the construction phase, with particular attention to the landscape integration of new installations.

New electricity distribution networks

Environmental aspects are integrated throughout the planning and construction phases of new electricity distribution assets. During planning, environmental assessments are performed as needed, where appropriate with the support of qualified environmental experts, to **identify potential interactions** with natural habitats, protected areas and species, supporting decisions on site selection, routing and technical design. Project development follows a **structured approach based on the mitigation hierarchy**, giving priority to impact avoidance through route and layout alternatives and, where feasible, by preferentially locating new infrastructure within already modified or anthropized areas, while minimizing the use of natural and semi-natural habitats and avoiding sensitive areas with high biodiversity value or legal protection (e.g. bird protection

areas). Where impacts cannot be fully avoided, planning and construction activities focus on minimization through route optimization, reduction of land take and habitat fragmentation, mast heights and gaps between lines verification and the adoption of solutions such as underground cables, where environmentally and technically appropriate. For overhead lines, design and construction choices aim to limit landscape and ecological impacts, particularly with respect to avifauna. Residual impacts that cannot be addressed through planning, design and construction measures are managed through **locally defined mitigation and, where required, compensatory actions**, consistent with the objective of minimizing biodiversity loss in new infrastructure developments.

3.1.6. Impact, Risk and Opportunity assessment for decommissioning power generation plants

For the management of the end-of-life power plants, Enel secures and verifies the environmental quality of the soil, subsoil, and groundwater in the plant areas in accordance with the authorization requirements and legal provisions in force in the various countries. In the event of potential contamination, the environmental matrices in the potentially affected areas are characterized and, if necessary, safety measures and subsequent **remediation are implemented to restore the quality of the area** to a

level suitable for its intended use as quickly as possible, in accordance with action plans agreed with the competent authorities and carried out by specialized and qualified companies. The procedures adopted ensure the **identification and optimal management of impacts and risks relevant to the organization** (for further details, please refer also to the section on pollution in relation to soil, subsoil and groundwater pollutants).

3.1.7. Impact, Risk and Opportunity assessment for the supply chain



The Impact, Risk and Opportunity analysis of the supply chain was conducted according to the approach taken for estimating GHG emissions in Scope 3. Starting with the **annual procurement plans**, commodity categories were identified and purchase volumes were assessed. By analyzing data from **Environmental Product Declaration (EPD) certifications** provided by accredited suppliers, proxy environmental indicators were selected among the Life Cycle Assessment (LCA) parameters contained therein for each **impact category** (pollutant emissions, water use, biodiversity, waste generation) and average values per unit of product were calculated. Based on the quantities procured, cumulative values were determined and then normalized into an **impact index** for each product category. In addition, through public databases (Yale University's Environmental Performance Index⁵), an **ESG indicator of countries of origin** was identified. By combining the impact index (from 0 to 5) with the ESG indicator (from 0 to 5), an **indicator of potential environmental risk** was estimated (in a scale from 0 to 25), making it possible to define a priority ranking for the analysis.

The environmental risk indicator was updated in 2025 for each product category, making it possible to identify, based on the relevance of the quantities procured, the specific environmental footprints of the products and the

performance of the countries of origin, the priority product categories on which to initiate direct dialogue with the main suppliers with a view to sharing joint improvement actions. The priority categories included **transformers, electrical cables, and photovoltaic solar panels**. The sustainability of the solar photovoltaic supply chain is a key focus for Enel pursued through different actions with 3Sun Gigafactory, representing a significant example of its commitment to innovation and sustainability (see **BOX 3**).

Also, for **commodities** (coal and gas), a preliminary Impact, Risk and Opportunity analysis was carried out, based on the potential impacts identified by Encore for the oil and gas supply chain in relation to the main environmental issues (polluting emissions, water resources, biodiversity, waste production) and public data.

The above preliminary analysis of Impact, Risk and Opportunity associated with the supply of products and equipment, focused on estimating the environmental footprint linked to their raw material extraction and manufacturing processes, complements the Group assessment of the risks associated with the resilience of supply logistics following the increase in frequency and magnitude of extreme weather events due to climate change.

BOX 3 – ITALY 3SUN: Advanced technology and circularity for a European solar supply chain

Located in Catania, 3Sun stands as **Europe's largest solar-cell and module gigafactory**, designed to achieve an annual production capacity of 3 GW – equivalent to roughly 15,000 photovoltaic modules per day. From 2018 3Sun manufactures the first bifacial heterojunction (HJT) panel – engineered to capture sunlight on both its front and rear surfaces. Just one year later, the facility became the first in the EU to deploy a fully automated production line for bifacial HJT modules. To transform 3Sun into a 3 GW-scale gigafactory, Enel launched the TANGO initiative (iTaliAN pv GigafactOry). The initiative increased the **plant's annual production capacity fifteenfold – from 200 MW to 3 GW** – making it the largest manufacturer of high-performance bifacial photovoltaic cells and modules in the European Union, capable of combining innovation, industrial competitiveness and sustainability. The modules produced in Catania leverage CORE-H@ technology, entirely developed by 3Sun, which combines crystalline and amorphous silicon to maximize energy extraction, delivering both high efficiency and durability.

The entire production process has been redesigned to produce more energy per square meter, reduce electricity consumption and the use of materials, increase automation and quality control, and minimize waste and inefficiencies, thus ensuring a truly competitive and sustainable solar supply chain. The panels are currently under development and for

5. <https://epi.yale.edu/>

the coming years 3Sun will introduce innovative solutions that include for example silicon wafers 15% thinner. The construction of the Gigafactory is based on a **fully circular approach**. The buildings were constructed using low-environmental-impact concrete with a high recycled content. During excavation, the amount of soil recovered and reused on site was maximised, avoiding waste and reducing the use of virgin materials. BIM (Building Information Modelling) design made it possible to accurately track the circularity of materials and to assess, already at the design stage, whether the elements could be reused, recycled or reintroduced into other production cycles at the end of their useful life. Enel has also introduced requirements for **supplies** that specify a certain percentage of recycled materials, such as steel. This vision is complemented by an ambitious goal: to create a local ecosystem of **industrial symbiosis**, in which 3SUN's waste can become a resource for other companies in the area, contributing to the development of a true circular economy.

Energy is also managed according to criteria of efficiency and sustainability. Tenders for the purchase of machinery reward suppliers who offer low-consumption solutions, while indoor and outdoor lighting is based entirely on LED technology. A centralized consumption monitoring system allows any anomalies to be identified and corrected promptly, further improving overall efficiency. The building has been designed with high insulation to reduce energy requirements, and the entire production process is supported by advanced technologies such as automatic wafer transport, the "Buffer N2" system to prevent energy degradation, and automated handling between the different levels of the plant.

Through 3SUN, Enel has not simply expanded the country's industrial capacity but has chosen to invest in **the solar supply chain as a strategic lever for a sustainable energy transition**, introducing a production model that integrates innovation, efficiency and circularity. 3SUN is also developing an internal research center to scale at Industrial level the new TANDEM technology, a solution that significantly improve conversion efficiency and reduce LCOE (Levelized Cost of Energy). The Gigafactory represents not only a technological leap forward, but also a concrete commitment to building a cleaner, more competitive energy future based on low-impact materials and processes throughout the entire life cycle.



3.2. Nature integration in the Climate Transition Plan

Integrating climate change and nature into a single, coherent pathway is considered by Enel to be essential to ensuring a sustainable and resilient transition that meets stakeholder expectations. This approach is based on the **recognition that climate change and biodiversity loss are deeply interconnected challenges**.

Natural ecosystems play a fundamental role in regulating the climate and providing essential resources for Enel's operations, while anthropogenic pressures and climate change can degrade ecosystems and biodiversity, thereby increasing physical, operational, and reputational risks for the Company's production assets and infrastructure.

By addressing climate change mitigation and adaptation together with nature protection as integrated pillars of its industrial strategy and long-term sustainability framework, Enel can optimize capital allocation, reduce its overall risk exposure, strengthen operational synergies, and develop new opportunities for responsible and sustainable innovation.

From a climate perspective, Enel implements a strategy centered on decarbonization and resilience. This strategy includes a **certified GHG net-zero roadmap aligned with SBTi standards (1.5°C pathway), committing the Company to climate neutrality by 2040**, as well as a robust adaptation and resilience plan designed to address the impacts of extreme climate events across its production and distribution assets.

In parallel, from a nature perspective, Enel has conducted a systematic assessment of its nature-related impacts, dependencies, risks, and opportunities, and has adopted dedicated policies, targets, and action plans covering all relevant environmental topics. These commitments include, among others, a **target to achieve No Net Loss ("NNL") of biodiversity for all new capacity assets by 2030**, in alignment with the Kunming-Montreal Global Biodiversity Framework.

The renewable energy development and repowering projects, included in the Enel's 2026-2028 Strategic Plan, are assessed not only for their contribution to avoided greenhouse gas emissions, but also for their interactions with natural ecosystems. Priority is given to sites that do not require the transformation of natural habitats; where this cannot be avoided, appropriate mitigation and compensation measures are implemented to ensure the achievement of NNL objectives.

The nature-related work carried out through the TNFD-LEAP analysis, described above, has enabled Enel to

identify the operating assets most exposed to environmental pressures, ensuring the adoption of sustainable management solutions and, where necessary, of targeted action plans. In addition, the results of site-specific impact, risk, and opportunity assessments guide the yearly planning of environmental monitoring and control activities, both at the local level, through updates to the relevant Environmental Management Systems, and at the central level, through annual HSEQ inspection plans (ECoS).

Water management represents another key area of integration between climate and nature strategies. Through advanced monitoring systems, water-stress assessments, and efficiency measures, Enel has set a 2030 target to reduce its specific freshwater withdrawals for electricity generation. This approach contributes to reducing local pressure on water resources and ensures that water dependency considerations are fully embedded in investment planning processes and physical climate risk assessments. Furthermore, Enel has adopted **procedures to manage climate risk and environmental impacts**, both during the construction phase (see [BOX 4](#)) and in the operation of existing facilities, particularly in the event of extreme weather events.

Further integration is achieved through **improvement targets for waste recovery** rates, extended also to contracted activities, and through the progressive adoption of increasingly sustainable and circular practices across the supply chain. These initiatives help reduce impacts along the value chain by limiting waste generation and raw material consumption, while at the same time enabling the development of new recycling and re-manufacturing value chains. In addition, **Nature-based Solutions ("NbS") are promoted** across commercial and customer service activities, contributing both to biodiversity enhancement and climate resilience.

The integration of the Climate-Nature Plan is further reinforced by a single, unified IT repository system, EDEN, which supports environmental data collection, KPI calculation, and performance monitoring. This system underpins industrial planning, decision-making processes, and transparent reporting to investors and stakeholders. This integrated governance and control framework enables the verification of the effectiveness of implemented measures over time and supports a structured approach to continuous improvement.

BOX 4 – Guidelines for hydraulic risk management in the design phase

The assessment of hydraulic risk and the integration of design criteria resilient to climate change for renewable plants and related infrastructures are of great importance to ensure safety and sustainability.

The guidelines define **methodologies for preliminary and detailed analysis** of flood risk, based on the principle of hydraulic invariance, to avoid increasing risk in surrounding areas. Differentiated criteria are provided for operational conditions and extreme events, including 2D/3D modeling, management of event sequences, and mitigation plans (retention basins, drainage systems, temporary works). Attention is given to the construction phase, with mandatory approval of drainage systems before the start of works and the design of temporary measures to ensure hydraulic safety. Moreover, the **Climate Change Resilient Design framework introduces innovative approaches** to integrate climate projections into design, considering both trends in extreme events, flooding and erosion, and long-term variations in renewable energy resources (availability of water for hydropower reservoirs, average wind speed, solar irradiation). The goal is to **ensure resilient plants**, thus **reducing impacts on land and communities** and **ensuring compliance with regulations and international best practices**. New global criteria and guidelines have been developed for hydraulic risk management, with dynamic analysis of climate data and advanced modeling tools that enable rapid screening of assets at risk.

3.3. Next steps

As part of the periodic review and continuous improvement of the analysis and reporting of environmental performance under ESRS E2–E5, Enel will continue to strengthen its assessment of **upstream** and **downstream** value chain phases.

Although the double materiality assessment, applied throughout the whole value chain including upstream and downstream, hasn't identified material IROs specifically attributable to these phases, certain aspects, such as waste arising from post-consume of energy efficiency products supplied to customers, have already been integrated into direct operational activities and are managed within existing environmental assessments and management systems.

Indeed, Enel has initiated a **structured supply chain analysis** based on a progressive screening approach, consistent with the current ESRS "phase-in" provisions of proportionality and gradual implementation, which allow for the progressive integration of value chain information based on reasonably available data and supported

estimates. The above prescreening enabled the development of prioritization indicators based on environmental intensity and economic relevance, providing a foundation for next-step supply chain analysis in line with potential regulatory developments.

Pending the adoption of new requirements from the ongoing revision of the European sustainability reporting framework (Omnibus Package, COM (2025)81), Enel will maintain close attention to upstream and downstream environmental dynamics. Focus will be placed on critical raw materials and related ecosystem impacts, supply chain resilience to environmental constraints, material circularity in the procurement, delivery and end-of-life management of electricity production and distribution equipment and customer products. In this way, Enel will ensure that emerging environmental risks, regulatory changes, and stakeholder expectations are promptly integrated into governance and environmental management processes, while maintaining methodological consistency and transparency.



4. Pollution

4.1. Dashboard Targets

The results of the 2025 double materiality process for aspects related to "Pollution" are reported below, with

details of the material IROs used in the preparation of this section.

Subtopic	Description of IRO	Type	Target/Action plan
AIR POLLUTION	Improved environmental conditions in the areas surrounding the company's industrial assets, resulting from the reduction of air pollutant emissions (other than GHG) pursued through continuous monitoring and improvement programs, as well as the progressive transition to renewable technologies.	Positive impact	Targets <ul style="list-style-type: none"> • Specific SO₂ emissions – g/kWh and reduction (% vs baseline 2017) • Specific NO_x emissions – g/kWh and reduction (% vs baseline 2017) • Specific dust emissions – g/kWh and reduction (% vs baseline 2017) • Mercury emissions (coal-fired plants) – kg and reduction (% vs baseline 2017)

4.2. Policies related to pollution

The prevention of air, water and soil pollution represents strategic objectives of Enel's Environmental Policy, implemented through a constant commitment to prevent and control the pollutant load in environmental matrices, the application of the most advanced available technologies and best practices, including minimizing

and, where possible, replacing the utilization of substances of concern. The Group has also defined suitable and adequate measures for the prevention and management of emergencies and any remedial actions where necessary.

4.3. Action plan for the management of material IROs

4.3.1. Air Pollutants

The emissions relevant for Enel are related to **air pollutants (SO₂, NO_x, Particular Matter and Mercury)**, for which the Group has adopted an action plan for their reduction in all its power generation sites, in line with its

energy transition strategy and decarbonization plan. The decarbonization plan, with the progressive transition from thermal to renewable production plants, allows itself for the reduction of the Group's polluting emissions.

ACTION	DESCRIPTION	SCOPE	TARGET	TIMING	MONITORING
Reduced emissions of SO₂, NO_x, dust and mercury⁽¹⁾	The decarbonization and energy transition plan enables drastic reductions in mass and specific emissions of air pollutants.	Thermal power plants	Yes	Decarbonization plan (2030)	The decarbonization and energy transition plan enables drastic reductions in mass and specific emissions of air pollutants.
Application of best practices (BAT-AEL, Best Available Technique-Associated Emission Level) for the emission of air pollutants	Adoption of air pollutants abatement and control technologies in line with the permitting and operating requirements valid in different countries	Thermal power plants	No	According to the specific permit requirements for the construction and operation of plants	<ul style="list-style-type: none"> • Internal procedures and environmental management systems ISO 14001. • Group KPI monitoring.

(1) In Italy, Chile and Spain

Enel ensures the environmentally safe operation in all its facilities through structured environmental management

systems and continuous emission control measures. Air emissions are managed in compliance with applicable

national and international regulations and permit conditions. In addition, Enel is committed in all its operating assets to the continuous application of the most advanced available technologies and best practices (BAT) in all its operating assets to minimize all possible forms of pollution of environmental matrices (air, surface water, groundwater and soil), also through the definition, where necessary, of specific action plan and quantitative targets, both mandatory and voluntary, from the design and construction phases to operation and end-of-life redevelopment.

Advanced emission abatement technologies are installed and maintained, including systems for the reduction of dust (electrostatic and fabric filters), nitrogen oxides (catalytic and non-catalytic DeNO_x) and sulphur oxides (wet DeSO_x) (see also [BOX 5](#)). Continuous Emission Monitoring Systems (CEMS) are implemented to ensure monitoring, reporting and verification of air emission levels. Operational procedures are designed to optimize combustion efficiency and minimize pollutant formation. Preventive maintenance programs and periodic performance testing are conducted to ensure the proper functioning of emission control equipment and to promptly address any deviations. LDAR (Leak Detection and Repair) programs are implemented to manage fugitive methane emissions, based on periodic inspections, advanced detection technologies, and timely repair actions, supported by digital tools.

Through these measures, the Company aims to minimize atmospheric impacts, protect air quality and public health, and ensure that thermoelectric operations are managed in an environmentally responsible and compliant manner. Enel's commitment also extends to the upstream and downstream activities of its value chain, through the definition of qualification criteria for contractors and in the contractual conditions assigned in order to ensure that the principles and good practices adopted by Enel apply to the work and services carried out by external companies operating at operational assets.

As regards additional air pollutants indicated by the **Pollutant Release and Transfer Registers (E-PRTR)** for the energy sector, the assessment of the annual emissions of individual plants for 2025 and the reporting of any quantities exceeding the threshold values shall be carried out by 30 April 2026, as required by Regulation (EC) No 166/2006. These emissions are considered not relevant on the basis of the values measured and reported for 2024, where only a few exceedances of organic (benzene) and inorganic (metals, chlorine) micropollutants were recorded at some production assets fueled by diesel, a fuel used in non-significant quantities at Group level. There were also a few isolated instances of exceedances due to SF₆ and HCFC leaks attributable to accidental events, which were immediately addressed through corrective maintenance.

BOX 5 – ITALY La Casella power plant: Reduction of nitrogen oxides in combined cycles

A technological revamping project has been completed at the La Casella combined cycle power plant, substantially improving the plant's environmental performance. The installation of advanced catalytic denitrification (DeNO_x) systems, compliant with Best Available Techniques (BAT) criteria, has enabled an expected reduction in NO_x emissions of over 60%, contributing to improved local air quality.

4.4. Metrics and targets

4.4.1. Targets related to air pollution

KPI	POLICIES	SCOPE	BASELINE 2017	ACTUAL 2025	TARGET		STATUS
					2028	2030	
Reduction of specific emissions of SO ₂	Environmental Policy	Thermal power generation plants in all countries and regions where Enel is present	0.36 [g/kWh]	0.05 [g/kWh] (-85%)	0.07 [g/kWh] (-81%)	0.05 [g/kWh] (-85%)	In line
Reduction of specific NO _x emissions	Environmental Policy		0.55 [g/kWh]	0.24 [g/kWh] (-56%)	0.23 [g/kWh] (-58%)	0.16 [g/kWh] (-70%)	In line
Reduction of specific dust emissions	Environmental Policy		0.0013 [g/kWh]	0.004 [g/kWh] (-69%)	0.005 [g/kWh] (-60%)	0.005 [g/kWh] (-60%)	In line
Reduction of mercury emissions	Environmental Policy	Coal-fired plants in Italy, Chile and Spain	378 [kg]	4 [kg] (-99%)	-	0 [kg] (-100%)	In line

In line with the decarbonization plan included in the Group's Strategic Plan and its commitment to minimizing atmospheric pollution, Enel has set voluntary targets for reducing the specific emissions of the main pollutants emitted by its thermoelectric generation plants (SO₂, NO_x, dust and mercury). These targets call for a reduction in specific emissions by 2030 compared to the base year (2017) of 85% for sulphur oxides (SO₂), 70% for nitrogen oxides (NO_x) and 60% for dust. In addition to these targets, there is also a target to reduce mercury emissions from coal-fired power plants in Italy, Chile and Spain by 100% by 2030, with an expected value of 3 kg in 2028, in line with the expected closure of the plants. The 2025 results,

with specific emission values of 0.05 g/kWh for SO₂, 0.24 g/kWh for NO_x, 0.004 g/kWh for dust and 4 kg for Hg, in line with the targets set for 2030 and 2028.

The precise implementation of these objectives follows the technological specificities of the electricity industry and is in line with main peers, applying the indications in international best practices (BAT-AEL) and EU frameworks (Directive 2010/75/EU on Industrial Emissions, WHO Guidelines on Air Quality, ISO 14001:2015 Standard – Environmental Management Systems). At the local plant level, during plant permit and technology renewal, reduction targets are also shared with the governments and stakeholders affected.

4.4.2. Air pollution metrics

The absolute emissions of the main atmospheric pollutants for the year 2025 were all lower than those recorded in 2024. In particular, SO₂ emissions amounted to 9,552 tons, significantly lower (-49.1%) than the 2024 figure (18,777 tons), as did dust emissions, which amounted to 693 tons (-41.8% compared to 1,191 tons in 2024), as a result of the 37% reduction in the Group's coal-fired production in 2025, particularly in Colombia. Similarly, mercury emissions (4 kg in 2025) are also down compared to the previous year (8 kg). Lastly, as regards

NO_x emissions, the quantity emitted in 2025 was 44,333 tons, a slight decrease (-7.4% compared to 47,871 tons in 2024), linked not only to coal-fired power generation but also to gas-fired power generation.

The measurement of macro-pollutants (SO₂, NO_x and dust) is carried out in compliance with the regulatory framework of each country and, in most plants, involves a "continuous" measurement system of concentrations capable of verifying compliance with the limits in real time, the reliability of which is guaranteed by accredited

certification bodies and joint verifications with the bodies in charge of the inspections. The quantities emitted are subsequently calculated from the flow rates of the relevant gaseous effluents. The collected data are recorded semi-annually in the Group data collection tool, validated and aggregated at the different levels of the organization. The processes of data collection and processing and evaluation of deviations from expected

performances are subject to specific internal control procedures. By contrast, the concentration of micropollutants (trace metals and acidic gases) is measured periodically (quarterly or semi-annually), subject to reporting according to licensing and operating regulations. Total annual quantities are estimated based on the volumes of flue gas emitted and subject to E-PRTR registration, if relevant.

	UM	2025	2024
Air emissions by pollutant			
SO ₂ emissions	ton	9,552	18,777
NO _x emissions	ton	44,333	47,871
Dust emissions	ton	693	1,191
H ₂ S emissions	ton	4,866	5,272
Hg emissions (coal-fired thermoelectric) ⁽¹⁾	ton	0.004	0.008
Emissions of Ozone Depleting Substances	kgCFC-11 _{eq}	3.15	1.23
Specific SO ₂ emissions	g/kWh	0.05	0.10
Specific NO _x emissions	g/kWh	0.24	0.25
Specific Dust emissions	g/kWh	0.004	0.006

(1) Mercury emissions in 2025 were 4 kg, due to thermal electricity generation in Italy and Spain. This is in addition to the mercury emissions from the geothermal sector, amounting to 502 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).

4.5. Management of additional not-material pollution issues

4.5.1. Water discharge pollutants

As regards the **effluents pollution management** from all the Group's operating assets, in thermal power plants not equipped with "zero discharge"⁶ systems, these always take place downstream of a treatment process for the removal of any pollutants present in wastewaters. This is done up to concentration levels such as not to cause negative impacts on the receiving water bodies and not significant⁷ with respect to disclosure obligations, as verified by sampling and analysis plans and in compliance Wastewater is managed through onsite and/or municipal treatment systems applying physical, chemical and biological processes (e.g. screening, sedimentation, neutralization, biological treatment and tertiary polishing where required). Measures to prevent the release of untreated or inadequately treated effluents include segregation of clean and contaminated streams, closed

with the limits and requirements set forth by the relevant national regulations and operating permits. **Water pollutants** potentially present in the discharges, among those listed as relevant for the energy sector by the E-PRTR Registry, consist mainly of metals (Fe, Al, Si, Ca, Mg) present in solution or, to a lesser extent, as suspended solids. Nitrates and phosphates, associated with combustion processes and not with utilization of chemicals, are also detected in negligible concentration. loop reuse systems, online monitoring and alarms, emergency containment, and discharge only after compliance with permit limits. Moreover, to reduce the impact of cooling water's discharges, water temperature is controlled to ensure that the receiving water body temperature, at the edge of the mixing zone, does not exceed the limit established by the local regulations.

6. Zero discharge involves the adoption of Zero Liquid Discharge (ZLD) solutions through Softening, Evaporation & Crystallization (SEC) plants.

7. In a very small number of cases, the quantities of certain pollutants in water included in the E-PRTR list were found to exceed the threshold for 2024 and were therefore reported by the relevant generation plants. The substances identified in the exceedances do not correspond to process compounds, but rather to substances present in wastewater as a result of accidental contamination or external sources. The exceedances are also generally attributable to overestimates of the quantities reported, calculated by assuming a concentration equal to the analytical detection limits of the control laboratory multiplied by the relevant water flow rates (cooling water). In any case, all values are below the legal limits, both in terms of concentrations and mass emissions. Given the occasional and site-specific variability of the exceedances subject to E-PRTR reporting (not attributable to specific process configurations), these emissions are considered immaterial for the Group.

4.5.2. Soil, subsoil and groundwater pollutants

Enel pays the utmost attention to the protection, monitoring and remediation of soil, subsoil and groundwater in the areas where power generation and service facilities are present in all countries.

The protection of environmental matrices guides every phase of each asset's life, from design choices to construction, operation and end-of-life management, in line with a preventive and risk-based approach aimed at avoiding contamination and mitigating potential environmental impacts. Both active and passive protection and safety measures are used in the **design 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, also through containment systems, impermeable surfaces, drainage management and leak detection solutions.

Operations are subject to compliance checks, inspections and monitoring plans according to ISO 14001-certified Environmental Management Systems (EMS), ensuring systematic control of environmental aspects, regulatory compliance and continuous improvement. In the event of accidental spills or environmental incidents, the immediate application of Stop Work and Emergency Management Policies, together with spill response and mitigation measures, minimize impacts, ensure prompt containment and support full compliance with environmental regulations and internal standards.

In the **decommissioning and repurposing** phase of the plants, Enel adopts a structured site closure and land rehabilitation approach, committing to minimizing negative environmental and landscape impacts and, where possible, maximize environmental and socio-economic benefits of the sites. Where contamination or legacy impacts are identified, Enel verifies the environmental quality of the areas and, if necessary, implements appropriate characterization, securing and remediation measures in cooperation with competent authorities to ensure environmental restoration and site rehabilitation in accordance with the intended use of the area.

To ensure effective implementation of closure and rehabilitation commitments, clear managerial

responsibilities are assigned within the relevant organizational functions, with defined roles and accountability for planning, execution and monitoring of closure and rehabilitation activities. In addition, the Company adopts a financial planning approach, including the allocation and periodic review of adequate financial provisions to cover decommissioning, site closure and rehabilitation obligations over the asset lifetime.

To support the effective application of sustainability principles to soil and groundwater management, Enel employs the best available investigation technologies (see [BOX 6](#)) and has developed specific Sustainable Remediation Guidelines dedicated to generation projects. These Guidelines incorporate a decision support tool designed to assist in comparing and selecting the most sustainable remediation technologies. The tool enables the integration of site-specific technical parameters (such as contaminant concentrations and soil granulometry) together with management priorities, assessed through weighted environmental criteria, efficiency, and economical sustainability.

The main drivers of the sustainable remediation model are:

- the protection of human health and the environment, through risk-based and site-specific remediation approaches;
- the promotion of "in situ" interventions, where technically feasible, to reduce soil excavation, avoid waste production and transportation needs;
- the recovery and reuse of remediated soil and groundwater, if possible and according to applicable legislation in force, reducing impacts on ecosystems and supporting circular economy principles;
- the reduction of air emissions through efficient energy use, preferably from renewable sources;
- the continuous monitoring, documentation and reporting of remediation, closure and rehabilitation activities to ensure alignment with regulatory requirements, corporate environmental policies and sustainability reporting obligations.

BOX 6 – ITALY Livorno decommissioning site: Implementing Innovative, Sustainable, In-Situ Groundwater Remediation Solutions

The Enel power plant in Livorno, decommissioned in 2015, has historically been affected by groundwater contamination caused by chlorinated solvents. Over the years, the site has undergone extensive environmental investigations, including offsite surveys carried out using a **highly innovative technology known as MIP (Membrane Interface Probe)**– a high-resolution system capable of detecting the presence of volatile organic compounds in the subsurface in real time. This technology, combined with the more traditional installation of a groundwater monitoring network through piezometers, made it possible to confirm that the contamination originates from a source external to the Enel site. Subsequently, the development of a **3DI hydrogeochemical model** supported the design of an advanced, effective, and sustainable **in-situ groundwater remediation strategy known as Groundwater Circulation Wells (GCWs)**. This technology consists of a system of wells installed upgradient of the site, which prevent the inflow of contaminated groundwater and returns clean water to the aquifer, creating so-called “recirculation cells”. A key advantage of this approach is the preservation of water resources, avoiding the need for disposal of contaminated groundwater. The results from the first two years of operation are highly satisfactory, demonstrating greater effectiveness and sustainability in contaminant removal compared to the traditional Pump & Treat approach.



5. Water and Marine Resources

5.1. Dashboard Targets

The results of the 2025 double materiality process for aspects related to “Water and marine resources” are

reported below, with details of the material IROs used in the preparation of this section.

Subtopic	Sub-subtopic	Description of IRO	Type	Target/Action plan
WATER	Water withdrawals	Depletion of freshwater resources due to unsustainable use in direct activities (e.g., excessive withdrawals compared to the resource's regeneration capacity or ecosystem and socio-economic needs, particularly in water-stressed areas)	Negative impact	Target Specific freshwater withdrawal for electricity production – l/kWh and reduction (% vs baseline 2017)

5.2. Policies related to water management

The responsible use and conservation of water resources are fundamental guarantees for the protection of natural habitats and for the wellbeing of the communities that, together with Enel, benefit from the ecosystem services provided by these resources.

To complement the Group Environmental Policy, Enel has adopted an internal **Water Management Policy**, which

defines guidelines for the utilization and supply of water and marine resources, considering water risk management at all life cycle phases of the assets, with particular attention to water-stressed areas and engaging communities, in line with international directives (Water Framework Directive).

WATER MANAGEMENT POLICY	
MAIN CONTENTS	<ul style="list-style-type: none"> • Defines criteria for wastewater treatment and reuse, with regular monitoring and systems to remove contamination while avoiding impacts on other environmental matrices. • Identifies risks, mitigation measures, and emergency management, with periodic checks on water quality. • Promotes the adoption of sustainable technology solutions, products and services to minimize water impacts and conserve marine resources throughout the entire value chain. • Reaffirms commitment to operating assets to reduce water consumption in water-prone areas by establishing tools to assess water stress (Aqueduct WRI) and commitment to apply sustainable practices and specific targets. • Recommends the adoption of Group targets and action plans aimed at limiting freshwater withdrawals and protecting natural habitats and local communities, giving priority attention to areas of high water-stress and marine ecosystems.
SCOPE	<ul style="list-style-type: none"> • Assets under Enel's operational control and entire value chain.
IROS COVERED AND REFERENCES	<ul style="list-style-type: none"> • Water withdrawals.
STAKEHOLDERS INVOLVED IN THE DEFINITION	<ul style="list-style-type: none"> • Promotes interaction with local communities, governments, and key stakeholders during resource use authorization and during withdrawal.
DIFFUSION	<ul style="list-style-type: none"> • Internal policy.

5.3. Action plan for the management of material IROs

5.3.1. Water withdrawals

The negative material impact revealed by the Impact, Risk and Opportunity analysis is related to water withdrawals for thermal and nuclear power generation, mainly for cooling thermal cycles and for the operation of air emission abatement systems. To reduce its water withdrawals and consumption, with a priority focus on freshwater and water stressed areas, Enel is committed in all its operating assets for which the resource becomes material to adopt specific action plans directed at minimizing its water consumption, reducing withdrawals and maximizing recoveries. At the Group level, this commitment is reinforced by setting a target related to the **conservation of freshwater**, the most valuable and vulnerable water resource for natural well-being and community needs.

The overall reduction of consumption is also being pursued at the Group level through the gradual reduction of generation from fossil fuels and the evolution of the energy mix towards renewable sources, in line with the Decarbonization Plan and the “Net Zero” commitment. Moreover, Enel adopts technical and management solutions aimed at reducing, where possible, its overall water footprint through withdrawals from “non-scarce” sources, including wastewater treated internally or supplied by third parties and reused as industrial water, or seawater used in open-cycle cooling processes or subjected to desalination for the production of demineralized water. Only when necessary, water is supplied from “scarce” sources, such as surface freshwater, groundwater, or potable water.

ACTION	DESCRIPTION	SCOPE	TARGET	TIMING	MONITORING
Reduction of specific freshwater withdrawal	The decarbonization and energy transition plan enables a drastic reduction in the total and specific amounts of water withdrawn and consumed in generation processes.	Electricity generation	Yes	2030	Implementation of the decarbonization and energy transition plan.
Maximize water withdrawals from non-scarce sources and wastewater recoveries in order to reduce freshwater withdrawals and consumption	Definition of technical and management solutions aimed at: <ul style="list-style-type: none"> covering total water needs through withdrawals from non-scarce sources; recovering wastewater and runoff treated internally or supplied by third parties and reused as industrial water. 	Thermal power plants, even in water-stressed areas	No	Plans for plant improvement	<ul style="list-style-type: none"> Internal procedures and environmental management systems ISO14001. Group KPI monitoring
Water management plans for hydroelectric reservoirs	Establishment of shared programs and action plans with watershed authorities and local communities in order to: <ul style="list-style-type: none"> protect the good ecological and chemical status of water; ensure minimum viable runoff and protection of local habitats. 	Hydroelectric plants	No	The frequency of updating water management plans for hydroelectric reservoirs depends on national legislation and specific local concessions and regulations	Application requirements reservoir water management plans.

The improvements aim to maximize the recycling of process wastewater and the efficiency of cooling systems, for example by upgrading the blowdown control and recovery systems in the evaporative cooling towers

(see [BOX 7](#)); the recovery of rainwater collected from potentially contaminated industrial areas is enhanced through storage and reuse in energy generation processes, in accordance with site-specific plans. In

addition, in thermal power plants, the utilization of crystallizers⁸ allows for the complete reuse of wastewater, eliminating effluents discharge (ZLD – Zero Liquid Discharge plants). Reduction in water withdrawal and improvement in water efficiency are also the focus of the WaVE project, launched in 2020 and continuing through 2025. The project includes the analysis of several innovative and technologically advanced solutions

proposed at the local level (see [BOX 8](#) and [BOX 9](#)), following assessment of their business plans. The solutions selected and implemented allowed a significant cumulated reduction in water withdrawals, particularly freshwater withdrawals from thermal plants.

BOX 7 – ITALY Combined Cycle Gas Turbine (CCGT) Power plants: Optimization of the Evaporative Cooling Towers

The projects, finalized and in operation since 2025, focuses on upgrading evaporative cooling towers in CCGT through advanced supervision and proprietary chemical-conditioning technologies. The solution enables continuous monitoring of key operational parameters and automated control of water makeup and blowdown cycles. The project delivers **significant reductions in water consumption and chemical use**, generating both economic savings and environmental benefits by lowering the water demand of evaporative cooling systems. The approach is scalable across all combined-cycle plants with evaporative cooling and is already implemented at Santa Barbara, Pietrafitta and the new Fusina CCGT. It also supports improved stakeholder relations by demonstrating commitment to innovation, efficiency, and sustainable resource management. Key Highlights:

- Advanced supervision for real-time control of bioactivity, pH, ORP, conductivity, and corrosion
- Automatic optimization of blowdown through sensors and actuators
- Expected benefits: reduced water footprint, lower chemical consumption, and cost savings

BOX 8 – SPAIN Mahón power plant: Reuse of wastewater for thermoelectric generation

This practice aims to rationalize water use and reduce environmental impact through **the reuse of treated wastewater** from the nearby municipal treatment facility. It has been implemented at the Mahón power plant in the Balearic Islands. Wastewater is purified using advanced processes (ultrafiltration, double stage reverse osmosis, and electro-deionization) to produce demineralized water for injection into gas turbines for NO_x abatement. The system includes a storage tank, dedicated pumping lines, and infrastructure for fluid transport from the treatment plant to the power station, reducing dependence on potable water and natural sources. A significant recovery of wastewater has been achieved thanks to this solution, along with the removal of the overall freshwater withdrawal, resulting in substantial savings in water resources and operating costs. The project serves as a replicable model for other plants, contributing to sustainability and reducing local water stress.

BOX 9 – PERU Malacas power plant: Reduction of Water Use for NO_x abatement

This solution has been implemented at a gas-fired power plant in Peru, where an environmental efficiency upgrade was carried out by **replacing the turbine's old burners with the new Dry Low NO_x technology**. The upgrading has led to nitrogen oxide emissions reductions without resorting to the injection of **demineralized water**, previously produced from potable water supplied by the municipal aqueduct, which significantly reduces environmental impacts, minimizes competition for civil water resources, and improves local resilience in areas where water supply may be subject to restrictions. Expected benefits are also a reduced water impact, due to the lower chemical usage, and cost savings.

In the action plans aimed at reducing water consumption and optimizing water management, priority is given to areas at risk of water scarcity (**water-stressed areas**). Mapping of generation, thermal, nuclear and renewable sites falling within water-stressed areas is carried out in line with the criteria of GRI 303 (2018) with reference to

the conditions of “(baseline) water stress” indicated by the Aqueduct Water Risk Atlas, covering accessibility, availability and quality of the resource in areas of high-water stress. Among the sites mapped, those positioned in water-stressed areas procuring significant volumes of fresh water are highlighted. These conditions were also

8. Crystallizers or SEC (softening, evaporation and crystallization) systems. Technology applied in Italy in coal-fired power plants.

used as asset prioritization criteria within the TNFD-LEAP analysis.

In these sites, mainly thermoelectric and nuclear power plants that use water for process and closed-loop cooling needs, water management methods and process performance are monitored with particular attention to minimize water consumption and prioritize withdrawals

from less valuable or non-scarce sources, according to locally defined action plans. Even for solar plants (where water need is limited) located in water-stressed areas, Enel adopts innovative solutions aimed at drastically reducing local water consumption used for the periodic cleaning of photovoltaic panels (see [BOX 10](#)).

BOX 10 – Solar power plants: Innovative Dry-Cleaning technologies

The project has been launched at a photovoltaic park in Spain, which introduces robotic systems for cleaning solar **panels without water use**. Dry cleaning of photovoltaic modules is based on the use of **innovative mechanical or robotic systems** that remove dust and sediments without using water, thus reducing water consumption and environmental impact with respect to most common methods involving rotating brushes. This solution addresses the need to reduce water consumption in our assets located in water stressed areas, as is often the case for solar installation, while ensuring operational efficiency and sustainability. The practice has been included in the Group’s sustainable practices catalog “SusPlant”, representing a replicable model for other plants located in high water-stress areas, such as those in Chile.

5.4. Metrics and targets

5.4.1. Targets related to water withdrawals

KPI	POLICIES	SCOPE	BASELINE 2017	ACTUAL 2025	TARGET		STATUS
					2028	2030	
Reduction of specific freshwater withdrawal for electricity generation	<ul style="list-style-type: none"> Environmental Policy Water management policy 	Own electricity generation activities in all geographical areas, including water-stressed areas	0.43 [l/kWh]	0.18 [l/kWh] (-58%)	0.17 [l/kWh] (-60%)	0.15 [l/kWh] (-65%)	In line

Enel has adopted the voluntary target of a 65% reduction in specific freshwater withdrawal in 2030 compared to the 2017 base year. The metric used to formulate the target, which refers to withdrawals, follows the guidance of the scientific community (*SBTN Technical Guidance 2023 Step3 Freshwater*) while aiming to reduce the Group’s water consumption. Specific freshwater withdrawal from electricity generation for 2025 was 0,18 l/kWh, a - 58% compared to the base year (2017) and in line with the 2030 (- 65%) and 2028 (- 60%) targets’ forecast.

The target definition stems primarily from the implementation of the Energy Transition and Net Zero program adopted by Enel, and its implementation according to the technological specificities of the electricity sector, applying the indications of international

best practices (IFC Performance Standard, TNFD, SBTN) and EU frameworks (European Green Deal, Water Framework Directive). The target also takes into account possible scenarios of evolution of the relevant regulatory framework (in order to ensure continued compliance of the activities carried out and reduce possible transition risks) and of future availability of the water resource in the Group’s reservoirs of interest, as a consequence of the medium- and long-term effects of climate change outlined in the different Intergovernmental Panel on Climate Change (IPCC) and Representative Concentration Pathways (RCP) scenarios. At plant level, during permitting and technology renewal, reduction targets are shared with the governments and stakeholders affected.

5.5. Management of additional not-material water related issues

5.5.1. Hydroelectric power plants

Water management is essential for hydroelectric plants which depend on the resource availability. Conditions of the relevant watersheds, including the ecological and chemical status of water bodies according to requirements of the Water Framework Directive (2000/60/EC), were considered as part of the assets' prioritization process and subsequent LEAP analysis. Specifically, the adoption of water management plans and continuous improvement programs shared with local stakeholders (reservoir authorities, local governments, regulators, citizen committees and NGOs) was verified, to guarantee the mitigations of impacts and ensure minimum viable flows, preserving the resource and protecting the surrounding habitats.

Hydroelectric reservoirs, which do not contribute to the Group's water consumption as they return all the water they withdraw, also represent an important environmental opportunity, as they may be surrounded by nature reserves and protected habitats. They also provide important services to local communities, from flood control to drinking water and irrigation, from fire prevention to the management of river waste retained by

the reservoirs. Finally, reservoirs play a key role in responding to the effects of climate change, increasing the level of protection for communities subject to extreme flooding and prolonged periods of drought.

Risk analysis related to water also considered possible scenarios involving the future availability of the water resource for hydropower uses. Through the development of medium and long term meteorological and climatic scenarios – particularly those related to climate change impacts such as chronic precipitation variability or water temperature rise – the expected change in water availability and quality in basins relevant to the Group were assessed. Producibility projections for Enel plants highlighted that, on average, no significant impacts are expected in the long term compared with available historical data.

The volume of **water stored in the Group's hydroelectric reservoirs** at the end of 2025 was 35,347,864 thousand m³, up 7% compared to 2024 (33,074,048 thousand m³) due to the good water flow recorded during the year, in any case, within the limits of seasonal variability.

Measures to Ensure the Sustainable Operation of Hydropower Plants

Enel is committed to ensuring the sustainable operation of its hydropower plants through a comprehensive environmental and safety management framework. Prior to development and during operation, **Environmental Impact Assessments** are conducted to identify, prevent, and mitigate potential adverse effects on ecosystems and local communities, such as upstream and downstream impacts, water quality, greenhouse gas emissions and

biodiversity impacts (e.g. on vulnerable and endangered species). A dedicated environmental risk assessment (Hydro Prevention Plan) was also carried out across hydropower assets, focusing on oil-containing systems and spill risks. It enabled prioritization of mitigation measures and infrastructure upgrades. In addition, biodegradable oils are being evaluated to replace mineral lubricants (see [BOX 11](#)).

BOX 11 – Hydropower plants: Testing use of biodegradable oils

Mineral oils used in hydropower plants represent one of the major risk drivers. This activity focuses on reducing the environmental impact of lubricating oils in hydropower plants by adopting biodegradable oils as substitutes for mineral oils. Laboratory and real-condition tests have been conducted to assess biodegradability, ecotoxicological safety, and technical performance of bio-oils. Results showed much faster degradation compared to mineral oils (up to 70% in 90 days versus less than 5%), absence of ecotoxicity, lower flammability, and different dispersion characteristics, which require attention in emergency management.

These findings confirm that, for certain applications, the mineral oils currently in use can be replaced by bio-oils, which represent an effective solution to **reduce the risk of soil and water contamination in case of accidental spills**, contributing to the sustainability of hydropower operations. However, operational use requires performance monitoring to avoid issues such as fouling and ensuring compatibility with specific plant conditions.

To preserve aquatic biodiversity and river continuity, dedicated **fish facilities** are implemented and regularly

monitored to support fish migration and habitat protection, verifying their effectiveness in minimizing

population loss through the operation of hydropower plants. Enel strictly complies with applicable **environmental flow** requirements, ensuring that adequate water releases are maintained to safeguard downstream ecological conditions, fish species and water use.

Effective **sedimentation management** practices are adopted to maintain reservoir capacity, protect infrastructure performance, and minimize impacts on river morphology (e.g., erosion phenomena).

Example of hydropower reservoirs sediment management and capacity restoration practices are:

- bathymetric monitoring and continuous de-sedimentation technologies (Hydrosuction, Sluicer, Minidredge) to preserve a “sustainable storage capacity” and promotes controlled sediment releases (see [BOX 12](#));
- sediment reuse, supported by environmental/agronomic testing and pilots for agricultural use and urban desealing (SuDS), enabling

circular-economy pathways while addressing regulatory constraints.

By optimizing basin capacity, this practice also contributes to increasing watershed resilience against high-intensity weather events. By preserving this dynamic storage buffer, sediment dredging strengthens reservoir adaptation to sudden inflows and boosts overall watershed resilience. It enables more precise flow regulation during erratic, high-intensity storms, helping prevent overtopping and maintaining reliable flood-mitigation performance as climate variability increases.

In addition, robust **dam safety** protocols are applied, including continuous monitoring, periodic inspections, risk assessments, and emergency preparedness measures, in line with national and international standards.

Through these measures, Enel aims to balance renewable energy generation with environmental protection, biodiversity conservation, and long-term infrastructure resilience to extreme hydrometeorological events.

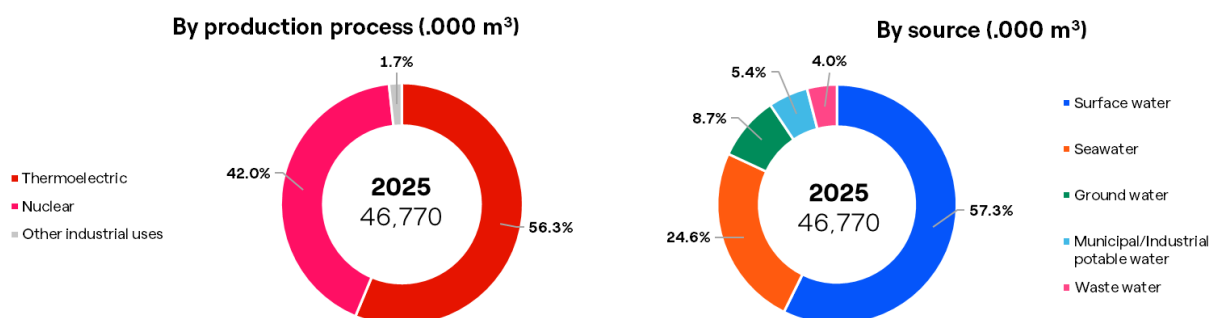
BOX 12 – ITALY Venaus Basin: Advanced Desedimentation system and Floating Photovoltaic installation

The Venaus power plant is located in the Susa Valley, in the province of Turin (Piedmont). Commissioned in 1967 and automated in 1986, it is an underground power plant that uses water from the artificial Lake Mont Cenis, impounded by a dam located on French territory, just beyond the border. In 2023, Enel’s first floating over water surface photovoltaic plant was installed here on the discharge basin, thus producing energy without any additional land consumption. In 2024–2025 the photovoltaic plant was expanded to reach the current installed capacity of 2 MW. In 2025 the floating photovoltaic plant was coupled with an advanced **desedimentation solution**. This system enables the removal of sediments accumulated on the basin attained by the float and their conveyance to the turbine, thereby avoiding extraction operations and the associated disposal activities, while also restoring river connectivity. The combined effect of PV installation and the desedimentation system, including the contribution resulting from reduced evaporation losses, is expected to increase the power plant annual production by 3.6 GWh.

5.6. Water metrics

During 2025, there was a decrease in total water **withdrawals** (-9.6%, 7,364,885 thousand m³ in 2025 compared to 8,145,414 thousand m³ in 2024) due to lower production by some open-cycle thermoelectric power plants, as can be seen from the withdrawal of such cooling water stream (-9.7%, 7,318,115 thousand m³ in

2024 compared to 8,102,028 thousand m³ in 2023), despite a slight increase in the withdrawals for the production process (7.8%, 46,770 thousand m³ in 2025 compared to 43,386 thousand m³ in 2024), which also includes closed-cycle cooling



As regards withdrawals from **scarce sources**, there was a slight increase in freshwater withdrawals for electricity generation (3,5%, 32,115 thousand m³ in 2025 compared to 31,019 thousand m³ in 2024), also confirmed by the target value for specific freshwater withdrawal for electricity generation, which was 0.18 l/kWh, however, in line with the targets for 2028 and 2030. The increases recorded are mainly attributable to the higher production of some combined cycle and nuclear plants with closed-cycle cooling in Spain in 2025, following the need to rebalance the national grid after the blackout event that occurred.

Water consumption in 2025 amounted to 32,141 thousand m³, also slightly up on the previous year (4.1%, 30,881 thousand m³ in 2024), in line with withdrawal data. Consumption **in water-stressed areas**, on the other hand, amounted to 5,494 thousand m³, down 18.3% compared to 2024 (6,724 thousand m³), because of lower

conventional thermoelectric production in these areas. This consumption represents 17.1% of total consumption, down by almost five points compared to the previous year (21.8%). Currently, 20 operational assets using freshwater⁹ for process-related activities are located in water-stressed areas.

Water withdrawal values are determined through specific ways for different sources and uses. Process withdrawals and discharges are generally determined through direct measurements, while large volumes associated with open-cycle cooling processes are generally calculated based on plant operating parameters such as circulating pump operating hours. On the other hand, rainfall data on the site and the associated volumes of rainwater collected and discharged are generally estimated. Consumption is then calculated as the difference between the quantities withdrawn and those released.

DATA TYPE	%	MAIN CATEGORY
Measured	58%	Process flows
Calculated	27%	Open-cycle cooling flows
Estimated	15%	Volumes of rainwater

The processes of data collection and processing and evaluation of deviations from expected performances are subject to specific internal control procedures. The data collected is recorded semi-annually in the Group's

environmental data collection tool, where it is validated and aggregated at different levels of the organization and target values and its period changes are calculated.

	UM	2025	2024
Water			
Total withdrawals⁽¹⁾ (alias "water used")	.000 m ³	7,364,885	8,145,414
- of which withdrawal for production process	.000 m ³	46,770	43,386
- of which withdrawal for open-cycle cooling	.000 m ³	7,318,115	8,102,028
Withdrawals by source			
Withdrawals from scarce sources	.000 m ³	2,945,227	2,855,450
Surface water (wetlands, lakes, rivers)	.000 m ³	2,938,664	2,849,364
Groundwater (from wells)	.000 m ³	4,059	4,590
Municipal/Industrial potable water	.000 m ³	2,504	1,497
Withdrawals from non-scarce sources	.000 m ³	4,419,658	5,289,964
Seawater used as is and desalinated	.000 m ³	4,417,769	5,289,849
Waste water (amount used inside plants)	.000 m ³	1,889	114
Percentage of water withdrawn from scarce source	%	40.0	35.1
Percentage of water withdrawn from non-scarce source	%	60.0	64.9

9. Considering the plants that withdraw more than 100 m³ per year.

Withdrawals of freshwater for electricity production	.000 m ³	32,115	31,019
Specific freshwater withdrawal for electricity production	l/kWh	0.18	0.16
Total Water withdrawals in water-stressed areas⁽²⁾	.000 m ³	11,359	12,308
– of which from scarce sources	.000 m ³	9,623	10,761
Percentage of water withdrawn in water-stressed areas	%	24.3	28.4
Volume of water recycled and reused⁽³⁾	.000 m ³	3,950	2,230
Percentage of recycled and reused water	%	8.4	5.1
Water Discharge			
Total Water discharge	.000 m ³	7,332,744	8,114,534
Discharge by source			
Discharge to scarce sources	.000 m ³	2,920,326	2,830,246
Surface water (wetlands, lakes, rivers)	.000 m ³	2,918,507	2,829,433
Water in municipal/industrial treatment plants	.000 m ³	1,819	812
Discharge Third party water	.000 m ³	35,437	60,604
Discharge Seawater	.000 m ³	4,376,981	5,223,684
Water Consumption			
Total water consumption	.000 m ³	32,141	30,881
– of which consumption in water-stressed and water risk areas	.000 m ³	5,494	6,724
Percentage of consumption in water-stressed areas	%	17.1	21.8
Total net freshwater consumption	.000 m ³	24,901	25,205
Total volume of water stored in hydroelectric basins	.000 m ³	35,347,864	33,074,033
Water intensity⁽⁴⁾	.000 m ³ /mIn €	0.48	0.44

(1) The value of “Total withdrawals” is equal to the sum of withdrawals of water for production process and withdrawals of water used for open-cycle cooling. It excludes civil uses and the contribution of through stormwater.

(2) 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%). 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”. This category also includes the thermal plants that use “freshwater”. Volumes of water withdrawn for open-cycle cooling in water-stressed areas were not included because these do not involve consumption of the water resource.

(3) The “recycled water volume” refers to the fraction of the “water withdrawal for production process” treated by on-site wastewater treatment plants and reintroduced to replace water from primary sources. It does not include water recovered through the optimization of closed-loop cooling processes.

(4) Indicator calculated using the IFRS 15 revenue of 67.428 million euros in 2025 (70.626 million euros in 2024) as shown in note 10.a “Revenue from sales and services” to the consolidated financial statements at December 31, 2025.



6. Biodiversity and Ecosystems

6.1. Dashboard Targets

The results of the 2025 double materiality process for aspects related to “Biodiversity and ecosystems” are

reported below, with details of the material IROs used in the preparation of this section.

Subtopic	Sub-subtopic	Description of IRO	Type	Target/Action plan
DIRECT IMPACT DRIVERS ON BIODIVERSITY LOSS	Land use change, fresh water and sea use change	Damage to the environment and local communities caused by inadequate prevention, mitigation, restoration, or compensation of impacts on environmental matrices, biodiversity, and ecosystems produced by activities under the operational control of the Company (e.g. habitat transformation and impacts on protected species and/or protected areas as a result of construction activities or operation of assets).	Negative impact	Targets <ul style="list-style-type: none"> Achievement of No Net Loss for new infrastructure by 2030 Achievement of No Net Deforestation for new infrastructure by 2030 No Go in UNESCO World Heritage Natural Site Areas⁽¹⁾
IMPACTS ON THE STATE OF SPECIES	Population size of species	Reputational damage, fines, and increased costs of construction, management, and restoration due to loss of biodiversity and impacts on the state of species, reduced acceptability by local communities as a result of construction or operation of power generation and distribution activities (causing fragmentation and degradation of natural habitats, protected areas, or species).	Negative risk	Targets <ul style="list-style-type: none"> Achievement of No Net Loss for new infrastructure by 2030 Achievement of No Net Deforestation for new infrastructure by 2030 No Go in UNESCO World Heritage Natural Site Areas⁽¹⁾

(1) Target related to new generation infrastructures.

6.1.1. Transition plan and consideration of biodiversity and ecosystems in strategy and business model

Biodiversity protection is one of the strategic objectives of Enel’s Environmental Policy, aimed at pursuing the sustainable development of renewable energy and distribution networks as outlined in the Group’s decarbonization strategy. The Group has adopted an integrated approach to defining nature and biodiversity transition plans coordinated with the climate transition plan, in line with the recommendations of the TNFD, which promotes the integration of these topics into risk management processes, corporate strategy, and reporting systems. The structure of the transition plan is

also consistent with the methodological framework proposed by GFANZ, establishing strategic objectives, implementation actions, monitoring metrics and targets, as well as appropriate governance and accountability mechanisms. Finally, in identifying actions and intervention priorities related to biodiversity, the Group has considered the best practices indicated by WWF for businesses, particularly regarding reducing pressures on ecosystems and promoting nature-based solutions (for further details, see the section “Climate Change, Transition Plan for Climate Change Mitigation”)¹⁰.

6.1.2. Material impacts, risks, and opportunities and their interaction with strategy and business model

The Impact, Risk and Opportunity analysis carried out on operating assets led to the identification of 54 priority sites (hotspots), where site-specific assessments were initiated using the TNFD-LEAP methodology; only 5 sites were found to be relevant in the analysis conducted: three hydroelectric plants in Colombia, a solar park and a

hydroelectric plant in Brazil, for which the action plans already defined and under implementation ensure the proper management of the associated risks, without the need for further action. The prioritization criteria for defining hotspots included local natural conditions, using indicators of transformation of natural areas, and the

¹⁰ “Guidance on nature in transition plans” (TNFD – Taskforce on Nature Financial Disclosure 2025), “Nature in Net-zero Transition Plans” (GFANZ – Glasgow Financial Alliance for Net Zero 2024), “Nature in Transition Plans: Why and How” (WWF 2023).

presence of assets in areas sensitive to biodiversity (protected areas, threatened species and critical habitats). The site-specific LEAP analysis also assessed additional

impacts, such as soil degradation, habitat loss and/or fragmentation, and the decline in the richness/abundance of threatened species (flora and fauna).

6.2. Policies related to biodiversity

To complement the Group Environmental Policy, in 2015 Enel adopted a **public Group Biodiversity Policy**, updated in 2023 and approved by the Board of Directors, in line with the Global Biodiversity Framework Kunming-Montreal (COP 15) and the EU Biodiversity Strategy.

The Policy defines the guidelines and principles under which to operate, for all biodiversity protection initiatives to be applied in all countries and regions in the Group value chain.

BIODIVERSITY POLICY	
MAIN CONTENTS	<ul style="list-style-type: none"> • Commitment to applying the principle of the mitigation hierarchy by reducing impacts on areas of high biodiversity value and ecosystem services. • Commitment to the implementation of “No Net Loss” of biodiversity and “No Net Deforestation”. • Assess and transparently communicate the impacts, dependencies, risks and opportunities on biodiversity for operating assets, the value chain and supplies.
SCOPE	<ul style="list-style-type: none"> • Assets under Enel’s operational control, including those owned, leased or managed and the entire value chain
IROS COVERED AND REFERENCES	<ul style="list-style-type: none"> • Changes in land, fresh water and sea use • Population size of species
STAKEHOLDERS INVOLVED IN THE DEFINITION	<ul style="list-style-type: none"> • Promote the integration of biodiversity into business services and products for customers. • Collaborate with governments, research centers, environmental and social associations, and international stakeholders as partners in conservation, restoration, and sustainable use of resources.
DIFFUSION	<ul style="list-style-type: none"> • Public policy available at the link: https://www.enel.com/investors/sustainability/strategy-sustainable-progress/biodiversity/policy

In addition, the Group has adopted a **Biodiversity Management Policy** that provides a structured framework **for identifying, managing and mitigating impacts on biodiversity and ecosystems**; it places emphasis on biodiversity-sensitive areas and engaging

local communities, and prioritizes the avoidance and minimization of impacts in areas with the highest biodiversity value, in alignment with international regulations and standards.

BIODIVERSITY MANAGEMENT POLICY	
MAIN CONTENTS	<ul style="list-style-type: none"> • Defines the analyses to be carried out to identify impacts, dependencies, and risks on biodiversity, for each asset life cycle stage and in relation to ecosystem type (e.g. natural areas, biodiversity sensitive areas, etc.) taking into consideration potential impacts on ecosystem services and communities; • Guides the mitigation actions to be taken, applying the Mitigation Hierarchy; • Defines the goal of No Net Loss, No Net Deforestation and No Go in UNESCO areas, aligned with the EU Biodiversity Strategy, and the criteria for implementation. It also includes guidelines for the quantitative assessment of habitat and priority species losses and for the establishment of Biodiversity Action Plans (BAPs).
SCOPE	<ul style="list-style-type: none"> • Assets under Enel’s operational control, including those owned, leased or managed and the entire value chain
IROS COVERED AND REFERENCES	<ul style="list-style-type: none"> • Changes in land, fresh water and sea use. • Population size of species.
STAKEHOLDERS INVOLVED IN THE DEFINITION	<ul style="list-style-type: none"> • Reiterates the importance of consultation with local communities and stakeholders at all stages of the asset lifecycle, starting with the design phase, and defines reporting metrics for biodiversity-related targets, impacts and actions.
DIFFUSION	<ul style="list-style-type: none"> • Internal Group policy.

6.3. Actions and resources related to biodiversity and ecosystems

Enel has a proven track record in managing and **protecting biodiversity** within its entire **value chain**: from the design and construction phase of new assets, in their operational management to decommissioning, as well as in selling sustainable products and services to customers. More specifically, in recent years action has focused on

managing the potential impacts associated with the development and operation of renewable plants and distribution networks, in line with the Group's decarbonization strategy, and proposing nature-based solutions to customers, in the marketing of products and services.

ACTION	DESCRIPTION	SCOPE	TARGET	TIMING	MONITORING
Minimization of biodiversity impacts related to new infrastructure development and management of existing assets	Application of the Mitigation Hierarchy in all phases of plant design and operation, defining appropriate biodiversity action plans where necessary.	Renewable power plants Distribution networks	Yes	Roadmap implementation target of 2030, with intermediate steps beginning 2025.	<ul style="list-style-type: none"> Annual monitoring and reporting of habitat and species impacts through KPIs, based on international maps and georeferenced sites. Quarterly collection and update of biodiversity projects.
Integration of nature-based solutions into products and services sold to customers	<ul style="list-style-type: none"> Defining design techniques and approaches for industrial and government customers. Development of a model for evaluating the positive impacts generated by solutions and products. 	Products for customers	No	Timing depends on the product/service and type of biodiversity project implemented.	Defining KPIs for monitoring and reporting on environmental performance achieved on individual projects.

Biodiversity risk is considered as early as the **feasibility and design** phase of a new asset/infrastructure, through the selection of the site of interest. At this stage, the type of habitat is evaluated, prioritizing those that do not have potential environmental impacts, such as geographic proximity to protected areas or critical habitat, or any aspects that may adversely affect natural areas (deterioration of natural habitats and species, resource use, etc.). Where impacts cannot be avoided, actions are defined to mitigate or compensate for them, through the engagement of local stakeholders, such as communities, relevant authorities, universities, etc. In **the construction** phase of new assets, specific action plans are also adopted and their effectiveness monitored. In the **operational** phase, biodiversity protection becomes an integral part of environmental management plans, through periodic monitoring to control the impacts highlighted in the permitting phase and the ongoing assessment of potential impacts that might occur later, as well as the effectiveness of ongoing actions. At this stage, the asset consolidates its relationship with the local area and develops initiatives on a voluntary basis, such as projects to safeguard local species and improve habitat conditions, based on knowledge of the environment around the site itself. The results of local-level monitoring actions are communicated and analyzed globally through internal tools, enabling the identification of Group-wide

improvement plans as well as best practices to be implemented in different countries and regions or technologies. Even during the **decommissioning** phases, an assessment is carried out to evaluate the impacts on biodiversity and possible mitigation actions (see [BOX 13](#)).

The **projects**, developed on a **voluntary basis** or in **compliance with ongoing authorization processes**, cover all different technologies:

- **wind plants**: the initiatives mainly concern the **reduction** of interference with birdlife and bat populations, including the installation of detection and deterrent systems (see [BOX 14](#) and [BOX 16](#)). The selected solutions are the subject of ongoing research, with the testing of more than ten technological options for the protection and conservation of avifauna. These solutions are based on camera-based- detection, acoustic/visual deterrence, and automatic turbine stop/restart mechanisms, involving facilities in South Africa, Spain, and Italy;
- **hydroelectric plants**: the initiatives of operating plants focus mainly on restocking the fish population for ecosystem and species recovery are highlighted, such as the **restoration** or improvement of juvenile fish reproduction or growth areas. Furthermore, to control soil stability and improve habitat conditions, native species have been planted directly in the reservoir or

near to its banks, in addition to the implementation of programs to monitor erosion and degradation of the banks. During the construction phase of the plants, compensation projects are also developed in agreement with local authorities. One example is the *Restoration Program and Protected Natural Area* projects at the El Quimbo hydroelectric power plant (400 MW), which involve the restoration of an area of over 11.000 hectares with native species and collaboration with local universities on numerous ecological restoration initiatives and projects supporting biodiversity research;

- **solar plants:** The interventions mainly concern the restoration of habitats affected during the construction phase, also for the benefit of the species present in the site concerned. There are various types of intervention, ranging from local wildlife monitoring programs, together with local stakeholders, to compensation, for example through reforestation and the creation of ecological corridors. **Agri-voltaic** systems are an example of Enel's focus on habitats and species conservation, not only where there is an impact on natural ecosystems, but also in anthropized ones, through careful design of spaces between rows of photovoltaic modules dedicated to the cultivation of aromatic and medicinal herbs, food plants and honey plants, which encourage the settlement of

pollinating species, as well as partnerships with various local stakeholders (see [BOX 15](#));

- **distribution networks** starting from the design phase and continuing throughout the operation and maintenance phase of existing networks, specific measures are taken to **reduce** the impacts and protect bird lives. These include the installation of anti-collision devices on conductors at regular intervals along overhead power lines, as well as the insulation of live parts. In addition, when necessary, replanting activities are carried out, often upon request by local authorities, to compensate for impacts on natural habitats resulting from the construction of new lines or substations, as well as maintenance activities (see [BOX 17](#), [BOX 18](#) and [BOX 19](#)).

Impact mitigation measures, which include **compensatory measures**, when necessary, are defined locally through active consultation with relevant stakeholders, such as local communities, permitting authorities, research institutions collaborating in project design, and others. With a view to achieving No Net Loss (NNL) status, Enel has equipped itself with a methodology to quantitatively define, during the construction phase of new plants, the impacts on habitats and species and give unambiguous guidance on how to compensate for them, to be able to consider the plant aligned with NNL principles.

BOX 13 – ITALY Santa Barbara decommissioning: Environmental Restoration Project of the Mining Area

The Santa Barbara mining area, a former lignite extraction site, covers approximately 1,600 hectares and is located between the municipalities of Cavriglia and Figline-Incisa Valdarno. The mining concession has been in force since 29 July 1961, when it was granted by the Ministry of Industry and Commerce for a period of 60 years, and was subsequently extended until completion of the restoration plan. Mining activities ended in 1994, and from 2000 onwards a lengthy permitting process began, leading to the definition of the environmental restoration plan. The plan is structured along four main pillars:



- **Morphology:** regrading works, slope stabilization, drainage trenches, and major earthworks.
- **Hydraulics:** construction of new riverbeds and outlets, and development of a reshaped hydrographic network designed to improve the water quality of the Castelnovo and Allori lakes.
- **Infrastructure measures:** development of cycle paths, gravel roads and bridges to ensure site accessibility with minimal environmental impact.
- **Renaturalization:** restoration of forest, grassland and riparian habitats to enhance biodiversity.

The plan therefore includes several initiatives aimed at **biodiversity conservation**, addressing both fauna and flora. It defines methodologies, monitoring frequencies and indicators to assess over time the ecological quality of the area and the effectiveness of restoration measures. Periodic **wildlife monitoring** is currently carried out in wetlands, breeding sites and ecological corridors to track population trends over time.

Thanks to progressive renaturalization, the area now hosts numerous bird species and is used for guided birdwatching activities. To support the renaturalization of the entire mining area, several actions are ongoing, including: the establishment of **180 hectares of new forest plantations** with native and non-invasive species; the active **management of 200 hectares of 1990s reforestation areas** (thinning and removal of dead trees); the creation, reinforcement and **protection of riparian buffers and wetland habitats**; the development of **ecological corridors** and agricultural landscape networks essential for biological connectivity; and periodic vegetation monitoring to verify the successful establishment of planted species. The Santa Barbara Mining Area restoration project is therefore transforming a former extraction site into an environment once again rich in life. Interventions on morphology, hydrology, flora and fauna are enabling the reconstruction of natural habitats, improving ecological functionality and supporting the return of numerous species. New forests, riparian buffers, ecological corridors and continuous wildlife monitoring contribute concretely to biodiversity conservation, restoring to the territory a more stable, resilient and sustainable ecosystem.

BOX 14 – SPAIN & CHILE Wind plants: From Pilot Testing to Full-Scale Rollout of innovative technological solutions for birdlife safeguard

In recent years, a broad experimental campaign has been carried out to improve environmental sustainability and protect biodiversity at wind power sites. The initiative tested more than **ten technological solutions designed to safeguard birdlife from collisions with wind turbines**. These solutions included camera-based detection systems, acoustic and visual deterrents, and automated turbine stop-and-restart mechanisms. The campaign involved wind farms located in South Africa, Spain, and Italy. The results enabled the identification of the most effective solutions—measured through key performance indicators commonly accepted within the scientific community—which we have started **to install at existing plants in Spain and Chile**, as well as integrated into new developments. Particularly noteworthy are several innovative systems that offer high detection efficiency, effective deterrence capabilities, and strong operational reliability. These solutions employ high-definition 2D or 3D cameras, microphones, and radar technologies to detect, identify, and protect bird species from collisions while optimizing turbine downtime.

BOX 15 – ITALY & SPAIN Agrivoltaics: Innovation, Biodiversity, and Sustainable Land Use

As part of its agrivoltaics program, Enel continued experimental activities aimed at demonstrating the value of integrating solar energy generation with agricultural and livestock practices, biodiversity conservation, and the enhancement of ecosystem services, supported by innovative methodologies and technical solutions. Progress also continued within the **Agrivoltaic Open Labs** initiative, which since 2023 has established five “open-air laboratories” designed to test a wide range of innovative photovoltaic technologies, monitoring sensors, and coexistence models with high-value crops and biodiversity protection measures. These efforts are carried out in collaboration with leading universities and research centers and with the active engagement of local communities. The initiative has already demonstrated the successful coexistence of **utility-scale photovoltaic plants** with beekeeping activities and the cultivation of aromatic herbs. The program has also expanded internationally. A notable example is the Sustainext-funded project in Valdecaballeros, Spain, where 10 hectares of rosemary are being integrated into a full-scale photovoltaic plant equipped with tracking and bifacial technologies. The harvested rosemary will be supplied to a biorefinery for further processing. Innovative agrivoltaic solutions have been deployed at several sites in Italy as well—such as vertical panels and elevated mounting structures exceeding typical utility-scale standards—with comprehensive performance evaluations planned to begin in 2026.

BOX 16 – SPAIN Wind plants: Protection and conservation of large birds of prey

When developing projects, Enel **avoids areas at risk of large birds of prey** presence and major migration routes and plans construction activities in harmony with breeding seasons and periods of peak activity. Furthermore, to **reduce and minimize the risk of collision** during the operation of wind farms, Enel installs, where necessary, anti-collision systems based on high-resolution optical sensors and stereoscopic vision for the identification and deterrence of large birds of prey, including, if necessary, the temporary shutdown of the turbines. Finally, Enel is experimenting with **compensation measures** for the



Iberian imperial eagle (*Aquila adalberti*), Europe's most endangered bird of prey, which has been the subject of intensive work since long time with the aim of improving its conservation status. It is currently classified as "endangered" in Andalusia. One of the most promising techniques worth mentioning is hacking, a captive breeding technique that simulates the natural conditions in which eagle chicks would grow in the wild, until they become strong and self-sufficient enough to be released into nature. Daily monitoring of the species by staff employed by Enel and the Agency has made it possible to identify chicks at risk and proceed with their rescue, feeding and surveillance of the cages until their release into the natural environment.

Similar projects also continue during the Operation phase, for example, the project entitled 'Recuperacion de poblacion de cernicalo primilla en Aragon' (Recovery of the lesser kestrel population in Aragon). Between 2020 and 2025, DEMA (Defensa y Estudio del Medio Ambiente) carried out an ambitious project to encourage the return of the lesser kestrel (*Falco naumanni*) to Aragon, a species that is currently in decline. Thanks to the support of Enel and collaboration with the Government of Aragon, a special building was constructed, the Zuera primillar, designed to house and protect these birds of prey. The project began in 2020 with the release of 50 chicks born at DEMA's Lesser Kestrel Breeding Centre (Almendralejo, Extremadura). Over the next three years, around 40 chicks were released each year, reaching a total of 171 individuals released in the area by the end of 2023. In 2024, after the formation of an initial colony with five breeding pairs, major improvements were made to the structure: more nests, safe walkways and protection systems for the chicks. These improvements had an extraordinary impact: in just two years, the colony almost tripled, growing from 5 to 13 pairs in 2025 with 13 occupied nests, 31 chicks and 26 eggs in the last season alone, with an average productivity of almost 4 chicks per nest. Daily monitoring via video surveillance has made it possible to follow every stage of reproduction and collect valuable data on the survival and fidelity of individuals to the site.



BOX 17 – BRAZIL Distribution network: Reforestation activities in Guarapiranga

The ecological restoration project, implemented between June 2024 and January 2026, constitutes a mandatory environmental offset initiative to compensate for vegetation removal associated with **network operation and maintenance activities** in São Paulo. The intervention area, located within the Itaim and Jaceguava Municipal Natural Parks, covers more than 25 hectares and has been **reforested** with over 21,000 native seedlings, selected from the local flora in accordance with the applicable regulatory requirements. In addition to reforestation activities, the project

included **re-naturalization measures** such as the eradication of non-native species and actions aimed at supporting the natural regeneration of native vegetation. The initiative also provides a **monitoring** phase to assess plantation development and periodic maintenance activities, including semi-mechanized mowing, biological control of leaf-cutting ants (*Formiga cortadeira*), irrigation and pruning.

BOX 18 – COLOMBIA Distribution network (LT Guaca–Colegio): Environmental compensation measures

The Colombian LT Guaca–Colegio project, carried out in March 2025, provides **the environmental compensation** required for the **construction of a new high-voltage transmission line**. The new infrastructure includes the development of a new 4-km double-circuit branch, resulting in a physical footprint of approximately 8 hectares. In compliance with the environmental obligations issued by the CAR (Corporación Autónoma Regional de Cundinamarca) and in alignment with the compensation criteria established in the Manual de Compensación (Ministerio de Ambiente y Desarrollo Sostenible), the offsetting initiative **covered approximately 2 hectares**. Within an area of 2.12 hectares located in the Agroparque Sabio Mutis, in the Escalante locality of the Municipality of Tena (Cundinamarca), a total of **2.232 trees from 18 native species were planted**, including Matarratón (*Gliricidia sepium*), guácimo (*Guazuma ulmifolia*), gualanday (*Jacaranda mimosifolia*), guayacán polvillo (*Handroanthus serratifolius*), igúa (*Pseudosamanea guachapele*), hobo (*Spondias mombin*), among others. In addition to reforestation activities, the project required the identification, removal and relocation of epiphytic vascular species—subject to specific protection measures under Colombian environmental regulations—from trees that needed to be cleared to enable the construction of the new infrastructure.

BOX 19 – SPAIN Distribution network: “Eremita” Project for Conservation of *Geronticus Eremita*

The conservation project, carried out between May and July 2025, was promoted by the Medi Natural of the Generalitat de Catalunya and implemented in collaboration with Fundació Alive. The initiative aimed to improve the safety of E-Distribución’s infrastructure along more than 1 km of overhead line within the Aiguamolls de l’Empordà Natural Park, in order to protect and support the migratory corridor of the Northern Bald Ibis (*Geronticus eremita*). The intervention involved **the adaptation of 40 structures** through the installation of one-meter polymeric insulators to guarantee the regulatory safety distance for avifauna, as well as the insulation of slack jumpers. The project area lies along the species’ migratory route between Austria and Cádiz, its wintering grounds. In collaboration with Fundació Alive and the Departament de Territori of the Generalitat de Catalunya, priority line sections were identified, and **monitoring** activities were launched to assess the effectiveness of the measures in supporting of species’ population.



Enel is also committed to enhancing biodiversity through the integration of **Nature-Based Solutions (NBS)** into commercial service and product offerings, i.e. techniques and design approaches for industrial and public administration customers that employ nature and nature-inspired processes to increase city resilience and enhance biodiversity. Among these initiatives, noteworthy examples include Urban Beekeeping projects, the

creation of urban gardens, architectural integration with horizontal and vertical green areas, and the use of permeable pavements. In addition, Enel has developed a specific model, respectively, to identify NBS solutions that can be associated with different business solutions and assess their potential positive impacts generated on climate, natural resources and communities, according to customer requirements.

6.4. Metrics and targets

6.4.1. Targets related to biodiversity and ecosystems

Enel's commitment

Enel undertakes to achieve **No Net Loss of biodiversity** for new infrastructures by 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 reverse 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-generation infrastructures in areas designated as UNESCO World Heritage Natural Sites.

KPI	POLICIES	SCOPE	BASELINE	MILESTONE 2028	TARGET 2030	STATUS
Achievement of No Net Loss (NNL) for new infrastructure by 2030⁽¹⁾	<ul style="list-style-type: none"> Biodiversity Policy Biodiversity Management Policy 	Enel at the global level	Year: 2024	50% expected ⁽²⁾ % number of assets matching the NNL out of total number of assets that go into operation in the reporting year.	100%	In line
Achievement of No Net Deforestation for new infrastructure by 2030⁽¹⁾	<ul style="list-style-type: none"> Biodiversity Policy Biodiversity Management Policy 	Enel at the global level	-	-	100%	In line

(1) The commitment was made in 2021.

(2) The milestone is calculated based on the Additional Capacity built in 2028 (referring to the generation plants) according to the Business Plan 2026-2028.

Enel's commitment to protecting biodiversity and ecosystems translates into the adoption of voluntary No Net Loss and No Net Deforestation targets¹¹, in line with the global post-2020 biodiversity framework and the EU Biodiversity Strategy 2030.

Furthermore, starting in 2024, Enel has set **quantitative intermediate milestones** for achieving NNL. Specifically, in 2025, it is expected that **NNL will be achieved in 2028 on 50% of new generation plants** that will contribute to the additional capacity built during the year.

To implement its commitment, Enel developed a quantitative methodology for site-specific adoption of the NNL principle on biodiversity in 2022 and included it as a guideline in the Group's internal Policy on Biodiversity Management. The methodology involves the application

of the **Mitigation Hierarchy principle**, avoiding where possible the construction of new generation plants and grid-relevant assets in Natural Habitats¹⁴, defined at the Global level as the first ecological threshold to be considered. In the case of falling into such habitats or in

These goals are in addition to the commitment made in 2021 and implemented from 2022 **not to build new generation infrastructure in areas designated as UNESCO World Heritage Natural Sites**. The metrics adopted in formulating the target follow the guidance of the scientific community (IFC Standard 6¹² and SBTN Technical Guidance 2024 for Land¹³). Implementation of NNL on new assets coming into operation ensures protection of potentially impacted habitats and species, mitigating biodiversity impacts and risks.

of the **Mitigation Hierarchy principle**, avoiding where possible the construction of new generation plants and grid-relevant assets in Natural Habitats¹⁴, defined at the Global level as the first ecological threshold to be considered. In the case of falling into such habitats or in

11. The target applies to the Group's new infrastructures, with the exception of assets and/or grid connections which are subject to localization requirements imposed by the authorities, during the tender phase.

12. Biodiversity Conservation and Sustainable Management of Living Natural Resources (2012); ref. <https://www.ifc.org/en/insights-reports/2012/ifc-performance-standard-6>.

13. Ref. <https://sciencebasedtargetsnetwork.org/wp-content/uploads/2023/05/Technical-Guidance-2023-Step3-Land-v0.3.pdf>.

14. Defined by IUCN - International Union for Conservation of Nature (<https://www.iucnredlist.org/resources/habitat-classificationscheme>).

the presence of priority species¹⁵, calculation criteria are defined for quantifying impacts and given indications for compensation, prioritizing on-site habitat recovery actions, respecting the criticality of local ecosystems. If, on the other hand, Modified Habitats or areas of low biodiversity risk are selected¹⁶, the project is considered aligned with the NNL goal, assessing only where impacts on priority species are present. Application of the NNL also ensures compliance with the No Net Deforestation commitment. Since 2023, the methodology has been

tested on plants in the planning and operating stages of both renewable generation and networks, allowing for the refinement of impact and compensation assessment metrics.

In line with its commitment, Enel has undertaken to **apply in 2025 the NNL to selected projects that provide additional capacity** during the year, giving priority to those located in areas of high biodiversity value, such as the **Guayepo III solar plant** (see [BOX 20](#)).

BOX 20 – COLOMBIA Guayepo III Wind plant: No Net Loss application

The project covers an area of approximately 500 hectares, 10% of which is natural habitat, and is located near the RAMSAR Ciénaga Grande, Isla De Salamanca and Sabana Grande Biosphere Reserve. During the environmental impact assessment, potential impacts on both endangered species in the area and natural habitats were identified, and a **Biodiversity Action Plan (BAP)** was defined in agreement with the Ministry of Environment and Sustainable Development. This plan includes: a) on-site monitoring of priority species, such as the white-fronted capuchin monkey of the Río Cesar (*Cebus cesareae*); b) the **restoration of 557 hectares of natural and semi-natural areas** of the tropical dry forest ecosystem; c) compensatory actions such as the expansion of existing vegetative areas, soil restoration, planting of native herbaceous, shrub and tree species associated with water bodies, installation of perches and construction of shelters and burrows.

6.4.2. Impact metrics related to biodiversity and ecosystems change

Enel has defined calculation metrics for biodiversity impact indicators based on business technology and their distribution throughout the area. To define the indicators, Enel uses geo-referenced application tools such as the GIS (Geographic Information System) Portal for generation assets, represented mainly by plant layout, and the PUC (*Portale Unico Cartografico*) Portal for distribution assets, the extent of which is represented in linear mode for MV and HV networks and point mode for primary and secondary substations¹⁷. The goal is to correlate georeferenced information related to global maps of species and habitats against the location of the

infrastructure itself to assess its impacts, based on technology-related specificities. These indicators are used in the design phase of new infrastructure for site selection and preliminary analysis of potential environmental impacts, in the prioritization analysis of operating assets as well as for Group reporting purposes. For more information, see the section “Process to identify and assess material IROs for the environment”.

The following table shows the main indicators of biodiversity impacts relating to the Group’s main technologies.

15. Priority species are those classified as threatened according to the IUCN Red List classification or other literature studies; in addition, stakeholders or authorities may also identify priority species during the authorization phase.

16. As defined in the Biodiversity management policy.

17. Land occupation is estimated for primary and secondary substations in relation to the average occupation area (which varies depending on the technology), while for MV and HV lines it is estimated as the geometric projection on the ground of their length for the width of the corresponding buffer zone, which varies depending on the technology and on the country.

INDICATOR	GENERATION	DISTRIBUTION
Assets in sensitive areas	<ul style="list-style-type: none"> Generation sites that fall in at least one of the areas of High Significance for Biodiversity classified as follows: <ul style="list-style-type: none"> Protected Areas: UNESCO World Heritage Natural Sites and IUCN I-IV⁽¹⁾. Critical habitats: defined by IFC Performance Standard 6, mapped "likely" by UNEP-WCMC, Conservation International and Fauna & Flora International⁽²⁾. Presence of threatened species as per IUCN Red List classification, weighted against extinction risk. 	<p>Distribution assets (substations and HV/MV lines) that fall into one of the following classifications:</p> <ul style="list-style-type: none"> Protected Areas: UNESCO World Heritage Natural Sites and IUCN I-IV1. Critical habitat: defined by International Finance Corporation (IFC) Performance Standard 6, mapped "likely" by UNEP-WCMC, Conservation International and Fauna & Flora International.
Soil transformation	Areas of land classified as "Natural Habitat" according to IUCN ⁽³⁾ habitat categories on which new assets that came into operation in the reporting year are built.	Area of land classified as "Natural Habitat" according to IUCN ⁽³⁾ habitat categories on which distribution assets are present.
Number and types of threatened species	Number and types of threatened species mapped in biodiversity projects related to operating facilities. The typology of species follows the IUCN Red List classification.	

(1) The impact on protected areas for assets in Italy and Spain was also calculated separately, including the Natura 2000 database.

(2) Ref. United Nations Environment Programme – World Conservation Monitoring Centre (UNEP-WCMC) Resources where the types of sensitive areas are mentioned, including Key Biodiversity Areas.

(3) IUCN – International Union for the Conservation of Nature (<https://www.iucnredlist.org/resources/habitat-classificationscheme>).

Assets in sensitive areas

	UM	2025	2024
Biodiversity and ecosystems			
Power Generation Plants			
Operating power generation plants that fall within biodiversity-sensitive areas ⁽¹⁾	n.	768	753
- of which operating power generation plants that fall within protected areas ⁽²⁾	n.	108	106
Hectares occupied by operating power generation plants that fall within protected areas	ha	5,798	5,731
Distribution Assets			
Hectares occupied by distribution assets that fall within protected areas ⁽³⁾	ha	14,767	14,187
Hectares occupied by distribution assets that fall within Critical Habitats	ha	38,209	37,804

(1) The number of plants in areas of high biodiversity importance has been modified following the update of thematic maps and the refinement of calculation methodologies.

(2) For Italy and Spain, in 2025, the number of plants in protected areas and the hectares occupied, including overlap with Natura 2000 areas, is 288 and 23,063 ha respectively.

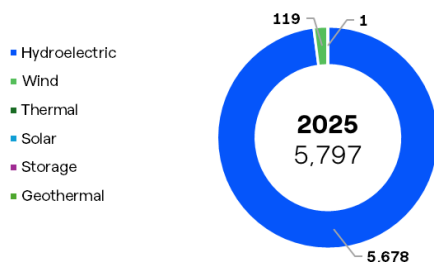
(3) The scope relates to the MV and HV grids in Italy, Spain, Chile, Colombia and Brazil. The increase in the figure compared to the previous year is mainly due to the updating of the cartography of protected areas. For Italy and Spain, in 2025, the hectares occupied by distribution assets, including the overlap with Natura 2000 areas, amount to 34,936 ha.

Generation

Most of the plants in sensitive areas are hydroelectric, mainly built in the 1970s or earlier (in many cases before the creation of protected areas, the classification of critical habitat or the identification of threatened animal species), both in Europe and Chile, and managed according to reservoir management plans shared with local authorities.

There are 108 power generation plants that fall totally or partially located in **protected areas** and account for 2.3% of the total area occupied by all assets, amounting to 5,798 hectares (out of a total of 251,444 ha). No new plants have been built in protected areas since 2013.

Power generation plants in protected areas (hectares)



Plants located in **areas of high biodiversity significance** are 768, a slight increase compared to last year due to the inclusion of acquired hydro plants in operation. In 2025, no new plants came into operation in sensitive areas, with the

exception of Guayepo III, which is close to an area of local relevance.

Generation sites in sensitive areas ¹⁸	25/176	96/244	583/639	37/56	25/36	2/43

(1) The number of plants in areas of high biodiversity importance has been modified following the update of thematic maps and the refinement of calculation methodologies.

Distribution

MV/HV assets that fall in **protected areas** account for 3,1% of the total area occupied, accounting for 14.767 ha (corresponding to 16.162 km¹⁹) out of a total of 484,622 hectares. In case the infrastructure is located in a protected area, Enel provides the best solutions to

mitigate the impact on the surrounding environment, also considering the need to comply with its service obligation. MV/HV assets falling under **Critical Habitat** are 7,9% of the total area, equivalent to 38.209 ha (59.236 km).

Soil transformation

Generation

Power generation plants that entered in operation in 2025 have a land occupancy of 1,394 ha, of which only 28% was built on natural habitats (397 ha), while 72% was built on modified habitats (997 hectares), demonstrating Enel's

commitment to preferring anthropized sites over natural ones. Of the impacted natural habitats, only 3 ha are in forest habitat²⁰, all of which have been compensated for through local restoration activities.

	UM	2025	2024
Transformation of natural habitats			
Power Generation plants			
Hectares occupied by generation assets that became operational in the current year	ha	1,394	5,005
Hectares occupied by generation assets that became operational in the current year falling within modified habitats	ha	997	2,497
Hectares occupied by generation assets that became operational in the current year and falling within natural habitats	ha	397	2,508
Hectares occupied by generation assets that became operational in the current year and falling within natural habitats (forestry habitat)	ha	3	223

¹⁸ The number of plants in areas of high biodiversity importance has been modified following the update of thematic maps and the refinement of calculation methodologies.

¹⁹ Including the Natura 2000 network, the total area of protected areas in Italy and Spain is 37,168 km, covering a surface area of 34,936 ha.

²⁰ The habitat classification is taken from the IUCN - International Union for Conservation of Nature database (<https://www.iucnredlist.org/resources/habitat-classificationscheme>).

Distribution

Almost all HV and MV distribution lines were built in the 1970s, mainly in urbanized habitats. Specifically, about

70% of distribution MV/HV assets are located in modified habitats, about 30% in natural habitats.

Number and types of endangered species

Enel identifies and assesses the presence of endangered species, with a focus on those on the International Union for Conservation of Nature (IUCN) Red List and national conservation lists. Below is a breakdown of the total

number of species identified in biodiversity project areas related to operating power plants by level of extinction risk.

COUNTRY	NO. PROJECTS	OF WHICH VOLUNTARY	PROJECT TYPE				SPECIES CLASS	NUMBER OF SPECIES ON THE IUCN RED LIST ⁽¹⁾			
			CONSERVATION (SPECIES)	MONITORING	RESTORATION (HABITATS)	RESEARCH AND OTHER PURPOSES		CR	END	VUL	TOT
Iberia	43	53%	29	3	6	5	Birds; Bats; Terrestrial fauna (Mammals); Terrestrial flora	0	8	7	15
Italy	50	42%	24	12	13	1	Birds; Bats; Terrestrial fauna (Mammals); Terrestrial flora; Fish fauna	4	22	19	45
Rest of the world ⁽²⁾	128	17%	19	59	40	10	Birds; Bats; Terrestrial fauna (Mammals); Terrestrial flora; Aquatic fauna (Amphibians and Reptiles); Fish fauna	5	21	71	97
Total	221	30%	72	74	59	16		9	51	97	157

(1) Critically Endangered (CR) – Endangered (END) – Vulnerable (VUL)

(2) Argentina, Brazil, Chile, Colombia, Guatemala, Mexico, North America and South Africa.

6.4.3. Metrics for monitoring the action plan

In 2025, **221 projects** were brought to completion to protect species and natural habitats at **operating power plants and assets**, of which about 48 were developed in partnership with government agencies and non-governmental organizations and universities, for a total capital expenditure of around 16 million euros. The projects are implemented in all countries and regions and mainly involve operating renewable power generation plants and distribution networks and have included habitat restoration activities of **10,705 hectares²¹**, most of which are related to ecological restoration and

reforestation activities, mainly in Colombia, North America e Brazil. In addition, **32 further projects** were implemented in 2025 at power generation construction sites, aimed at habitat restoration, conservation and monitoring of affected native species, for a total investment of over 2 million euros. Moreover, there are **5 active projects in power plant decommissioning sites** in Italy. Examples of the measures to mitigate impacts on biodiversity carried out in compliance with the related policy are available on the sustainability section of the enel website.²²

21. These are recovered hectares, relative only to ongoing habitat recovery projects in 2025.

22. <https://www.enel.com/investors/sustainability/strategy-sustainable-progress/biodiversity/policy>

6.4.4. Additional metrics of exposure and assessment

This paragraph outlines the impact metrics previously identified, together with the assessment and mitigation actions undertaken by Enel, with reference only to power

generation assets in operation, excluding nuclear, and considering only hydroelectric reservoirs in operation in the last 10 years.

2025 assessment of biodiversity project impacts	Number of sites	Hectares
Number of sites and total area used for operating assets	560	55,764
Assessment		
Sites where biodiversity impact assessments have been carried out in the last five years	560	55,764
Exposure		
Sites with biodiversity impact assessment in the vicinity of critical areas and total area of these sites ⁽¹⁾	185	5,861
Management plans		
Sites with biodiversity impact assessment located in the vicinity of critical areas that have a biodiversity management plan, and total area of these sites	185	5,861

(1) Generation assets in critical habitat include all sensitive areas (ref. ESRS E4-5)



7. Resource Use and Circular Economy

7.1. Dashboard Targets

The results of the 2025 double materiality process for aspects related to “Resource use and circular economy” are reported below, with details of the material IROs used in the preparation of this section.

Subtopic	Description of IRO	Type	Target/Action plan
WASTE	Economic and reputational benefits linked to the reduction in the production and landfill disposal of non-hazardous waste from direct and indirect operations through the optimization of segregation, treatment and recovery processes and the promotion of sustainable end-use chains.	Opportunity	Target Percentage of total industrial waste recovered (O&M and E&C)

7.2. Policies related to resource use and circular economy

Reducing waste generation and ensuring its optimal management are strategic objectives of the Group’s Environmental Policy. In line with these principles, Enel renewed its **Waste Management Policy** in 2025, confirming and further strengthening its commitment to

avoiding or minimizing waste production, especially of hazardous waste, and maximizing the reuse, recycling and recovery of waste and end-of-life goods, with a view to a circular economy of resources and in line with the European waste management hierarchy.

WASTE MANAGEMENT POLICY	
MAIN CONTENTS	<ul style="list-style-type: none"> Align the principles and operational criteria for waste management and the definition of related objectives and improvement plans with the recommendations contained in the ESRS standards and the results of the Group’s materiality analysis; Adopt the European waste management hierarchy: prevention, reuse, recycling, recovery and disposal, starting with the sustainable design of assets and the sourcing of products with reduced environmental impact, up to the maximization of waste recovery; Implement circular economy practices aimed at maximizing the value of end-of-life assets and reintegrating secondary materials into production cycles, extending these practices to contracted activities as well; Identify roles, responsibilities, classification criteria and management and control procedures designed to prevent and reduce risks to the environment and the organization and to ensure corporate compliance with local laws and regulations; Indicate the procedures adopted for the qualification, control and consequence management of contractors and subcontractors responsible for managing waste produced by Enel, as well as those who produce and manage waste as part of activities carried out on behalf of Enel; Collect and share best practices and management rules developed within the Group.
SCOPE	<ul style="list-style-type: none"> Assets under Enel’s operational control and entire value chain.
IROS COVERED AND REFERENCES	<ul style="list-style-type: none"> Waste.
STAKEHOLDERS INVOLVED IN THE DEFINITION	<ul style="list-style-type: none"> Qualified suppliers of services and goods.
DIFFUSION	<ul style="list-style-type: none"> Internal policy.

7.3. Action plan for the management of material IROs

In line with decarbonization strategies, since 2017 the Group has adopted a voluntary target for reducing waste produced by operations and maintenance (O&M)²³ activities, both directly and by contractors working on Enel behalf, of 3,0 Mt by 2030 (-55% vs 2017). The decision to include in Enel's reporting and improvement targets also indirect waste, i.e. waste produced at the Group's operating assets by contractors, is in line with the principles of extended producer responsibility

recommended by EU regulations.

The decarbonization process undertaken by the Group has led to a gradual and drastic reduction in the waste produced by coal-fired thermoelectric plants, mainly consisting of coal ash and desulfurization gypsum. In particular, the production of this type of waste is expected to be completely eliminated in the coming years, in line with the Net Zero Plan.

ACTION	DESCRIPTION	SCOPE	TARGET	TIMING	MONITORING
Reduction of waste production from O&M activities	The ongoing phase-out of coal-fired plants allows for a drastic reduction in related process wastes (ash, gypsum, and sludge).	Direct and indirect O&M activities involving operational assets	Yes	2030- Already achieved	Already achieved as a result of the ongoing implementation of the decarbonization plan
Increased the percentage of waste recovery	Establishment of specific programs and procedures to maximize waste recovery and recycling.	Direct and indirect O&M, construction sites and decommissioning activities	Yes	2030	KPIs for monitoring and reporting on country and business line plans
Extended producer responsibility	Inclusion in the Group's target of the amount of waste produced by contracted companies as part of outsourced activities.	Direct and indirect O&M, construction sites and decommissioning activities	Yes	2030	KPIs for monitoring and reporting on waste produced by contractors
	<ul style="list-style-type: none"> In the post-consumer phase, take-back and recovery of equipment installed at customer premises. Periodic customer awareness campaigns. 	Products and services offered to end customers	No	Continuous improvement	Based on the country's implementation programs
Technical and economic valuation of end-of-life and waste goods	Adoption of procedures and recommendations for the collection, classification and final destination of goods and wastes.	Activities under the operational control of the Group	No	Continuous improvement	Based on specific plans for the operation, refurbishment or decommissioning of assets

The voluntary target for the reduction of O&M waste, defined in 2017, is therefore substantially achieved, with values for the period 2023-2024 remaining close to the assigned target (3,2 Mt for 2023 and 2,6 Mt for 2024, respectively, compared to the 2030 target of 3,0 Mt). Due to the ongoing decarbonization process, the types of waste produced are increasingly less related to thermoelectric production and more associated with the management and modernization of electricity grids, strategic for the energy transition.

Within generation activities, waste produced by engineering and construction (E&C) activities related to

the construction of new renewable plants and the decommissioning or repurposing of end-of-life thermoelectric plants, which are also mostly attributable to contracted activities, appears to be playing an increasingly significant role. During decommissioning of generation plants, selective demolition techniques for structures and dedicated management procedures are adopted to maximize economic value, mainly obtaining reusable goods and valuable metal waste.

Based on the above considerations, Enel has decided in 2025 to **renew its public Group target at 2030** with a new objective aimed to increase the percentage of total waste

23. In the case of distribution networks, given the size and widespread nature of the construction sites, this also includes waste from the construction and refurbishment of assets. This specification applies to all waste data relating to Distribution networks.

recovered compared to the 2024 baseline year. The target includes both direct and indirect activities, extending its scope of application not only to operation & maintenance activities but also, within the scope of power generation, to construction and decommissioning activities, and to the smaller waste quantities produced by service activities (e.g. public lighting networks and electric mobility). The target is supported by commitments set out in the Group Waste Management Policy and reinforced by a structured waste recycling program and dedicated action plans implemented at country and business line level.

Local and business line's action plans and initiatives ensure context-based target implementation, the operational accountability and the continuous improvement in waste management performance, in line with circular economy principles and regulatory requirements. The results and effective practices emerging from these initiatives converge into the "Zero Waste" project, which since 2020 has acted as a common platform to collect, systematize, and share best practices aimed at reducing waste in generation plants and construction sites. Through this integrated approach, Zero Waste promotes the reuse, recovery, and recycling of materials, leveraging actions such as maximizing the recovery of excavated materials, applying second-life processes for equipment under decommissioning or refurbishment, and improving the recovery of sludge and drilling debris. Implemented together with contractors and local communities, these practices consolidate Group knowledge, enhance recovery performance, and strengthen Enel's circularity objectives.

Particular attention is also paid to waste management by contractors, not only during the initial stages of companies qualification, but also during the operative phases through audits to verify the validity of authorizations, the robustness of management processes adopted and the final destination of produced waste to

off-side disposal and recycling facilities, with special regard to substances of concern and hazardous waste.

Regarding the products and services offered to **end customers**, Enel is committed to minimizing their impact on production cycles by selecting its main providers also based on information (verified, transparent and comparable) on the environmental impact of individual products, as well as the use of recyclable raw materials in products and packaging.

As part of our tender processes, for example we require suppliers to report the Global Warming Potential (GWP) of the products offered, based on recognized certifications (EPD, LCA or CFP), and we apply incentive mechanisms for solutions that achieve environmental performance below the defined targets. Moreover, to minimize the environmental impact during the design phase of our **charging infrastructure**, work continues on the project aimed at using recycled material derived from Enel smart meters to produce plastic casings for Enel Way Pole charging stations, ensuring the same performance as virgin material. For Way Pole 2.1 charging stations, approximately 37% of the total plastic content is recycled from smart meters, whilst for the Way Pole 1.0 and 1.1 models, the proportion stood at 6%.

In addition, periodic campaigns are conducted to raise awareness among customers on environmental sustainability issues, end-of-life management of products, ensuring in the post-consumer phase the take-back and recovery of installed equipment according to an Extended Producer Responsibility (EPR) model. Based on the quantities of EEE placed on the market, Enel submits a periodical declaration to the EPR systems, which guarantee the WEEE recycling.

With the aim of supporting customers along the small WEEE management value chain, as well as promoting economic development and circular economy processes, Enel has launched the "DireFareRAEE" project in Italy in collaboration with the Erion consortium, to test the one-to-zero collection scheme in selected Enel stores.

7.4. Metrics and targets

7.4.1. Targets on waste

KPI	POLICIES	SCOPE	BASELINE	MILESTONE 2028	TARGET 2030	STATUS
Percentage of total industrial waste recovered⁽¹⁾	<ul style="list-style-type: none"> Environmental Policy Waste Management Policy 	Direct and indirect O&M, construction and demolition activities in all countries and regions	Year: 2024 Value: 85%	87%	90%	In line

(1) Waste originating from exogenous factors are excluded (e.g. extreme weather events, acquisition of brownfield land found to be contaminated, changes in regulatory frameworks, new site-specific administrative regulation).

Based on the above considerations, in 2025 Enel adopted a new voluntary target aimed at maximizing and maintaining over time the recovery rate of total waste produced by the Group's direct and indirect activities, including not only activities carried out during the O&M phase but also those carried out during the construction or demolition of plants. The target set is to achieve a

recovery percentage of 90% by weight in 2030, five percentage points higher than the base year, 2024, when a percentage of 85% was recorded. This is a particularly challenging commitment, aimed at confirming and further improving the performance achieved by Enel in recent years.

7.4.2. Resource outflows

Total waste produced by the Group in 2025 amounted to 4,611,277 tons, of which 3,963,539 tons came from O&M activities (86%) and 647,738 tons from construction and demolition activities, mainly of power generation assets. The recovery rate of total waste produced was 87%, two percentage points higher than the 2024 baseline value, confirming the improvement path set by the new target. As regards **waste produced by O&M activities**, in 2025 there was an increase (+50.4%) in the total quantity compared to 2024 (2,634,863 tons), mainly attributable to the increase in stone aggregates and excavated soil and rocks, produced by the management and modernization of electricity networks in Italy as part of the National Recovery and Resilience Plan. These residues are predominantly (99%) represented by non-hazardous waste (3,910,479 tons), consisting mainly of stone aggregates and excavated soil and rocks, with an overall recovery percentage of 94.8%, a significant improvement compared to the previous year (88.6% in 2024). Excavated soil and rocks and stone aggregates, that in some countries, including Italy, are classified and managed as waste, are almost completely recovered.

Hazardous O&M waste sent for disposal in 2025 was 15,451 tons (29.1% of total hazardous waste equal to 53,060 tons), in line with last year's performance despite a slight increase in the quantities produced.

On the contrary, it is now marginal, due to the closure of coal-fired power plants, the amount of **ash and gypsum** produced by generation activities, amounting to 144,231 tons in 2025, in line with the previous year. At the same time, there has been a decrease in the recovery rate of ash and gypsum from operation activities, equal to 6% compared to the previous year (19% in 2024), due to the lower quality of residual waste.

Waste from construction and demolition activities is mainly associated with the construction of renewable energy plants and the demolition of end-of-life thermoelectric plants, in line with the implementation of the decarbonization and energy transition process. The construction of new renewable energy plants mainly generates inert materials, such as excavated soil and rock, which are primarily reused on site as secondary raw materials, while demolition activities mainly generated inert waste from removal and cleaning of deposits and tanks, which was disposed of in accordance with local regulations. A total of 647,738 tons of waste was produced, a significant reduction compared to the previous year (-43.2%, 1,140,775 tons in 2024). This was mainly non-hazardous waste (97.9%).

Values for hazardous and non-hazardous waste generation, as well as quantities sent to different final destinations, are determined in most cases through direct measurements. Waste is weighed at the final delivery

recipients and, in some cases, already within the Enel asset where it is generated, if that asset is equipped with a certified weighing instrument. Regarding waste produced by contracted work, data and transport documents are recorded by contractors, including through the utilization of computerized tools for work

accounting, which are periodically verified by Enel. The data collected are entered semi-annually into the Group environmental data collection tool, where they are validated and aggregated at different levels of the organization.

	UM	2025	2024
Waste generated			
Total amount of waste generated	ton	4,611,277	3,775,638
- of which from operation & maintenance activities	ton	3,963,539	2,634,863
- of which from construction & demolition activities	ton	647,738	1,140,775
Radioactive waste	m ³	258	235
Waste generated from operation & maintenance activities			
Non-hazardous waste	ton	3,910,479	2,591,234
Hazardous waste	ton	53,060	43,629
Waste diverted from disposal			
Recycling and reuse	ton	3,745,550	2,328,331
- of which hazardous waste	ton	37,609	30,991
- of which hazardous waste excluding ash and gypsum	ton	37,609	30,991
- of which non-hazardous waste	ton	3,707,941	2,297,340
- of which non-hazardous waste excluding ash and gypsum	ton	3,698,591	2,280,998
Total amount of ash and gypsum diverted from disposal	ton	9,350	25,964
Percentage of waste recycled and reused	%	94.5	88.4
Waste directed to disposal			
Waste directed to disposal	ton	217,989	306,532
- of which hazardous waste	ton	15,451	12,638
- of which hazardous waste excluding ash and gypsum	ton	14,278	10,838
- of which non-hazardous waste	ton	202,538	293,894
- of which non-hazardous waste excluding ash and gypsum	ton	68,829	183,501
Total amount of ash and gypsum directed to disposal	ton	134,881	112,194
Landfill disposal	ton	180,793	263,250
- of which hazardous waste	ton	8,620	6,185
- of which non-hazardous waste	ton	172,173	257,065
Incineration	ton	5,614	9,579
- of which hazardous waste	ton	1,862	1,670
- of which non-hazardous waste	ton	3,752	7,909
Other disposal operations	ton	31,582	33,703
- of which hazardous waste	ton	4,969	4,782
- of which non-hazardous waste	ton	26,613	28,921
Percentage of waste directed to disposal	%	5.5	11.6

7.5. Materials, Resource Use and Circular Economy

Circular economy represents a strategic pillar for the Group, aimed at decoupling business activities from raw materials consumption and waste generation. This approach is embedded in the Group's environmental policies and supported by technological innovation, enabling a reduction in pressure on resources that are critical for the energy transition, while mitigating risks, impacts and costs along the entire value chain.

The Group's approach spans all phases of the product and service life cycle and is based on five pillars:

- **Circular inputs**, through the use of materials from renewable sources, recycling and reuse;
- **Extension of useful life**, enabled by design focused on durability, improved reparability and predictive maintenance;
- **Product as a service**, through business models in which the company provides a service while retaining ownership of the asset;
- **Sharing platforms**, aimed at maximizing asset utilization rates;
- **New life cycles**, focused on the recovery and valorization of assets and materials at end of life.

The Group's initiatives mainly focus on three pillars: **circular inputs, extension of useful life and new life cycles**, which are particularly relevant for energy technologies.

- **Circular inputs**: in addition to reducing fuel consumption through the increasing use of renewable energy sources, the Group focuses on the raw materials embedded in equipment and products purchased for its various business activities, with the

aim of reducing overall material consumption. For example, during tender processes, incentive mechanisms have been introduced for certain core components to reward equipment with lower CO₂ impact compared to market standards, thereby encouraging the use of recycled materials in suppliers' manufacturing processes. Among the raw materials used, particular attention is paid to critical raw materials (in line with the Critical Raw Materials Act), especially those such as polysilicon and lithium, which are directly linked to strategic technologies for the Group, including photovoltaics and batteries. In this context, research, assessment and support activities have continued to develop solutions complementary to lithium-based batteries, with the aim of reducing dependence on critical materials while improving efficiency, safety- and sustainability (see [BOX 21](#)).

- **Extension of useful life**: in addition to a global asset management approach for electricity distribution and generation based on repair activities and predictive maintenance, the Group is also working on innovative solutions (see [BOX 22](#)).
- **New life cycles**: initiatives are underway in all countries where the Group operates, aimed at the systematic reuse, both internally and through resale, of obsolete or unused generation equipment with residual useful life, as well as at the valorization through recycling of materials recovered from distribution network maintenance activities or from the decommissioning of generation plants (see [BOX 23](#)).

BOX 21 – Energy storage: Evaluation of innovative solutions

To **reduce dependence on critical raw materials** and **enhance the resilience and sustainability of energy storage systems**, the Group is carrying out scouting, validation and development activities focused on storage technologies complementary to lithium-based batteries.

In detail, the main initiatives include:

the validation of innovative sodium-ion batteries at Enel's Passo Martino Innovation Lab (Catania);

the participation as a partner in a project consortium, successfully awarded in the Horizon Europe funding framework, aimed at developing an Italian value chain for sodium ion batteries;

the realization of a vanadium electrolyte flow battery plant at Son Orlandis (Majorca, Spain), in operation since 2023, with a capacity of 1,1 MW and 5,5 MWh, coupled with a photovoltaic system, aimed at assessing the performance and reliability of the technology.

BOX 22 – Energy storage: Pioneer project

With the Pioneer project, in Italy, Enel collaborates with ADR – Aeroporti di Roma to develop an energy storage system based on the **reuse of end-of-life electric vehicle batteries**. Installed at Rome Fiumicino Airport, the system has a total capacity of 10 MWh and is built using 762 second-life batteries. Pioneer represents the largest second-life battery storage system in Italy and one of the leading examples in Europe, as well as the first Made-in-Italy project integrating

heterogeneous batteries from different automotive manufacturers. The project enables an estimated reduction of 16.000 tons of CO₂ over 10 years and is integrated with the largest self-consumption photovoltaic plant at a European airport.

BOX 23 – The “New Life” project

The “New Life” Program, launched in 2020, is a core pillar of Enel’s sustainability strategy and its commitment to the circular economy. The program is designed to **maximize the value of materials, spare parts and equipment** no longer required at generation power plants and construction sites, by reintegrating them into the value chain and generating new economic and environmental benefits.

The program currently supports the entire generation value chain and operates **across 10 countries**, involving **more than 120 power plants and projects**. New Life is based on a strong cross-functional and cross-geographical collaboration model. In recognition of its contribution to sustainable development, the program was awarded with the Sustainable Development Award – Circular Economy Sector, Business Section – Best Project in 2024.

Since its launch, New Life has generated approximately €100 million in economic value through the implementation of circular asset management practices, including internal reuse, resale and recycling.

- **Internal reuse:** optimization of asset utilization and reduction of procurement costs through the redeployment of materials and components within the generation asset fleet
- **Resale:** generation of additional revenues through the commercialization of obsolete or surplus assets to external partners
- **Recycling:** recovery and valorization of raw materials contained in end-of-life assets

Beyond economic performance, the program delivers measurable environmental benefits, contributing to the reduction of the Group’s carbon footprint by avoiding the production of new components and promoting responsible waste management. These actions result in lower CO₂ emissions, reduced consumption of raw materials and a decrease in industrial waste generation.

The New Life Program acts as a strategic enabler of sustainable asset management, demonstrating how circular economy principles can **generate long-term economic, environmental and organizational value**. More than an operational initiative, New Life represents a cultural transformation, fostering innovation, accountability and collaboration throughout the entire value chain.

Through the initiatives mentioned above, Enel is working to maximize the recycling of key materials used across the main energy technologies relevant to the Group. Below

are an overview of the expected end-of-life volumes and their potential recyclability.

TECHNOLOGY	MAIN MATERIALS	EXPECTED VOLUME ⁽¹⁾	POTENTIAL RECYCLABILITY (PUBLIC SOURCES)
WIND	Steel, aluminum, copper, fiberglass	Around 0,8 GW before 2030. Most significant volumes are expected post-2040	Wind turbines are already around 85%-90% recyclable, thanks to metals ⁽²⁾ . Blades are more challenging to recycle
SOLAR	Aluminum, glass, copper, polysilicon, silver	No significant volume at the end of life expected before 2040 considering the installed capacity	PV modules are already around 90% recyclable, mainly thanks to glass and aluminum, while other materials ⁽³⁾ (e.g., electronic component) remain harder to recover
BESS	Lithium, graphite, phosphorus, aluminum, copper	No significant volume at the end of life expected before 2035 considering the installed capacity	EU regulation ⁽⁴⁾ requires, by the end of 2025, batteries used in BESS achieve 65% recycling by average weight of lithium-based batteries
GRIDS EQUIPMENT	Steel (e.g. transformers, poles), aluminum (e.g. cables), copper (e.g. cables, transformers, meters)	To date, these end-of-life materials related to network activities are largely recovered, given the high recovery potential of their material composition.	The recyclability of grid components depends on their material composition. Metals represent the most easily and widely recyclable share

(1) Potential expected volume at end of life considering the installed capacity

(2) Source: Wind Europe

(3) Source: Solar Power Europe

The following boxes ([BOX 24](#), [BOX 25](#), [BOX 26](#), [BOX 27](#), [BOX 28](#) and [BOX 29](#)) illustrate selected initiatives that exemplify how Enel translates its circular economy principles and sustainable resource management into

concrete practices along the value chain, including waste recovery, reuse and recycling solutions, circular design approaches and innovative projects applied across different technologies.

BOX 24 – SPAIN Aldeavieja Wind Plant: Pioneer example of circular repowering

The Aldeavieja wind plant, located in the province of Ávila (Spain), represents a pioneering example of circular repowering in the European wind sector. It presents an improvement in energy efficiency, increasing the installed capacity from 14.5 MW to 24 MW and annual production from approximately 32 GWh/y to 64 GWh/y. In particular, during the dismantling process were applied advanced circular economy principles to increase product recyclability, obtaining the **AENOR “Zero Waste” certificate** for the dismantling process, ensuring the correct management of all materials. All dismantled components were either sold to third parties or stored for future reuse as spare parts. As part of the circular economy approach, a special concrete mixture incorporating recycled wind turbine blade fibers was produced and used for the construction of the foundation slab of the waste storage area. This innovative solution was developed within the framework of the European Blades2Build project, led by an international consortium of 14 partners including Endesa.

BOX 25 – European innovative project in Wind sector: DeremCo

Enel, together with 30 European partners, is collaborating on DeremCo – “De & Remanufacturing for Circular Economy Investments in the Composite Industry”, an EU-funded project coordinated by the Politecnico di Milano and scheduled for completion in mid2026. The project aims to promote a systemic, cross sector, and demand driven circular economy solution that enables the economically viable **reuse of fiber reinforced polymer materials and components** in new high value-added products. In the wind sector, while most turbine components are easy to recycle – being primarily made of metal – an open challenge remains: the end of life management of blades, which are composed of fiber reinforced polymers. These materials are also structural elements of a wide range of consumer and industrial goods, and managing composite products after use in line with circular economy principles continues to be a significant challenge. DeremCo plans to demonstrate 14 reuse cases for composite materials, promoting their replication across Europe based on two promising pilot strategies: (i) mechanical recycling, and (ii) thermochemical reprocessing and remanufacturing.

BOX 26 – European innovative project in Solar sector: PHOTORAMA

Enel participated, as part of a consortium of 12 organizations, in the European **PHOTORAMA** innovative project, funded under the **Horizon** program, aimed at improving the recycling of photovoltaic panels and the recovery of raw materials. Concluded in 2025, the project addressed the challenge of the expected increase in end-of-life photovoltaic waste, with the objective of making the solar value chain more sustainable across its entire life cycle. The approach involved the development of a fully circular model integrating all phases of the process: collection, automated dismantling, advanced material separation, and selective recovery of critical components such as silicon, silver, indium and gallium. The overall objective was to implement a reliable and competitive recycling scheme capable of reintegrating recovered materials into new industrial applications, thereby contributing to the creation of sustainable secondary raw material markets in Europe. PHOTORAMA achieved significant results. In 2025, an innovative pilot line was successfully developed and inaugurated, integrating advanced technologies for the recovery of high-purity secondary raw materials from end-of-life photovoltaic modules, some of which were provided to the consortium by Enel. In addition, several reuse applications for the recovered materials were developed and validated within a circular economy framework, and the main economic, environmental, regulatory and social contexts were analyzed to improve the collection and treatment of photovoltaic panels. Overall, the PHOTORAMA project contributed to promoting a more sustainable value chain and market at European level, laying the foundations for the future industrialization of technologies and processes successfully validated within the project.

BOX 27 – SPAIN commercial: ALVA Project (ALternativas de VALorización)

In line with the principles of the Circular Economy and in compliance with environmental waste regulations, Enel has developed a project in Spain aimed at the **reuse and recycling of products or components of Electrical and Electronic Equipment (EEE) returned by customers**. The project applies to electronic devices marketed by Enel that are returned at the end of a rental period or replaced when EEE installed at customer premises is substituted (one-to-one take-back scheme). With reference to the waste hierarchy pyramid, the project aims to implement a virtuous management and traceability system for products/waste in order to prioritize EEE reuse operations over disposal. The project involves installers, a qualified repair company, and the ECOTIC consortium for the management of Waste Electrical and Electronic Equipment (WEEE), with the objective of improving circularity through full traceability of the installation/replacement process, increasing the rate of WEEE reuse and recovery at treatment facilities, and consequently reducing CO₂ emissions. In addition to the environmental benefits of this project, Endesa donates the financial compensation obtained for administrative expenses to EDUCO, an NGO for International Cooperation for Children, adding a socially benefit initiative to a circular economy project.

BOX 28 – ITALY Livigno Primary Substation: example of resilient and sustainable construction

The new Livigno primary substation, inaugurated in December 2025, is the highest in Italy, located at 2,177 meters above sea level, and plays a key role in ensuring a modern, **resilient and sustainable power supply** for the Milano Cortina 2026 Winter Olympics and for the long-term development of the territory. The facility was built as an underground (hypogean) infrastructure, enabling full integration into the alpine landscape and minimizing environmental impact. In line with circular economy principles, all 27,000 m³ of excavated soil and rock were **reused** for local community infrastructure, such as the Passo Eira municipal parking area. The project is part of a broader grid reinforcement plan in Alta Valtellina, including 60 km of underground cables, the construction of 4 new secondary substations and the technological upgrade of 12 existing substations, enhancing automation, remote control and climate resilience. Beyond supporting the Olympic Games, the infrastructure improves service quality for residents and enables future electrification for around 20,000 customers.

BOX 29 – COLOMBIA Distribution networks: Reducing hazardous waste through vegetable-oil transformes

In 2025, the Group continued to implement lower-impact technologies in asset management, with a specific focus on reducing the generation of hazardous waste. In Colombia, the rollout of **transformers using vegetable-based dielectric oil** progressed with the acquisition of an additional 1,366 units, bringing the total number of transformers purchased since the initiative began in 2021 to 8,223. The vegetable oil – derived from soybean, canola and sunflower seeds – offers superior dielectric performance, a biodegradability level of around 90% and a high flash point, which helps reduce fire risk. These characteristics contribute to lowering the environmental risks associated with potential spills, reducing the generation of hazardous waste and simplifying mitigation and clean-up activities, with benefits also in terms of operational efficiency.



8. Energy Management

At Group level, Enel is committed to promoting a more sustainable use of energy through its decarbonization strategy. The Group has confirmed to eliminate thermoelectric sources by 2040, thereby achieving a zero-greenhouse gas emissions production mix. This phase-out of thermoelectric capacity also entails a progressive reduction in fossil fuel consumption in electricity generation processes.

In addition, Enel places strong emphasis on reducing energy consumption, actively and systematically promoting continuous improvement initiatives (see [BOX 30](#)), including the implementation of certified Energy Management Systems in accordance with the EN ISO 50001 international standard and the regulatory requirements established by the EU Directive 2023/1791. Globally, Enel has **ISO 50001** certified approximately 11,860 MW of the **thermoelectric generation capacity**, equal to 54% of its net installed capacity. Furthermore, in Italy, it's worth noting that Larderello, the world's oldest **geothermal complex**, obtained its first ISO 50001 certification in 2021, together with the other Italian geothermal units (776 MW net installed capacity), making Enel the first renewable energy company in Italy to achieve this important recognition.

All **Distribution System Operators** (100% DSOs) in Enel's countries of operation (Italy, Spain, Argentina, Brazil, Chile, and Colombia) covering a total of 1.9 million of km of high, medium, and low voltage networks, are ISO 50001 certified. This ongoing commitment aims to enhance energy efficiency across all business processes, including the design, construction, development, operation, and maintenance of the overall electricity networks, remote control systems, and commercial services related to electricity distribution, customer and producer connections, as well as metering and energy balance processing.

Among Enel's key achievements is the ISO 50001 certification of its main operating **commercial companies** in Italy and Spain, where a significant number of corporate vehicles are certified as Energy Service Companies (ESCo) in compliance with UNI CEI 11352 (Italy) and Clasificación de proveedores de servicios energéticos in accordance with UNE 216701 (Spain). These certifications support the implementation of "guaranteed results contracts" aimed at improving energy efficiency. In Italy, two companies—Enel Sole Srl and Enel X Italia Srl—are certified under UNI EN ISO 50001:2018, managing energy across 25,552 supply points for both electricity and natural gas. These results reflect effective energy management

through the rational use of energy and the implementation of energy efficiency measures via Energy Performance Contracts (EPCs). These were made possible thanks to the companies' ESCo certification (UNI CEI 11352) and the expertise of certified Energy Management Experts (EMEs) in accordance with UNI 11339:2023.

Through the adoption of a certified ISO 50001 Energy Management System, Enel ensures effective control of its processes via both internal audits and third-party external audits. This system also enables the implementation of continuous improvement actions aimed at enhancing energy performance, which are measured and monitored locally, with the definition of specific and quantified performance targets (e.g., machinery performance improvement, consumption reduction, etc.).

In terms of electricity consumption, Enel also places a strong emphasis on the use of green energy. In Italy, for example, Enel has contracted the supply of electricity from renewable energy sources for its civil buildings, further reinforcing its commitment to sustainability.

Regarding its value chain, focusing on downstream services, Enel offers technological solutions to its customers aimed at lowering carbon emissions associated with energy consumption across a wide range of sectors, including transportation, building management, industrial processes, and services (see [BOX 31](#)). These solutions include:

- The deployment of public and private electric vehicle charging infrastructure,
- The promotion of energy efficiency in both industrial and residential processes,
- Distributed generation,
- Energy consulting services,
- Smart street lighting, and
- The development of circular cities.

Recognizing the strategic importance of efficient energy management for environmental sustainability, competitiveness, and social responsibility is also a key commitment for **3Sun Srl**, which obtained its own Energy Management System certification in accordance with ISO 50001 standard on 30 January 2026.

Enel fosters an integrated corporate culture that considers quality, safety, environment, innovation and ethics as strategic pillars. The Group is committed to disseminating this culture across its entire organization, through dedicated training programs, mainly focused on the ISO 50001, in 2025.

BOX 30 – ITALY La Casella & SPAIN Son Reus CCGT plants: Energy efficiency Initiatives

At the **La Casella power plant**, turbine start-up data were analyzed, to optimize energy efficiency, given the increased number of start-ups required at gas-fired power plants in recent years. The goal was to improve the heating profiles of metal components, reducing both time and energy use without altering the final required temperature. This optimization generated significant time and energy savings, resulting in a positive energy balance. The energy benefit was calculated by multiplying the average savings per start-up by the total number of start-ups performed. In 2025, compared to a forecast of 14,400 MWh, actual savings amounted to 83,200 MWh.

At **Son Reus power plant**, one heat recovery steam generator was cleaned with dry ice in October. This intervention aimed to boost the unit's thermal output, making the combined cycle more efficient and reducing fuel consumption. By removing deposits from inside, the equipment now transfers heat more effectively, letting it produce more steam and electricity without needing extra natural gas. In 2025 the actual energy saved reached 9,000 MWh.

BOX 31 – ITALY commercial: The Enel "Lumiè" and "Ebitts" innovation projects

In 2025, Enel launched several innovation projects focused on reducing energy consumption and encouraging the use of energy from renewable sources, such as Enel Lumiè and Ebitts. Enel Lumiè is an innovative digital simulator already publicly available on enel.it and in all Enel shops. By splitting the simulator into pieces and focusing on single products (e.g. air conditioning), is now easier to identify the best product to fulfill a specific need while improving the energy efficiency of customers' homes, thereby reducing energy consumption. Indeed, vertical simulators' algorithm consider many more factors and technical conditions than the previous version, which allows to cover wider scenarios. Enel Lumiè helped over 15,000 customers in providing offers and insights to optimize their energy consumption, through energy efficient products and electrifying their energy use.

Ebitts is a digital platform on which customers can purchase a Token Box, an innovative product that allows customers to virtually self-produce renewable energy from fractions of utility-scale wind and solar power plants. The Token Box is designed for those who cannot install an on-site generation system but still wish to benefit from renewable energy. Ebitts supported over 200 customers in generating and auto-consuming over 141 MWh. The platform is available at ebitts.conio.com.

In 2025, the initiatives implemented by Enel to improve efficiency, drive technological innovation, and reduce CO₂ emissions across its operating commercial activities were further strengthened and consolidated. In the **public lighting sector**, the initiatives carried out in Italy, Spain, Colombia, Chile, and Brazil generated cumulative energy savings of approximately 338 GWh. For its **B2C (Business to Consumer)** customers in Italy, Spain and Chile Enel installed approximately 89,402 high energy efficiency commercial products, including condensing boilers, air conditioning systems and 26 GW of photovoltaic systems (partly equipped with energy storage systems). In the **B2B – B2G (Business to Business – Business to Government)** sector, photovoltaic plants and spot sales projects for customers in Italy, Spain, Portugal, Colombia, Brazil, Chile,

and Korea enabled the production of approximately 148 GWh of distributed renewable energy. In the **e- mobility sector**, contributed to provide electrical charging points in Chile, Colombia, Spain and Italy with a total amount of energy of 115.8 GWh. These results are complemented by the energy savings achieved through the cogeneration and trigeneration plants in Italy and Spain. Overall, Enel's efficiency and electrification products and services enabled its customers to **avoid the emission** of approximately 280.5 kt of CO₂. These figures were calculated using algorithms validated by an internationally recognized certification body, in accordance with the principles set out in the UNI EN ISO 14064-2:2019 standard.

8.1. Energy consumption and mix

The following metrics are applied to quantify Enel's energy consumption, providing a detailed disaggregation of purchased or acquired electricity by renewable and

non-renewable sources, as well as the breakdown of energy use by fuel typology.

	UM	2025	2024
Energy consumption for own operations			
Total energy consumption (primary and final)	TWh	168.59	170.52
Total energy consumption from fossil source	TWh	79.84	83.68
Fuel consumption from nuclear sources (uranium)	TWh	73.92	71.95
Total renewable energy consumption	TWh	14.83	14.89
Total non-renewable energy consumption	TWh	153.76	155.63
Total renewable energy consumption	%	91.20	91.27
Total non-renewable energy consumption	%	8.80	8.73
Total fuel consumption by primary sources	TWh	165.68	167.98
- from fossil sources	TWh	77.07	81.34
- coal	TWh	5.00	7.67
- natural gas	TWh	49.56	51.51
- diesel oil	TWh	14.34	13.71
- fuel oil	TWh	8.17	8.45
- from renewable sources	TWh	14.69	14.69
- biomass, biogas and waste	TWh	0.25	0.18
- geothermal fluid	TWh	14.44	14.51
Total consumption of electricity from renewable sources	TWh	0.14	0.20
Total consumption of electricity from non-renewable sources	TWh	2.78	2.34
Total consumption of electricity (final energy)	TWh	2.92	2.54



9. Environmental Legal Disputes and Violations

The amount of fines²⁴ imposed in 2025 was approximately 1.8 million euros, mainly from Brazil and Colombia and related to biodiversity and ecosystems.

No significant or severe events or incidents²⁵ related to **water** were recorded during 2025, nor were fines²³ issued

on this topic. Additionally, no severe events or incidents occurred resulted in **pollution** of the environmental matrix (i.e. oil spills, uncontrolled leakages or emissions).

	UM	2025	2024
Number of violations of legal obligations/regulations	n.	17	19
Amount of fines/penalties related to the above violations	M€	1.8	1.4
Environmental liability accrued at year end	M€	1.4	0.9

24. The relevance threshold for sanctions is \$10,000, therefore only sanctions that individually exceed this amount are reported.

25. The event's classification is defined in Enel internal procedure "Group Policy for the Classification and Analysis of Environmental Incidents" (ref par. 2.4).

