

Analysis of environmental risks and opportunities

The analysis of environmental risks and opportunities associated with Enel's business activities was conducted with a multifunctional integrated approach in line with the guidelines set out in the guidelines of the TNFD proposal and of the SBTN. The analysis, conducted in 2022 based on the results of the materiality analysis for impacts and dependencies described above, led to the identification for each technology of the main operational and economic-financial risks expected for the Company, as well as social and environmental risks, and the identification of the biggest opportunities in relation to each relevant impact factor and dependency. This preliminary screening analysis led to the definition of an evaluation template for each technology, which was used to identify the main critical events of a physical type (both acute in the short-medium term and chronic in the long term) and of a transitional type (resulting from possible changes in the regulatory, technological, reputational or market framework), and the main associated risks and opportunities expected. The main **operational and material economic-financial risks** for Enel are shown below:

- reduction or interruption of generation capacity;

- recovery and repair needs;
- authorization delays;
- adaptation and technological innovation needs;
- additional insurance fees;
- loss of competitiveness.

Simultaneously, this screening phase selected the following **main opportunities**:

- improvement of environmental and sustainability performance, such as efficiency in the use of resources and initiatives for the protection, restoration and regeneration of natural habitats;
- business opportunities, linked for example to the offer of nature-positive energy products and services, the launch of new partnerships in sustainable innovation sectors, access to green financing, and strategic choices of commitment and sector leadership, aimed at the economic, reputational and financial growth of the Company.

The screening analysis on Group impacts/risks conducted in 2022 reaffirmed the action priorities identified last year and described in the following table.

Impact Factors (or Pressures)	Importance • Magnitude • Probability	Level of control • Goals • Mitigation plans	Priorities
Use of terrestrial ecosystems	High	Moderate	High
• Land use • Habitat transformation and fragmentation			
Use of natural resources	High	High	Moderate
• Water withdrawal			
Climate change	Very high	Very high	Moderate
• Climate-changing gas emissions			
Pollution	High	High	Moderate
• Pollutant emissions (non-GHG) • Water and soil pollution • Waste production			
Disturbance factors and other	Low	Moderate	Low
• Noise and other • Invasive species			

The **identified intervention priorities** relate to the control of risk associated with **land occupation and the transformation of ecosystems**, and particularly to the use of land and the **transformation of terrestrial habitats**, in relation to which new commitments were made at Group level as early as last year (see the paragraph "Enel's commitment to biodiversity"). The analysis also highlighted an already very high level of commitment and control for risks associated with the use of natural resources (water withdrawal) and with potential pollution factors of environmental matrix

(emissions, discharges and waste production), as well as with climate change. In fact, for years Enel has already been defining stringent improvement targets, the results of which are described in the following paragraphs, which make it possible to mitigate the main risks associated with these impact factors in the future.

Following the screening activity described above, a more detailed aggregate analysis (by technology) was launched and is currently under way, which takes into account the estimated magnitude of potential risks or possible oppor-

tunities, the relative probability of occurrence and the mitigation actions already adopted by the Company. At the conclusion of this phase, the risk/opportunity analysis will therefore also be extended to the project and site level, to take into account the specific local context and the interaction of each technological asset with the local characteristics of nature and biodiversity. In this further phase, particular importance and priority will be given to plants in operation and to new assets in the planning and authorization phase which are located in areas of high value or naturalistic vulnerability, such as protected areas, critical habitats and water risk areas.

Dependency management

Meanwhile, as regards the management of **dependencies**, the main criticality of which is linked to the effects of climate change (climate regulation), an analysis was conducted for each technology and for each geographical area in which the Group is present. The operational and economic-financial risks resulting from the occurrence of acute and chronic meteorological phenomena were also analyzed in order to define specific adaptation and resilience plans. Acute and chronic physical phenomena are intensified and accelerated by ongoing climate change and their effects on the integrity, operational continuity and correct functioning of our plants depend, to an essential extent, on the ecosystem services of mitigation and control performed by the surrounding natural environment, which may be potentially compromised by human impacts (such as the sealing of occupied soil or the extraction of raw materials). Among these ecosystem services, regulation of the water cycle and the ability of vegetation to protect, prevent and mitigate the onset and intensity of flooding or soil subsidence phenomena are particularly relevant, as is the action of extreme winds. For more details, see the paragraph [“Enel’s impact on climate change – Climate scenarios, strategy and risks”](#) in the chapter [“Zero emissions ambition”](#).

Operational analysis and monitoring tools

From an operational point of view, in order to identify and minimize environmental risks related to our activities, Enel has equipped itself at Group level with a series of important tools for guidance, investigation and intervention with respect to both the environment and the socio-economic context. These tools are referred to below and can operate in a capillary and synergistic way within the organization to protect the environment and associated ecosystems.

Group Policy for the classification and analysis of environmental accidents. Environmental accidents are classified according to their type and relevance. This classification is based on their possible impact on the environmental matrices and on any potentially sensitive areas (ecosystems and protected areas), in addition to their negative impact on the organization itself (operational, legal, reputational and financial). In accordance with their classification and magnitude of such accidents, the policy defines communication procedures, the creation of analysis groups with the participation of the Global Functions, cause analysis, and monitoring of subsequent corrective actions and improvements.

Policy for assessing risks and opportunities related to environmental impacts. The policy applies to all operational sites (including those being decommissioned) and to Group staff functions in which an EMS compliant with ISO 14001:2015 requirements is adopted. Its application involves the adoption of a single model for the classification and assessment of risks and opportunities linked to impact factors (or pressures) exerted on the environment, through the use of an IT tool called ERA (Environmental Risk Analysis). The analysis process involves evaluating both the interactions of significant operational aspects with various environmental matrices, and mitigation controls adopted for compliance with regulatory compliance, as well as the most stringent voluntary continuous improvement targets; furthermore, taking into account the results of the analysis of any accidental environmental events and periodic environmental visits to the various sites (Extra Checking on Site - ECoS), it allows a high level of integration of continuous control processes between the various levels of the organization and the related prioritization of improvement actions. Finally, the analysis enables the assessment of environmental aspects linked to governance and strategic activities carried out by the central Functions of the organization.

Extra Checking on Site (ECoS) Policy. The ECoS is a tool for planning and conducting site visits by cross-divisional teams of experts in support of plants and operational facilities and with a view to identifying improvement plans and sharing best practices. In 2022, the different Business Lines across all the Countries in which the Group operates conducted over 80 ECoS with a focus on the environment. See also the chapter [“Occupational health and safety”](#).

Environmental qualifications and inspections for suppliers of products and services. In consideration of the importance and role that suppliers have in determining the overall environmental performances of the Company, Enel has adopted a supplier environmental assessment procedure that is structured and homogeneous for the entire Group, activated in the development phase, above all for high environmental risk activities, and following important environmental events. Environmental assessments aim to verify the EMS of suppliers

as a whole and propose improvement actions to be shared with the supplier. They are also accompanied by environmental inspections conducted at the suppliers' operating sites, which include assessments on specific aspects of biodiversity. In order to standardize inspection standards and obtain a structured and widespread control system, Enel has adopted Group Guidelines on Environmental Inspections, which define the planning criteria as well as methods of execution in the field (see the chapter "[Sustainable supply chain](#)").

Consequence Management Procedure. At Group level, Enel has adopted an organizational procedure that defines a global line of action to improve the environmental perfor-

mance of its suppliers; specifically, roles and responsibilities are defined in order to implement Consequence Management, as well as actions against its contractors, in the event of their involvement in significant environmental events and/or due to low performance on specific environmental issues, encountered during the performance of the contract.

Finally, it should be noted that in analyzing the local context, which forms the basis for the community relations model, an assessment of the main social and environmental risks and opportunities is carried out in order to minimize them and promote socio-economic development. See the chapter on "[Engaging communities](#)".