Biodiversity Report 2024

Iberdrola Biodiversity

Ignacio S. Galán

Chairman

Iberdrola assumed a firm commitment to the environment decades ago, focusing its activity on building an energy model in harmony with nature and people."

According to the World Economic Forum, more than half of the world's gross domestic product depends to some extent on nature[1]: from the construction, agriculture, and food industries to other sectors such as tourism and medicine, they are much more linked to nature than what people can imagine. Of course, energy is not at all alien to this reality.

Biodiversity is essential for the balance of ecosystems. Therefore, proactively promoting it helps us guarantee environmental stability and, with it, the resources and quality of life of future generations.

From its origins, Iberdrola assumed the duty of carrying out its activity in total harmony with the natural environment, and specifically with the fauna and flora of its surroundings. Currently, this commitment rests on three main pillars: the Climate Action Plan, the Biodiversity Plan and the Circular Economy Plan.

In this way, the objective of being neutral in CO_2 emissions in our plants by 2030 is added to the objective of having a net positive impact on biodiversity in that same year and promoting the reuse and recycling of products and materials in all our activities. All of them are born from the same vision, and their coordinated execution generates a multitude of synergies and positive externalities.

Furthermore, the Group strongly supports the efforts of the United Nations and other organisations to disseminate and realise global biodiversity protection goals. This was demonstrated at the COP15 in Kunming-Montreal (Canada), which took place in December 2022, and this same year we will also be present at the COP16 in Cali (Colombia) to advocate an energy system based on electrification with renewables that integrate into the natural environment and protect ecosystems.

Ignacio S. Galán

Chairman of IBERDROLA

1. 'The New Nature Economy Report' World Economic Forum.

We protect the **biodiversity** of ecosystems such as **source of sustainable development**

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1. Introduction

1.1 Presence and areas of activity

1.2 The biodiversity crisis in the spotlight

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This report presents the current approach to **nature and biodiversity management in the Iberdrola group**, the interactions of its activities with biodiversity and the actions of the action plan in terms of conservation, improvement of knowledge, collaborations with interest groups and awareness carried out in 2022 and 2023.

Iberdrola publishes this **Biodiversity Report** to transparently inform its stakeholders of the Group's actions regarding biodiversity, in accordance with the commitments assumed in the Biodiversity Policy approved by the Board of Directors in fiscal year 2007, modified by last time in December 2023.

1.1 Presence and areas of activity

What we are

After more than 180 years of history, the Iberdrola group is today a **global energy leader, the leading wind producer and one of the largest electricity companies by market capitalisation in the world**. Iberdrola was two decades ahead of the energy transition to combat climate change and offer a sustainable and competitive business model that creates value in the territories in which the company operates. The Group supplies energy to nearly 100 million people in dozens of countries, has a workforce of more than 42,000 employees and has assets of 150 billion euros[2].

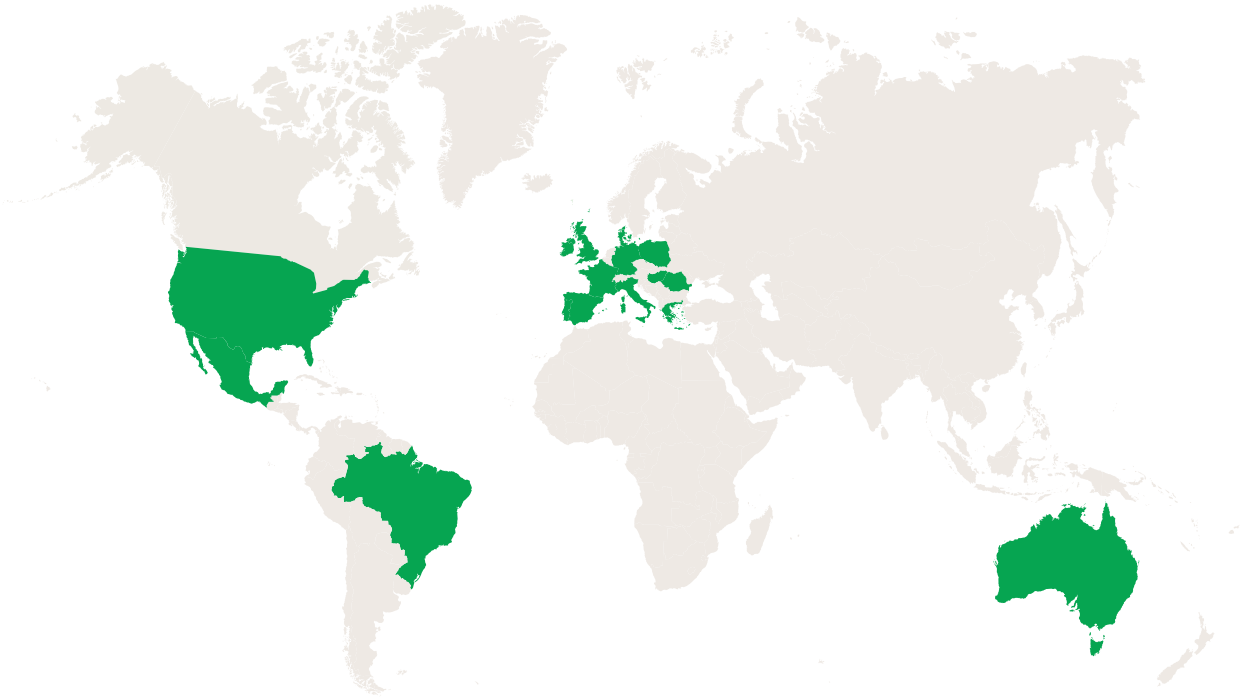
Main figures of the Group to 2023

Main figures 2023

1,276,519 Km
Power lines

62,883 MW
Total installed capacity

168,599 GWh
Net production



Main indicators of performance 2023[4]

42,187 MW
Renewable installed capacity

233,704 GWh
Distributed energy

36 millions of consumers[3]

9,281 M€ Direct tax contribution

18,111 M€ Purchases[4]

11,096 M€ Gross investments[5]

42,276 People
Direct employment

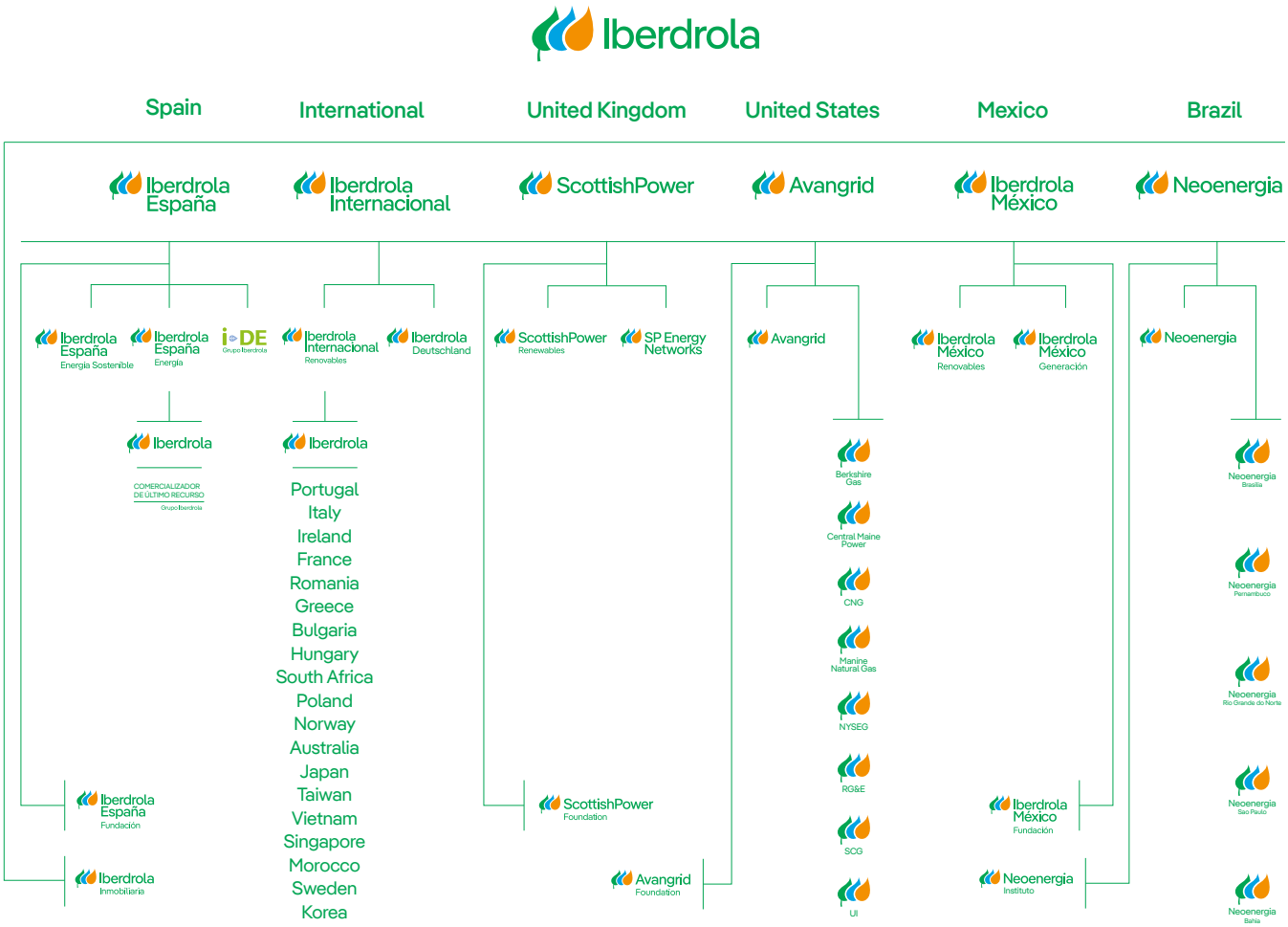
Around
500,000 People
Direct and indirect employment

2. At year-end 2023.
3. Consumers; at the end of the 2023 financial year, the group's companies together supplied energy to a total of 36 million users. Of this total, 31.9 million users are electricity users, with the rest being gas users
4. Volume awarded during the year.
5. Includes the purchase of Neoenergia Brasilia (CEB-D), in the amount of €409 million.

Iberdrola in the world

The company, together with its subsidiaries and investee companies, carries out its activities in nearly thirty countries. The Group carries out its activities in multiple countries, among which Spain, the United Kingdom, the United States, Brazil, and Mexico stand out; and also in Portugal, Australia, Germany, Greece, France, Ireland, Italy, Hungary and Poland. Likewise, it has closed several agreements to begin the development of several offshore wind projects in new markets: Sweden, Poland, Japan, Taiwan, Vietnam, etc.

Below are the **Iberdrola brands with the greatest operational and market presence** in each country, at the end of 2023:



1.2 The biodiversity crisis in the spotlight

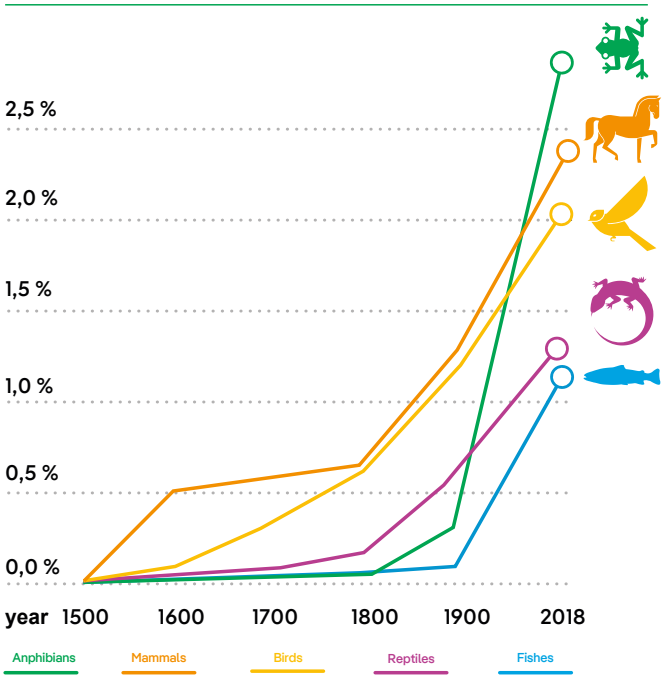
The Convention on Biological Diversity defines biodiversity as "the variability of living organisms from all sources, including, but not limited to, terrestrial and marine ecosystems and other aquatic systems, and the ecological complexes of which they are part; it includes genetic diversity (within each species) , diversity between species and the diversity of ecosystems."

In recent decades, humans have introduced unprecedented changes to ecosystems to supply an ever-increasing demand for food, water, raw materials, and energy. This has led to a loss of biodiversity and the degradation of ecosystems that is increasingly a cause of concern in the world. According to IPBES[6], around one million[7] species of animals and plants are now in danger of extinction, more than ever in human history, as a result of the increasing impact of human activities.

The report identifies the main causes of biodiversity loss, in order of relevance, as changes in land and sea use, exploitation of species, climate change, pollution and invasive exotic species. Furthermore, it also foresees a greater significance of climate change as a direct driver of changes in nature.

This disappearance of diversity is a negative indicator of loss of habitability on the planet, since all living beings, including humans, depend on biodiversity and the natural resources it provides. In addition to the loss of the intrinsic value of nature, an enormous amount of goods and services that ecosystems provide in a purely social or economic dimension are lost or deteriorated. Biodiversity safeguards food security, human health, the supply of clean air, drinking water and provides a protective effect, mitigating pathogens and infections. Biodiversity contributes to local livelihoods and economic development. However, despite its fundamental importance and international protection and conservation efforts, biological diversity remains in unprecedented decline.

Species extinction since the year 1500 @IPBES



The biodiversity crisis, with one million species at risk of extinction, can endanger the human species in a matter of decades, according to the report of the Intergovernmental Science-Policy Platform on Biological Diversity and Ecosystem Services (IPBES) from the UN.

6. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

7. Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors). IPBES secretariat, Bonn, Germany. http://bit.ly/IPBESReport.

According to the World Economic Forum's Global Risks Report 2024[8], biodiversity loss is one of three most serious risks facing the planet over the next decade, along with extreme weather events, critical changes in Earth systems and scarcity of natural resources. This could cause a decline in global GDP of $2.7 trillion annually by 2030. This economic recession would have a devastating effect on poverty, security, social well-being, and equality.

If companies effectively manage biodiversity-related risks in their business management, they can benefit from a competitive advantage in access to markets, capital, and resources[9].

Despite all our technological advances, we are completely dependent on healthy and vibrant ecosystems for our health, water, food, medicine, clothing, fuel, shelter and energy, among others. ***Our solutions are found in nature.”***

Convention on Biological Diversity

8. 2024 - Global Risks Report 2024. World Economic Forum.
9. TEEB Report – “The Economics of Ecosystems and Biodiversity”.

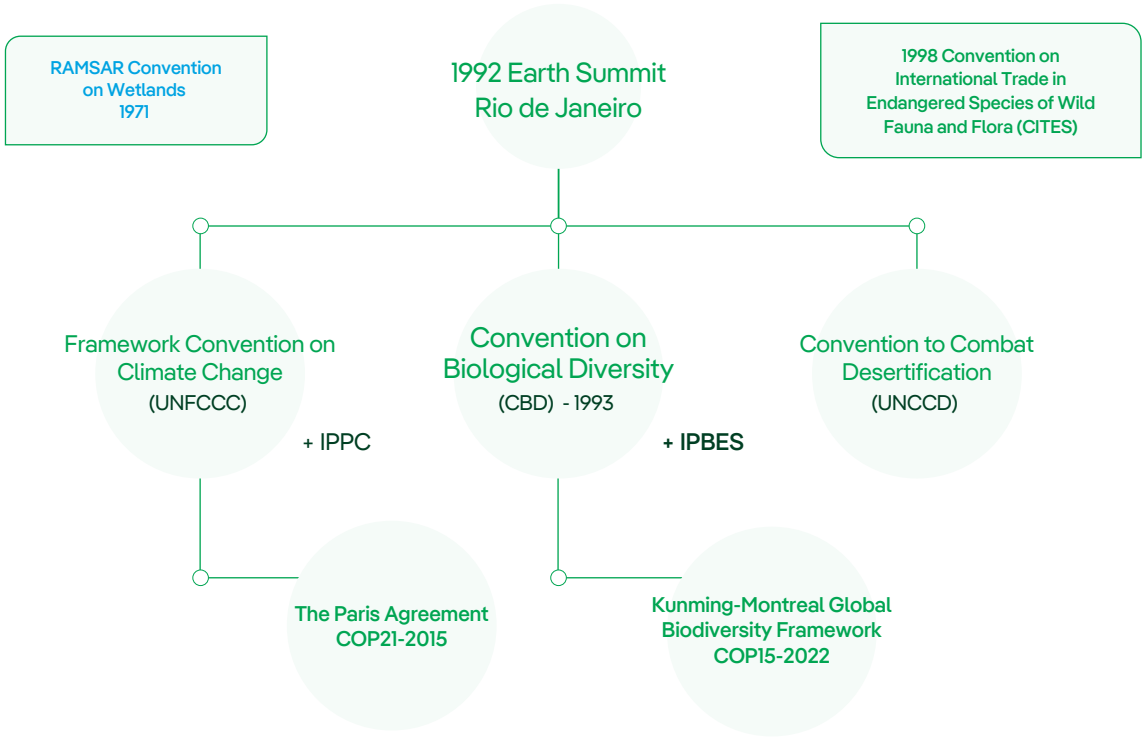
1.3 Action for biodiversity on the international agenda

Over the past two years, frameworks, strategies, regulations, and initiatives have **increased to accelerate action against biodiversity loss and nature decline**. The Kunming-Montreal Global Biodiversity Framework (KMGBF), the European Biodiversity Strategy 2030, the European Green Deal and the Sustainable Finance Action Plan and the Corporate Sustainability Reporting Directive (CSRD) are examples of this.

Other initiatives such as the Science-Based Targets for Nature (SBTN) or the Task Force on Nature-related Financial Disclosures (TNFD) are also creating frameworks to help companies and financial institutions **integrate nature into their decision-making processes**. The TNFD, based on the existing Climate Change Framework (TCFD), has published a framework for the disclosure of nature-related risks and opportunities. This framework is aligned with objective 15 of the KMGBF and seeks **to promote transparency** in the business and financial sector in relation to the impacts and dependencies they have on nature.

1.3.1 Convention on Biological Diversity (CBD)

International action to **conserve the variety of life on Earth** is based on the Convention on Biological Diversity (CBD) signed by more than 195 countries after the Earth Summit in Rio in 1992.

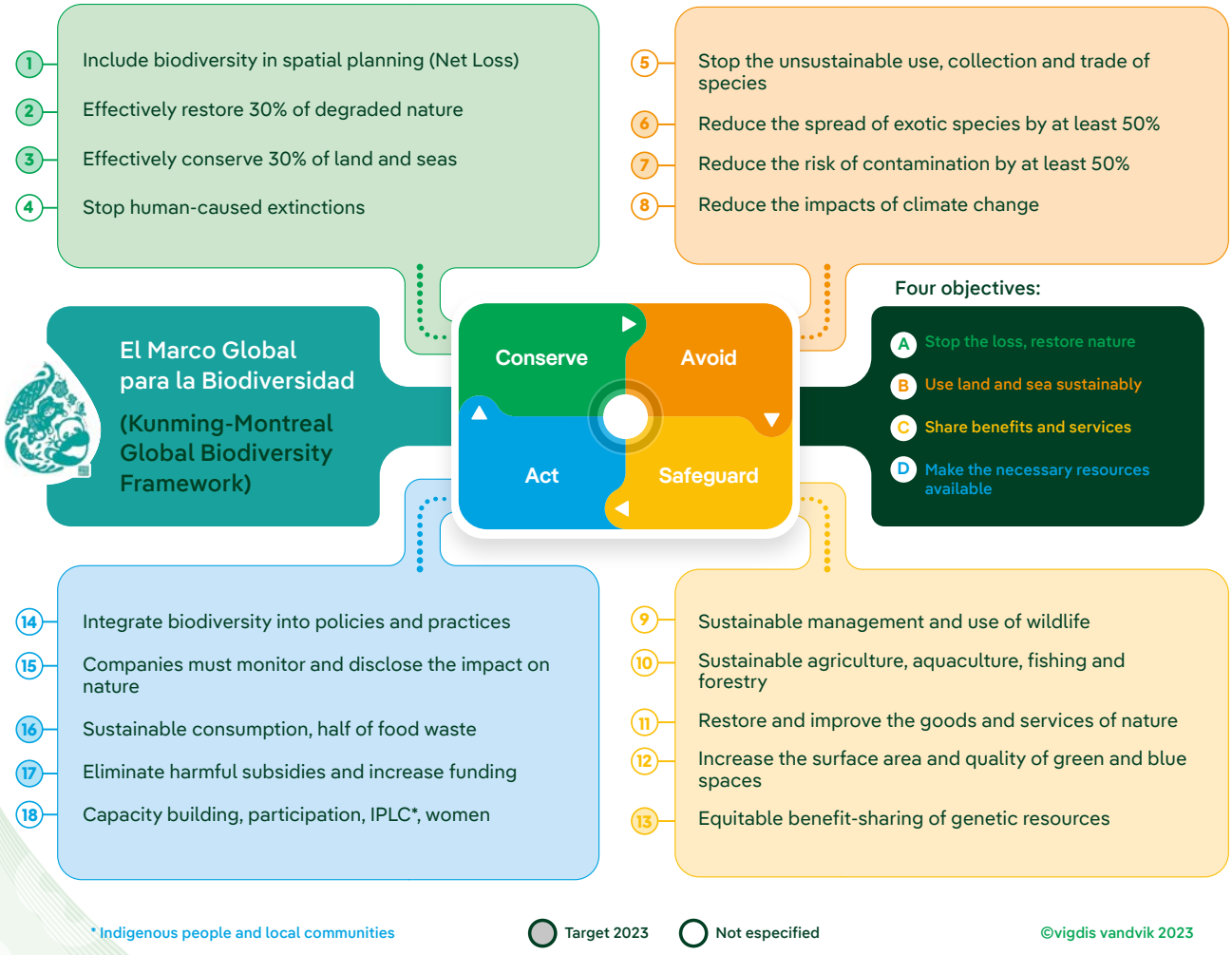


From the Earth Summit, the Framework Convention on Climate Change (UNFCCC), Convention to Combat Desertification (UNCCD) and the Convention on Biological Diversity (CBD) emerged. All of them have Conferences of the Parties where all the members meet annually or biennially depending on the convention. All of the countries plus the European Union make up the Parties.

Kunming-Montreal Global Biodiversity Framework (KMGBF)

The Kunming-Montreal Global Biodiversity Framework (KMGBF) was approved at the fifteenth meeting of the Conference of the Parties to the United Nations Convention on Biological Diversity (COP15-CBD) in December 2022. The KMGBF includes four long-term objectives and 23 urgent targets and measures to be adopted in the decade to 2030 to achieve a transformation in society's relationship with biological diversity and ensure that by 2050 the shared vision of "living in harmony with nature" becomes a reality.

The four objectives focus on: the conservation and sustainable use of biodiversity; access to genetic resources of biodiversity; the fair and equitable distribution of the benefits they generate; and the financing of all necessary measures in favour of biodiversity.



The KMGBF includes for the first time a goal specifically aimed at the business sector, Goal 15, which involves evaluating and reporting its impact on biodiversity, in addition to carrying out actions that reduce its impact.

1.3.2 2030 Agenda

In 2015, world leaders adopted 17 Sustainable Development Goals (SDGs) to eradicate poverty, protect nature and ensure prosperity for all as part of a new sustainable development agenda. Each goal has specific goals that must be achieved by 2030.

Reserves of natural capital and flows of ecosystem services support all human activities, which is why social and economic development depends on the sustainable management of our planet's natural resources.

The achievement of SDG 6 (clean water and sanitation), SDG 13 (climate action), SDG 14 (life under water) and SDG 15 (life on land) is necessary to achieve the rest."

1.3.3 Legislative framework of the European Commission

The European Green Deal, the European Biodiversity Strategy 2030 and the Regulation of the European Parliament

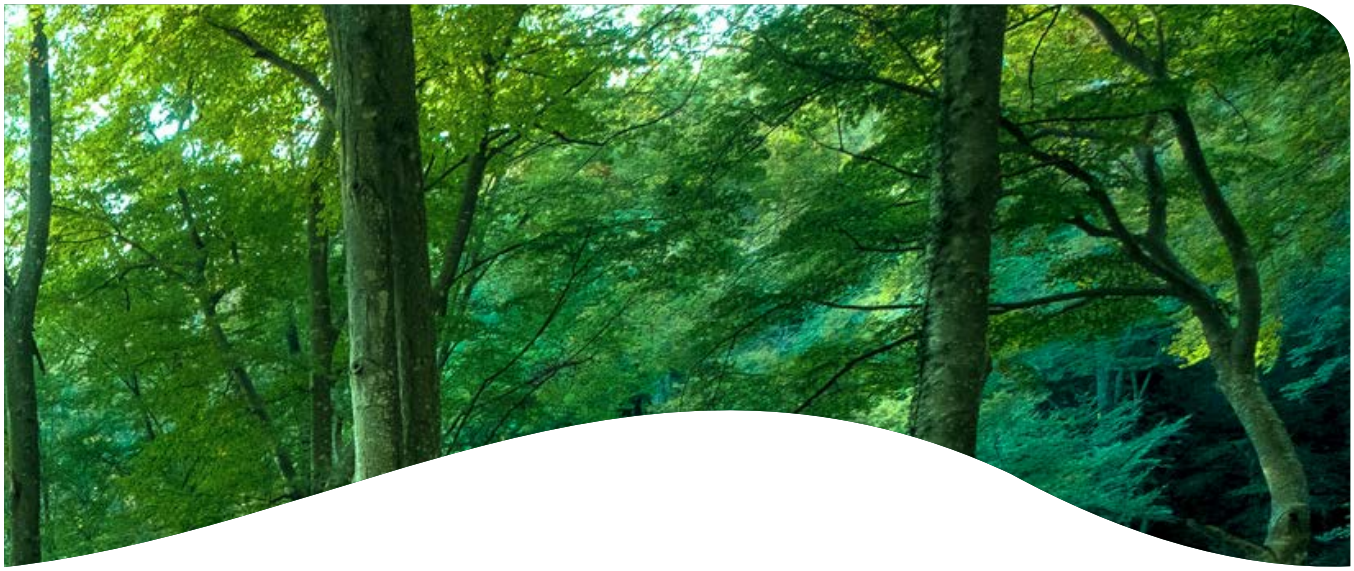
Within the European Union, the protection and improvement of biodiversity is one of the fundamental objectives of the European Green Deal, launched by the commission in December 2019. The **European Green Deal** establishes an ambitious path to reorient capital flows towards a sustainable economy. Its framework includes the **Sustainable Finance Action Plan**, in which biodiversity is an essential axis of the taxonomy of sustainable activities; the ambitious 2030 Biodiversity Strategy and its commitment to protect and restore biodiversity by 2030; and far-reaching legislation on disclosure of information related to aspects related to sustainability for both companies 5 and the financial sector. In this sense, the European Commission has approved the following regulations to provide additional incentives and harmonise the rules and disclosure of information for sustainable investment:

- Corporate Sustainability Reporting Directive (CSRD) which replaces Directive 2014/95/EU and will apply from 2024. This Directive obliges all large companies to publish periodic reports on their environmental and social impact activities under the ESRS (European Sustainability Reporting Standards) standards.

- **Sustainable Finance Disclosure Regulation (SFDR)** 2019/2088 establishes harmonised transparency standards for financial market participants and financial advisors on how they integrate environmental, social and good governance factors into their investment and financial advice decisions and on their overall financial-related sustainability ambition.

- **Sustainable Investment Regulation** 2020/852 (art.8) aims to establish the criteria to determine whether an activity is considered environmentally sustainable for the purposes of establishing the degree of environmental sustainability of an investment and for Member States and the European Union to use a common concept of “socially sustainable investment”.

- Proposal for a **Regulation on environmental accounts** amending Regulation (EU) No 691/2011 with regard to the introduction of new modules in environmental economic accounts: forestry accounts, ecosystem accounts, as well as accounts for environmental subsidies and other similar transfers.



The **European Biodiversity Strategy 2030** addresses the key factors that have led to biodiversity loss, such as unsustainable land and sea use, overexploitation of natural resources, pollution, and invasive alien species. The strategy proposes, , to define binding targets to regenerate degraded rivers and ecosystems, improve the health of EU protected species and habitats, reduce pollution, greener cities and improve the health of European forests. The strategy presents concrete measures to undertake the regeneration of Europe's biodiversity by 2030, including transforming a minimum of 30% of Europe's lands and seas into effectively managed protected areas. In this sense, the Commission has published the following regulations:

Iberdrola supports the objectives of the World Biodiversity Framework, as well as those of regional strategies and works on the development of clean energy responsible for nature as a source of sustainable development, in line with the United Nations Sustainable Development Goals, integrated into its strategy."

- The Regulation of the European Parliament and of the Council on **Nature Restoration**[10] which sets the general objective of reversing biodiversity loss on at least 20% of the EU's land and sea area by 2030 and all ecosystems in need of restoration by 2050.
- Regulation (EU) 2023/1115 on the placing on the Union market and the export from the Union of certain raw materials and products associated with **deforestation and forest degradation**. It came into force in June 2023 and obliges operators and merchants, before introducing, marketing or exporting products in the EU, to present the corresponding due diligence declaration certifying that they are exempt from deforestation and that they have been produced in accordance with the legislation of the country of production.
- The **Due Diligence Directive** CSDD which modifies Directive (EU) 2019/1937 and requires the establishment of processes and measures to detect, prevent, mitigate, and eliminate negative impacts, real or potential, against the environment or human rights, at any point in its value chain.
- The proposed **Directive soil monitoring**, which seeks to establish a common framework for the monitoring and evaluation of soil quality in the Member States of the European Union.

10. Pending final approval at the date of publication of this report.

1.3.4 Reporting standards and initiatives

Target 15 of the Kunming-Montreal Global Biodiversity Framework calls on companies to monitor and disclose their impact on nature. However, there is no concrete and agreed way to analyse a company's performance in terms of biodiversity. Its complexity makes it difficult to find a single metric like the one found for Climate Change (tonnes of CO_2 equivalent).

In recent years, numerous voluntary initiatives and frameworks have been developed for companies to begin measuring, managing, and disclosing their impacts and dependencies on/from nature. They all try to converge on common points however, each initiative can seek different objectives.

European Sustainability Reporting Standards (ESRS)

The European Sustainability Reporting Standards (NEIS or ESRS) were developed by EFRAG, formerly known as the European Financial Reporting Advisory Group, an independent body bringing together various stakeholders. ESRS will be mandatory for companies that are required by the Corporate Sustainability Reporting Directive (CSRD) to report certain sustainability information.

ESRS take a “double materiality” perspective, requiring companies to report both on their impacts on people and the environment, and on how social and environmental issues create financial risks and opportunities for the company. There are 12 ESRS, covering the full range of environmental, social, and governance issues (ESG).

Taskforce on Nature-related Financial Disclosures (TNFD)

The Task Force on Nature-related Financial Disclosures (TNFD) is a global initiative composed of financial institutions, companies and market service providers that was established in 2021 with the mission of developing and offering a risk management and disclosure framework for organisations to report and act on the nature-related risks and opportunities, with the ultimate goal of supporting a shift in global financial flows.

The TNFD recommendations were published in September 2023, after two years of work, with the participation of partners from more than 60 countries and having carried out more than 200 pilots. Like their climate change counterparts (TCFD), the recommendations are voluntary and structured around four pillars: governance; strategy; risk and impact management; and metrics and objectives. The TNFD consists of 14 recommendations and for its adoption it has published numerous guides and support manuals.

Its objective is to provide decision makers in the business and capital markets with quality information that improves business risk management. Having solid information on nature-related issues allows companies to incorporate risks and opportunities into their strategic planning, risk management and asset allocation decisions. Better information can help shift the flow of global capital towards more positive outcomes for nature and society.

Iberdrola has participated in the pilots of the draft versions of the TNFD recommendations, being the only electricity company to publish it and has registered as an 'early adopter', committing to comply with said recommendations for the 2024 report. In this way, It becomes one of the first Spanish and energy companies to adopt the TNFD and report on nature and biodiversity.”

Science Based Targets for Nature (SBTN)

The Science-Based Targets Network, a global coalition of more than 80 non-profits environmental organisations, international agencies and a collective of experts from various fields and organisations has published the first 2023 Science-Based Targets for Nature (SBTN). These nature goals build on and complement the SBTI's existing climate goals. SBTNs have been developed to help businesses know if they are doing their part to realise the vision of an equitable, net-zero and nature-positive future.

Cuadro de textoIn this first release, SBTN prepares companies to assess their environmental impacts and set targets related to freshwater and land use change, enabling companies to reduce their negative impacts and increase positive ones across all direct operations and in the supply chain . This first launch is part of a multi-year plan to provide companies of all sizes and sectors with comprehensive science-based goals for nature, the scope of which will increase as science and technology advances.

Iberdrola's 2030 Biodiversity Plan is aligned with the SBTN principles."

Global Reporting Initiative (GRI)

The Global Reporting Initiative (GRI) is a non-profit organisation that has developed a recognised sustainability reporting methodology. Since its creation in 1997, the GRI reporting framework has evolved to include different social and economic aspects of sustainability, becoming today a global reference standard for the presentation of business information on sustainability.

At the beginning of 2024, GRI has presented its new biodiversity standard (GRI 101: Biodiversity 2024) in order to update previous methodologies and define guidelines to comprehensively disclose the impacts of organisations on biodiversity. This standard modifies the previous GRI 304:2016 and will become effective in 2026.

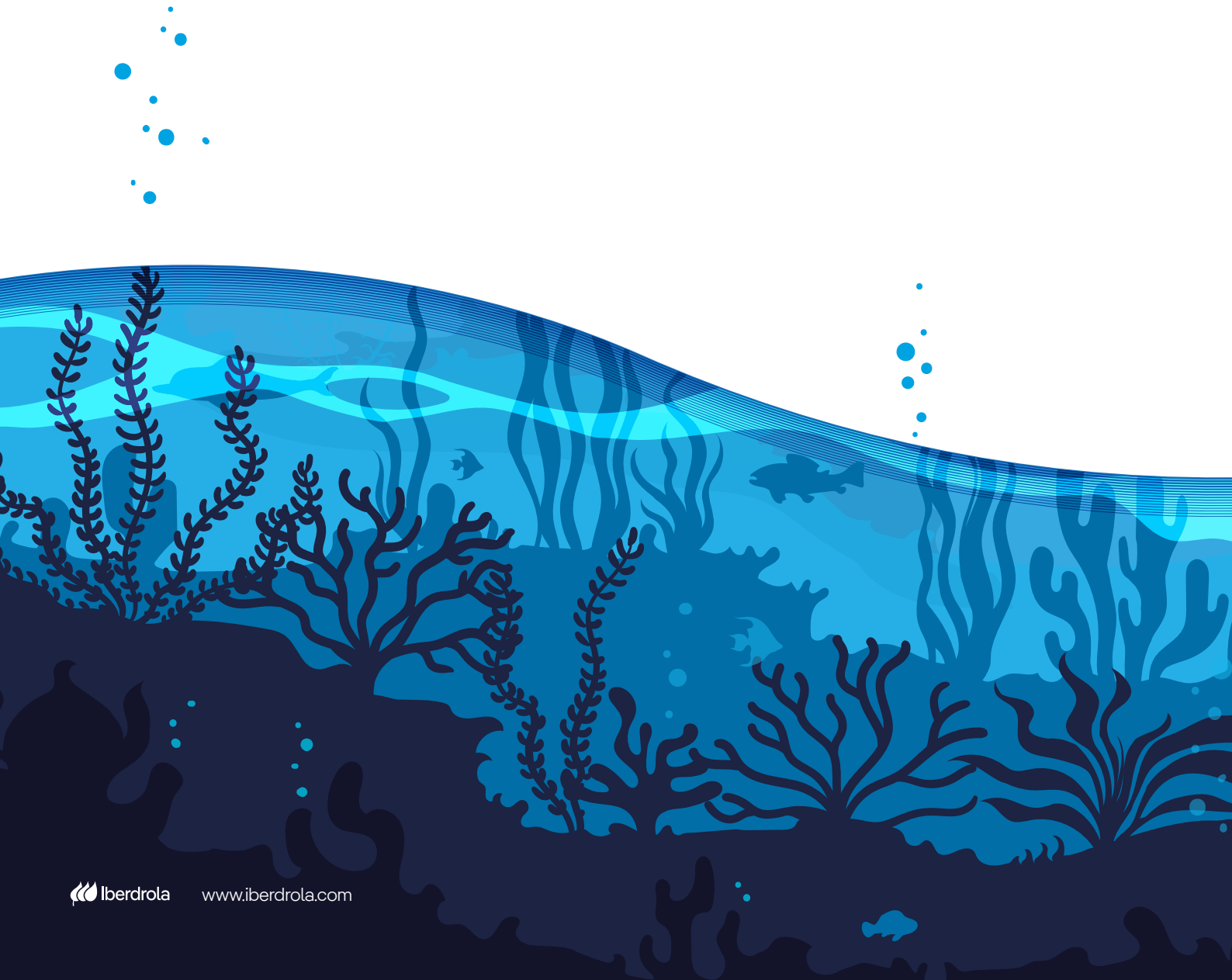
The International Financial Reporting Standards Foundation or IFRS Foundation

The International Financial Reporting Standards Foundation (IFRS Foundation) is a private organisation that develops, oversees, and promotes the use and application of International Financial Reporting Standards (IFRS).

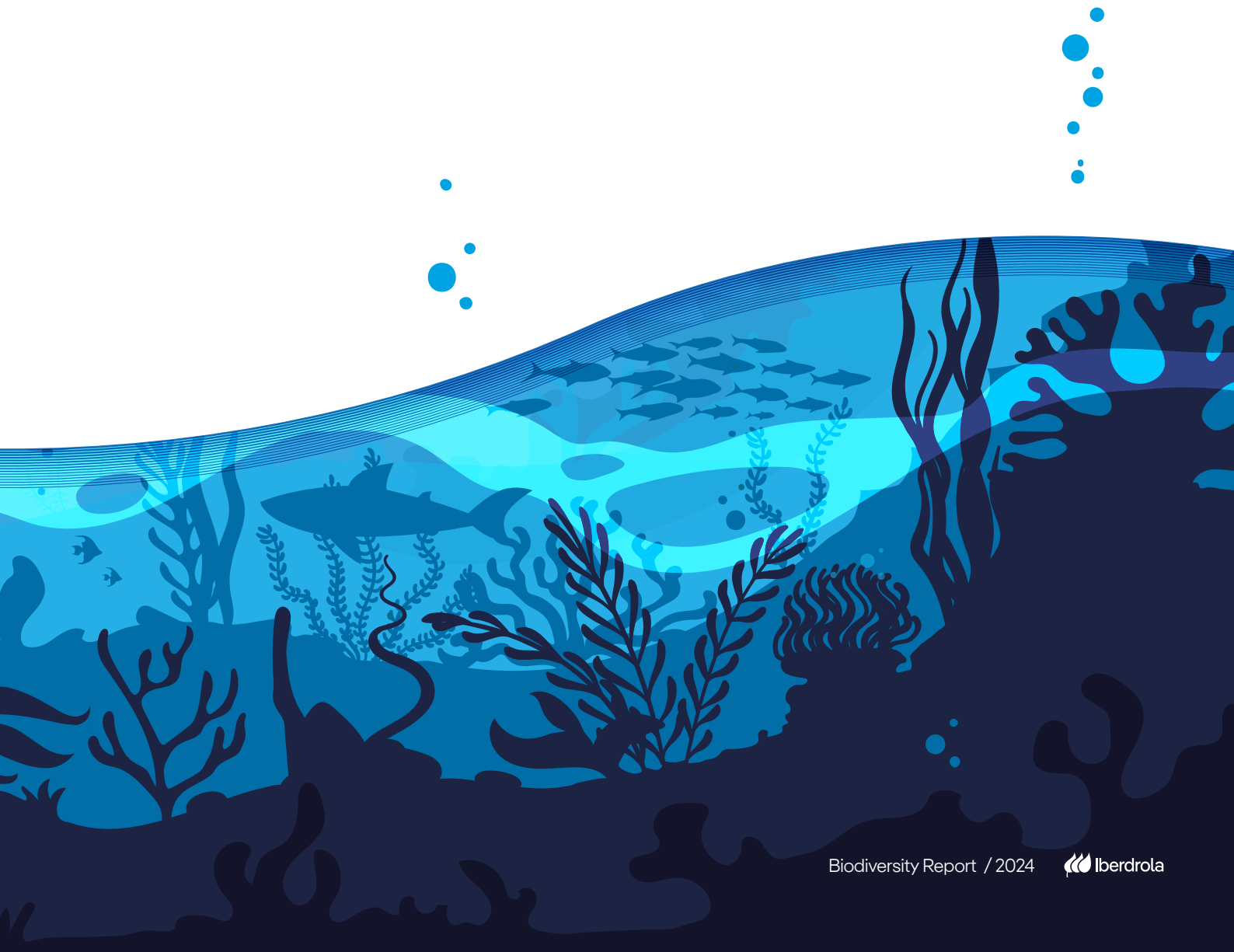
These standards are developed by the International Accounting Standards Board (IASB) and the International Sustainability Standards Board (ISSB). In 2023 ISSB has published its first two proposed standards with the aim of making sustainability reporting consistent, comparable, and reliable worldwide.

Furthermore, in recent years IFRS has done great work to consolidate and integrate the different existing reporting frameworks. In this way, in its latest publications it has taken into account European and American regulations and has integrated widely used methodologies (for example, the SASB sustainability standards or the IRF Integrated Reporting Framework).

2. Iberdrola with action for Biodiversity



At the Iberdrola group we integrate the conservation and promotion of biodiversity into the company's strategy and work on the development of an energy model in harmony with nature and people as a source of sustainable development."



2.1 Iberdrola with nature and human beings

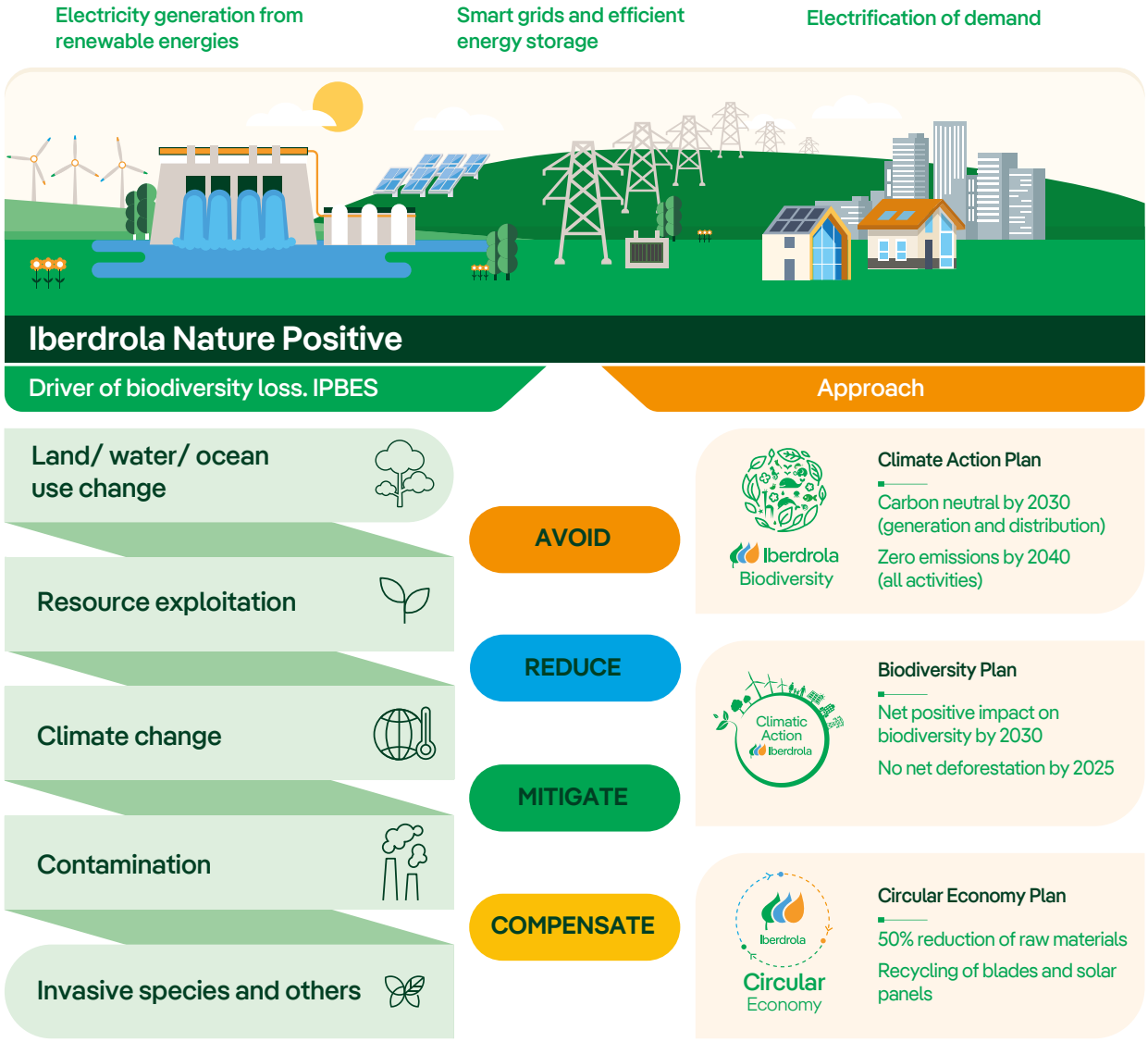
Vision: build an energy model in harmony with nature and humans

The preservation of nature and the well-being of people are priority elements for Iberdrola in determining its entire business strategy and business model. Therefore, in a scenario characterised by strong growth in global energy demand, **Iberdrola works to build an energy model in harmony with nature and humans as a source of sustainable development**.

For more than two decades, Iberdrola's business activity has been guided by the principles of preservation, care, and protection of the environment as a lever to ensure its own survival and well-being, and that of other living beings. In recent years, the environmental crisis that has occurred, together with the growing energy demand, has exacerbated the need for a new energy model based on the use of renewable energy, the development of smart networks and efficient energy storage, and the promotion to the electrification of demand as vectors of competitive and efficient decarbonisation. In addition to all these qualities, the model must integrate the conservation and promotion of biodiversity, as well as the sustainable use of resources in all its activities and processes. The Iberdrola group continues working on the transition towards this new energy model that simultaneously guarantees sustainable development, considering the well-being of people and respect for nature.

Aware of the location of our infrastructure and its interaction with the territory and to guarantee the success of the Group's commitment to carry out its activity in harmony with nature and people, Iberdrola has developed a roadmap with which it addresses the five drivers of biodiversity loss identified by the UN Intergovernmental Science-Policy Platform on Biological Diversity and Ecosystem Services (IPBES) in its latest report: (i) changes in land and sea use, (ii) direct overexploitation of species, (iii) climate change; (iv) pollution; and (v) the spread of invasive species.

Roadmap - Iberdrola Nature Positive



Iberdrola's Nature Positive roadmap is made up of:

- **Climate Action Plan:** establishes an ambitious roadmap aimed at achieving zero net emissions of CO_2 equivalent before 2040. This Plan describes the levers, actions and associated metrics that contribute to the decarbonisation of Iberdrola's activity and the promotion of the electrification of the economy.
- **Biodiversity Plan:** establishes the objective of a net positive impact on biodiversity in the year 2030 and foresees the mechanisms to measure, act and support the transformation to stop and reverse biodiversity loss.
- **Circular Economy Plan:** defines the lines of work and objectives that direct the company to reduce the use of raw materials, advocating for greater use of renewable and recycled materials, improving the efficiency of Iberdrola's processes, products and services and betting on a greater use of the value of waste that leads us towards a future without unused waste. Thus, Iberdrola has defined the challenges for 2030 to reduce the consumption of raw materials by 50% and the recycling of blades and panels by 100%, among other measures focused on working with suppliers to adopt best practices.

Addressing the drivers of biodiversity loss is complemented by the Group's global Environmental Management System that integrates the principle of pollution prevention in all its processes and activities.

The "Iberdrola Nature Positive" roadmap is the fundamental tool to avoid and minimise risks and materialise opportunities related to nature.

2.2 Objectives and Biodiversity Plan 2030

In 2022, at Iberdrola we strengthened our commitment to nature and set ourselves the goal of having a net positive impact on biodiversity in the year 2030, that is, for the aforementioned year our activities have contributed to the preservation and improvement of biodiversity.

Goal 2030: Have a net positive impact on biodiversity

2025: 20% of generation facilities and 100% of new projects assessed and with a biodiversity action plan in force

2030: 100% of generation facilities and networks assessed and with a biodiversity action plan in force

Goal 2030: Have a net positive impact on biodiversity.

This objective considers the direct impacts on species and ecosystems derived from the activities of the Iberdrola Group throughout the life cycle of its facilities. It is based on the application of the principle of conservation hierarchy, as well as the implementation of identification mechanisms and quantification of impacts and monitoring of compliance.

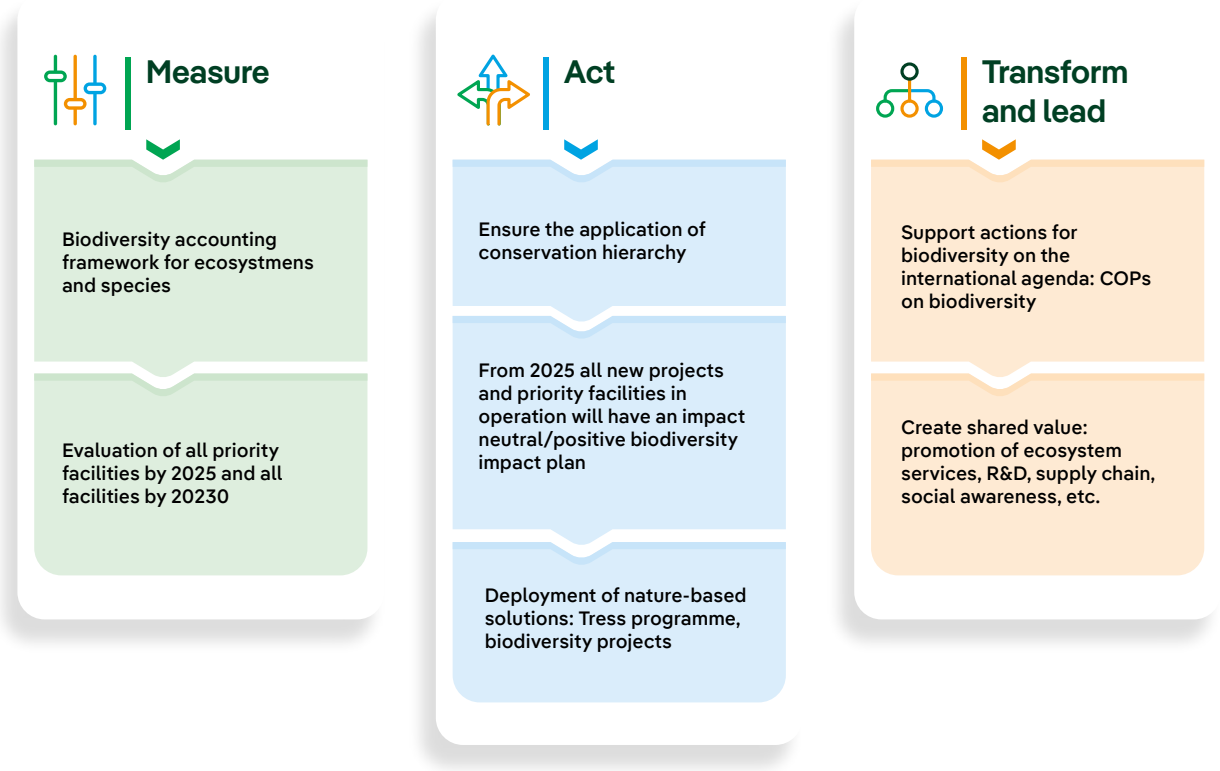
Goal 2025: no net deforestation

Iberdrola is committed to ensuring that its activity does not generate net deforestation in 2025."

As part of the actions to achieve compliance with this objective by 2030, Iberdrola commits that its activity does not generate net deforestation in 2025 and no gross deforestation in the case of the supply chain.

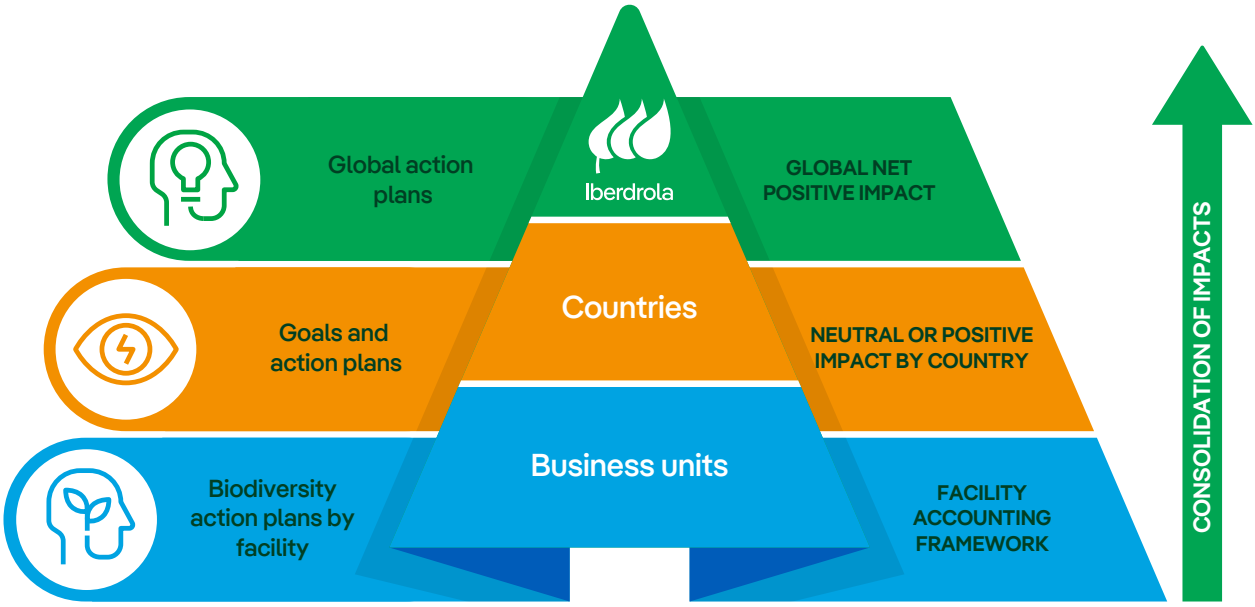
Biodiversity Plan 2030

To complete the achievement of these ambitious objectives, Iberdrola has launched **the 2030 Biodiversity Plan** (the "Plan"), applicable to all facilities and activities of the Iberdrola group and which has three lines of action: measure, act and transform, and lead.



The ecological processes of nature are complex and it is difficult to establish indicators and metrics that aggregately represent the state and impact of a varied set of activities on biodiversity. In recent years, numerous methodologies have emerged that measure different aspects from various points of view and that are applicable to different contexts.

With the 2030 Biodiversity Plan, the Iberdrola group has gone one step further and has worked on a **net balance accounting framework for biodiversity**. This accounting framework allows Iberdrola to quantify the positive and negative impacts on species and ecosystems derived from the construction, operation and decommissioning of projects. The framework is applicable to all facilities and allows consolidating the net balance of impacts at the facility, business, and Group level. In this way, the Iberdrola group will know the degree of compliance with its objective at a global level, adjusting the biodiversity action plans accordingly.



This accounting framework consists of two metrics applicable to the material impacts of its activities on biodiversity.

- **The ecosystem metric**, applied to new developments, measures the change in the extent and condition of ecosystems before and after the installation of the facility in equivalent hectares. The state of the ecosystem is evaluated through various indicators such as land use, vegetation cover, the presence of protected species, etc.
- **The species metric**, applied to operational facilities, measures the balance between impacts and actions in species. The species index, calculated with potential or actual impact data and the protection category, is calculated to prioritise actions.

Compliance with the objective is monitored with the percentage of facilities that have measured their impacts on ecosystems and species and established a neutrality plan that, added to global actions, are consolidated to achieve positivity through the subholdings.

Los principios de aplicación de este Plan son:

I. conservation hierarchy;

II. compensation of impacts on an equal basis – with the same type of habitat and species affected in accordance with the Biological Diversity Protocol;

III. application of solutions based on the preservation of nature; and

IV. supply chain involvement.

All of them, together with other measures, constitute adequate tools to guarantee the achievement of the Plan's objectives in 2030.

The 2030 Biodiversity Plan is a continuation of years of work on the protection and preservation of biodiversity, on its integration into the Group's strategic planning and decision-making.

Iberdrola Biodiversity

Historical commitment to the environment

1996 – Environmental policy

2001 – Bet on clean energy

2007 – Biodiversity policy

2009 – Climate Change policy

2013 – Sustainable Management Policy

2016 – Integration of SDGs into business strategy

2017 – Protect the environment and stop the loss of Biodiversity

2018 – Carbon Neutral Objective in 2050

2019 – Biodiversity Objective "zero net loss" by 2030

2021 – Biodiversity Policy Review

2022

Vision: An energy model in harmony with nature and human beings.
Biodiversity Plan 2030

2.3 Governance and integration in management

Iberdrola's commitment to the environment and sustainable development is reflected in its Governance and Sustainability System that addresses environmental, social, and governance (ESG) criteria. Its purpose is to ensure the realisation of the Purpose and Values of the Company and the achievement of its business purposes and objectives.

The three "Iberdrola Positive with Nature" plans develop the principles established by the Governance and Sustainability System. The content of these plans and their monitoring is reported to the advisory committees of the Board of Directors that have responsibility for the matter, such as the Sustainable Development Committee and the Audit and Risk Supervision Committee. In addition, all directors have a training and knowledge updating programme, which in 2023 has included topics related to biodiversity, among other environmental aspects. The main issues addressed by each of the governing bodies can be consulted in the Activities Report of the Board of Directors and its committees.

In turn, the remuneration structure for executive directors and the management team considers economic-financial, operational and sustainability aspects. The General Meeting of Shareholders on April 28, 2023 approved a new long-term remuneration plan (Strategic Bonus 2023-2025), which includes parameters related to the Sustainable Development Goals among others (see "Remuneration Policies").

At the management level there are three key areas that report directly to the President, the CEO and the Board of Directors on specific issues related to the development of a model in harmony with nature and people.

- **Innovation, Sustainability and Quality Division:** responsibilities include aspects related to global climate action, global management of biodiversity and natural capital or the circular economy.
- **Risk Management Division:** supervises the Groups comprehensive risk system, which seeks to ensure that the main risks of all the Group's activities and businesses are identified, managed, and reported appropriately. The risks derived from nature and biodiversity are integrated into the risk management processes and included in the periodic reports presented by this Division to the Audit and Risk Supervision Committee.
- **ESG Division:** in charge of sustainable development at the Group level, corporate non-financial reporting, serves investors and indices on ESG issues and carries out global management of interest groups and the human rights due diligence system. Reports directly to the Sustainable Development Commission.

Biodiversity Policy

Environmental policies formalise and specify the determined reaction of the Group to the challenges, objectives and goals of climate change, the preservation of the environment and the loss of biodiversity, while contributing to identifying and taking advantage of the opportunities derived from the energy transition. They are, therefore, the expression of Iberdrola's commitment, to which all its interest groups join, with the creation of comprehensive business value. This t takes into account and respects the natural and environmental capital on which its activity depends. These policies are part of the Environment and Climate Action book of the Governance and Sustainability System.

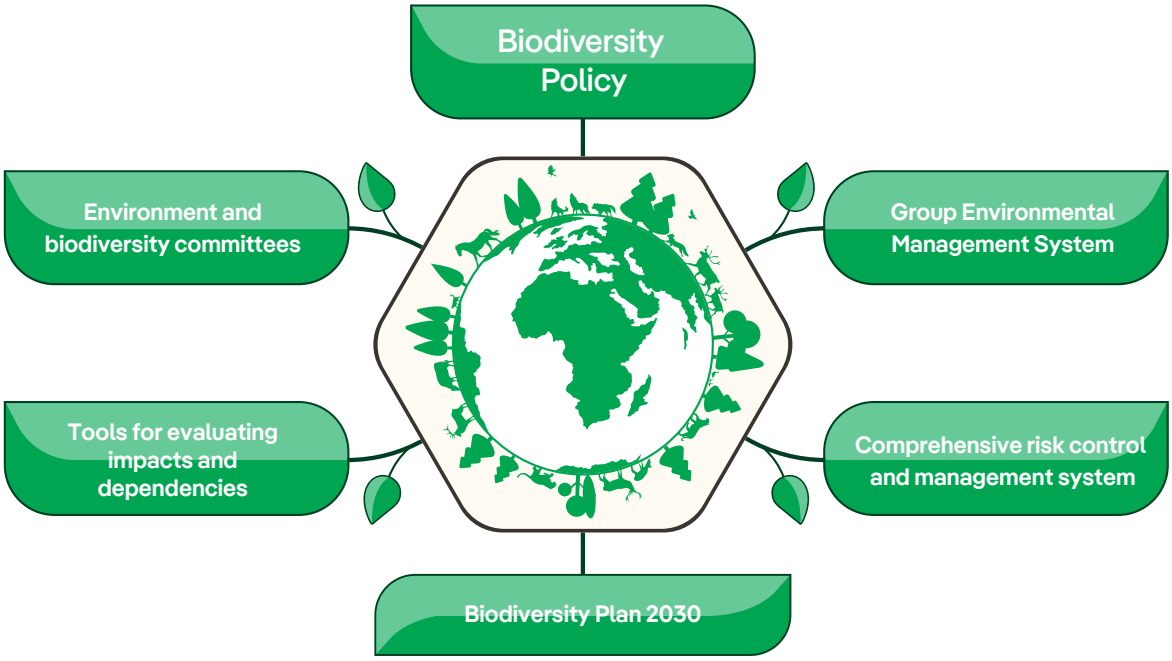
Given the location of Iberdrola's facilities, and their interaction with the territory, for more than fifteen years Iberdrola has considered that biodiversity is a material issue for its business model, and therefore respect for biodiversity and ecosystems has a key role within the business strategy.

Thus, Iberdrola has had a global Biodiversity Policy since 2007, which is part of its governance and sustainability system. In 2021, Iberdrola substantially modified the aforementioned Biodiversity Policy to define the principles of action that support the 2030 Biodiversity Plan and the sustainable and positive business model with nature. In December 2023, a new update of the priority lines of action was made to emphasise the relationship with interest groups and awareness-raising actions, both internal and external.

The Biodiversity Policy shows Iberdrola's commitment to fighting the loss of biodiversity and generating a net positive impact on biodiversity through its activities. This commitment involves integrating biodiversity into strategic planning, risk management through continuous assessment and throughout the life cycle of impacts and dependencies, applying the mitigation hierarchy (avoid, mitigate, restore, and compensate) in all our activities, avoiding the location of new infrastructure in protected areas, implementing biodiversity action plans, collaborating with interest groups and promoting awareness and communication. Furthermore, it involves promoting a social culture, together with its interest groups, where biodiversity is valued, conserved, restored, and used in a sustainable manner, maintaining ecosystem services, promoting a healthy planet and providing essential benefits for all people.

To this end, this Biodiversity Policy establishes four lines of action: protecting biodiversity and making sustainable use of natural capital; continuously identify, quantify, and assess the impacts and dependencies of the Group's activities; collaborate with interest groups and highlight, raise awareness and communicate internally and externally with transparency.

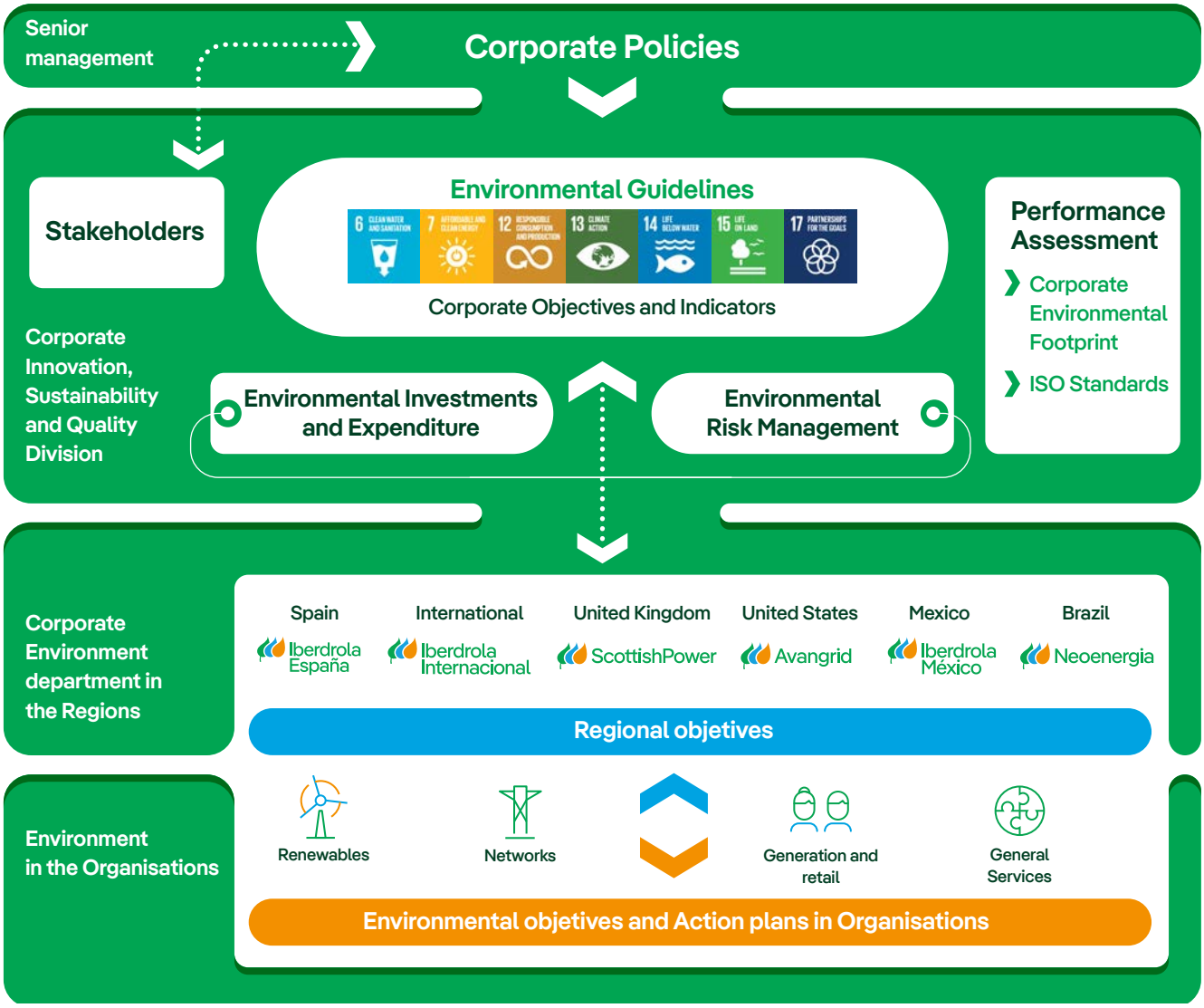
Iberdrola has, in addition to the Biodiversity Policy, the following mechanisms for the integration of the protection and conservation of biodiversity in management and its consideration in decision-making processes:



Environmental Management System of the Iberdrola group

Iberdrola has a common and homogeneous environmental management system for all Group organisations in which the protection and conservation of biodiversity is a key feature of the environmental guidelines.

The Environmental Management System is integrated into all Iberdrola group organisations."



Iberdrola Group Environmental Management System Directives

The commitments acquired in terms of biodiversity and the environment are thus transferred to the environmental management of the Group's organisations through their systems, most of which are approved (EMAS or ISO 14001), framed within the global management system. In these management systems, the Group's organisations define their continuous improvement objectives in relation to biodiversity, which materialise in environmental monitoring and control programmes and specific actions aligned with the principles of the Action Plan.

To coordinate the actions and programmes of new or existing facilities, Iberdrola has an environmental committee in which the different operating organisations deal with day-to-day management aspects and promotes the launch of initiatives. Additionally, the Group's stakeholder relationship model helps organisations manage the integration of stakeholder needs into decision-making.

Priority lines of action

The actions for the management of aspects related to biodiversity follow the four priority lines of action of the Biodiversity Policy:

- **Protect** biodiversity and make sustainable use of natural capital by adopting a conservation hierarchy, integrating best practices into its management throughout the entire life cycle and promoting regeneration and conservation actions of natural heritage;
- Continuously **identify, quantify, and assess** the impacts and dependencies of the Group's activities on natural capital with a focus on biodiversity throughout the life cycle of the facilities by promoting research and improving knowledge of the ecosystems of the facilities and environments of the territories where it operates;
- **Collaborate** with interest groups, considering their needs and expectations regarding biodiversity and participating in projects to improve biodiversity, protection, and respect for animals; and
- **Highlight and raise awareness** about the relevance of the protection and conservation of biodiversity with training activities, internal and external education, awards, publications, as well as sponsorship actions, and communicate internally and externally the impact of the Group's activities on this subject.

2.4 Action on drivers of biodiversity loss

The **analysis of the impacts of the Group's activities** on these drivers allows Iberdrola to take the necessary measures to avoid or minimise them. The drivers where Iberdrola has problems and the measures adopted to avoid and minimise the impact of its activities are analysed below:

Land use changes

In a context of growth in energy demand and decarbonisation, the construction of new clean energy facilities is necessary whilst respecting nature. These infrastructures may result in a change to the land use and the potential loss of their habitats, which entails the displacement of species.

The 2030 Biodiversity Plan reinforces the company's efforts to integrate into its strategy the search for opportunities to make the generation of renewable energy compatible with other uses and improve the biodiversity of those territories where it operates.

In 2025, new developments will have been evaluated and will have an action plan to achieve neutral/positive impact."

The Plan also reinforces the work that the company has been doing in applying the mitigation hierarchy (avoid, minimise, remedy and as a last option compensate) in all phases of the projects from the conception and the Environmental Impact Assessment (EIA) processes to decommissioning.

Most of the impacts that result in loss of biodiversity are avoided in the design phase and that is why Iberdrola are committed to knowledge of the environment as the best tool to avoid or minimise the effects on the environment. For correct site selection, Iberdrola avoids locating new infrastructure in protected areas (including World Heritage, national protections, Natura 2000 Network and the relative categories of the International Union for Conservation of Nature – IUCN). This also includes areas of high value for biodiversity. Without a statutory designation, unless there are no alternatives, or the only alternatives are less compatible with the environment.

If, after the prior analysis of the environmental study, significant conditions are identified, the project is modified as much as possible, adopting the best available techniques to correct and minimise it. Participation and consultation with interest groups is carried out throughout the design process, which allows good construction practices to be incorporated, going beyond the legal requirements applicable in each case. After the development process and during construction, Iberdrola continues to work with stakeholders seeking to ensure that the environmental impact is as minor as possible, as well as to restore affected areas and compensate for residual impacts.

Iberdrola works to ensure that new infrastructure projects are a refuge for biodiversity while preserving local employment. Proof of this are the photovoltaic plants in Spain, which have gone from being land for intensive agricultural use to being, thanks to the measures adopted, a reservoir for biodiversity.

Loss of habitats and species

Adequate habitat is essential to ensure the success of the survival of local species, which is why Iberdrola carries out specific programmes and actions to avoid, minimise, restore and compensate for effects on habitats and species in its infrastructure, as well as monitoring their interactions to mitigate impacts . In addition, it also promotes voluntary projects that contribute to reversing the loss of biodiversity in ecosystems. Section 5 includes examples of the following programmes that Iberdrola carries out.

- Habitat **conservation, restoration, and compensation** programmes in which the launch of Carbon2Nature is worth highlighting, which in 2023 alone has promoted the planting of more than 770,000 trees in ecosystem conservation and restoration projects on more than 640 hectares in Spain.
- Programmes for the **protection and conservation of species of fauna and flora** in which it is worth highlighting the project for the conservation of the kite roost that houses more than 2,000 red kites.
- **Wildlife tracking and monitoring** programmes (mainly birds, bats and ichthyofauna) that are the basis for continuous improvement in the conservation and protection of fauna in our facilities. It is worth highlighting the innovation in surveillance systems with 3D Radar systems and high-resolution cameras that include an artificial intelligence system capable of detecting and identifying the position of the bird, its species, and its trajectory.
- Programmes to **improve the management of vegetation** under powerlines and in photovoltaic plants where vegetation cover is maintained with livestock, avoiding the use of herbicides.
- Programmes to **promote knowledge and research** for the conservation of habitats and species, among which include the Coralizar project for coral restoration in Brazil, the Restoration Forth oyster reintroduction project or the Migra and Flyways projects that represent a knowledge base fundamental of the behaviour of the species should be highlighted.

Iberdrola seeks and implements the best available techniques to preserve or improve the habitats around the facilities."

Climate change

In March 2024 Iberdrola updated its Strategic Perspectives for 2030. The new investment plan (focused on renewables, smart grids and efficient storage), together with the investments already made in recent years, has allowed the company to increase the ambition of its emissions reduction objectives.

The aspiration to accelerate the decarbonisation of the economy must begin by reducing the direct emissions of each economic agent to the maximum, and as quickly as possible. Iberdrola, in accordance with science, defends immediate action in the main climate forums, and in this context, Iberdrola has declared its aspiration to achieve neutrality in equivalent CO_2 emissions for Scopes 1 and 2 in the year 2030.

Iberdrola's ambition is to reach a state of net zero emissions (Net Zero) before 2040. Thus, Iberdrola would reduce absolute emissions by 85% compared to 2020 and residual emissions would be neutralised in compliance with the highest emissions standards. Likewise, Iberdrola would be10 years ahead (from 2040 to 2030) of the emissions reduction requested from the electricity sector (for Scopes 1 and 2).

The interconnection between climate and biodiversity is increasingly evident and only by considering them as part of the same complex problem can effective solutions be developed. Therefore, in the Biodiversity Plan, Iberdrola promotes Nature-Based Solution projects that seek to improve forest ecosystems and their biodiversity, while helping to mitigate the effects of climate change.

Pollution

The problems of eutrophication and ecotoxicity are derived from pollution. For this reason, Iberdrola applies the principle of prevention in all its activities and implements control mechanisms to avoid contamination of the water or soil environment due to spills or discharges.

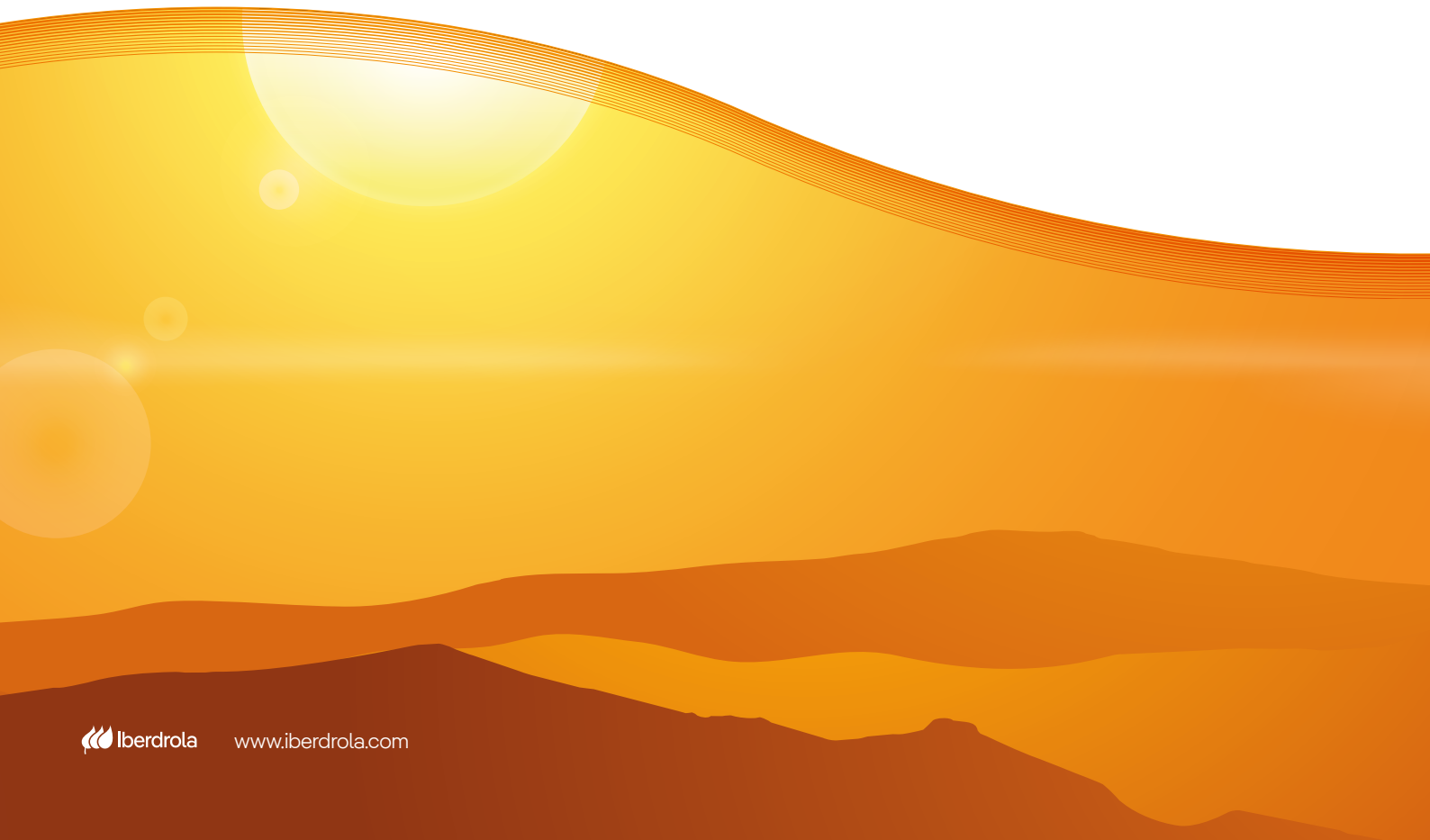
To this end, in all Group organisations, pollution prevention programmes are implemented with actions to improve safety and containment measures to avoid damage. Among these planned actions is the construction of tanks to collect oil in the event of a significant spill at substations and transformation centres, the waterproofing of bunds or the installation of containment barriers in sensitive environments.

Invasive species

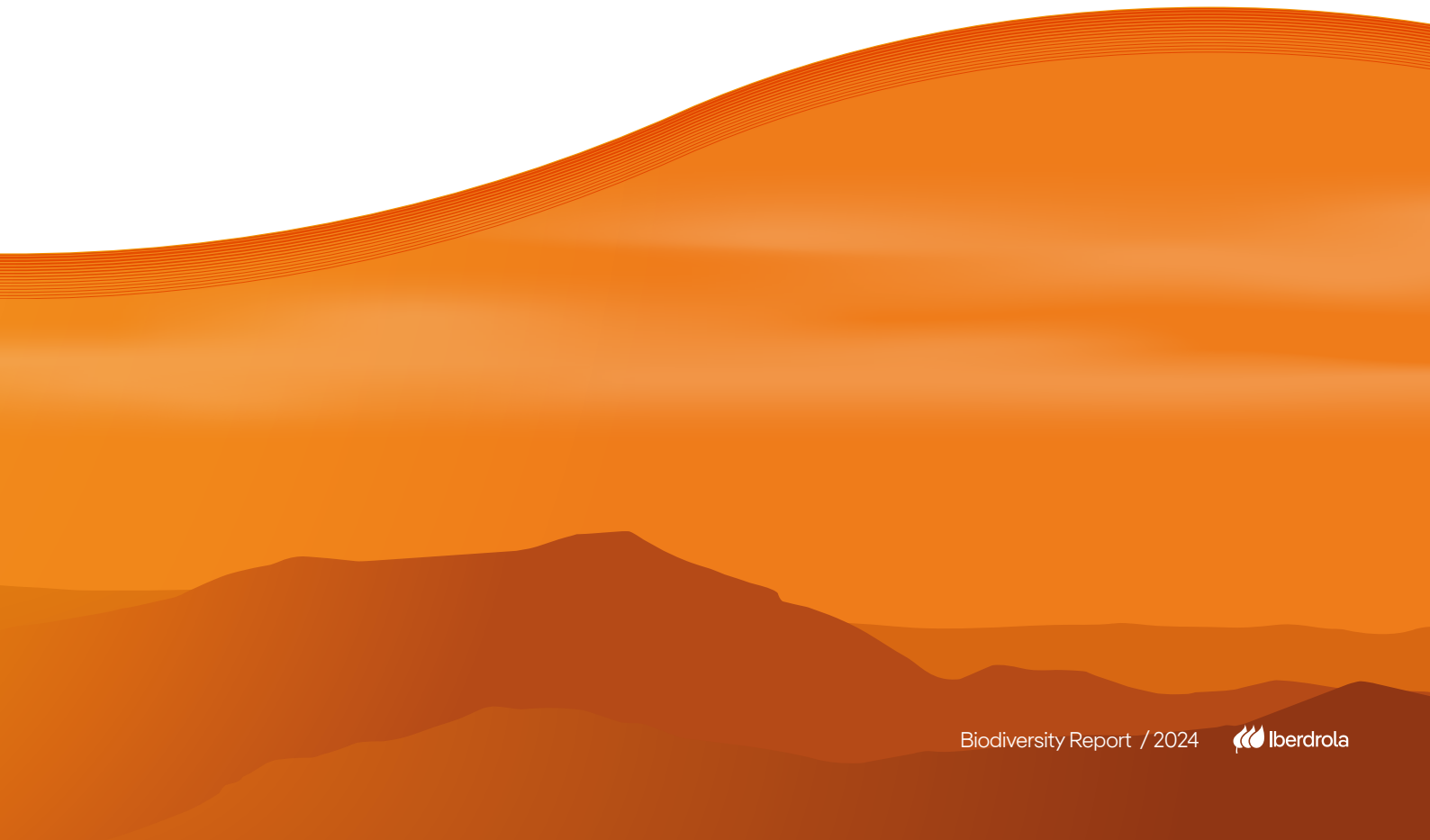
Invasive species are animals, plants or other organisms that develop outside their natural distribution area, in habitats that are not their own or with unusual abundance, producing alterations in the richness and diversity of ecosystems.

The control of these species is essential for the balance of ecosystems. Iberdrola contributes to the reduction of these species both in the operation of its facilities (vegetation management and zebra mussel control programmes) and in volunteer actions dedicated to this purpose.

3. Risk and impact management



Our "Iberdrola positive with nature" work plan, with its Climate Action, Biodiversity and Circular Economy Plans, is the fundamental tool to avoid and minimise risks and materialise opportunities related to nature."



3.1 Introduction

In its activity of generating, transporting, distributing, and marketing electrical energy, Iberdrola interacts with diverse ecosystems, their landscapes, and species in a very extensive geographical area.

Generation and storage of electricity and green hydrogen

Generation of renewable electricity (onshore and offshore wind, photovoltaic and hydro) and other sources of energy.

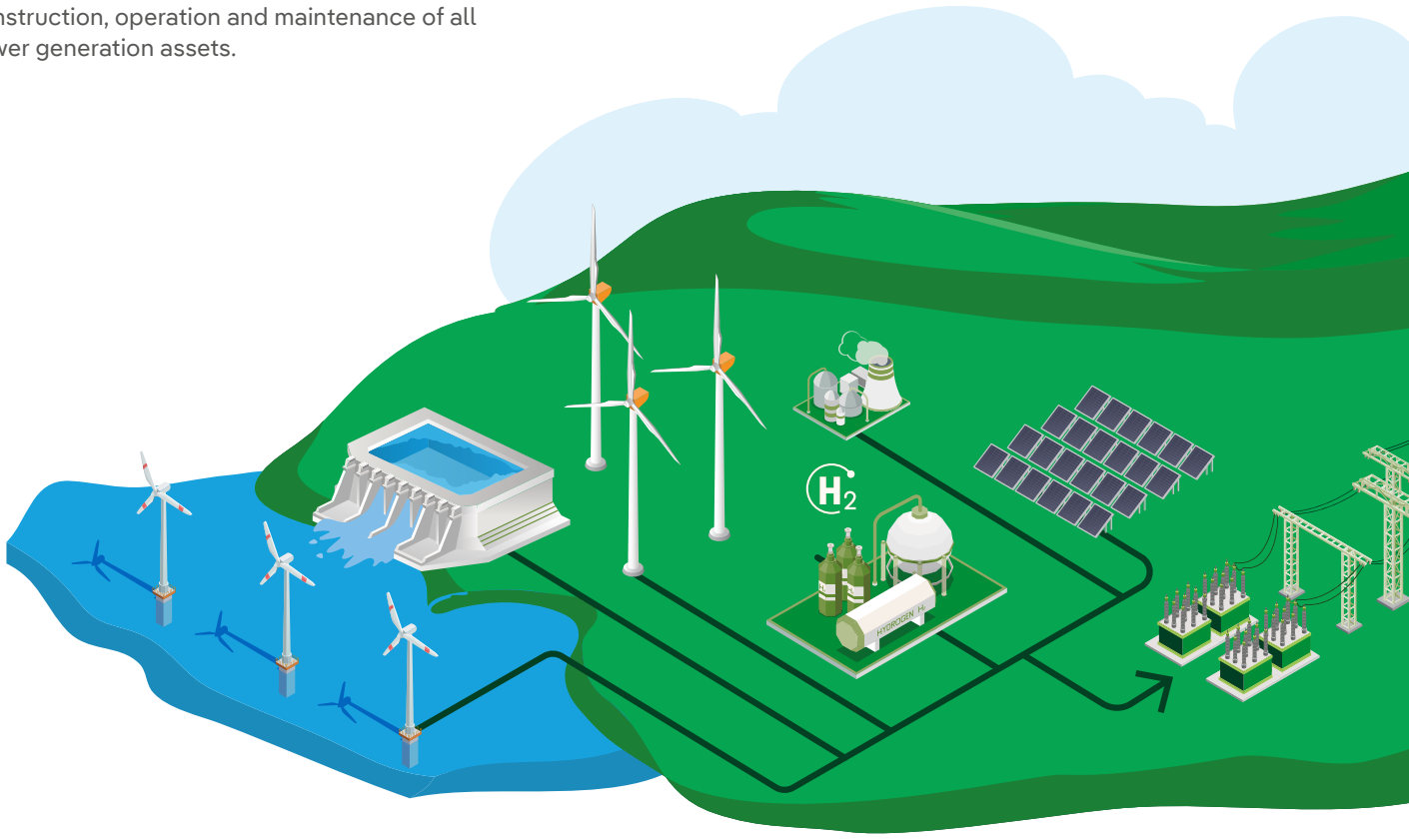
New technologies such as green hydrogen (from clean energy sources)

Large-scale storage, through pumping hydro and other generation assets.

Construction, operation and maintenance of all power generation assets.

Transmission and distribution

Construction, operation and maintenance of power grids, substations, transformer centres and other infrastructure, to bring electrical power from production centres to the end user and to integrate distributed generation within the grid.

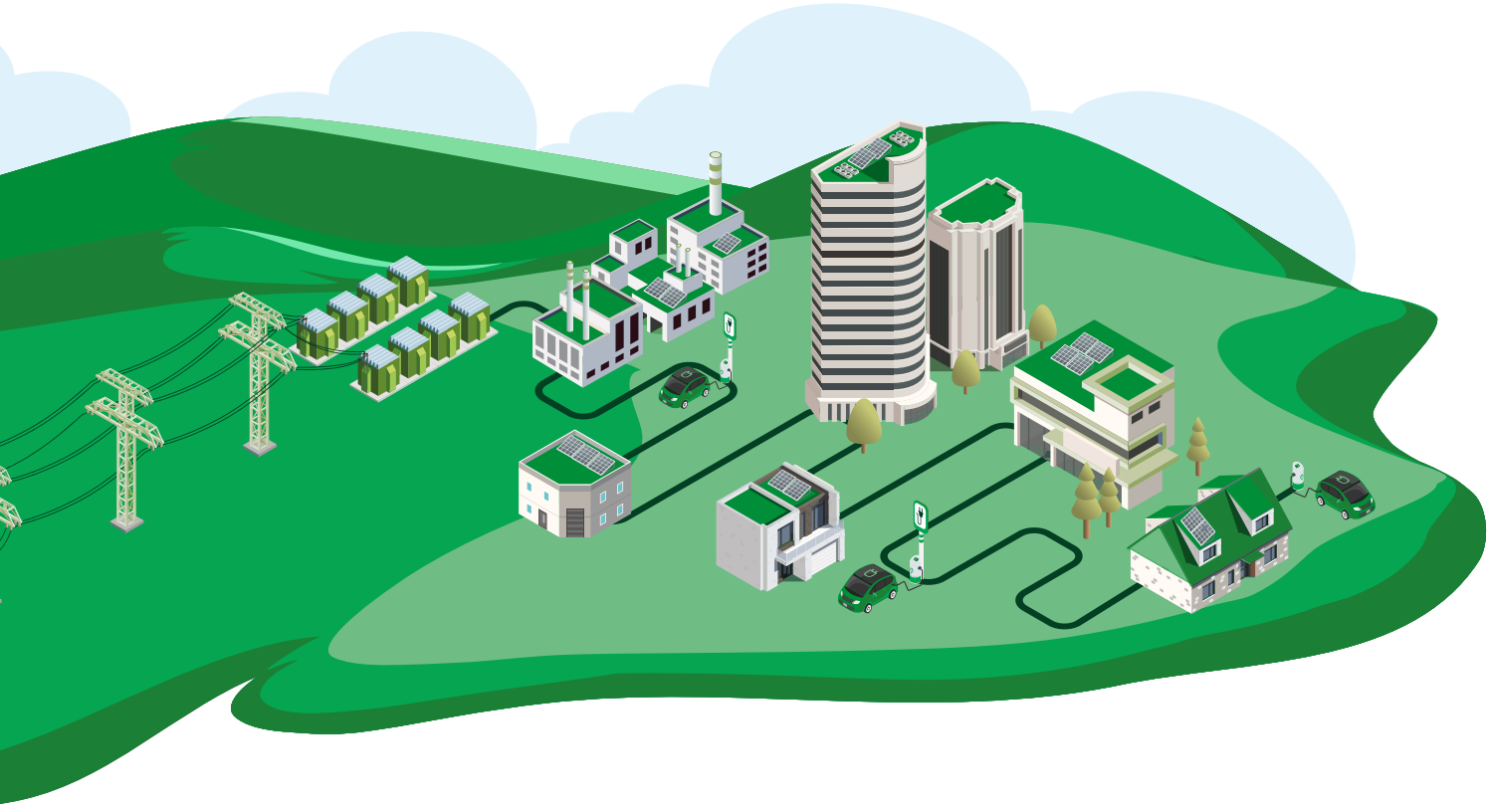


The development of these activities requires having adequate infrastructure, which must be built, operated, maintained and, eventually, decommissioned. These facilities and structures are located in places ranging from remote hills, forests or coasts to the heart of cities.

Sale of electricity and gas, innovative products and services (Smart solutions)

End user supply of electricity and gas.

Innovative and intelligent (smart) energy products and services for residential and industrial customers.



The breadth of activities and geographies creates multiple priorities for Iberdrola when evaluating its impacts, dependencies, risks, and opportunities related to nature and, ultimately, meeting the objectives established in the 2030 Biodiversity Plan.

3.2 Identification of impacts and dependencies on nature

Iberdrola identifies potential impacts on the degradation of nature in order to avoid, minimise, mitigate or compensate them in line with the application of the principles of the mitigation hierarchy indicated in its Biodiversity Policy.

The identification of these impacts is a continuous process in the life of the facilities. Below are some of the sources of information and tools used:

- **Environmental** impact assessments in new projects.
- **Surveillance** and monitoring programmes during construction and operation.
- Continuous **evaluation** of environmental aspects within the framework of environmental management systems.
- **Compilation** of impact metrics and calculation of the Group's Corporate Environmental Footprint.
- **Application** of the ecosystem and species metrics of the Biodiversity Accounting Framework of the Group's Biodiversity Plan.

The actions of the installation phases that can generate the most significant effects are described below:

DESIGN STAGE

- Site Selecction.
- Construction and technology solutions.
- Selections of materials.

CONSTRUCTION STAGE

- Introduction of vehicles and machinery.
- Opening of roads and disturbance of vegetation cover.
- Extended human presence (wich temporarily affects the behaviour of wildlife species and is generally reversible).
- Changes to the landscape.

OPERATION STAGE

- Emissions of gases to the atmosphere.
- Changes to the natural regimen of rivers and barrier effect in cases of hydroelectric plants (wich affect the ecosystems and habitats of certain species).
- Animal mortality from collisions and electrocution.
- Disturbance to vegetation for maintenance of power line roads, etc.
- Generation of spills and discharges.

DECOMMISSIONING PHASE

- Use of machinery and vehicles for removing and demolition of existing facillities.
- Extended human presence (wich temporarily affects the behaviour of wildlife species and is generally reversible).

Following the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD), Iberdrola has used the ENCORE and STBN materiality tools to carry out a first high-level analysis to evaluate the materiality of the potential impacts and dependencies of its main technologies and value chain. These were contrasted with the results of the evaluation of the Natural Capital Working Group of the Spanish Energy Sector and reviewed by internal experts to adapt it to the particularities of the Group.

The results of this analysis for direct activities, classified according to ENCORE, are shown in the following tables.

Materiality of potential impacts on drivers

Drivers	Sub-driver	Technologies						
		Solar	Onshore wind	Offshore wind	Hydroelectric	Combined cycle and cogeneration*	Nuclear	Networks
Changes in land/ sea use	Use of land ecosystems	▲	▲		▲			▲
	Use of aquatic ecosystems				▲			
	Use of marine ecosystems			▲				
Exploitation of resources	Water				●	●	●	
	Other: supply services	▲	▲	▲	▲			▲
Climate change	GHG emissions					●		●
	Other: regulation services				●			
Pollution	Non-GHG emissions					●	●	
	Water/Soil	▲	●		●	●	●	
Invasive species and others	Other biological alterations		●	●	●			●
	Disturbances		▲	▲	▲	●	●	▲

▲ New developments ● Operations and maintenance ● Both

Very low | Low | Medium | High | Very high

* No new thermal or nuclear developments are evaluated

The analysis shows that, excluding Greenhouse Gas (GHG) emissions, the Group's main potential material impacts on the drivers of nature degradation are:

- Changes in the condition and extent of ecosystems produced in the development of new renewable infrastructures and networks;
- The use of natural resources and the withdrawal of supply services; and
- The interaction of renewables and network infrastructures with species during their development, operation and maintenance.

In the same way, Iberdrola identifies natural capital dependencies to establish actions that reduce them and manage possible risks derived from them.

Material dependencies

Function	Ecosystem services	Technologies						
		Solar	Onshore wind	Offshore wind	Hydroelectric	Combined cycle and cogeneration*	Nuclear	Networks
Direct physical inputs	Water supply				■	■	■	
	Wind resource		■					
	Solar radiation	■						
	Mineral and non-mineral resources					■	■	
Enables production process	Water flow management services				■	■	■	
	Water quality			■	■	■	■	
Mitigating direct impacts	Bioremediation				■	■	■	
	Filtration				■	■	■	
Protection against interruptions	Climate regulation	■	■	■	■	■	■	■
	Flood and storm protection	■	■	■	■	■	■	■
	Soil stabilisation and erosion control	■	■	■	■	■	■	■

▲ New developments ■ Operations and maintenance ● Both

Very low | Low | Medium | High | Very high

* No new thermal or nuclear developments are evaluated

The analysis shows that **the main material dependencies on nature for Iberdrola are:**

- **The use of renewable resources** (water, wind and sun) and mineral and non-mineral resources (gas and uranium) that function as direct physical inputs.
- **Regulating ecosystem services** such as protection against erosion, floods and storms, climate regulation of water, etc. which can interrupt the operation and increase the operating cost
- The **hydrological cycle regulation** service necessary for energy production in hydroelectric plants and the cooling processes of thermal plants.

These potential impacts and dependencies are analysed and quantified at each facility with various metrics. These metrics identify vulnerable areas (see Section 3.4), other metrics are also used, such as those defined in the **Biodiversity Plan** to evaluate the impacts of new developments on ecosystems (due to changes in land use) and the impacts on species of the facilities in operation. The application of these metrics at the facilities allows Iberdrola to make decisions and prioritise actions to achieve the established objectives.

Impacts and dependencies of the value chain

The main activities of the operation of Iberdrola assets with upstream impacts are the consumption of raw materials (gas and uranium) and energy. The company is aware of these impacts and their consequences on nature in consumption, in operation and in the upstream impacts for its production, which is why Iberdrola's vision with nature in its climate action and circular economy plans has objectives reducing the consumption of these fuels.

Upstream activities are land and aquatic use change, greenhouse emissions, resource (water) use, pollution (including solid waste disposal) and disturbances to biodiversity. The material dependencies of these upstream activities are, in addition to the availability of the resource itself, the water necessary for production and regulation ecosystem services.

Furthermore, although they are not material consumption, due to their relevance to the conservation of biodiversity, Iberdrola has committed to non-deforestation in its supply chain by 2025. To this end, its suppliers must have due diligence policies and systems to ensure their services provided to Iberdrola does not result in deforestation.

The main activities of the operation of Iberdrola assets with downstream impacts are the sale of gas for consumption by the end customer. The material impacts produced by these downstream activities are the emission of greenhouse gases.

Iberdrola calculates its Corporate Environmental Footprint to measure the impact of its activities considering their life cycle, that is, quantifying the upstream and downstream impact of its operating activities. More information can be found in Section 3.4.1 and in the Iberdrola Group Corporate Environmental Footprint report.

3.3 Risk and Opportunity Management

Our “Iberdrola positive with nature” work plan, with its Climate Action, Biodiversity and Circular Economy plans, is the fundamental tool to avoid and minimise risks and materialise opportunities related to nature.

Iberdrola has been analysing and identifying the environmental risks of its activities and these processes for years as part of its comprehensive risk control and management system. This system is monitored and governed by a Risk Committee and by the Internal Audit and Risk Division, independent and specialised, with functional dependence on the Audit and Risk Supervision Committee, which analyses and quantifies the risks present in the main businesses and corporate functions of the Group. In application of the recommendations of the Task Force on Nature-related Financial Disclosures (TNFD), Iberdrola has updated its analysis of its risks and opportunities.

According to the TNFD, risks and opportunities are classified into three categories: physical risk, transition risk and systemic risk.

⚠ Nature-related **physical risks** are risks to an organisation that result from the degradation of nature and the resulting loss of ecosystem services on which economic activity depends. These risks can be chronic (such as an increase in the rate of erosion resulting in an increase in dam maintenance costs) or acute (caused by extreme events such as a fire or spills).

⚠ Nature-related **transition risks** are those that result from a misalignment of economic stakeholders with actions aimed at protecting, restoring and/or reducing negative impacts on nature. These risks may be caused, for example, by changes in regulation and policies, legal precedents, technology or investor perceptions and consumer preferences.

⚠ Nature-related **systemic risks** are risks to an organisation that arise from the failure of the entire system, rather than the failure of individual parts. These risks are characterised by tipping points that indirectly combine to produce major failures, where one loss triggers a chain of others and prevents the system from functioning.

Risks and opportunities are analysed at the Group, technology and installation level. In this way, based on the materiality analysis of the impacts and dependencies described in Section 3.4, the main nature-related risks and opportunities expected were identified against critical physical events (both acute in the short-medium term and chronic in the long term) and transitional events (derived from possible changes in the regulatory, technological, reputational or market framework).

The following table shows the risks, the main management measures and the opportunities identified after this analysis.

PHYSICAL RISKS			
RISK	**IMPLICATIONS FOR IBERDROLA**	**MANAGEMENT / MITIGATION**	**OPPORTUNITY**
The impact on protected or high-value ecosystems from the construction of new developments and maintenance of assets.	Limitations to the development of renewables by increasing the cost of corrective measures or the rejection/ delay of project approval.	Target Positive Net Impact on Biodiversity in 2030. Biodiversity policy. Avoid installations in protected spaces. Mitigation and Conservation Hierarchy Application. Adaptation of supports and installation of anti-collision and electrocution elements, burial of overhead lines, and installation of deterrent systems and detection cameras in wind farms. Biodiversity Plan. Vegetation management plans. Detection and warning systems and emergency plans. Diversification of generation technologies and geographies. "Meteoflow" prediction system. Pumping projects in existing hydraulics. Climate Action Policy. Environmental Policy. Contamination prevention. Group Environmental Management System. Actions to prevent pollution, improve energy efficiency and reduce water consumption. Compliance with applicable regulations. Insurance.	Lead the energy transition in harmony with nature and people. Improved competitiveness in both new developments and operations. Improvement in the relationship with interest groups. New pumping projects in current facilities. Innovation, research and development of new, more resilient technologies. New business opportunities such as those derived from Nature-Based Solutions.
The impact on threatened **species**.	Interruption or reduction of production and an increase in the cost of measures and fines.		
Degradation of **ecosystems**, increases of erosion and landslides.	Increase in maintenance/ repair costs.		
The impacts of fires caused by infrastructure on ecosystems.	Cost of repairing damage caused by fire and impact on ecosystems		
Use of water for cooling and reservoir management.	Changes in resource availability can reduce or disrupt production.		
Consumption of natural resources for energy generation, construction and maintenance of facilities.	Changes in resource availability can reduce or disrupt production		
Changes in **weather conditions** and extreme events.	Interruption or reduction of production.		
Exceed ecological and regulatory thresholds for emissions to soil, water or air.	Interruption or reduction of production and an increase in the cost of measures and fines.		

TRANSITION RISKS (REGULATORY/REPUTATIONAL/MARKET/TECHNOLOGICAL)			
RISKS	**IMPLICATIONS FOR IBERDROLA**	**MANAGEMENT / MITIGATION**	**OPPORTUNITY**
Global decarbonisation process.	Pressure on fossil-based businesses and deterioration of their business model.	Climate action plan. Solid internal governance, in line with best practices. Iberdrola nature positive roadmap. Internal launch of initiatives focused on social and biodiversity aspects such as the Convive Project Identification and analysis of risks related to nature in new investments and operational activities. Objective Impact Net positive in Biodiversity in 2030. Stakeholder management model. Participation in alliances and participation in working groups. Technological diversification.	Increased electrification of the economy. Development of more resilient and competitive projects in the long term. Energy transition in harmony with nature and people. New designs in projects that incorporate the compatibility of land uses and contribute to the local economy. Brand improvement and consumer preference. Advantages in attracting customers financing in the face of growing pressure from the financial sector and capital markets. Positioning in indices and improvement in the relationship with interest groups. Innovation, research and new business opportunities with investment in new technologies.
More demanding policies in the protection of nature that increase the CAPEX/OPEX of the project and/or reduce the opportunities for new developments.	Increase in CAPEX/OPEX of the project and/or reduction in opportunities for new developments.		
Conflicts with interested parties when locating new developments in agricultural or livestock areas.	Reduce opportunities for the implementation of new developments in the territory.		
Non-compliance with the demands of interest groups.	Impact on brand reputation and competitiveness.		
Stricter financial requirements on nature-related impacts and dependencies.	Increase in CAPEX/OPEX of the project and/or reduction in opportunities to access financing or investment.		
Adaptation to new technologies with lower impact or dependency and implementation of new immature technologies to reduce the impact or dependency.	Technological obsolescence in measures to reduce impacts and dependencies.		

Provisions and guarantees for environmental risks

Iberdrola has **guarantees to cover the occurrence of environmental risks** in the insurance it has contracted. The main corporate insurance policies that the company has contracted in which there is environmental coverage are:

- Environmental liability insurance.
- Civil liability coverage for sudden and accidental pollution in the general civil liability policy.

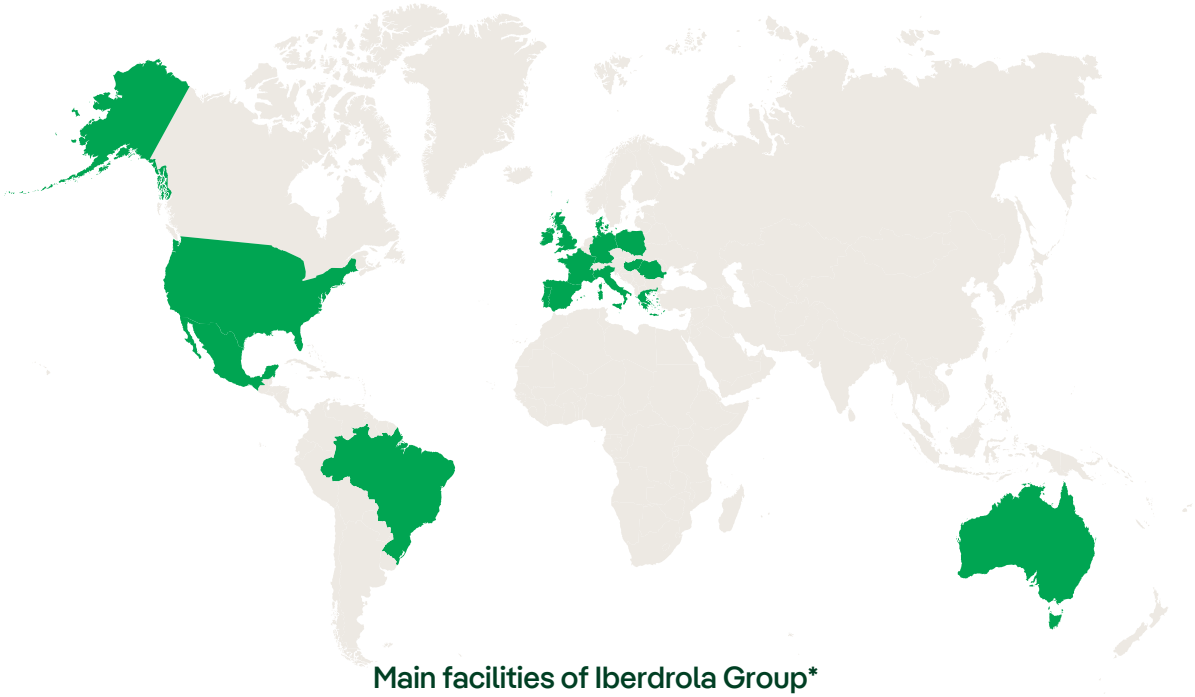
3.4 Indicators and metrics

The ecological processes of nature are complex, and it is difficult to establish indicators and metrics that aggregately represent the state and impact of a varied set of activities on biodiversity. Iberdrola evaluates the impacts, dependencies, risks and opportunities at the facility, technology, and Group level, relying on metrics and indicators. Below are the metrics on Iberdrola's activities and their relationship with respect to sensitive areas and impact indicators such as the corporate environmental footprint.

As mentioned in Section 2.2, Iberdrola launched its Biodiversity Plan in 2022, which establishes an accounting framework for impacts on ecosystems and species to measure the Group's impact on biodiversity and be able to report the objective as a percentage of facilities, with a neutrality/positivity plan so that countries are positive in biodiversity with global actions. In this period, work has been done to define the methodologies and implement the ecosystem metrics in the Group's companies in order to begin reporting in 2025.

3.4.1 Iberdrola Group

Activities and facilities



Main facilities of Iberdrola Group*

435 Onshore wind	**140** Hydroelectric power plants	**5** Offshore wind	**30** Combined cycle power plants	**10** Batteries	**1,276,520** Km of electric power line
24 Cogeneration plants	**5** Nuclear power plants	**72** Photovoltaic	**2** Green hydrogen	**5** Other renewables	

Projects under construction*

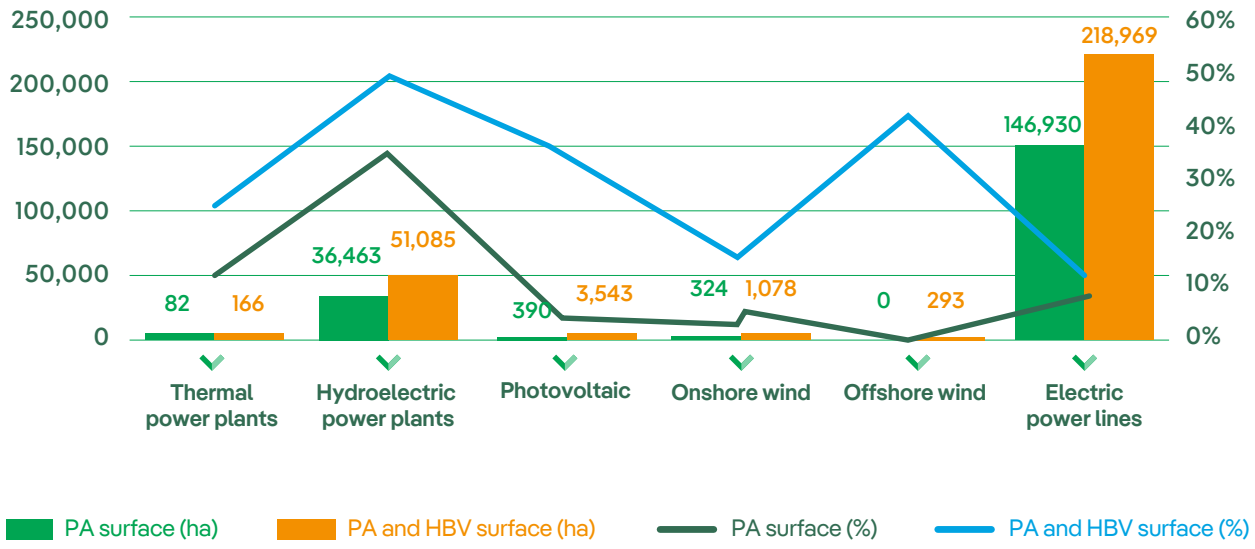
9 Onshore wind	**3** Offshore wind	**36** Photovoltaic	**1** Green hydrogen	**1** Batteries	**8** Transmission projects

Iberdrola 2024 Integrated report. https://www.iberdrola.com/documents/20125/3643974/gsm24-integrated-report-2023.pdf

Protected areas and high value for biodiversity

Understanding the sensitivity of the territory with respect to protected spaces or areas of high value for biodiversity is a fundamental aspect to be able to properly manage its activities, analysing possible effects to adopt mitigation measures or develop recovery and conservation projects. The following graph represents the surface area in protected areas or high value for the Group's biodiversity and its percentage with respect to the area occupied or managed by the facilities or the street width in the case of power lines.

Surface in protected areas (PA) or of high biodiversity value (HBV) of Iberdrola Group



Reservoirs are, due to their extension in the territory, the facilities with the largest surface area in protected areas or areas of high biodiversity value.

- 49% of the surface of the hydroelectric power plant reservoirs is located within protected areas or areas of high biodiversity value. However, many of these areas have been cataloged afterwards thanks to the existence of the reservoir.
- 5% of onshore wind farms are in protected areas[12].
- 8% of power lines are in protected spaces.

Threatened species in facility environments

Knowledge of the species that live in the areas of influence of the facilities is essential for preventing the effects on them, even more so if they are protected. **Iberdrola identifies threatened species** included in the IUCN Red List and in national and regional lists with habitats in the areas where it operates to prevent effects on them. The company implements species monitoring programmes and research projects at many of its facilities in order to learn more about their behavioral patterns and incorporate this knowledge into its operations (see Section 5.2).

12 National protected areas and Areas of the Natura 2000 Network: Places of Community Importance (SCI) and Special Protection Areas for Birds (SPA).

The following table shows the **number of species on the IUCN Red List** identified by Iberdrola facilities, without this implying any impact or threat derived from the activity.

Threatened species

Critically endangered **(CR)**	Endangered **(EN)**	Vulnerable **(VU)**	Near Threatened **(NT)**	Least Concern **(LC)**
22	81	172	188	2,568

Some of the species are:

Critically endangered:

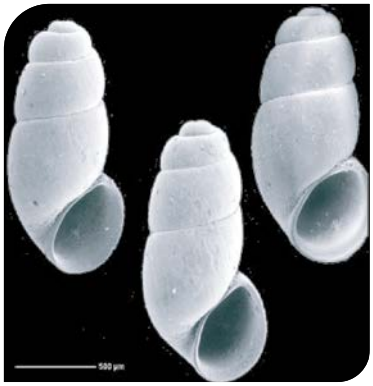
California Condor *(Gymnogyps californianu)* - USA
@ U.S. Fish and Wildlife Service

Brazilian Merganser *(Mergus octosetaceus)* - Brasil
© Adriano Gambarini

Northern Muriqui
(Brachyteles hypoxanthus) - Brazil
© Kevinschafer.com

European eel
(Anguilla anguilla) - Spain
© ABS Natural History

Alzoniella galaica
(Alzoniella galaica) - Spain
@ Emilio Rolán



Endangered:

Whooping crane (*Grus americana*) - USA
@ U.S. Fish and Wildlife Service

Pava yacutinga (*Pipile jacutinga*) - Brazil
Stock photo

Dupont's lark (*Chersophilus duponti*) - Spain
@ seo.org

Egyptian vulture (*Neophron percnopterus*) - Spain and Greece
@ seo.org

Tamarino león de cabeza (*Leontopithecus chrysomelas*) - Brazil
Foto de stock

Orange-spotted Emerald (*Oxygastra curtisii*)
Spain and Portugal © Jean-Pierre Boudot

Spanish Algyroides (*Algyroides marchi*) - Spain
© Per Blomberg

Loggerhead turtle (*Caretta caretta*) © Howard Hall

Blue Marlin (*Jumping marlin*) - All the oceans
Stock photo

Freshwater Pearl Mussel (*Margaritifera margaritifera*) - Europe and USA
© Ian J. Killeen

Vulnerable

Spanish Imperial Eagle (*Aquila adalberti*)
Spain
@seo.org

Rusty Blackbird (*Euphagus carolinus)*
USA
© Daniel Jauvin

Red-browed Amazon
(*Amazona rhodocorytha*) - Brazil
© Ricardo Marques

Black-handed Titi (*Callicebus melanochir*)
Brazil
© Jacek Kisielewski (CC BY-SA 3.0)

Splendid Cruiser ((*Macromia splendens*)
Spain and Portugal
© Jean-Pierre Boudot"

Northern Tiger Cat (*Leopardus tigrinus*)
Brazil
@Groumfy69

Corporate Environmental Footprint of the Iberdrola group

Iberdrola identifies the impact of its activities on the value chain through the Group's Corporate Environmental Footprint. The Corporate Environmental Footprint (CEF) is a multi-criteria measure of a company's environmental behaviour, from a life cycle perspective. The CEF allows Iberdrola to evaluate the impacts in the impact categories defined in the ReCiPe methodology (see figure 1). The CEF is calculated considering the impacts from the "cradle to the grave", this means that, through data, for example, gas consumption, the CEF calculates not only the direct impacts produced in the generation of electricity (emissions, etc.) but also the impacts generated by the extraction, production, and transportation of gas.

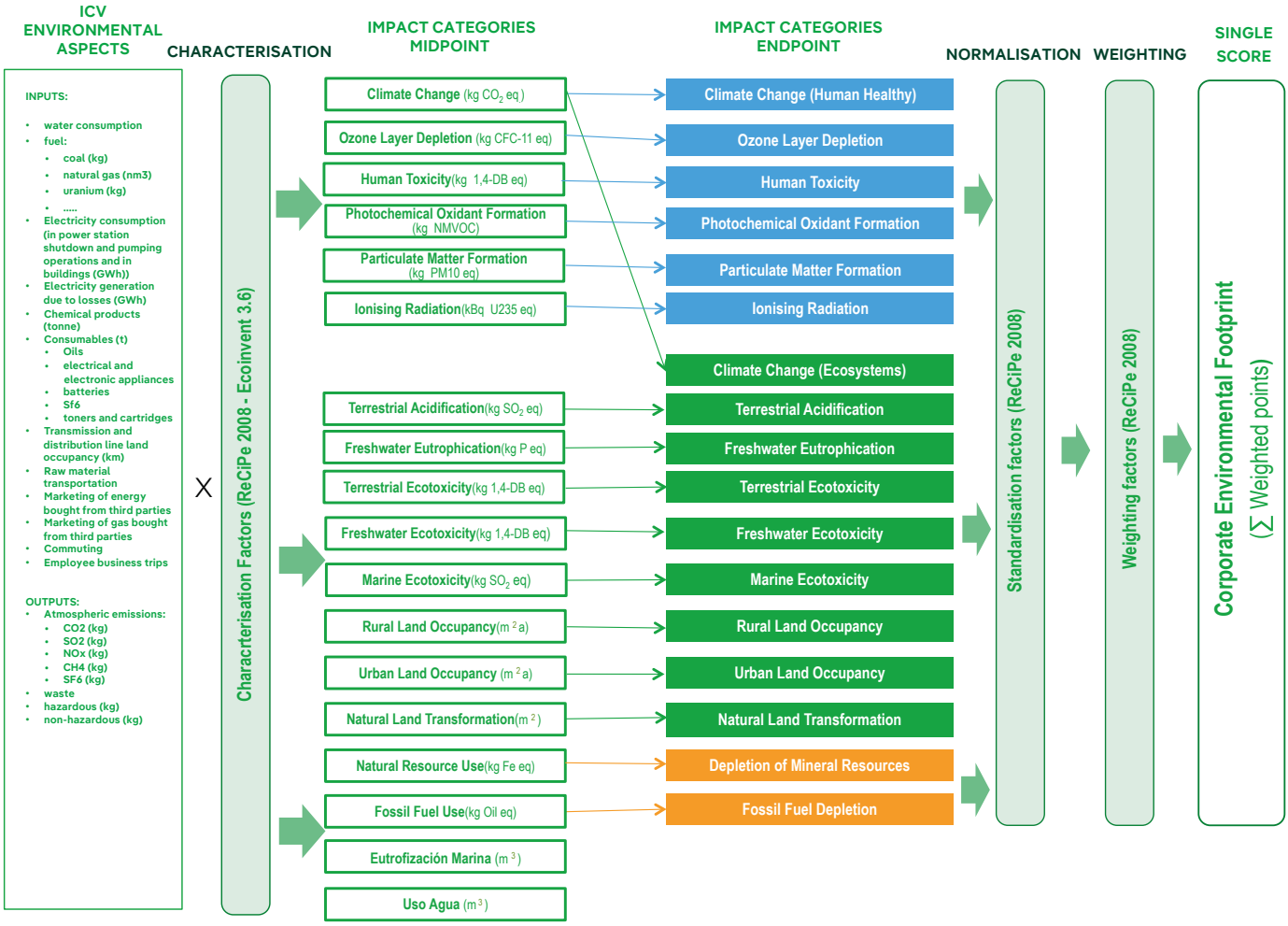
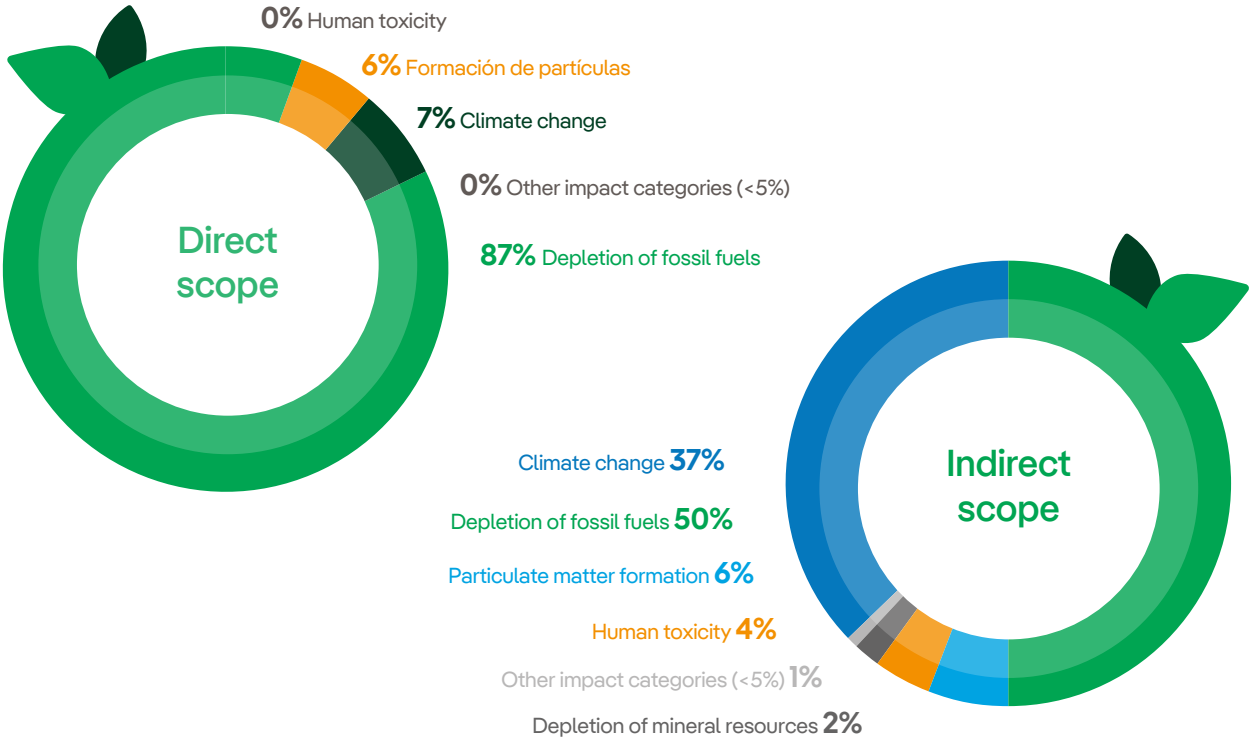


Figure 1. **Methodology for calculating the Corporate Environmental Footprint**

In this way, the Group's Corporate Environmental Footprint (CEF) allows Iberdrola to know and objectively compare the impact of its activity on the different categories of environmental impact, trace its cause, identifying environmental aspects and responsible facilities, technologies, and regions.

Below are the results of the calculation of the Corporate Environmental Footprint of the Iberdrola Group derived from the activities of 2022. For more information see the 2022 Corporate Environmental Footprint report.

Impact category	Direct scope (points)	Indirect scope (points)	Total (points)	Iberdrola Group Environmental Footprint (points)
Climatechange (Human health)	458,113,133	2,260,535,768	2,718,648,901	7,195,598,048
Ozone layer depletion	5,593	320,593	326,186	
Human toxicity	54,599	239,988,171	240,042,770	
Photochemical ozone formation	30,418	112,616	143,035	
Particulate matter formation	40,902,102	427,057,349	467,959,451	
Ionising radiation	0	10,386,143	10,386,143	
Climate change (Ecosystems)	38,586,360	220,428,838	259,015,198	
Soil acidification	32,011	312,319	344,330	
Freshwater eutrophication	0	153,112	153,112	
Soil ecotoxicity	348	327,538	327,886	
Freshwater eutrophication	1	845,756	845,757	
Marie ecotoxicity	4	143,550	143,554	
Rural land occupancy	0	22,538,009	22,538,009	
Urban land occupancy	32,961,947	2,451,491	35,413,438	
Natural lans transformation	0	18,443,598	18,443,598	
Mineral resource depletion	0	118,477,192	118,477,192	
Fossil fuel depletion	0	3,302,389,489	3,302,389,489	



Metrics

Below are the main metrics on the drivers of biodiversity loss in 2023.

Land use

1,965,372 ha
Total land occupied or under management control

Climate change

10,587,589
tons CO_2eq
Scope 1
Direct emissions

1,746,827
tons CO_2eq
Scope 2
Indirect emissions

39,304,151
tons CO_2eq
Scope 3
Other indirect emissions

Use of resources*

79,804 ML
Water consumption

1,745,363 ML
Water withdrawal

1,655,559 ML
Water discharged

Waste

337,541
tons
Total waste

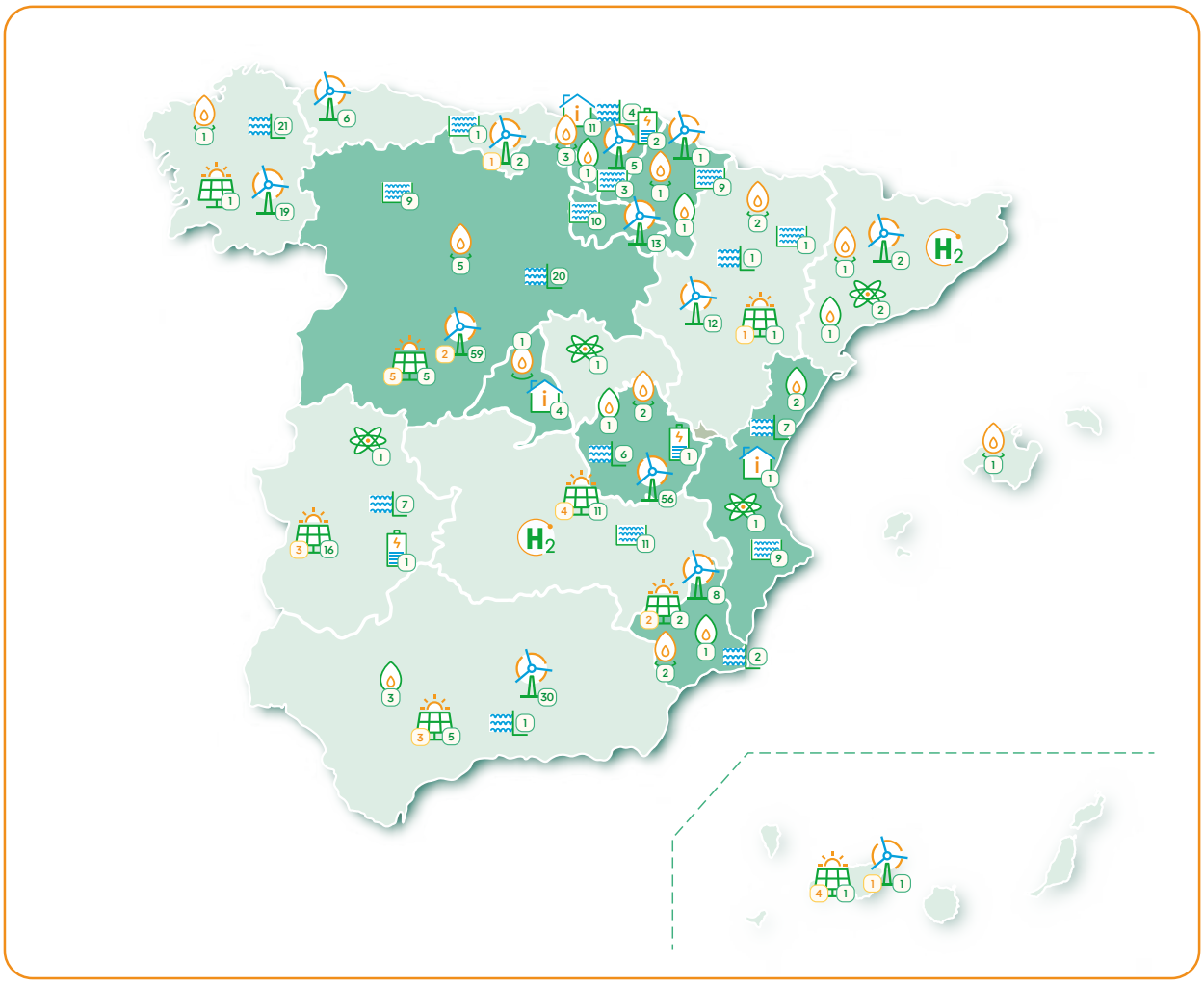
1,746,827
tons
Hazardous

322,587
tons
Non-hazardous

* For fuel consumption see GRI 301 of the Non-Financial Reporting Report.

3.4.2 Iberdrola Spain

Activities and facilities



214 Onshore wind 6,550 MW

42 Photovoltaic 3,951 MW

125 Hydroelectric + mini-hydroelectric power plants 11,070 MW

2 Green hydrogen

4 Batteries 19 MW

10 Combined cycle power plants 5,695 MW

19 Cogeneration plants 347 MW

5 Nuclear power plants 3,177 MW

265,337 Km of electric power lines

Projects under construction

4 | 22 | 1

Main offices | Electricity distribution | Area of influence

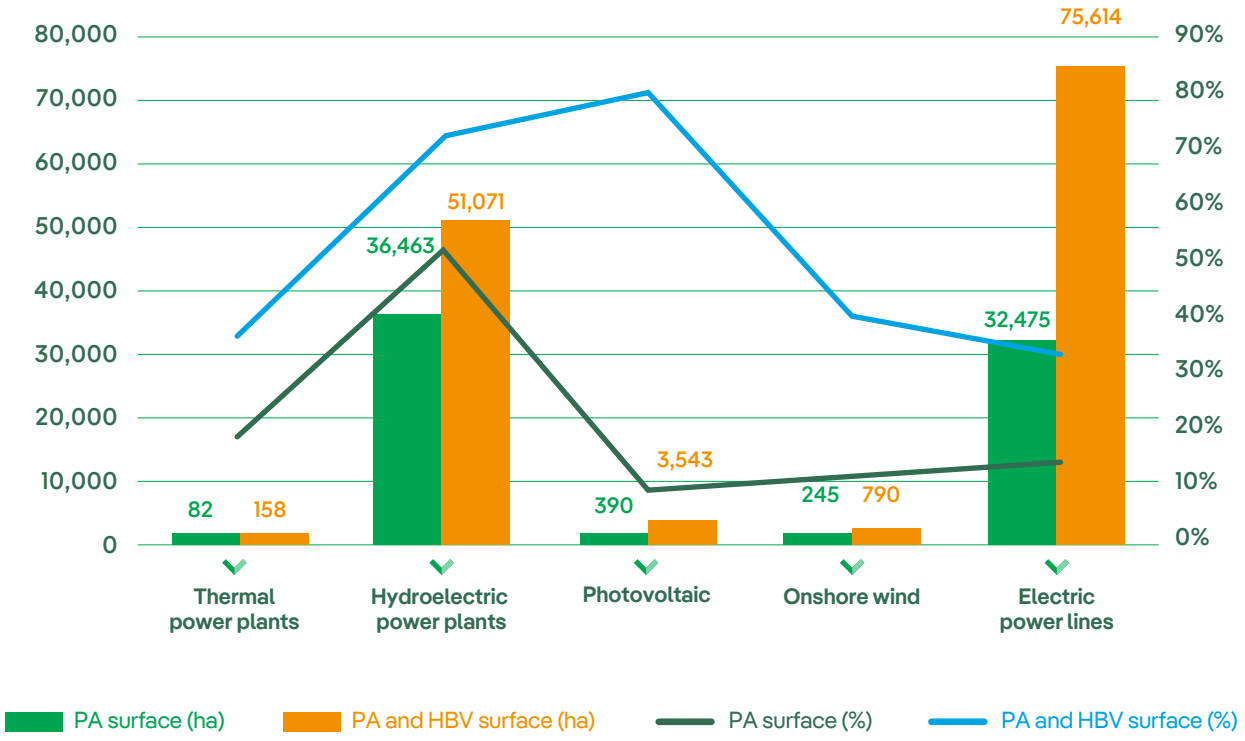
Protected areas and high value for biodiversity

The presence of facilities in protected areas is largely due to the fact that their construction was prior to the declarations of protection by the Public Administrations.

- 72.7% of the surface of the reservoirs is located within protected areas or areas of high biodiversity value. It must be considered in this sense that many of the protections were derived from the ecosystems created by the presence of the reservoir.
- 12% of onshore wind farms are protected areas.
- 14% of distribution power lines are in protected spaces.

The surface of the company's reservoirs in Biosphere Reserves, National Parks, Ramsar Wetlands and natural parks represent 1.2% of the surface of these protected areas. The reservoirs located in the Monfragüe National Park and Biosphere Reserve, the Sierra de Cazorla, Segura and Las Villas Biosphere Reserve and the Arribes del Duero Natural Park should be highlighted.

Surface in protected areas (PA) or of high biodiversity value (HBV) of Iberdrola España



Threatened species in facility areas

The following table shows the number of species on the IUCN Red List identified by Iberdrola facilities, without this implying any impact or threat derived from the activity.

Threatened species

Critically endangered **(CR)**	Endangered **(EN)**	Vulnerable **(VU)**	Near Threatened **(NT)**	Least Concern **(LC)**
13	42	100	122	1,190

Metrics

Below are the main metrics on the drivers of biodiversity loss in 2023.

Land use

303,689 ha
Total land occupied or under management control

Climate change

3,745,409
tons de CO_2eq
Scope 1
Direct emissions

832,776
tons de CO_2eq
Scope 2
Indirect emissions

2,330,075
tons de CO_2eq
Scope 3
Other indirect emissions

Use of resources*

50,699 ML
Water consumption

1,512,411 ML
Water withdrawal

1,461,712 ML
Water discharged

Waste

31,041
tons
Total waste

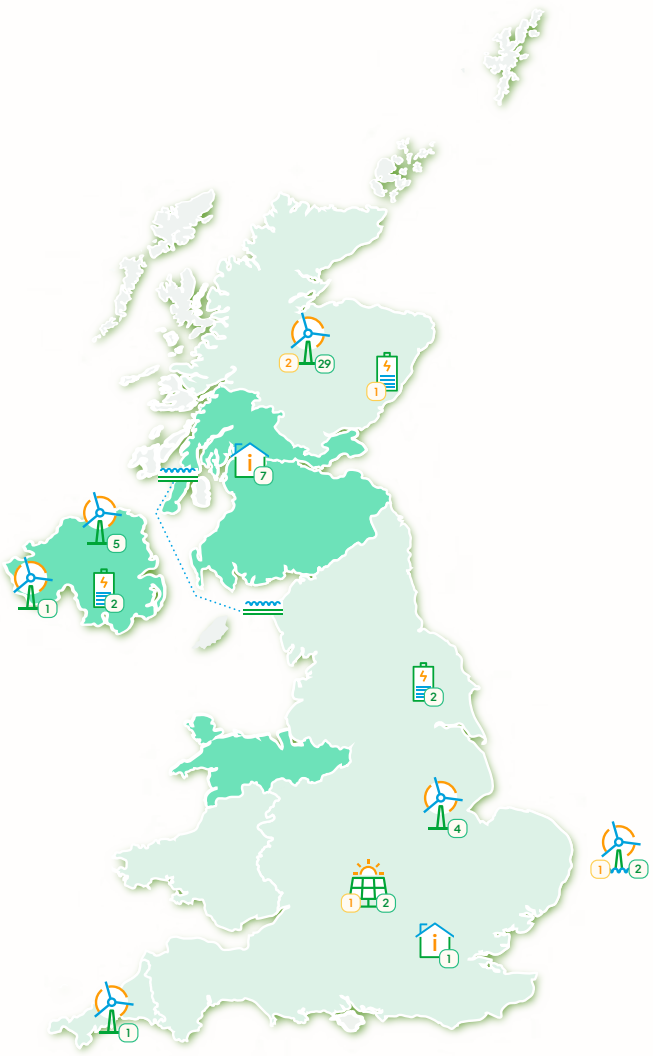
7,427
tons
Hazardous

23,614
tons
Non-hazardous

* For fuel consumption see GRI 301 of the Non-Financial Reporting Report.

3.4.3 ScottishPower

Activities and facilities



40 Onshore wind 1,971 MW

2 Offshore wind 908 MW

2 Photovoltaic 19 MW

4 Batteries 104 MW

11,468 Km of electric power lines

Projects under construction

2 | 1 | 1 | 1

Main offices | Electricity distribution | Area of influence

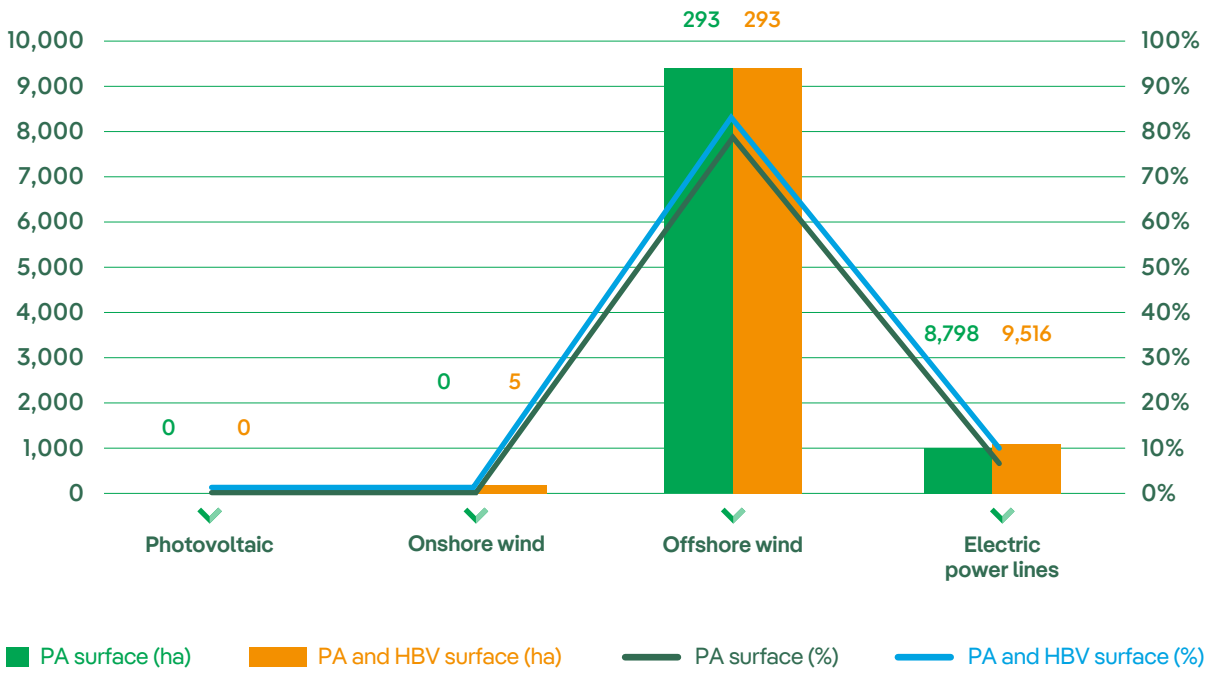
Protected areas and high value for biodiversity

ScottishPower does not have any onshore wind farm facilities in operation in areas declared protected, although 10.4% of its wind farms are located in areas of high biodiversity value, particularly in peatlands and priority habitat. Barnesmore Wind Farm is located adjacent to the Barnesmore Bog Natural Heritage Area. The Lynemouth wind farm in England is also located in an area of high biodiversity value due to its importance for hibernating swans and geese.

The East Anglia ONE offshore wind farm is located within the South North Sea Special Conservation Area, formally designated in 2019 after construction of EastAnglia ONE began in 2018; The West of Duddon Sands Marine Diversity Area is located within the West of Walney Marine Conservation Area, an area designated by the Government for the conservation of habitat and species (under the "Marine & Coastal Access Act"). Part of the area is also within the Liverpool Bay Special Bird Protection Area.

Only 11% of ScottishPower's power lines are located in designated areas of significant biodiversity, habitat and landscape value. These include Loch Lomond and Trossachs National Parks, the Natura 2000 Network, Ramsar Wetlands, the National Nature Reserve and Sites of Special Scientific Interest (covering protected species such as badgers, otters and hen harriers).

Surface in protected areas (PA) or of high biodiversity value (HBV) of ScottishPower



Threatened species in facility areas

The following table shows the number of species on the IUCN Red List identified by Iberdrola facilities, without this implying any impact or threat derived from the activity.

Threatened species

Critically endangered **(CR)**	Endangered **(EN)**	Vulnerable **(VU)**	Near Threatened **(NT)**	Least Concern **(LC)**
1	3	2	9	127

Metrics

Below are the main metrics on the drivers of biodiversity loss in 2023.

Land use

85,287 ha
Total land occupied or under management control

Climate change

39,374
tons de CO_2eq
Scope 1
Direct emissions

499,418
tons de CO_2eq
Scope 2
Indirect emissions

6,989,095
tons de CO_2eq
Scope 3
Other indirect emissions

Use of resources*

57 ML
Water consumption

0 ML
Water withdrawal

Waste

149,176
tons
Total waste

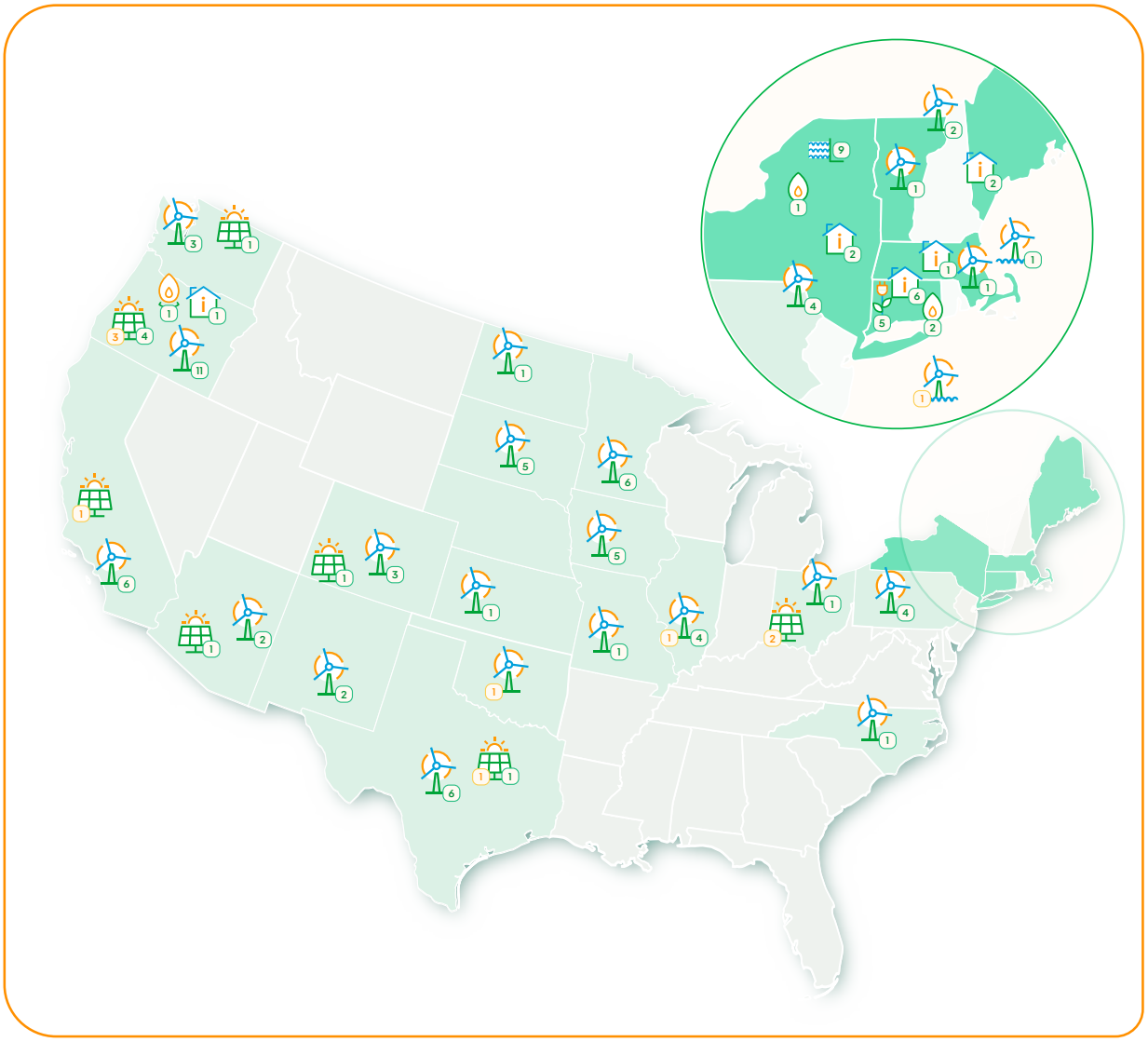
4,395
tons
Hazardous

144,781
tons
Non-hazardous

* For fuel consumption see GRI 301 of the Non-Financial Reporting Report.

3.4.4 Avangrid

Activities and facilities



70 Onshore wind 8,045 MW

1 Offshore wind 39 MW

8 Photovoltaic 618 MW

9 Hydroelectric power plants 118 MW

3 Combined cycle gas power plants 204 MW

1 Cogeneration plants 636 MW

5 Other renewables 13 MW

171,912 Km of electric power lines

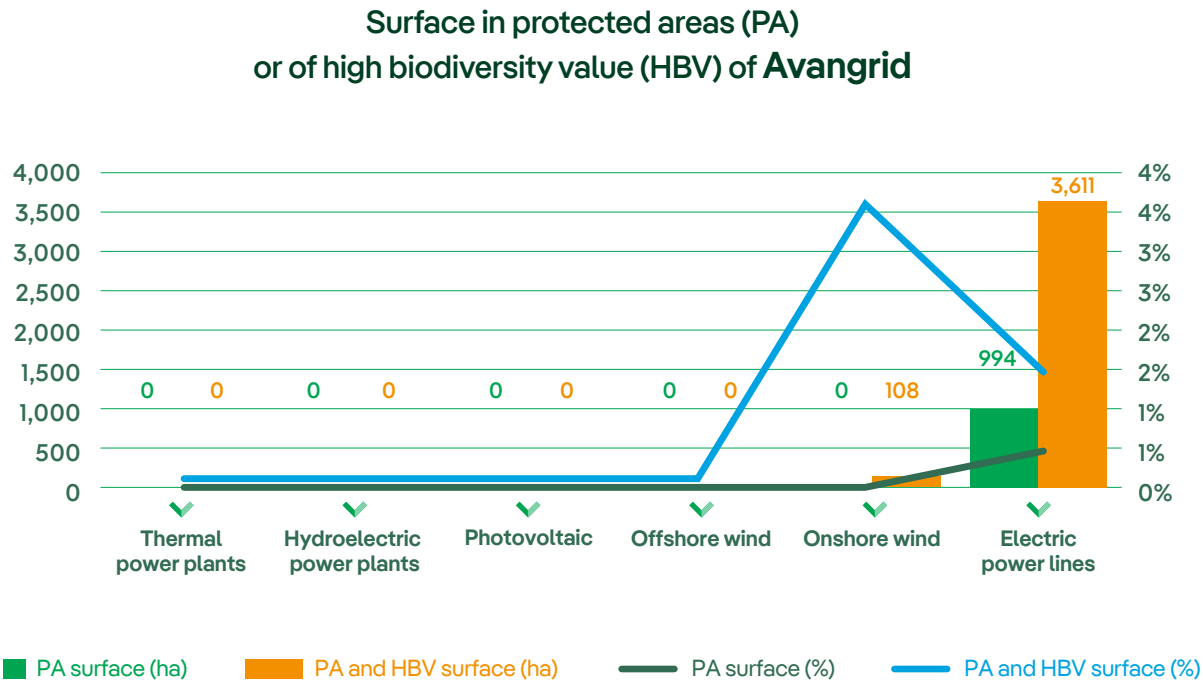
Projects under construction

2 | 1 | 7

Main offices | Electricity distribution | Area of influence

Protected spaces and high value for biodiversity

Of Avangrid's 70 onshore wind farms, two are located within areas of high biodiversity value.



In energy distribution and transportation, only 2% are located within protected or high value areas for biodiversity. These areas include the New York State Adirondack Forest Park and Preserve, the New York State Catskill Forest Park and Preserve, Letchwork Park, the United Nations Champlain-Adirondack Biosphere Reserve, and Connecticut West Rock State Park.

Threatened species in facility areas

The following table shows the number of species on the IUCN Red List identified by Iberdrola facilities, without this implying any impact or threat derived from the activity.

Threatened species

Critically endangered **(CR)**	Endangered **(EN)**	Vulnerable **(VU)**	Near Threatened **(NT)**	Least Concern **(LC)**
2	13	10	11	36

Metrics

Below are the main metrics on the drivers of biodiversity loss in 2023.

Land use

235,126 ha
Total land occupied or under management control

Climate change

1,636,499
tons de CO_2eq
Scope 1
Direct emissions

185,746
tons de CO_2eq
Scope 2
Indirect emissions

8,890,579
tons de CO_2eq
Scope 3
Other indirect emissions

Use of resources*

2,048 ML
Water consumption

3,419 ML
Water withdrawal

1,371 ML
Water discharged

Waste

108,375
tons
Total waste

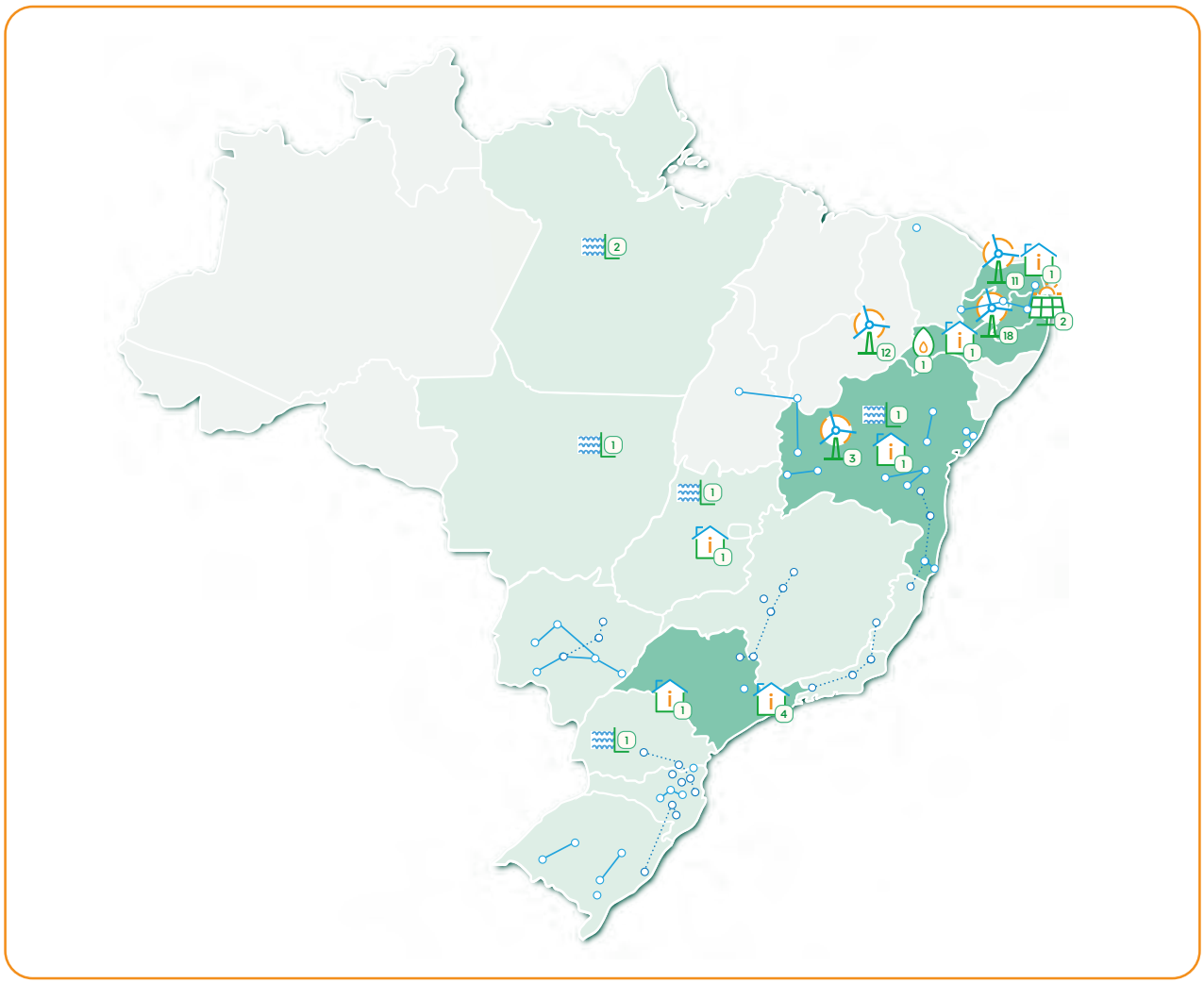
614
tons
Hazardous

107,761
tons
Non-hazardous

* For fuel consumption see GRI 301 of the Non-Financial Reporting Report.

3.4.5 Neoenergia

Activities and facilities



44 Onshore wind 1,554 MW

6 Hydroelectric power plants 2,159 MW

1 Combined cycle gas power plants 533 MW

10 transportation lines in operation

2 Photovoltaic 149 MW

727,802 Km of electric power lines

Projects under construction

8 transportation projects

Main offices | Electricity distribution | Area of influence

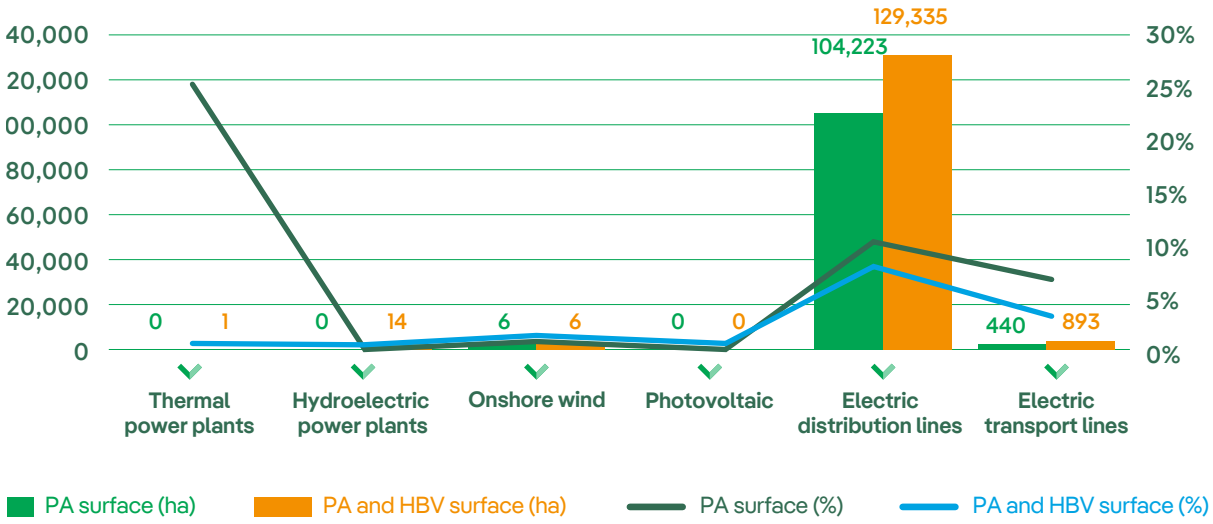
Protected spaces and high value for biodiversity

The Neoenergia group develops part of its activities in biomes considered to be focal points for biodiversity conservation worldwide, such as the Cerrado and the Atlantic forest, which increases the Group's commitment to minimising the environmental impact of its activity.

According to the definition of the Brazilian Ministry of Environment, protected areas and conservation units are parts of the national territory with natural characteristics of special importance and high biodiversity value, subject to a special administration regime, with adequate guarantees for their protection.

The facilities that are located within protected areas or adjacent to them meet all the requirements demanded by environmental organisations to guarantee the protection of these spaces, which are essential to conserve biodiversity.

Surface in protected areas (PA) or of high biodiversity value (HBV) of Neoenergia



Threatened species in facility areas

The following table shows the number of species on the IUCN Red List identified by Iberdrola facilities, without this implying any impact or threat derived from the activity.

Threatened species

Critically endangered (CR)	Endangered (EN)	Vulnerable (VU)	Near Threatened (NT)	Least Concern (LC)
5	20	43	35	928

Metrics

Below are the main metrics on the drivers of biodiversity loss in 2023.

Land use

1,333,794 ha
Total land occupied or under management control

Climate change

104,025
tons de CO_2eq
Scope 1
Direct emissions

208,392
tons de CO_2eq
Scope 2
Indirect emissions

1,678,035
tons de CO_2eq
Scope 3
Other indirect emissions

Use of resources*

191 ML
Water consumption

46542 ML
Water withdrawal

46,351 ML
Water discharged

Waste

40,317
tons
Total waste

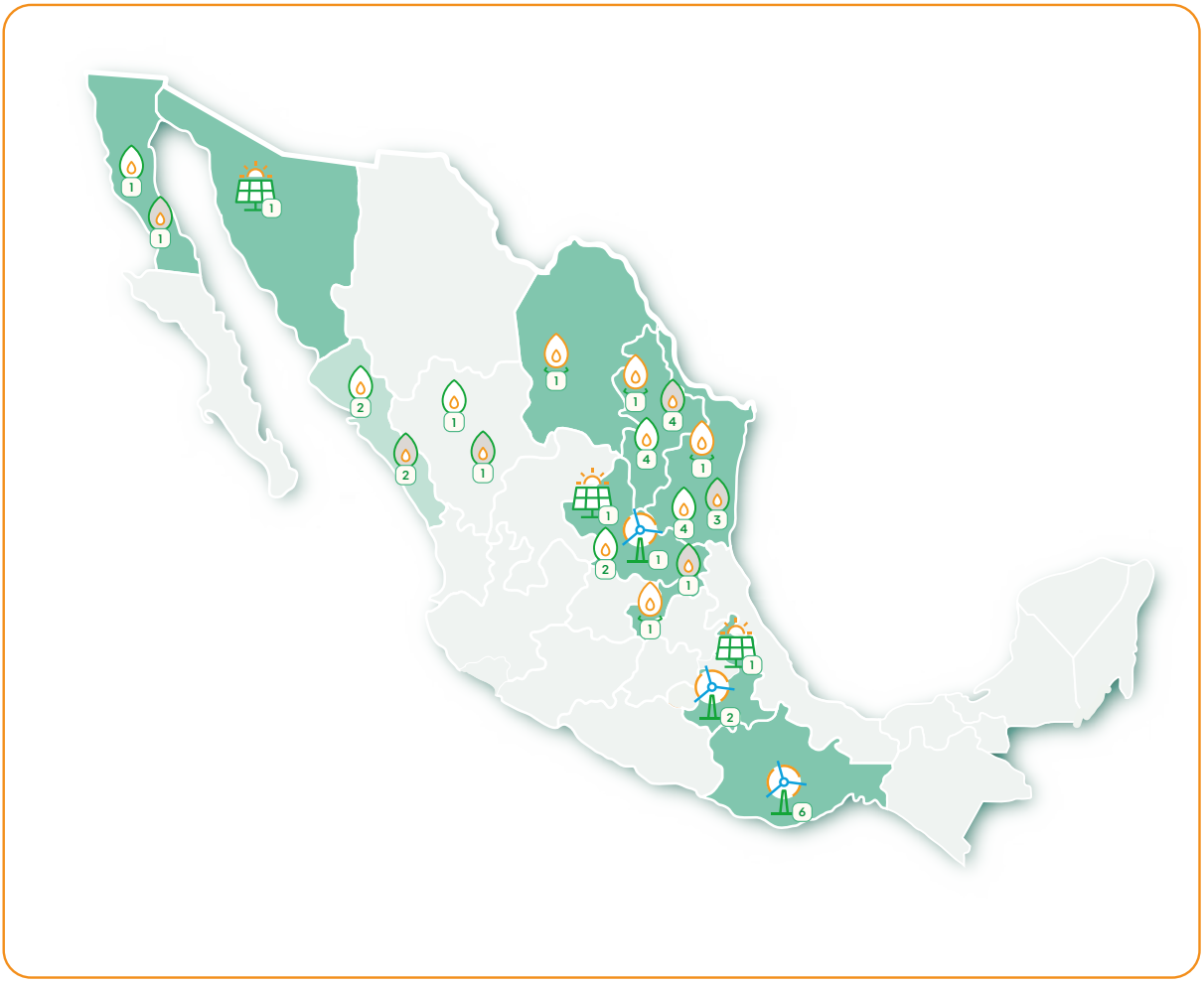
1,979
tons
Hazardous

38,337
tons
Non-hazardous

* For fuel consumption see GRI 301 of the Non-Financial Reporting Report.

3.4.6 Iberdrola México

Activities and facilities



9
Onshore wind
693 MW

3
Photovoltaic
642 MW

4
Cogeneration plants
202 MW

14
Combined cycle power plants

own: 2,617 MW
for third parties: 7,043 MW

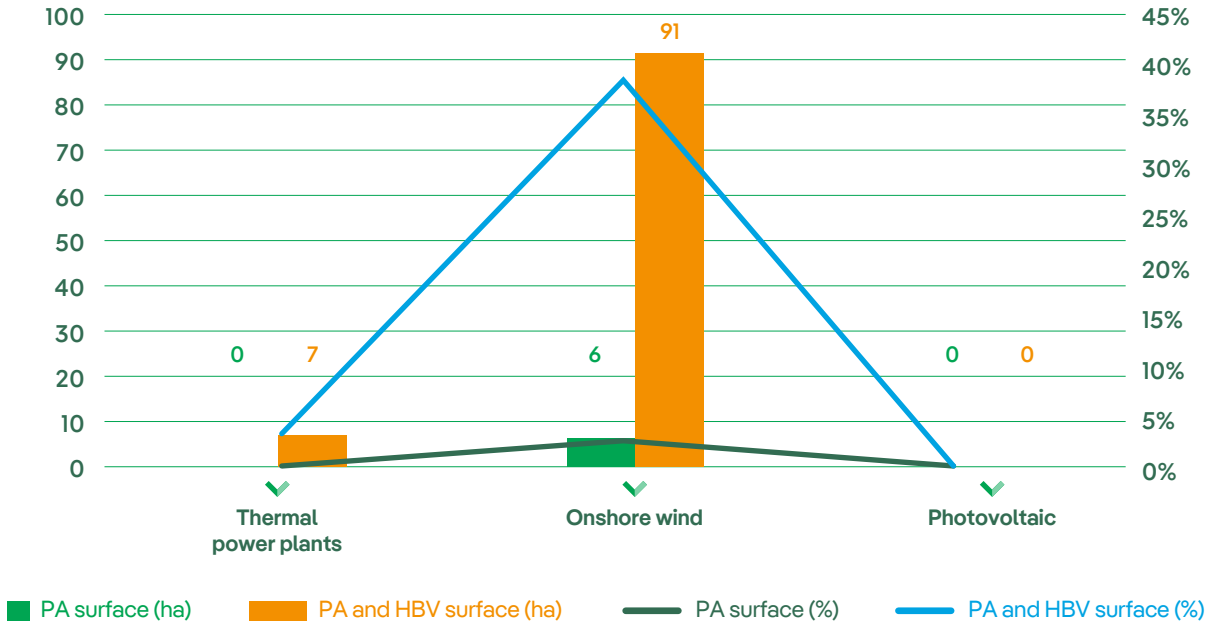
Main offices | Electricity distribution | Area of influence

Protected spaces and high value for biodiversity

None of Iberdrola México's thermal generation plants, wind farms or photovoltaic plants are located in protected areas.

The Altamira III and IV plant is near the Arroyo Garrapatas estuary, an originally estuarine body of water, which is part of a wetland system in the southern coastal strip of the state of Tamaulipas and to which Iberdrola has contributed to its recovery thanks to the diversion of cooling waters to the wetland.

Surface in protected areas (PA) or of high biodiversity value (HBV) of Iberdrola Mexico



Threatened species in facility areas

The following table shows the number of species on the IUCN Red List identified by Iberdrola facilities, without this implying any impact or threat derived from the activity.

Threatened species

Critically endangered (CR)	Endangered (EN)	Vulnerable (VU)	Near Threatened (NT)	Least Concern (LC)
0	5	10	15	417

Metrics

Below are the main metrics on the drivers of biodiversity loss in 2023.

Land use

2,199 ha
Total land occupied or under management control

Climate change

5,009,574
tons de CO_2eq
Scope 1
Direct emissions

13,106
tons de CO_2eq
Scope 2
Indirect emissions

17,656,344
tons de CO_2eq
Scope 3
Other indirect emissions

Use of resources*

26,794 ML
Water consumption

182,901 ML
Water withdrawal

156,107 ML
Water discharged

Waste

8,582
tons
Total waste

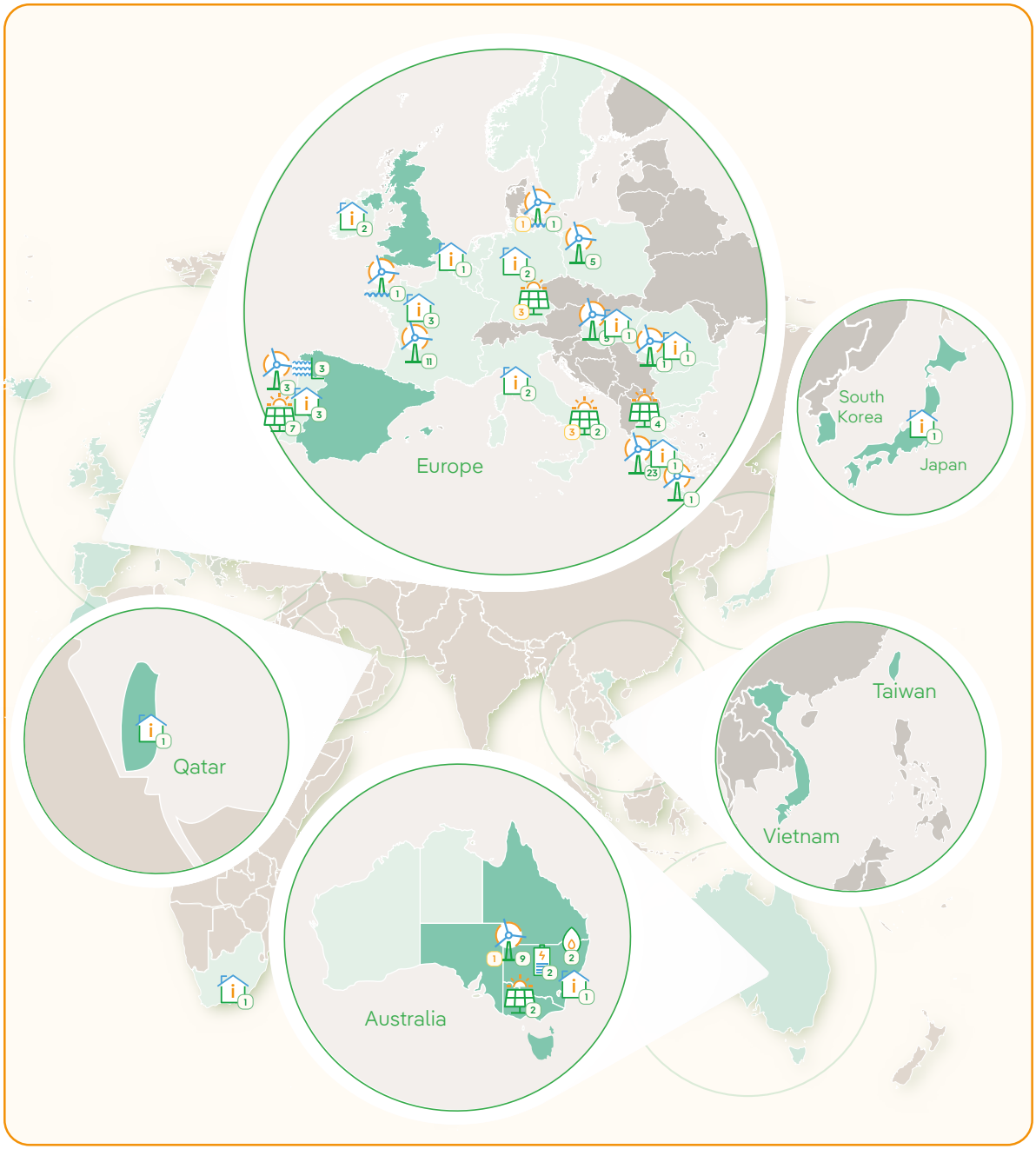
444
tons
Hazardous

8,138
tons
Non-hazardous

* For fuel consumption see GRI 301 of the Non-Financial Reporting Report.

3.4.7 Iberdrola Energy International (IEI)

Activities and facilities



58 Onshore wind 2,072 MW

2 Offshore wind 846 MW

15 Photovoltaic 573 MW

2 Batteries 75 MW

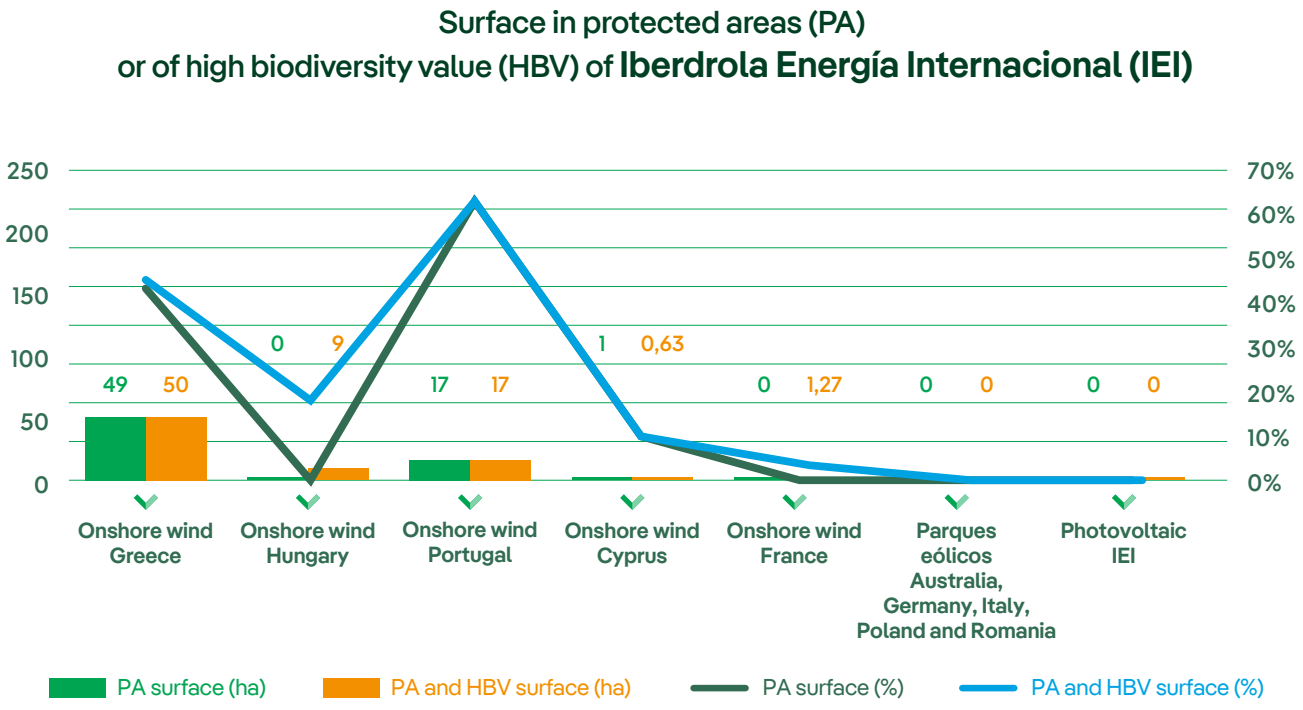
2 Combined cycle power plants 243 MW

Projects under construction

1 | 1 | 6

Main offices | Electricity distribution | Area of influence

Protected spaces and high value for biodiversity



Threatened species in facility areas

The following table shows the number of species on the IUCN Red List identified by Iberdrola facilities, without this implying any impact or threat derived from the activity.

Metrics

Land use

2,681 ha
Total land occupied or under management control

Climate change

52,708
tons de CO_2eq
Scope 1
Direct emissions

7,389
tons de CO_2eq
Scope 2
Indirect emissions

1,760,022
tons de CO_2eq
Scope 3
Other indirect emissions

Use of resources*

16 ML
Water consumption

34 ML
Water withdrawal

1,804 ML
Water discharged

Waste

163
tons
Total waste

103
tons
Hazardous

60
tons
Non-hazardous

* For fuel consumption see GRI 301 of the Non-Financial Reporting Report.

4. Main projects under construction

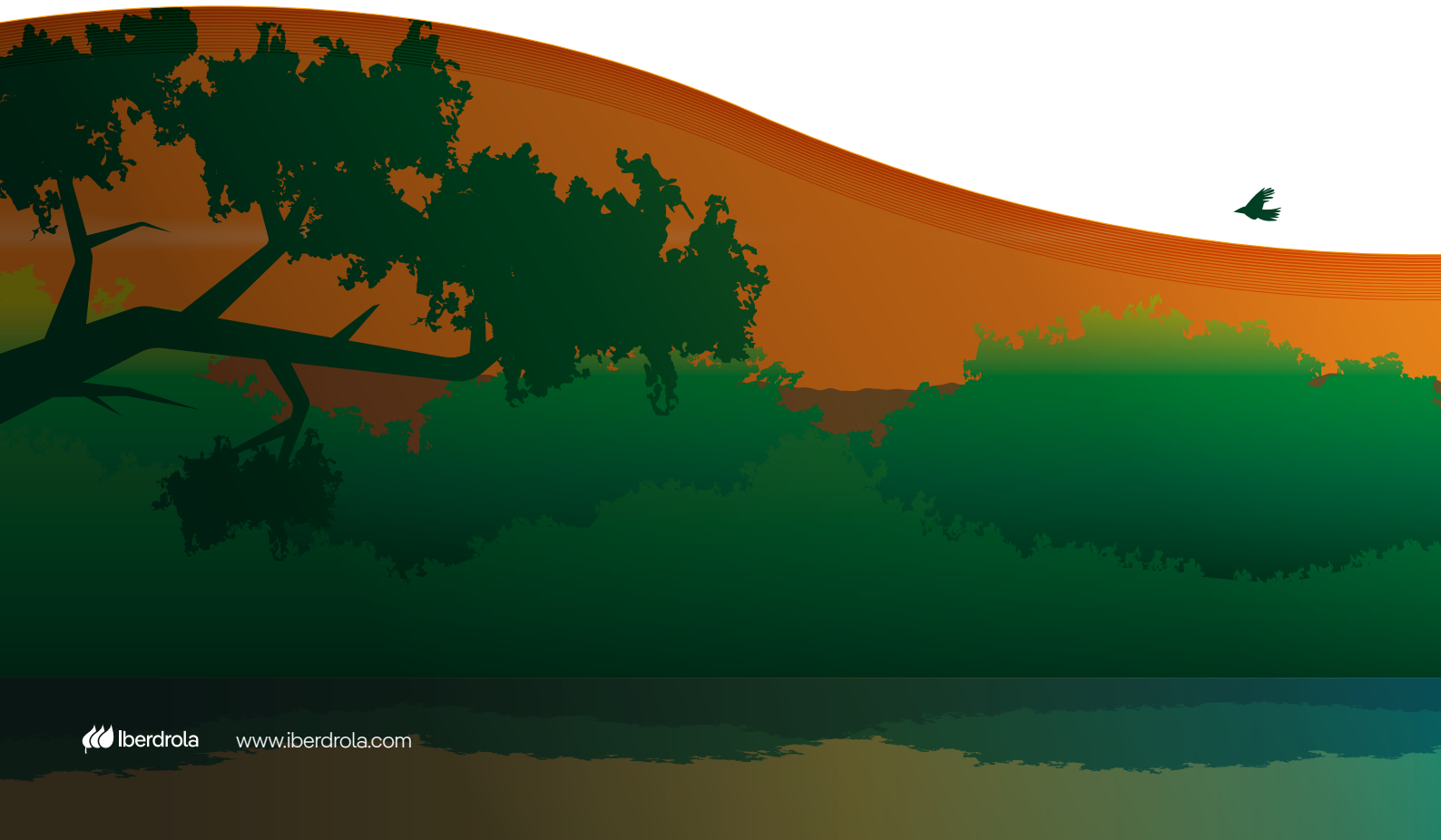
4.1 Iberdrola Spain

4.2 ScottisPower

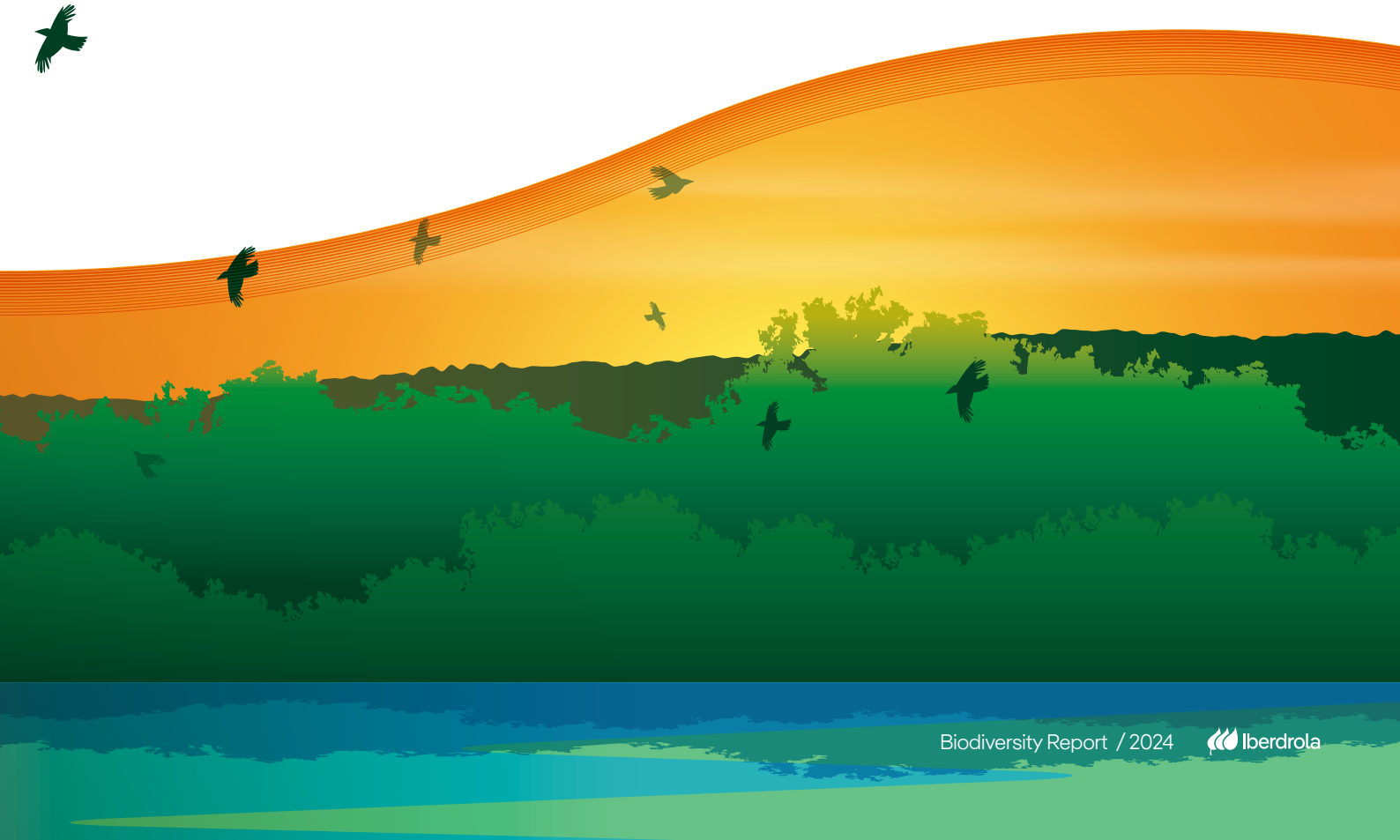
4.3 Avangrid

4.4 Neoenergia

4.5 Iberdrola Energy International



Iberdrola applies the mitigation hierarchy for the protection and conservation of biodiversity in all stages of the projects from the evaluation of alternatives to their location, the design, in the execution of the project and in the operation and maintenance."



4.1 Iberdrola Spain

Campo Arañuelo III Photovoltaic Plant (Spain)

In 2021, Iberdrola launched the Campo Arañuelo III photovoltaic plant (Cáceres). With 40 MW, it was the first photovoltaic project in Spain that incorporates a storage system: a battery with 3 MW of power and 9 MWh of storage capacity. Arañuelo III is part of the Campo Arañuelo complex, located in the Almaraz region, made up of the Arañuelo I, II and III photovoltaic plants, which have a total installed capacity of 143 MW.

- Capacity 143 MW
- Battery 3MW
- Storage 9 MWh
- Investment 80 M€
- Local employment during construction 500 professionals

The protection and conservation of biodiversity and the environment have been a constant throughout the entire project from the evaluation phase of alternatives to its location, design, and previous studies in the environmental impact evaluation phase, to the construction, operation and maintenance phases.

Following the principle of the mitigation hierarchy, different location and layout alternatives have been considered during the design phase depending on the potential impact on fauna and flora. In this way, a location has been chosen, not only free of protection figures, but also avoiding areas with important vegetation covers. In fact, one of the implementation areas had been used as a waste dump and the rest also had deteriorated soils. The design and arrangement of the panels has minimised the fragmentation of the territory, opting to divide the plant into three enclosures, all of them with a perimeter enclosure made with hunting mesh that allows permeability for fauna. In total, the plant occupies an approximate area of 53 hectares; surface that has been divided in order to preserve the existing natural vegetation.

The surrounding area is dominated by pastures along with natural grasslands and, to a lesser extent, agriculture. In addition to locating the facilities in the most anthropised lands, the layout of the line avoids passage through protected spaces. The chosen area was affected by two fires in 2016, so the Prevention of Forest Fires in Extremadura Plan (PREIFEX, acronym in Spanish) has been designed to avoid fires as much as possible, as well as a Forest Management and Protected Fauna Conservation Plan.

With the construction of the plant, Iberdrola have contributed to revitalising the industrial sector and employment in the region, with practically all of the work having been carried out by local companies. In addition to taking the respective prevention measures to avoid impacts on fauna, various mitigation measures were established:

- Restoration of a 20 m² pond with water all year round for amphibian reproduction.
- Installation of 10 ratchet and lesser kestrel nest boxes and 5 owl/common kestrel nest boxes on 6 metre posts with anti-predation measures.
- Placement of anti-collision, anti-perching and anti-nesting devices in the evacuation line.

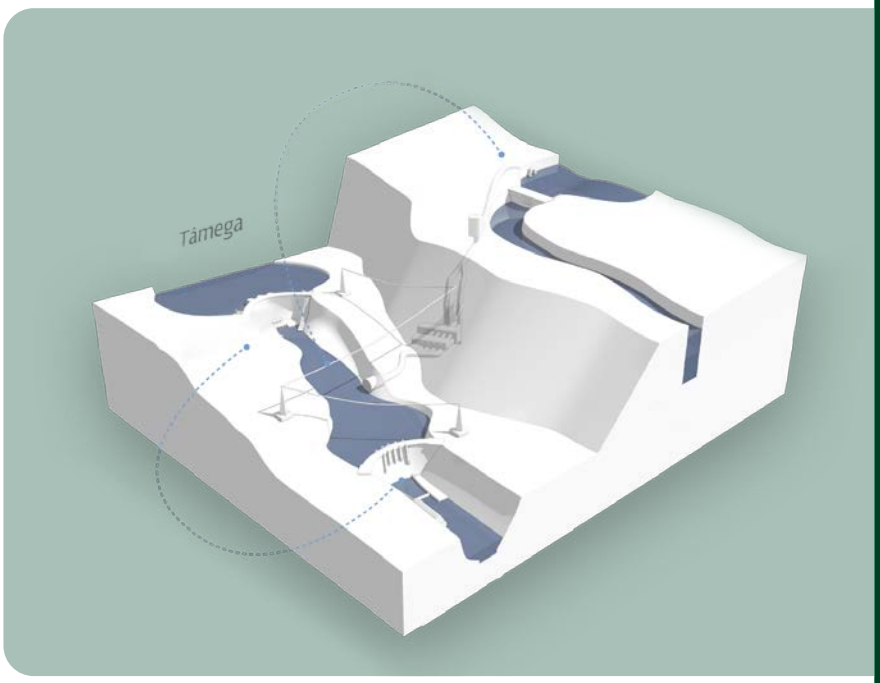
As **examples of compensation measures** that have been established, the following can be indicated:

- Construction of 50 rabbit vivariums and haystacks on farms close to the location of the facility to promote wild rabbit populations, in order to reinforce the trophic resource of key species such as the Iberian lynx or the imperial eagle.
- Introduction of 35 hives on land classified as ecological, achieving validation of the area for ecological beekeeping. This initiative demonstrates the compatibility with this activity, seeking that the location of pollinators in renewable facilities can help pollination in the area and if these are located near agricultural lands, it can improve crop yields.
- Planting of 650 oaks included in the Forest Restoration Plan that includes 10 hectares
- Management of 5 hectares for feeding the lesser kestrel.

In the operation phase, all these measures will be monitored and adaptive management will be carried out based on these monitoring. An inventory of flora has also been prepared in the “El Sierro” area, with the aim of proposing measures to improve the environment.

The environmental surveillance plan includes the placement of eight photo-trapping cameras inside the plant. The images captured by these motion-activated cameras have shown that the facility is a quiet and highly favourable space for wildlife, confirming the presence inside the plant of more than 10 different species of mammals (deer, rabbit , marten, genet, wild boar, hare, mongoose, field mouse, badger and fox) and up to 64 small birds (goldfinch, house martin, tit, short-toed eagle, turtle dove etc.).

Tâmega Gigabattery (Portugal)



Támega complex
Bird's eye view

- Location Támega River, north of Portugal
- Total installed capacity 1,158 MW
- Energy production 1,760 GWh annual
- Investment 1,500 M€
- Jobs generated 13,500 direct and indirect positions

The hydroelectric project involves the construction of three new power plants: Gouvães, Daivões and Alto Tâmega, which are built on the Tâmega River, a tributary of the Douro located in the north of Portugal, near Porto. This great work consists of three hydrological uses (with their corresponding evacuation lines, substations and auxiliary facilities such as, accesses, quarry, landfills, construction facility areas, etc.). It is one of the largest hydroelectric complexes developed in Europe in the last 25 years, with 1,158 MW of total installed capacity, which will mean an increase of 6% of the total installed electrical power in the country. The complex will be capable of producing 1,766 GWh per year, enough to satisfy the energy needs of the people in neighbouring municipalities and the cities of Braga and Guimarães (440,000 homes). In addition, this large renewable infrastructure will have a storage capacity of 40 million kWh, equivalent to the energy consumed by 11 million people for 24 hours in their homes.

Regarding their entry into operation, Gouvães and Daivões came into operation at the beginning of 2022 and Alto Tâmega will be operational in the spring of 2024.

The project occupies a total area of approximately 1,000 hectares and is partially located in an area designated as a Site of Community Importance (SCI) Alvão Marão (code PTCON0003) derived from the implementation of the Gouvães dam and reservoir. The location was defined by the Portuguese government itself in the conditions of the public tender within the National Plan for High Potential Hydroelectric Dams so it was not possible to alter its location.

However, since obtaining the concession, Iberdrola has prioritised a set of criteria that help conserve and compensate biodiversity and the environment and launched an environmental plan that covers all phases of the project: design, construction and operation.

Iberdrola has collaborated with several administrative entities or interest groups, in particular with the Institute for the Conservation of Nature and Forests of Portugal in the development of this plan and is working with surrounding municipalities to involve communities in these actions and promote the hiring of local companies and associations.

Some of the measures of the Environmental Plan that have been implemented in the project are cited below in a non-exhaustive list.

Measures to avoid or minimise impacts:

- The effects in protected environments have been minimised, limiting the planned area to the smallest possible and making an evaluation of location alternatives and specific signaling on the energy transport lines to minimise the effect on birdlife (anti-collision and anti-electrocution devices).
- The surfaces of areas to be used during the work phase were optimised, reducing them to the minimum possible and reducing the effects on protected flora and fauna (e.g., water lines with the presence of *Galemys pyrenaicus, Margaritifera margaritifera*, hábitats de *Quercus suber*, territories with the presence of *Phengaris alcon*), s well as heritage.
- Rescues and translocation of flora and fauna were carried out whenever applicable, protection of bird nests or bat shelters and undertaking landscape recovery of temporary areas at the end of construction.
- Particular specifications were included in the tenders for the design of electromechanical equipment focused on compliance with the best environmental practices (e.g., selection of materials with less environmental impact, limitation of the speed of passage through the intake grilles of the groups for the protection of aquatic fauna, etc.).
- The layouts of the power lines were modified in some locations to reduce the impact on species (*Canis lupus*, *Quercus suber*, etc.) or protected areas (SIC).
- At the entrances, amphibian passages were built in the hydraulic passages with permanent water for more than 6 months and escape ramps for mammals that may be trapped inside the fences of the facilities.

Preventive measures and monitoring:

- Prevention against forest fires has been a priority in the forest redesign of the region, in particular avoiding the growth of pyrophytic species on the slopes downstream of the Daivões power plant.
- Acquisition of emergency kits and dispersants for different areas (dam, turbines, drainage, substation, alternators, transformers).
- Acquisition of portable and floating multiparameter probes to be installed in the cutwaters and plant intakes.
- Construction of bunds or barriers next to refrigeration or regulation oil equipment in the plant.
- Implementation of a Fish Translocation and Monitoring Programme, a Hydropic Monitoring Programme and an Action Plan for the Control of Invasive Exotic Species with a focus on aquatic species, in the operational phase.
- Implementation of Ecological Systems Monitoring Programmes in the construction phase (12) and operation phase (13), to verify the effects of the project phases on the fauna and flora and to evaluate the effectiveness of the environmental measures implemented.
- Implementation of several monitoring programmes in the construction and operation phase: water quality (reservoirs, underground, discharges and water masses receiving the discharges, ecological flow regime) and air quality, sound environment and socioeconomics.

Flora and Fauna Compensation Plan: it is made up of 28 specific compensation measures that could be grouped into the following lines of work:

- Plantations of native species and protected flora: plantation of cork oaks, laurels and deciduous trees of native species, increase in biodiversity in forest masses of natural pine regeneration, increase in trophic availability and host capacity for fauna in scrubland and the creation of a habitat of community interest. The objective is an area of 1,000 hectares and to date almost **377,000 trees** have been planted.

Reforestation actions with native species in the Tâmega project.






Improvement of the reception capacity and trophic availability of fauna in scrub areas (Cabeceiras de Basto, Daivões reservoir).

- **Restoration and improvement of river courses:** the longitudinal connection of river courses has been improved, the riparian gallery has been recovered and revegetation of riverbank slopes has been carried out using bioengineering techniques. Additionally, aquatic ecosystems have been improved by creating ponds and adapting slow areas. 18 ponds have been created and 10 slow zones have been adapted.

- **Fauna conservation measures:** 100 bat shelter boxes have been installed, restoration of trout spawning, and repopulation sites has been carried out (a total of 1,260,000 fry have been released), and 6 hectares of the butterfly (*Phengaris alcon)* habitat have been improved.

- **64 micro-habitats** have also been created for herpetofauna and threatened forest invertebrates and bat colonies in caves and galleries have been protected. In addition, an outreach and awareness centre has been created to encourage the reproduction of mussels (*Margaritifera margaritifera*).



- A total of 14 hectares of land has been improved including the establishment of *Arnica montana, Drosera rotundifolia and Sphangum spp.* peatlands and the improvement of the populations of *Verónica micrantha, Arenaria queroides, Sedum pruinarum, Narcissus triandrus, Narcissus Bulbocoidum* and *Armeria humilis*.

- Associated with the Flora and Fauna Compensation Plan there is the corresponding Monitoring and Maintenance Programme for Compensatory Measures.



Protected fauna for which compensation measures have been designed: *Phengaris alcon* and *Margaritifera margaritifera*.

4.2 ScottishPower

400/275 kV line from Beauly to Denny (Scotland)

The 400/275 kV overhead line from Beauly to Denny is situated in the raised bog area of the Falkirk Lowlands, Scotland. From the planning stage, efforts have been made to minimise any impact on the landscape and ecosystems, applying the mitigation hierarchy. Taking into account the existence of raised peatlands, measures were carried out to minimise the potential impacts and to mitigate and compensate for the generated impacts.

The project has been carried out in conjunction with Scottish Hydro Electricity Transmission Limited (SHETL), with ScottishPower responsible for the construction of a major new 400/275 kV substation at Denny and 20 kilometres of overhead line. The project also includes the undergrounding of some 132kV circuits in the Stirling area, which will allow for the removal of 50 transmission towers and other visual mitigation measures to minimise the impact of the overhead line on local communities and residents.

Before

After

In addition, the project includes important restoration actions on raised bogs, joining forces with BugLife, the national charity for the protection of invertebrates in the United Kingdom.

ScottishPower Energy Networks (SPEN) has been supporting BugLife initiatives since 2016. Specifically, the aim of the initiative under the overhead line projects in this area is to restore 260 hectares of ancient and damaged peatlands in nine locations near Falkirk, on the Slamannan plateau.

This landscape was formed 9,000 years ago, when Scotland and Denmark were linked by land, and is made up of a mosaic of peat bogs and farmland, surrounded by plains. Raised peatlands have suffered from various harmful practices over the years, including burning, draining, mining, tree planting and overgrazing.

Raised bogs are wetlands that form on clay or other impermeable surfaces in lowland Scotland. They are mainly composed of *Sphagnum moss*, which grows on itself and creates peat as it decomposes. Peat accumulates over time and forms a dome-shaped elevation that rises above ground level, hence the name.

Raised peatlands are important for the environment because they store huge amounts of carbon (1,620 megatonnes in Scotland's peatlands) and water, helping to reduce carbon emissions and prevent flooding when healthy.

The restoration work has involved SPEN volunteers and contractors, led by BugLife, filling in old ditches and removing undergrowth to allow *Sphagnum moss* to retain water, grow and restore the peat bog. Volunteers played a crucial role in the work, which has involved installing more than 3,600 dams and clearing up to 25 hectares of invasive conifers and undergrowth. So far, 116 hectares of the area have been restored, with another 114 hectares planned in the coming years.

Project benefits include:

- Improved ecological coherence and connectivity of peat habitat across the Slamannan Plateau.
- Improved habitat for rare species and other peat life.
- Nine areas of the plateau have been included in conservation management schemes.
- Carbon sequestration in all restored sites.
- Stabilised hydrology throughout the plateau, with less risk of local flooding events and better water quality.

Restoration of Raised Peatlands.

4.3 Avangrid

Vineyard Wind 1 Offshore Wind Farm (Massachusetts, United States)

Located 15 miles off the coast of Massachusetts, this offshore wind farm will feature 62 13 MW General Electric Haliade-X wind turbines over a total area of 306 km². It will have a total installed capacity of 806 MW to provide energy to 400,000 homes.

Vineyard Wind 1 is **the first large-scale offshore wind project under construction in the United States**. By the end of 2023, six wind turbines were installed. The project area was carefully located to avoid, minimise and mitigate impacts to the environment. The park is estimated to come into operation in the second half of 2024.

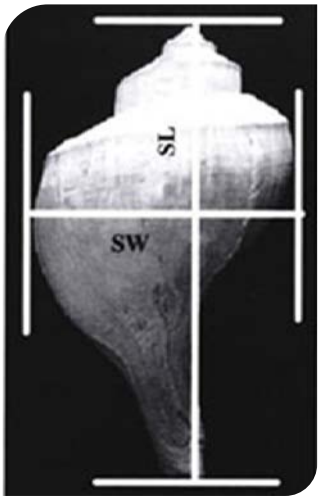
Biodiversity has been considered throughout the development of the project:

- **Design and construction:** Monitoring plans and mitigation measures have been implemented to avoid, minimise and/or mitigate potential adverse effects of construction activities, including following best management practices, guidance and terms and conditions of approval of the Construction and Operations Plan (COP).
- **Operation and Maintenance** – The project will implement post-construction monitoring plans and adhere to management practices to avoid, minimise, and mitigate measures.

Examples of measures to avoid and minimise project impacts:

- **Marine wildlife noise mitigation:** Rigorous measures were implemented during geophysical surveys and drilling to minimise impacts on marine wildlife (particularly marine mammals and sea turtles) from underwater noise generation. Mitigation measures include: visual observation of protected species, pre-use monitoring of acoustic sources, sound field verification, pre-start clearance zones, closure zones, monitoring requirements, and reporting requirements.
- **Preventing Collisions with Marine Wildlife:** All vessels required for the project must follow prescribed mitigation measures to avoid collisions with protected species, including speed restrictions, surveillance requirements, separation distances, detouring, and reporting requirements.

- **Benthic Habitat Monitoring:** A four-year study will be completed to document benthic habitat, benthic communities, and sand lance along the export cable route and within the wind development area before and after the construction and Installation of Vineyard Wind 1, using multibeam depth sounder, underwater video and sample capture.



- ***Zostera marina* seagrass studies:** the extent of the *Zostera marina* meadows surrounding Cape Poge will be mapped before and after the installation of the export cable for Vineyard Wind 1. This will be done using visual observation by divers, sonograms, videos and underwater cameras.

- **Environmental information talks:** the project includes environmental awareness talks for all external vessels that operate within the scope of the project.

  The training covers:

  - Protected marine species
  - Shock prevention
  - Reports
  - Marine debris
  - Waste

- **ECOncrete Marine Mattresses:** ECOncrete eco-engineered articulated concrete block mattresses were used to protect submarine cables and create environmental conditions that encourage the growth of marine flora and fauna during the operation of the Vineyard Wind 1 project. The marine mattresses used include a bio-enhanced mix, surface and design -based on nature optimised to create habitats for a wide range of organisms. They are manufactured to prevent scour, weathering, and erosion and to provide stabilisation and protection to offshore infrastructure. ECOncrete marine mattresses are designed to create a variety of habitats and environmental conditions that encourage the growth of marine flora and fauna, increase species richness, reduce the dominance of invasive species, and increase biodiversity.

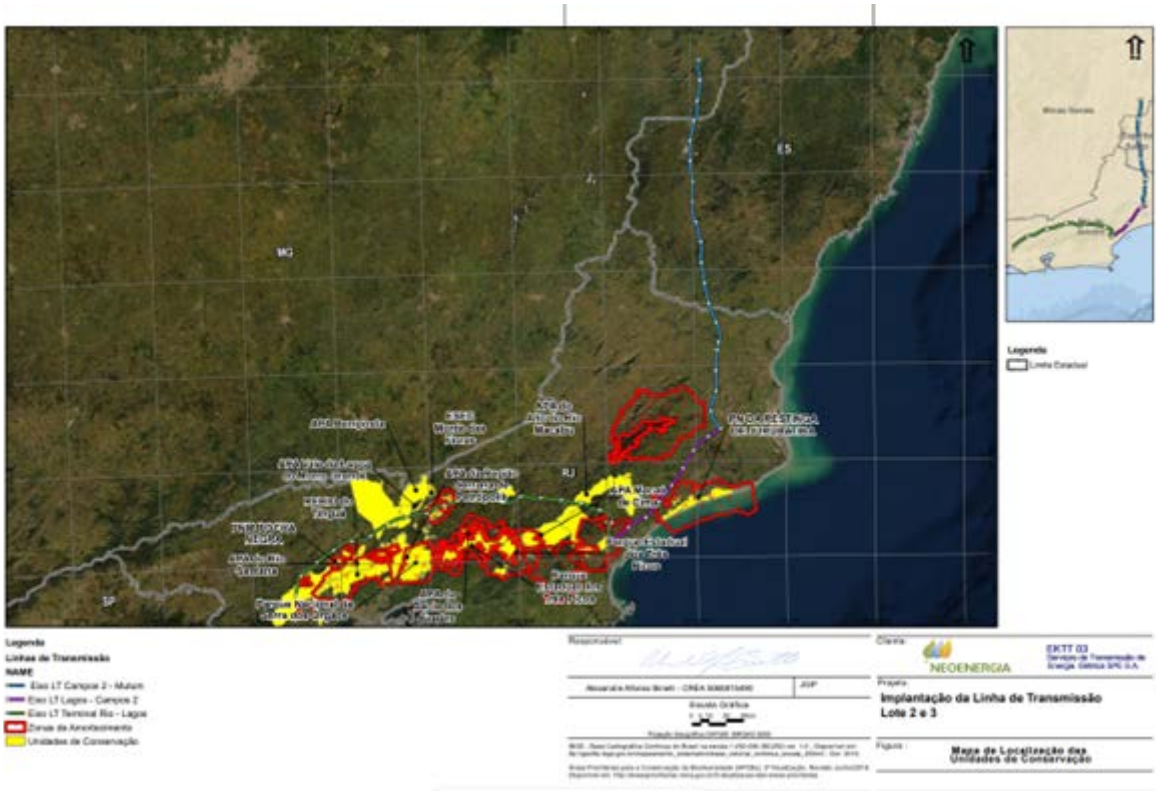
- **Wind and Whales Fund:** Vineyard Wind 1 established a $3 million fund to develop and demonstrate innovative methods and technologies to improve marine mammal protection and support regional monitoring efforts as the Massachusetts and USA offshore wind industry grows. This fund provides opportunities to explore new methods and technologies or to establish infrastructure, facilities or programmes that enhance regional marine mammal monitoring or document marine mammal research.

4.4 Neoenergia

Neoenergia Guanabara transmission line (Rio de Janeiro, Brazil)

Neoenergia Guanabara, located in the state of Rio de Janeiro, is a transmission project of the Neoenergia Group, with an extension of 222.2 kilometers of 500kV line, including the expansion of the Mutum substation.

Its location was defined from the intersection of environmental, social and electrical engineering studies in order to achieve a route with the least possible socio-environmental impact, respecting the mitigation hierarchy based on avoiding, reducing, restoring and compensating impacts. With the help of this methodology, the impact on the Antenor Novaes Journalist Natural Heritage Private Reserve, coordinated by the Chico Mendes Biodiversity Conservation Institute (ICMBio), and other state conservation figures has been avoided.



In addition, the Guanabara project has a vegetation control programme during vegetation suppression, which aims to mitigate impacts on wild flora and fauna and minimise impacts on adjacent vegetation, including fire prevention. These objectives have been achieved through reductions in street width and service reach, drone cable launching, moving supports, and erecting towers.

During vegetation suppression activities, germplasm and epiphytes are also collected through the germplasm rescue programme, which seeks to preserve genetic material and, when possible, reuse native species in reforestation.

The material from the felling of trees, when not returned to the landowners, becomes a refuge for fauna and over time provides nutrients to the soil.

Parallel to the flora programme, Neoenergia has a protocol for the removal and rescue of fauna with the help of biologists and, in cases where there is a need for treatment and rehabilitation of animals, it has the support of associated veterinary clinics.

Censuses have also been carried out in order to identify which animals were present in the region, as well as to identify the abundance of each taxon. From this information it was possible to develop two actions aimed at fauna. The first, the installation of devices on the cables that signal the presence of an obstacle to the birds so that they can anticipate and deviate or change their route. The second, the development and execution of the fauna conservation programme.

The fauna conservation programme considered not only the location, but also the abundance of each species in the directly affected areas and its vulnerability to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and List Red of the International Union for the Conservation of Nature and Natural Resources (IUCN). Through the results obtained, which contribute to the Brazilian scientific literature, they were defined, together with the Brazilian Institute of the Environment (IBAMA, as per Portuguese acronym) and ICMBio, the following actions that Neoenergia Guanabara carried out: :

- **Action 1** - Locate and monitor active chauá parrot nests or red-browed (*Amazona rhodocorytha*) during the construction phase of the project. To date, no Chauá parrot nests have been located. It is believed that due to the extensive rainy season the reproductive period of the species was also affected and that is why records have still not been made. However, purple-breasted parrot nests were observed.

- **Action 2** - Continuity of the census of the species red-browed chauá parrot (Amazona rhodocorytha), mealy parrot (*Amazona farinosa*) and bitten-breasted parrot (Amazona vinacea) in the northern region of the state of Minas Gerais.

Mealy parrot
(*Amazona farinosa*)

Bitten-breasted parrot
(*Amazona vinacea*)

Red-browed chauá parrot
(*Amazona rhodocorytha*)

Throughout the 3 campaigns, 78 specimens of the chauá parrot, 4 specimens of the mealy parrot and 101 specimens of the purple chest parrot were recorded through listening and/or viewing.

- **Action 3** - Carry out a population estimate of the chauá parrot in the state of Rio de Janeiro. 165 individuals have been counted, demonstrating the importance of the conservation units in which the censuses were carried out for the conservation of the species in strategic places in the State of Rio de Janeiro.

These actions contribute to the knowledge of these species and to improving their conservation.

4.5 Iberdrola Energy International

Montalto di Castro photovoltaic plant (Italy)

The 23 MW Montalto di Castro photovoltaic plant is located in the central region of Lazio and is Iberdrola's first installation in Italy.

Photovoltaic plant Montalto di Castro
Italy

Capacity 22,87 MW

51,492 solar panels

Following the principle of the mitigation hierarchy, different alternatives for the location and arrangement of the panels have been considered during the design phase depending on the potential impact on fauna and flora. In this way, protected or sensitive areas for biodiversity have been avoided.

In the location area, the predominate biome is grasslands derived from abandoned agricultural use, typical of rural areas with low built density. Other photovoltaic installations are located in the surroundings of the installation, forming a mosaic with the grasslands and riverside ecosystems present.

The protection of ecosystems has been prioritised in all phases of the project. The arrangement of the panels in the three selected plots, as well as the construction sites, has avoided an area close to an aquatic ecosystem formed by a public watercourse (Fosso di Ponto Rotto). The existing cork oaks on the easternmost plot have also been maintained.

During the construction phase, archaeological remains dating from the Etruscan period were found, as well as ceramics, bronze elements and iron weapons. Thanks to the cooperation between Iberdrola and the Archeology authority, the materials have been transferred to the National Archaeological Museum of Vulci, one of the most important Etruscan towns in Italy.

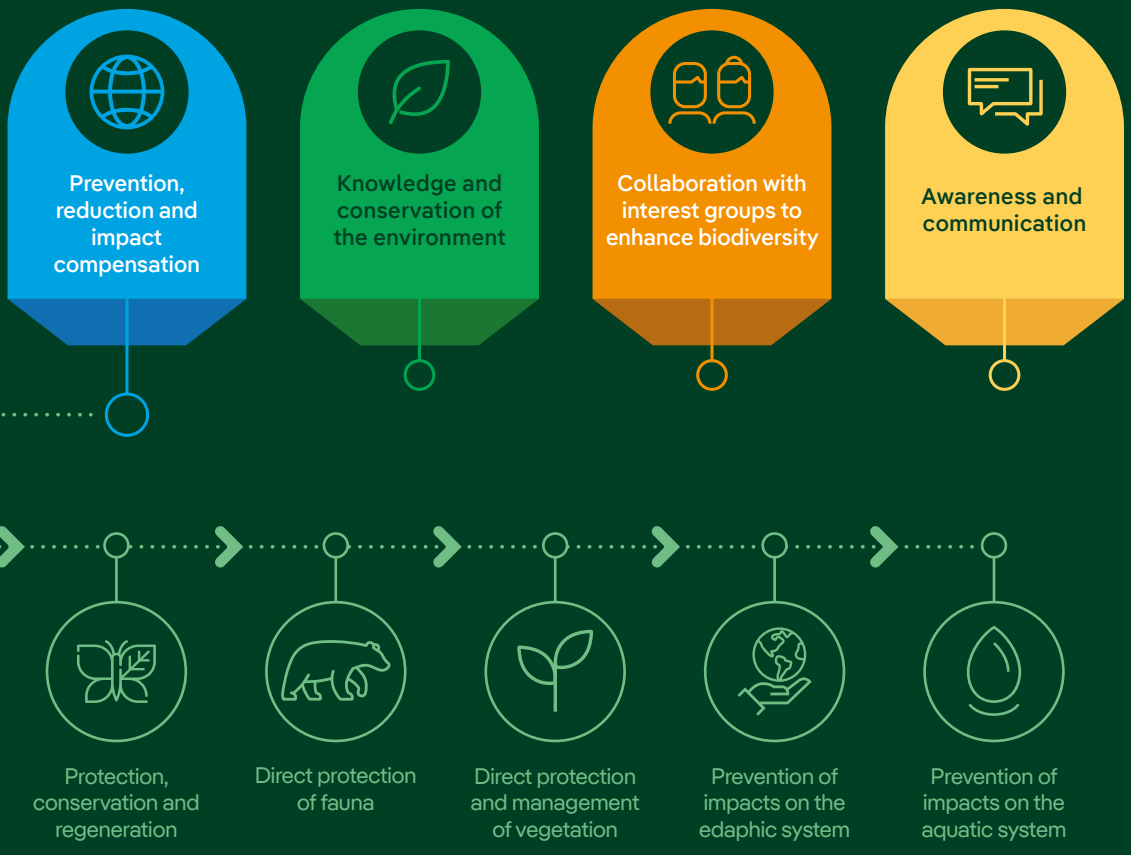
In this project, Iberdrola will carry out various actions to protect biodiversity in the photovoltaic environment:

- The fencing of the three plots has been made with hunting mesh, to allow the passage of small fauna.
- During the construction phase, only the necessary areas have been cleared inside the fence, leaving patches of natural vegetation as wildlife refuges.
- Once the work was completed, the areas used as fields was restored with the original vegetation.
- A perimeter plantation with olive and laurel trees has been carried out, planting more than 5,000 trees. Olive trees have also been planted inside the fence, to renaturalise those areas that have been left free of panels. In addition to the installation of protective meshes against fauna, in 2023 an automatic irrigation system was installed to ensure the survival of the plantation in the dry season.
- The control of the vegetation inside the plant is carried out with sheep.
- Since before the start of construction, nesting and wintering birds have been monitored annually in the spring and winter seasons.
- The bird monitoring is undertaken in and outside the photovoltaic plants, allowing the writing of detailed population studies that also analyse the behaviour of birds in relation to the area occupied by the photovoltaic plant. The study suggests that the dominant species are found both inside and outside the occupied area, without modifications in the structure and composition derived from the installation.

5. Programs and actions 2022-2023

Iberdrola defines in its Biodiversity policy its priority lines of action that are integrated into the management of operational units in action programmes and specific actions. In this period 2022-2023, Iberdrola has carried out ***more than 1,600 actions to protect biodiversity.***"

Priority lines of action



5.1 Protection, conservation and regeneration

Protect biodiversity and make sustainable use of natural capital by adopting a conservation hierarchy, integrating best practices into the management of assets throughout their entire life cycle and promoting actions for the regeneration and conservation of natural heritage.

5.1.1 Conservation, restoration and regeneration actions of ecosystems

Iberdrola is committed to the conservation, restoration and regeneration of ecosystems and works not only to avoid, reduce and compensate for the effects caused by the construction of new infrastructures, but also promotes voluntary projects that contribute to reversing the loss of biodiversity in ecosystems.

Iberdrola Trees Programme

Forest ecosystems are home to 80% of terrestrial biodiversity. Iberdrola, in its commitment to the protection of biodiversity, created the Trees Programme in 2020 for the conservation and regeneration of forest ecosystems. In this programme, Iberdrola sets the objective of promoting the conservation and planting of 20 million trees in 2030. Since the beginning of the programme, the Group has promoted the planting of 3.4 million trees.

The programme encompasses **three main lines of action** called "branches", with the following objectives:

Branch 1: Conservation of natural heritage. Iberdrola applies the mitigation hierarchy in all its projects and prioritises alternatives that avoid affecting forest vegetation. In those cases where it is unavoidable, work to minimise and compensate for this impact. The objective of this branch is to compile information on these actions and their results to monitor the conservation of natural heritage.

Since the programme began, the planting of 2.4 million trees has been promoted in Brazil, Spain, Portugal, the United Kingdom, Mexico, Italy and Greece. The actions of this line in this period are described in this section and are identified with the symbol "Trees Programme – Branch 1".

Branch 2: Regeneration and creation of natural value. This line of action aims to promote reforestation and restoration projects that contribute to the regeneration of forests. These projects are not linked to mitigation or compensation of infrastructure and are voluntary in nature. In total, more than 900,000 trees have been promoted under this line. The actions of this line are identified with the symbol "Trees Programme – Branch 2" and are described in this and in Section 5.3.

Iberdrola launched Carbon2Nature in July 2023 with the aim of developing high-impact nature-based solutions projects that reduce the global carbon footprint, improve biodiversity, and promote a sustainable economy. Carbon2Nature has promoted the planting of more than 770,000 trees in ecosystem conservation and restoration projects on more than 640 hectares in Spain.

Branch 3: Social value: research and awareness. This line seeks to promote shared knowledge, promoting collaboration, awareness and research with interest groups among them.

Since the beginning of the programme, more than 70,000 trees have been planted, awareness-raising talks have been held and work has been done with interest groups in alliances such as the 1t.Org Corporate Alliance of the World Economic Forum. The actions of this line are identified with the symbol "Trees Programme – Branch 3".

In addition to the actions of the Trees Programme, focused on forest ecosystems, actions have been carried out in other types of ecosystems. Below, some of the conservation, restoration, and regeneration actions of the different types of ecosystems that Iberdrola has carried out in the different geographical regions in this period 2022-2023 are also described.

Iberdrola Group

Carbon2Nature

Actions	Goals
Restoration has been carried out on the land owned by Iberdola located in **Valparaiso** (Zamora). This land was affected by the 2022 Sierra de la Culebra fire. The objective is to restore and regenerate the lost forest ecosystem, eliminating burned trees, crushing them and incorporating them into the soil to maintain regrowth and planting native forest species, such as: rhododendron pines, pear trees, chestnut trees, cherry trees, hawthorn trees, chestnut trees, holm oaks and oaks. In 2023, action was taken on more than 22 hectares in which 33,270 trees were planted and the objective is to increase the activity in the coming years.	Reforestation for restoration of degraded area. **Tree Programme – Branch 2.**

The project aims to plant 97,433 trees on 74.48 hectares in the municipality of **Sobrado** (León), in an area degraded by a fire that occurred in 2017. In autumn 2023, Caron2Nature promoted the planting of 66,874 trees of a wide variety of species, such as: radiata pine, cherry, birch, aerbal and hawthorn.	Reforestation for restoration of degraded area. **Tree Programme – Branch 2.**

Actions	Goals
The **Bostal project** has been acquired, consisting of the reforestation of 322.61 hectares in **Trabazos** (Zamora). In 2023, the replacement was carried out on the 274.64 hectares in which 439,424 trees had been planted during the years 2020 and 2021. This pioneering project in Spain pursues the conversion of commercial wood cultivation into a multifunctional forest with enrichment species and actions of biodiversity improvement.	Forest renaturalisation. **Tree Programme – Branch 2.**
	
In the restoration project in **Dueñas** (Palencia), the replacement has been carried out in the area in which action was taken in 2021. In this land highly degraded by agricultural activity, the planting of 43,296 trees of four native species: hawthorn, cherry, stone pine and almond tree.	Reforestation for restoration of degraded area. **Tree Programme – Branch 2.**
	

Actions	Goals
The project in **San Esteban De Gormaz** (Soria) aims to generate new ecological niches, introducing new forest areas. In 2023, a plantation was carried out on 100 hectares of former abandoned agricultural and livestock land. In total, 110,000 trees of species such as stone pine, hawthorn, almond, juniper and holm oak were planted. In addition, the habitat of protected species such as the ricotí lark has been respected.	Reforestation for land restoration. **Tree Programme – Branch 2.**

A 20-hectare plot of land has been restored, located in Retortillo (Soria). The objective of the action is to restore an area with high erosion due to soil loss. The project seeks to prevent surface erosion, and generate soil rich in nutrients. For this, species with different root development have been chosen to increase soil retention. In total Carbon2Nature promoted the planting of 22,352 trees.	Land restoration. **Tree Programme – Branch 2.**

In the municipality of **Támara de Campos** (Palencia), a project has been carried out to restore degraded land and improve the quality of steppe biodiversity with the planting of 57,911 trees on 36.86 hectares. In 2023, maintenance actions were carried out with the replacement of yore in the planted area.	Reforestation for restoration of degraded area. **Tree Programme – Branch 2.**

Iberdrola Spain

General services

Actions	Goals
During the 2022-2023 period, the maintenance of the actions carried out in the Reforestation **Plan of the Training Campus in San Agustín de Guadalix** (Madrid) has continued. This Plan includes the recreation of four forest ecosystems: Pine Forest, Riverside Forest, Mediterranean Forest and Holm/Pineapple Forest, with 875 trees planted, in addition to the creation of an Ecological Garden. In 2023, 30 more trees will have been planted, including a new irrigation system to ensure their settlement.	Iberdrola's commitment to reforestation. **Trees Programme – Branch 1.**

Foundation

Actions	Goals
Within the framework of the **Iberdrola Defense Forest** project, several reforestations have been carried out in the period 2022-2023 in collaboration with the Ministry of Defense and the General Directorate of Infrastructure. Specifically, 17,000 trees have been planted in the Villatobas Air Surveillance Squadron (Toledo), 40,000 trees in the Coronel Sánchez Bilbao Base in Almagro (Ciudad Real), 7,700 trees in the Noia Air Surveillance Squadron (Galicia) and 25,800 trees at the Conde de Gazola Base in Ferral del Bernesga (León). All these actions have been carried out with native varieties and in collaboration with regional entities. See details in Section 5.3.	Forest restoration. **Tree Programme – Branch 2.**

Solar photovoltaic

Actions	Goals
At the **Barcience** plant (Toledo), in order to integrate the facilities and improve the visual of the environment, native shrub species have been planted on the outside of the fence. In addition, plantations of small species (thyme and albardín) have been planted inside the plant.	Integration of facilities and creation of refuge areas for fauna.
With around 1,000 hectares, including the 400 hectares occupied by thepanels, several measures have been carried out at the **Núñez de Balboa** plant to renaturalise the ecosystems. Among them, the restoration of riparian vegetation, the planting of mosaics of trees and shrubs on 1.5 hectares for wildlife refuge, the implementation of sustainable vegetation management and the reintroduction of four-leaf clover (Marsilea Batardae) have been carried out in the ponds located along the stream. These measures, together with others described in the following sections, mean that the plant has a positive impact on biodiversity, quantified with ecosystem metrics and corroborated with monitoring studies.	Renaturalisation of riparian and Mediterranean ecosystems.

Actions	Goals
In the design of the **Olmedilla** photovoltaic, to reduce the fragmentation of habitats and improve connectivity, ecological corridors have been included, planting native tree and shrub species (rosemary, broom, hawthorn, juniper, pine, etc.). Areas degraded by dumping of inert waste on nearby livestock trails have also been restored.	Ecological corridors integrated into the design.
At the **Oriol** plant, reforestation has been carried out with 802 holm oaks, creating an island forest.	**Trees Programme – Branch 1.**

Hydroelectric generation

Actions	Goals

Tâmega hydroelectric complex (Portugal)

In the period 2022-2023, the following measures have been carried out with the aim of preserving the natural environment of the project and thanks to which the biological diversity of the area will be improved:

- **Tree planting:** in the Tâmega hydroelectric complex, reforestation and maintenance of the planted land continues, with almost 150,000 new trees planted in this period.
- **Slope revegetation:** bioengineering techniques and selective manual deforestation of competing vegetation have been used to promote natural regeneration. In addition, diseased or damaged branches were pruned, and native deciduous species were planted in clearings and on the perimeter of the plot. Finally, the plants were protected with protective tubes.
- **Improvement of river courses and recovery of the river gallery:** compensatory measures were carried out to improve the longitudinal connection of the river courses and recover the river gallery.

Reforestation and restoration to improve the biological diversity of the area.

Trees Programme – Branch 1.

ScottishPower

Social projects

Actions	Goals
ScottishPower collaborates with *Trees For Life*, an ecological restoration charity based in Scotland, committed to creating large-scale environmental change and focused on restoring the once extensive **Caledonian Forest**. Efforts aim to foster biodiversity and the natural processes that support life in forests. ScottishPower has its own grove which currently has 1,617 trees planted. In 2022, 200 were planted and in 2023, during International Volunteer Week, 400 more trees have been planted. In addition, during this period, the restoration of **Riverwoods** Enrick has been carried out, creating forest areas in the river area in which more than 8,000 trees have been planted in collaboration with ScottisPower volunteers. See Section 5.3 Volunteer Programme for more information about these projects.	Restauración, reforestación y sensibilización. **Trees Programme – Branch 3.**
Restoration has been carried out at Cuthbert's Moor, one of the most environmentally important sites in the north of England, requiring comprehensive management to achieve its true ecological and environmental potential. This project, in collaboration with *Durham Wildlife Trust,* seeks to restore peatland and moss cover habitats, and carry out extensive inventories, volunteering opportunities and citizen engagement activities with schools and a range of communities, as well as implementing practical wildlife management within these habitats. During 2023, approximately 30 hectares of peatlands has been restored. Training on identification and study of species and habitats has been carried out.	Restoration of Cuthbert Moor. 

Onshore wind

ScottishPower has carried out ecological restorations at its onshore wind farms, the majority of which relate to the recovery of degraded habitats and the creation of native forests. During the 2022-2023 period, ScottishPower has continued to work on habitat management plans at 27 sites totaling around 10,000 hectares. These plans define the objectives for conservation management and establish the management and monitoring measures necessary to achieve the objectives. This management is carried out until the end of decommissioning at each site.

Actions	Goals
ScottishPower has committed to restoring and improving approximately 9,225 hectares of degraded general peatland habitat. To do this, a variety of methods are used to aid habitat restoration, including grazing management, ditch blocking, and soil softening. The company developed the soil smoothing technique that reverses the damage caused by commercial plantations that were historically planted in peatland habitats, by using low-pressure excavators on the ground to create a flattened surface, helping to lower the water table, to recover and allowing the growth of typical peat bog plants such as *Sphagnum mosses*. A major restoration programme at the **Black Law Extension** and **Beinn an Tuirc II** wind farms in Scotland was completed in 2023, including the restoration of 131 hectares of peat bog.	Restoration of blanket peatlands.  Area with blanket bog habitat just after completion of reclamation work and five years later.
ScottishPower manages 2,393 hectares of forest in 18 wind farms, of which more than 833 hectares are native forests. In the period 2022-2023 alone, more than 419,000 trees have been planted in wind farms, establishing new forested areas and carrying out maintenance work in previously created areas. Reforestation was completed at the **Killgallioch** wind farm (Scotland), leading to the establishment of more than 1 million coniferous and broadleaf trees.	Creation of native forests. **Trees Programme – Branch 1.**

Offshore wind

Actions	Goals
In **East Anglia ONE** (North Sea), restoration actions were carried out to replace habitats affected during onshore cable construction works, including woodland planting, hedgerow planting and grassland seeding. In total, these activities included 35 hectares of replacement planting, 3,500 linear metres of hedges and 1,600 trees. During the year 2023, the plantation was replaced.	Habitat restoration. **Trees Programme – Branch 1.** 

Actions	Goals
Pseudognaphalium luteoalbum plants and seed-laden soil were moved to a receiving site of more than 315 m². The recipient site is an area of uncultivated grassland at the edge of a field that encourages new plant growth in open soil.	Translocation of *Pseudognaphalium luteoalbum*.

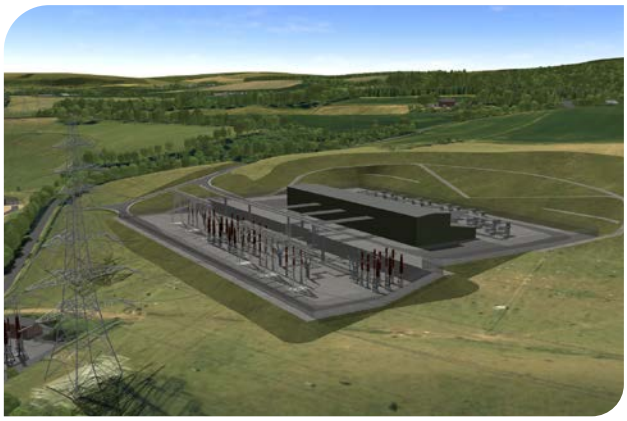
Networks

ScottishPower Energy Networks applies an environmental approach to the siting and layout of overhead lines and substations, ensuring that the impact of such development is minimised, and sites of special interest, importance or quality are avoided. The land and planning teams work to the highest standards of international, national and regional guidelines, which are reflected in Energy Networks' bespoke advice, and documents such as the "*Method for Routing and Environmental Impact Assessment*"[12] and the "*Field Code of Conduct*"[13]. These publicly available documents set out Energy Networks' approach to environmental protection and commitment to minimising disruption and impact to the land on which infrastructure is located by avoiding adverse impacts on environmental resources and identifying and providing opportunities for improvement to the biodiversity.

Actions	Goals
The **North Shropshire** Reinforcement Project (England) has seen several environmental improvement schemes carried out along the route, including various restorations of hedgerows, ponds and wetlands, and the creation of a wildflower meadow. During 2022, an otter den was also created, and the river habitat was improved.	Hedgerow restoration, pond restoration, creation of wildflower meadows, wetland restoration. 

12 SPEN_Approach_to_Routeing_Document_2nd_version.pdf (spenergynetworks.co.uk)

13 LandCodeOfConduct_ENG.pdf (spenergynetworks.co.uk)

Actions	Goals
On the **Eastern Green Link 1** project (a large underwater electricity transmission line linking Scotland with the north-east of England) preventive work and biodiversity net gain programmes are being carried out as part of the planning and development phase of the Branxton substation. Mitigation measures have been implemented including conservation of existing vegetation including hedgerows, retention of mature trees, removal of vegetation outside the bird breeding season and maintenance of a buffer zone of up to 10 metres from waterways to reduce the potential for direct or indirect impacts. The excavations are closed at night to prevent animals from becoming trapped. To achieve a net biodiversity gain on the project, trees and a new hedgerow have been planted to provide additional habitat for birds and bats.	Mitigation and biodiversity gain at the Eastern Green Link 1 substation. 
An area of over 6,500 m² was sown with a heathland seed mix in accordance with a heathland restoration plan. A hibernaculum for amphibians and reptiles was also built and installed. The site will undergo monthly monitoring to ensure the desired species are establishing correctly and to remove any weeds that are encroaching on the site. The work was completed on Natural Resources Wales land (although it is a project managed and owned by SP Networks).	Heathland restoration.

Avangrid

During this period, Avangrid has carried out multiple conservation and restoration actions in the different habitats in which it operates.

Solar photovoltaic and terrestrial wind

Avangrid Renewables implements measures to offset impacts on wildlife and habitat associated with the construction and operation of its facilities through mitigation. Mitigation activities may include conservation and restoration work. Monitoring of mitigation areas may be long-term and may be assigned or managed by a third party.

Actions	Goals
In Oregon, habitat management areas (HMAs) have been implemented to mitigate impacts to habitats associated with the **Klondike III and IIIa**, **Leaning Juniper IIa and IIb**, **Pebble Springs**, **Hay Canyon**, **Montague** and **Golden Hills** wind farms. In total 110 hectares are being recovered. HMAs have been established after construction of projects in native grasslands or shrub-steppe habitats and consist of preserving these areas through activities that include invasive species management and grazing exclusion, as well as monitoring to document progress of the restoration.	Restoration of grassland and shrub-steppe habitats.

Actions	Goals
As a compensatory measure for the construction of the **Bakeoven I** Solar photovoltaic plant, financial contributions have been made to protect 300 hectares where important species of big game in Oregon live in winter.	Habitat protection.

Offshore wind

Avangrid is a pioneer in the offshore wind industry in the United States, building the country's first large-scale offshore wind project while developing a portfolio seeking to install 5 GW of clean energy along the East Coast.

Actions	Goals
At the **Vineyard Wind 1** offshore wind farm, marine mattresses were installed to create environmental conditions that encourage the growth of marine flora and fauna, increase species richness, reduce the dominance of invasive species, and increase biodiversity. These mattresses consist of ECOncrete eco-engineered articulated concrete blocks for the protection of cables in the facilities. The marine mattresses use a bio-enhanced mix of ECOncrete, with a complex surface and design that promotes ecosystem regeneration and conservation. See details in Section 4.	Protection of ecosystems and improvement of biodiversity. @EcoConcrete 

Networks

For each project, a design and location analysis is carried out to avoid, when possible, areas of high biodiversity or protected areas. If these areas cannot be avoided, Avangrid seeks to minimise the impact through design, planning or additional protective measures during construction. For example, by modifying the design to reduce occupancy, strategically studying the location of structures in case of placement in sensitive areas, or scheduling activities to avoid spawning or nesting periods. Subsequently, a series of protection measures are defined during construction, such as the use of smaller vehicles or equipment that does not penetrate the ground, as well as the use of support plates for machinery.

For unavoidable impacts, compensation actions have been carried out.

Actions	Goals
The comprehensive mitigation plan for the inevitable impacts due to the gas pipeline projects has continued. Restoration and improvement of wetlands has been carried out in the **East River Road** area of **Rochester**, New York.	Wetland restoration. 
Agricultural monitoring, wetland mitigation monitoring, and invasive species monitoring have also been conducted in **Rochester**.	Ecosystem monitoring.
During this period, the riparian restoration plan for fishing access in **Owego** (New York) has begun. This plan aims to restore and plant native trees and shrubs to create riparian buffers and improve habitat for pollinator species around designated streams. Restoring native vegetation in riparian and wetland areas has several benefits: increased stormwater retention, increased pollinator species, increased carbon sequestration, sediment and erosion control, filtration of excess nutrients, etc. Riparian restoration will also improve habitat for terrestrial and aquatic organisms and contribute to improved wildlife habitat in the watershed. Existing vegetation includes buckthorn, sycamore, honeysuckle, multiflora rose, blackberry, dogwood, apple and willow. In 2023, a total of 117 trees were planted. This replanting will continue in 2024 and maintenance activities will be carried out afterwards.	Riverside restoration. **Trees Programme – Branch 1.**

Neoenergia

Brazil is the country with the greatest biodiversity on the planet, hosting 20% of all the world's biological diversity, with more than 116,000 animal species and more than 46,000 plant species known in the country, spread across six terrestrial biomes and three large marine ecosystems (Ministry of Environment, 2020).

Despite this wealth, there is consensus among the scientific community about the threat to Brazil's biodiversity, largely caused by the loss of habitats, especially forests in the different Brazilian biomes.

Aware of this problem and with the commitment to conserve biodiversity, the companies of the Neoenergia Group, a subsidiary of Iberdrola in Brazil, develop various actions so that, based on the principle of conservation hierarchy and the results of the studies carried out, the facilities and its associated processes have a net positive impact on species and ecosystems. During this period, degraded areas of Brazilian biomes were conserved, recovered and restored, for which forest nurseries were created, using different forest recovery techniques depending on the particularities of each biome, with the aim of achieving the best results in each location.

In total, between 2020 and 2023 and in compliance with its commitments, Neoenergia promoted the planting of more than 1 million trees and carried out actions for the conservation and regeneration of more than 8,975 hectares of Permanent Preservation Areas. In addition, it has carried out actions for the management of more than 18,400 hectares.

Solar photovoltaic and terrestrial wind

With the aim of working for the recovery of the Caatinga ecosystem, in the years 2022 and 2023 Neoenergia worked on projects that aim to maintain biodiversity by applying the conservation hierarchy.

Actions	Goals
At the **Oitis** wind complex (Piauí), the recovery programme for degraded areas has begun. The actions have been located in the Cânion do Rio Poty State Park, selecting three target areas devoid of vegetation and validated by the environmental agency. After fencing the areas and preparing the soil, in 2023, 3,517 trees of different native species were planted. The objective is to plant 29.77 hectares that will result in more than 30,000 trees.	Recovery programme for degraded areas. **Trees Programme – Branch 1.**

Actions	Goals
The recovery programme for degraded areas has also begun at the **Chafariz** wind complex (Paraíba). Seven areas have been defined, totaling an area of 14.32 hectares, in which a planting of 21,788 native trees is planned. After preparing the land, more than 17,000 trees were planted in 2023, installing irrigation for the first years and carrying out pest control.	Recovery programme for degraded areas. **Trees Programme – Branch 1.**
In the **Luzia** photovoltaic complex (Paraíba), the recovery programme for degraded areas has included the following actions: • Creation of a forest nursery, with a great effort in collecting and processing seeds, which varies depending on the species. This point is essential to ensure local genetic variability and maintain biodiversity. With this nursery, in addition to compensation projects, we will contribute to voluntary projects. Furthermore, during the activities, local communities and space users were included as support stakeholders in the environmental recovery process. • Placing information posters for fire prevention and environmental protection. • Planting of 7,899 native trees, and subsequent conservation and maintenance. In addition to this, as a result of the participatory diagnosis carried out in Santa Luzia, the voluntary planting of 50,000 trees has been set as an objective. To date, this objective has been exceeded, with 54,802 trees planted.	Recovery programme for degraded areas. **Trees Programme – Branch 1.**
In the vicinity of the **Arizona 1** wind farm (Rio Grande do Norte), the cellar improvement programme has been developed including planting, conservation and monitoring on 8,500 m². In this area, after various soil treatments to prevent erosion (application of hydroblanket and construction of palisades to contain slopes), in 2022 1,650 seedlings of native species were planted. After planting, maintenance activities were carried out, such as pest control, irrigation and the elimination of competing species.	

Transmission Networks

Actions	Goals
To compensate for the vegetation removed during the installation of transmission networks, **two programmes** have been created: **Degraded Areas Recovery Programme:** degraded or sensitive areas affected by concession areas are identified, mapped, characterised and rehabilitated, establishing recovery, control and mitigation measures appropriate to each biome, restoring the environmental quality of these regions. Its main objective is to establish conditions for the implementation of environmental processes that configure a new dynamic process of the soil/water/flora/fauna system, from which ecological interactions similar to the previous ones are preferably developed, or that allow the development of new uses, compatible with the installation and operation of the company and the occupation of the environment. **Forest Compensation Programme:** forest areas are restored using proven environmental recovery techniques, complying with all the obligations imposed by current environmental legislation, to compensate for the impact of the loss of native vegetation and allow the development of ecological corridors and new protected areas. Its main objective is to recover the vegetation removed during the installation of the projects, mainly by planting seedlings in areas of environmental relevance approved by environmental licensing agencies. In the period 2022-2023, around 21,000 trees were planted in Santa Luzia in direct planting and another 10,000 were maintained for the forest replacement programme in Santa Luzia and 3,000 in Sobral.	Planting seedlings for forest compensation.

Distribution Networks

Actions	Goals
Due to the implementation of distribution networks and substations, the areas affected by these facilities are being recovered. In the period 2020-2023, more than 180,000 seedlings of native species have been planted, mainly in the states of **Bahia, Pernambuco and São Paulo**, which contributes to improving environmental quality in the concession areas. In the period of 2022-2023, more than 55,300 trees of native species were planted.	Recover degraded areas and contribute to improving the environmental quality of our concession areas. **Trees Programme – Branch 1.** 

Hydroelectric generation

With the actions carried out during this period, more than 8,975 hectares were conserved and regenerated within the Permanent Preservation Areas.

Actions	Goals

To restore the Cerrado biome, the teams are looking for the best and most efficient practices at the **Corumbá III** hydroelectric plant, within the framework of the Recomposition of the Permanent Preservation Area (PPA) programme, seeking the following objectives: recovery of vegetation cover, recomposition of gene flows between forest fragments, reestablish the natural ecological processes of the biome, contribute to the conservation of ecosystems and guarantee shelter and food for local fauna, recovering their natural habitats.

In recent years, actions have been carried out such as fencing areas to avoid anthropogenic impacts and partially mechanised direct sowing using the subsoiler on contour lines. Permanent plots were also installed for the qualitative and quantitative inventory of areas in recovery, in order to evaluate the efficiency of restoration actions.

In total, more than 1,860 hectares of PPAs surrounding the hydroelectric reservoir were restored with native vegetation to preserve water resources, geological stability, biodiversity, protecting the soil and facilitating the genetic flow of fauna and flora. Neoenergia has promoted the plantation of more than 283,000 trees in Corumbá III, of which more than 19,200 trees were planted in the period 2022-2023.

In addition, conservation work was carried out on more than 3,500 hectares of native forest. Since 2012, the Corumbá III hydroelectric plant team has been carrying out intense fencing and monitoring of the use and occupation of the land around the reservoir, ensuring that the preserved areas are free of disturbances that could compromise the conservation conditions of the surrounding forest areas of the hydroelectric plant, helping the natural regeneration of conserved areas.

Conservation, restoration and regeneration of the Brazilian Cerrado biome.

Trees Programme – Branch 1.

Before and after restoration.

Actions

To restore the Atlantic Forest biome around the **Itapebi** and **Baguari** Hydroelectric Power Plants, the method used depends on the current state of each area, and enrichment can be carried out in the case of areas with medium and high self-recovery potential or a plantation in the entire the area in the case of areas with low self-recovery potential.

The Degraded Areas Recovery Programme was carried out at the **Itapebi** plant (Bahía). With this programme, actions are defined so that degraded areas reach minimum characteristics that allow the formation of ecological processes, promoting their restoration, so that they recover, to the extent possible, a non-degraded condition. In the period between 2022 and 2023, maintenance actions were carried out that involved the replacement of seedlings in plantations already undertaken in an area of 42.6 hectares.

In addition, a Plant and PPA Monitoring Programme is being carried out at the **Itapebi** plant with the objective of identifying activities or actions that can contribute to mitigating negative impacts on the Islands and PPAs in the reservoir area.

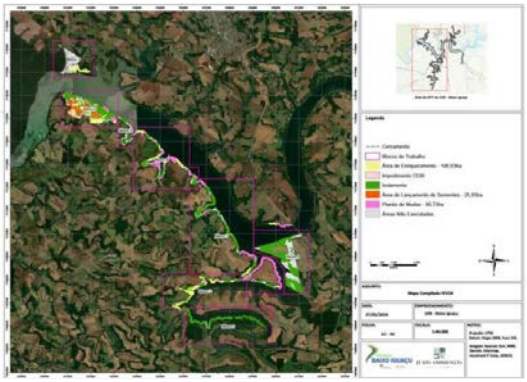
At the **Baguari** plant (Minas Gerais) 655 hectares of APPs are managed, of which planting was carried out in 115 hectares, enrichment in 182 hectares and continuous monitoring in the other 321 hectares. During the years 2022 and 2023, maintenance work was carried out, with special attention to the areas already planted, where actions were undertaken to replace some seedlings that did not survive. Since 2007, the environmental team at the Baguari hydroelectric plant has been working on the fencing and monitoring of native forest areas, ensuring the maintenance of the ecological quality of these areas.

Goals

Conservation, restoration and regeneration of the Atlantic Forest biome.

Trees Programme – Branch 1.

Actions	Goals
The **Baixo** Iguaçu hydroelectric plant (Paraná) develops actions to implement a biodiversity corridor that aims to connect the forest areas of the Iguaçu National Park with the areas acquired for the installation of the project and for the recovery of the plant in the area of direct influence. The areas cover the surroundings of the reservoir (PPA of 100 meters) and an area downstream of the dam, overlapping the buffer zone of the Iguazú National Park. In the restoration of this ecological corridor, different vegetation recovery methodologies have been used to guarantee the effectiveness of the actions, which were adapted to the edaphoclimatic characteristics of each area. Seedlings have been planted, seeds mixed, nucleation and enrichment carried out, as well as isolation of areas to promote and carry out natural regeneration. In addition to the recovery itself, preparatory actions have been carried out for the consolidation of the ecological corridor. In the period from 2020 to 2023, more than 155,000 trees were planted and 1,100 hectares of areas in different states of natural regeneration were preserved. The recovery of areas affected by the implementation of the project is also being carried out through soil restoration and vegetation recovery.	Conservation, restoration and regeneration of the Atlantic Forest biome. **Trees Programme – Branch 1.**



Actions

The **Teles Pires** hydroelectric plant (on the border of the States of Pará and Mato Grosso) aims to monitor and conserve 15,425 hectares of the Amazon biome by inspecting the heritage, use and occupation of the land. This involves territorial regularisation and the implementation, recovery, maintenance and preservation of PPAs around the reservoir.

In the period from 2022-2023, Neoenergia has contributed to the planting of 112,307 trees, totalling more than 300,000 trees since the start of the action.

In addition, it worked on the recovery of 3,941 hectares of Amazon Forest in PPA zones, using different techniques. Recoveries are divided into four stages:

I. **Land preparation:** manual and/or mechanised, using agricultural tractors with plows and leveling harrows.

II. **Planting:** using different methodologies, depending on the development of each area worked, up to four different planting methodologies can be used: total planting, island planting, enrichment planting and diversity planting.

III. **Maintenance:** carried out at different times of the year, with the aim of ensuring the development of the planted seedlings.

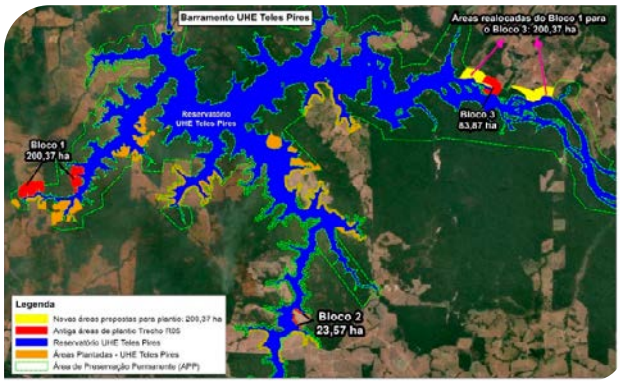
IV. **Monitoring:** carried out periodically, with the aim of characterising the plantation and identifying the development of the planted trees.

It should be noted that, in addition to the techniques described above, the natural regeneration of native vegetation is managed through fencing around the PPAs. In this action, the soil seed bank and the dispersal of seeds by fauna help in this regeneration.

Goals

Conservation, restoration and regeneration of the Amazon biome.

Trees Programme – Branch 1.



Iberdrola Mexico

Iberdrola México has various plans for reforestation, rescue, and relocation of flora in the construction and operational stages of the facilities, which have the objective of compensating for the environmental impact and regenerating the different habitats. During this period, more than 28,000 trees have been planted, reaching almost 70,000 since the start of the Tree Programme in 2020.

Social projects

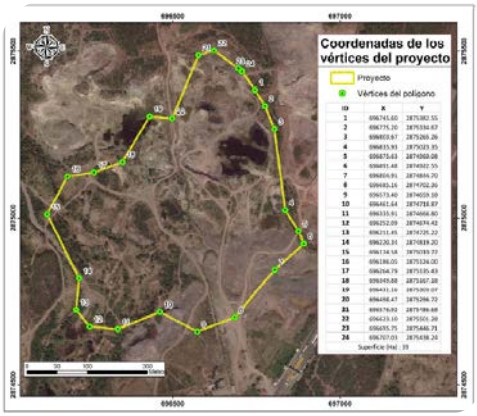
Actions	Goals
Within the framework of the **Volunteer** programme, Iberdrola México organised several initiatives to involve employees in the reforestation of several degraded areas, adding more than 15,000 trees planted between 2022 and 2023. See Section 5.3.7 for more details on these actions.	Reforestation and awareness. **Trees Programme – Branch 3.**
Reforestation actions began at the **Santiago** photovoltaic plant, which were successfully concluded in 2022. Monitoring is currently being carried out to evaluate the survival of the planted native tree species (*Opuntia robusta*).	Reforestation for land restoration. **Trees Programme – Branch 1.**

Onshore wind

Actions	Goals
At the **La Venta III** wind farm (Oaxaca) in 2022 and 2023 the maintenance of the 25 hectares reforested in 2021 continued, with more than 80% survival. Currently, more land is being studied for the recovery of evergreen forest vegetation.	Reforestation for land restoration. **Trees Programme – Branch 1.**
In the **Pier B** wind farm (Puebla), work began prior to the reforestation of 144 hectares during 2023, delimiting the areas and producing the plants in the nursery.	Reforestation for land restoration. **Trees Programme – Branch 1.**
In the **Santiago** wind farm (Guanajato), the activities that comprise the Mesa de San Pedro Reforestation-Restoration Programme have continued, with the objective of restoring more than 180 hectares located in the municipality of San Felipe. During 2023, the polygons have been defined and fencing has been carried out, also including a firebreak. Reforestation has been carried out with 30,423 specimens of native species (both trees and cacti), carrying out pest control on the seedlings. Geocoastal dams have also been placed on 67.35 m2 of slopes to prevent soil erosion. In the coming years, reforestation will continue.	Reforestation for land restoration. **Trees Programme – Branch 1.**

Actions	Goals
In addition, maintenance continues at the **Pier II**, **Pier IV**, **Pier B** wind farms (Puebla) and **Santiago** (Guanajuato), carrying out actions to maintain the flora. The plan encompasses the monitoring and replacement of plants to cover a survival of at least 80% of the rescued plants for a period of 5 years. More than 50 species are included.	Maintenance and reforestation.

Thermal generation and cogeneration

Actions	Goals
At the **Topolobampo III** plant (Sinaloa), the reforestation, maintenance and conservation plan has continued for ten years. This plan includes 35 hectares, in which it is intended to plant 21,280 trees with more than 85% survival. Between 2022 and 2023, maintenance work was carried out in the restoration area. These consisted mainly of maintaining the firebreak, protective fencing, irrigation and replacement.	Protect and contribute to the stabilisation and restoration of land where there are problems of vegetation loss and erosion. **Trees Programme – Branch 1.**
At the **Topolobampo II** Plant (Sinaloa) more than 13,700 trees were planted during the period, in several projects: • Reforestation and water and soil conservation plan in an area of 40 hectares. • Change in land use and forest land with the planting of more than 5,700 trees. Furthermore, during the construction of the facilities, a relocation of 85% of the flora in an area of almost 4 hectares is required.	Planting and restoration of land. **Trees Programme – Branch 1.** 
At the **Baja California** plant, a reforestation plan has been developed in an area of 35 hectares. The reforestation of the Izote de Sahuiliqui (*Yucca grandiflora*) and Parry pinyon (*Pinus quadrifolia*) species has been maintained, achieving a survival of 86.43%.	Maintenance and reforestation of land.
At the **Escobedo** Power Plant (Nuevo León), in 2023 maintenance actions were carried out on the 38 hectares in which restoration was undertaken as a compensatory measure for the occupation of the land. In total, more than 23,500 trees were planted, the species include; *Yucca filifera, Opuntia engelmannii, Cylindropuntia lindsayi* and *Cylindropuntia fulgida*. The objective is to achieve a survival rate of the species above 85%.	Restoration of degraded lands. **Trees Programme – Branch 1.**
At the **La Laguna** Power Plant (Durango), a reforestation project was carried out in the Cañón de Fernández State Reserve, promoted by Iberdrola México. The objective of this initiative was the preservation of the soil and part of the restoration of the reserve. With the help of volunteers from Iberdrola México and students, a total of 500 trees were transplanted. See more details in Section 4.3.	Reforestation in the Cañón de Fernández State Reserve. **Tree Programme – Branch 2.**

Actions	Goals
In the area of the **Ramos** Cogeneration Plant (Coahuila), 16 evergreen oak trees (*Quercus virginiana*), native to the region, were planted in the area surrounding the cooling tower. Trees, which reduce wind speed, minimise the volatilisation of suspended particles, reducing the non-hazardous waste generated in the system.	Planting to minimise impacts at the plant. **Trees Programme – Branch 1.**
At the **Altamira** and **El Carmen** plants (Altamira and Nuevo León, respectively), maintenance work on reforestation with native species *(Prosopis laevigata, Yucca filifera, Cylindropuntia leptocaulis*) was carried out.	Reforestation maintenance. **Tree Programme – Branch 2.**

Iberdrola Energy International

France

Onshore wind

Actions	Goals
The wetland restoration project has continued, including monitoring studies of the improvement actions carried out in the area around the **Plemy** wind farm (Brittany).	Wetland conservation.

Greece

Onshore wind

Actions	Goals
The mitigation and compensation actions of the **Mikronoros** wind farm (Thrace), in addition to restoring the affected land, have led to the planting of 54,504 trees (*Pinus nigra*) on an area of 46.4 hectares.	Reforestation and plant treatment. **Trees Programme – Branch 1.**

Work has been carried out at the **Sarakatsaneika**, **Arachnaio II** and **Pyrgari** wind farms to restore surfaces altered after the works. To date, more than 25,000 trees have been reforested (*Pinus nigra, Robinia pseudacacia, Spartium junceum, Medicago sativa, Trifolium repens, Melilotus officinalis*). During 2023, irrigation, excavation and fertilisation treatments were carried out.	Reforestation and plant treatment. **Trees Programme – Branch 1.**

Italy

Photovoltaic plant

Actions	Goals
At the **Montalto di Castro** photovoltaic plant (Lazio), during the vegetative rest period, reforestation work on bushes and trees was carried out, using species native to the area and suitable for the phytoclimatic zone. 4,950 laurels and 71 olive trees were planted. During the first five years after planting, the necessary care treatments will be carried out, including emergency irrigation during the dry season. To ensure that the laurels are watered when needed, an automatic irrigation system has been installed along the facility's fence. See Section 4 for more information.	Reforestation and plant treatment. **Trees Programme – Branch 1.**

5.1.2 Direct protection actions for fauna

Iberdrola strives to **minimise the impacts of its facilities on fauna** and takes actions to promote its protection and conservation. Special attention has been paid to the impact of our networks on fauna, particularly birds. Numerous actions have been carried out in this sense, from the adaptation of supports to the implementation of new methodologies in the protection of birds. Work is also continuing on innovative bird detection and identification methodologies to activate the shutdown of the wind turbines in our wind farms when birds or bats pass by.

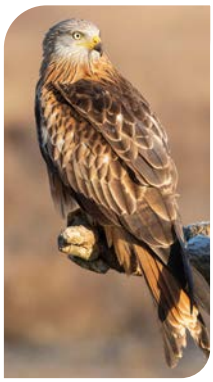
In these two years, we have worked on nearly 500 actions to protect fauna, among which it is worth highlighting the efforts to find innovative solutions to reduce the impact on sites and power lines, conservation actions for species and the rescue of Ichthyofauna in hydroelectric plants.

Iberdrola Spain

Design of photovoltaic plants that respect ecological corridors and support a habitat capable of housing numerous species of fauna."

In this period, work has been done on the conservation of species, such as the red kite, and on impact reduction. Thus, support has continued to be adapted to minimise the risk of electrocution of birds and a reduction in the number of electrocutions is beginning to be seen. Anti-collision elements are also placed on drivers at high risk of collision.

Foundation

Actions	Goals
Comprehensive management project for raptor populations in the area of **Binaced** (Huesca). Iberdrola has acquired a poplar grove in Binaced, considered the largest stable roost for red kites known in Spain and which was at imminent risk of disappearance, due to felling for logging. This poplar grove immediately ensures the conservation of more than 1,000 specimens of this bird of prey that is in danger of extinction. Currently, the red kite has secured a place in the wintering areas for its long-term survival. Through the Iberdrola Spain Foundation, in addition to the purchase of land, the project has been launched for the comprehensive management of the populations of birds of prey that inhabit the environment. based on the sustainable management of the purchased plot and including maintenance of the feeder for necrophagous raptors of Las Pichillas, in addition to different markings and population studies.	Conservation and improvement of raptor populations.    

Solar photovoltaic

Actions	Goals

Photovoltaic plants are a refuge for native fauna and compensation measures are common for their construction that aim to improve conservation for various taxonomic groups:

- Creation of refuges for fauna with vegetation, in addition to the installation of hunting enclosures, with cat flaps at the bottom.
- Formation of stone clusters for reptiles.
- Construction or repair of primers.
- Installation of nest boxes for birds and bats and shelters for pollinating insects.
- Installation of platforms for birds of prey.
- Construction of piles and shelters.
- Construction of watering holes and ponds, with various species of birds and amphibians as the objective.
- Hunting enclosures of the plants, with cat flaps at the bottom
- Land agreements on nearby lands, in which agroecological management is carried out to ensure the conservation of steppe lands.
- In order to avoid disturbing the species, hunting is prohibited in the implantation areas and in the protection areas of 300 meters around.

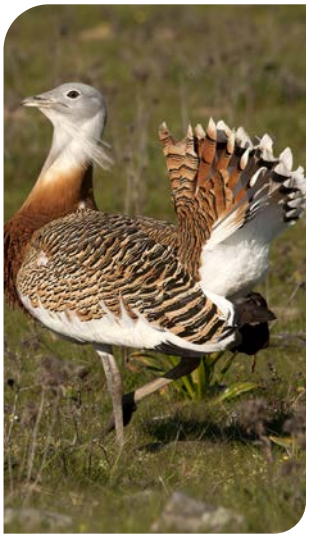
Improvement of wildlife populations.

On land near the **Francisco Pizarro** photovoltaic plant (Cáceres), 100 hectares have been signed, in areas of very high value for the little bustard and the great bustard. Agroecological management is carried out on these lands that includes the irrigation of legumes in summer and the creation of a pond with the aim of ensuring the availability of water at this time and the presence of tender shoots.

In these lands, 20 steppe species have been marked that will help improve knowledge about population dynamics.

In addition, nest boxes placed on 5-metre-high posts have been installed within the plant for common kestrels or owls, one for every 10 hectares of occupied surface within the plant. Nest boxes must have anti-predation systems, as well as annual maintenance to guarantee their functionality. 50 nest boxes have also been placed for forest bats and two “bat house” type shelters for cave-dwelling bats.

Conservation of steppe species.



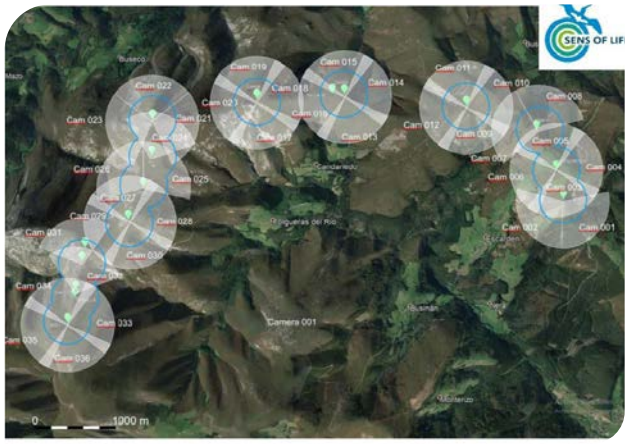
Actions	Goals
Ceclavín photovoltaic plant (Cáceres), during 2022-2023, the restoration plan for the areas for the goat vole, one of the most endangered Iberian rodents in the Spanish fauna, has continued. For the conservation of the black stork, different ponds have been built where fish species have been introduced to ensure the black stork has food readily available.	Restoration of areas for the goat vole. 
Tagus I, II, III and IV photovoltaic plants (Toledo), monitoring is carried out with a video surveillance camera for continuous monitoring of the activity of threatened birds (large raptors or black storks). A steppe reserve of 360 hectares has been created outside the plants, where the grasslands are managed agro-environmentally, carrying out non-productive sowing, implantation or diversification of fallows and creation of hedges and multifunctional margins. This measure has been initiated thanks to the joint action of these 4 plants and will be expanded and maintained thanks to these and the future 380 MW Tagus PV plant. The creation of two new 1,000 m^2 naturalised ponds has begun, which will maintain a minimum water level all year round as points of interest for the black stork. Five shelters for pollinating insects, two boxes for bats and ten nest boxes on poles have also been installed inside the plants.	Black stork and steppe conservation. 
Within the framework of the **Romeral** photovoltaic plant (Cuenca), the habitat of the common crane is improved through an agreement with farmers for the application of good agricultural practices.	Common Crane Habitat Improvement.

Actions	Goals
An initiative to reintroduce the imperial eagle in Cádiz (Andalusia) was carried out linked to the **Cespedera** photovoltaic plant, in a project that includes recovery, maintenance and research activities on the behaviour of these birds. Iberdrola has collaborated from the initial collection of eight imperial eagle chicks selected for their high risk of survival in different nests in Córdoba, where 90% of the population of this species is concentrated until their final release. Guarded by a group of experts during their transfer to Cádiz, the chicks have been installed in "hacking" cages, built expressly for the project and strategically located in order to promote reintegration, which allows for feeding, maintenance and start-up of the flight of birds without any contact with the human team. In this way, the identification of them as a nest is encouraged and, after the eagle is released, its tendency to return to the same environment for the future breeding of chicks, a phenomenon known as "philopatry". In addition, GPS tagging was carried out to monitor their habits and migratory behaviour. It is expected that the set of birds that will be incorporated into the project in its development in the coming years will link with the populations of other places in the geographical chain of Andalusia, such as Sierra Morena or Doñana.	Reintroduction of the imperial eagle. 
Aside from the actions defined in each plant, once construction is completed, all photovoltaic installations have an **Environmental Monitoring Programme** in the operation phase. The programme in the operation phase consists of visits to the plant by a contracted company to control possible environmental impacts and monitor the established protective and compensatory measures. Periodically, reports are prepared and delivered to the Administration.	Environmental Monitoring Programme. 

Onshore wind

Actions	Goals
In the wind farms in operation, environmental monitoring of birds and bats is carried out by an external consulting company. The data is collected, managed and used to analyse collisions and species censuses and assist decision making. Some wind farms maintain environmental surveillance from dawn to dusk 365 days a year. The technicians notify control in the event that there is a risk of collision with a threatened bird so that it stops at the wind turbine and avoids the collision. In addition, many wind farms have implemented efficient collision prevention measures: • Stopping wind turbines • Stop during the day when the wind speed is less than 5 m/s. • Night stop for the protection of bats, based on wind speed, temperature and schedule.	Protection of birds and bats.
In the period of 2022-2023, vinyl patterns in the shape of eyes have continued to be placed on the wind turbine tower and one out of the three blades has been painted black, as bird deterrent measures. Vinyl's have been placed on almost 50 wind turbines and the effectiveness of these measures is also being analysed with historical collision data.	Minimise the impact on birdlife through deterrence measures.



Actions	Goals
In 2020, a new surveillance system project based on artificial intelligence began. A 3D Radar is used with high resolution cameras that include an artificial intelligence system capable of detecting and identifying the position of the bird, its species and its trajectory. This allows the risk of collision to be analysed in real time, allowing the wind turbine to be stopped. In 2022 and 2023, work has been done on adjusting the system and verifying its effectiveness. Currently this system is programmed with stops in the **Cavar I**, **Cavar II**, **Cavar IIIA** and **Cavar IIIB** wind farms (Navarra) and is in the contracting process in Zorreras (Cádiz).	Surveillance with artificial intelligence for the protection of birdlife.   Modeling the volume monitored by the cameras for a bird with a wingspan of 150cm.
In addition to impact prevention measures, numerous conservation actions are carried out whose objective is to strengthen the population of the species. The installation of perches, adaptation of evacuation lines and placement of nest boxes for birds and bats are common.	Species conservation.
In the **Martín de la Jara** wind farm (Seville), a population reinforcement of lesser kestrels has been carried out using the hacking technique.	Lesser Kestrel population reinforcement.
The **Ballestas** wind farm (Burgos) has carried out actions to conserve European mink populations, a species in critical danger of extinction globally. Materials have been acquired to control the American mink, in addition to genetic studies of tissue samples from the populations of Castilla y León.	Conservation of the European mink population. 

Networks

Actions	Goals
During the 2022-2023 period, the development of the Aerial Network Improvement project has continued, the objective of which is to adapt the medium and high voltage supports for the protection of birdlife. Since the end of 2022, pilot projects have been carried out in different provinces of Spain with the installation of a new insulating material crosshead developed by the Standardisation area and the BIRKA company. This crosshead allows us to adapt powerline supports up to 20 kV without the need to install long insulators (sticks) or linings in areas with tension, eliminating the risk of electrocution of birds and facilitating the operation and maintenance of the electrical network. At the moment the results of the follow-ups carried out demonstrate 100% effectiveness.	Air network improvement project.

In the municipality of **Quer** (Guadalajara), Iberdrola is collaborating to recover the lesser kestrel population. Ten lesser kestrel chicks have been reintroduced into the municipality's primary kestrel and their evolution is being monitored. The project will continue until 2025 with more reintroduced specimens bred in captivity.

Lesser Kestrel Conservation.

Actions	Goals
In the planning, design and construction processes of power lines, prior environmental studies are carried out and numerous measures are applied to avoid and reduce impacts. Examples of actions are listed below: • Design and adaptation of the line layout to minimise impacts, avoiding protected areas and minimising the impact on vegetation. • Carrying out birdlife studies prior to the works in order to determine the reproduction areas and limit the sections and temporal limitation of the works. • Adaptation of the work schedule, avoiding work in critical periods of species reproduction. • Marking of lines with bird guards to avoid collisions. • Inspecting for nests before construction.	Protection of fauna with special emphasis on birds. 

Hydroelectric generation

Actions	Goals
During the construction phase of the Tâmega hydroelectric complex, actions were carried out to protect terrestrial and aquatic fauna and birds, among which the following stand out: • The creation of 16 microhabitats for herpetofauna and 48 microhabitats for threatened forest invertebrates • Aquatic ecosystems were improved with the creation of 18 ponds. • 6 hectares of *Phengaris alcon* habitat were improved. • 12 galleries were restored and shelter boxes were installed to protect bat colonies in caves and galleries.	Wildlife protection.
  	 
In the hydraulic plants, the established ecological flows have been maintained to ensure the conservation of the habitats in the river sections downstream of the dams.	Ichthyofauna protection.

Actions	Goals
Collaboration with the Government of Castilla y León to promote the conservation of bat colonies, enabling openings or passages for bats at the entrances to the Molinera and Huebra tunnels, in the vicinity of the **Saucelle** hydraulic power plant (Salamanca).	Chiroptera protection.
	
In the **Mijares**, **Turia** and **Júcar** rivers, work has continued to repopulate eels, a species classified as critically endangered on the IUCN Red list.	Recovery of the eel population.
	

Actions	Goals
At the **Labastida** hydraulic power plant (Álava) an agreement has been signed for the placement of a breeding tub for repopulation of one of the rarest Spanish freshwater mollusks and currently, the most endangered, the auriculated naiad (*Margaritifera auricularia*).	Auriculate Naiad Conservation. 
At the **La Muela I** power plant (Valencia), the reservoir is maintained at a certain level during the marsh harrier breeding season.	Protection of the marsh harrier. 
During the period 2022-2023, hunting fences have been placed in various channels belonging to hydraulic infrastructures, with the aim of preventing the fall of terrestrial fauna.	Terrestrial fauna protection.
Multiparameter probes and water oxygen meters have been installed in several plants to control water quality.	Ichthyofauna protection.

ScottishPower

In its **commitment to the protection of biodiversity** at its renewable sites, ScottishPower Renewables applies the principle of mitigation hierarchy by carrying out an exhaustive study of the impacts on fauna, modifying and adapting the implementations and executing, where appropriate, mitigation plans or consistent compensation.

Planning: During the planning, design and environmental assessment process, studies are conducted to determine what wildlife is present at the site and whether the project could have potential effects on habitats and species of local, national or international importance. Where possible, project designs will be modified to avoid sensitive species and habitats. Where this is unavoidable, appropriate additional studies will be carried out on protected species of amphibians, birds and mammals. Bird surveys are typically conducted over approximately two years to ensure that appropriate assessment and mitigation design is robust and appropriate for the site in question. Chiropteran activity studies are carried out to establish their presence and assess activity levels at the proposed site, whilst studies are also carried out to identify the presence of protected mammals such as otter and badger. The results of the inventories identify whether ecological limitations exist for the project, leading to the development of mitigation measures, if necessary.

Construction: Green method statements, which form part of a broader set of mitigation measures (typically within a Construction Environmental Management Plan), are used where preparation and construction work could potentially impact sensitive species or habitats. The schedule of a project is adjusted to avoid spawning or nesting periods and the duration and sequence of work is also controlled. The scope and detail of these method statements are established by expert ecological advisors and environmental regulatory bodies. Studies continue to be conducted during construction to ensure there are no negative impacts on habitats and species. To facilitate this, each site has an Ecological Management Plan that may include a Breeding Bird Protection Plan and a Protected Species Plan. These detail the mitigation measures that will be implemented should particular species be discovered on the site during construction. Monitoring activities are described in Section 5.2.

Onshore wind

Actions	Goals
In **Glen App** (Ayrshire, Scotland) a raptor deterrent plan has been put in place in the project area, with the construction of a control tower and the use of artificial deterrents if deemed necessary.	Bird deterrence plan for the protection of avifauna.
In **Lynemouth** (North East, England), replanting has been carried out to create an alternative feeding area away from the wind farm, with the aim of deterring geese that hibernate in the vicinity of this site.	Goose protection.
Wind turbine shutdown strategies have been implemented at several operational wind farms to minimise any risk of collision to bat species.	Bat protection.
The restoration activities carried out in the wind farms (see Section 5.1.1) will have direct benefits in the habitats of the species in the area. Species benefiting include red squirrel, black grouse, wading birds such as breeding snipe and curlew, and birds of prey such as hen harrier.	Improving species habitats.

Offshore wind

Actions	Goals
To ensure the protection of the lesser loon (*Gavia stellata*) during the operation and maintenance activities of the **East Anglia ONE** offshore wind farm, a protocol has been implemented for offshore vessel traffic during sensitive periods. This protocol also allows for the collection of sighting data to improve understanding of lesser loon behaviour.	Protection of the lesser loon. 
In **East Anglia ONE** and **East Anglia TWO**, artificial nesting structures have been constructed for kittiwakes (*Rissa tridactyla*) at Lowestoft. The structures will also allow the marking and monitoring of the species.	Kittiwake Protection. 
As of 2023, an enclosure and fence has been built at **Orford Ness** to protect the Black-backed Gull (*Larus fuscus*), providing a predator-free area for nesting and therefore encouraging population growth.	Black-backed Gull Protection. 

Avangrid

A pillar of Avangrid Renewables' approach to the development, construction and operation of its renewable energy facilities is the use of **practices that avoid, minimise or mitigate risk to wildlife and their habitat**.

During the initial planning of a project, a series of studies are carried out to determine whether the project could have an effect on habitats and species of local, national and/or international importance. As appropriate, additional studies are carried out on aquatic species, amphibians, birds and mammals. As far as possible, areas of sensitive habitat are completely avoided. If it is not possible to avoid a specific area, the scheduling of construction activities is adjusted to limit any impact. Additional protective measures and monitoring by specialists can be implemented during construction. Additionally, for the projects in operation, several actions have been deployed to protect fauna.

Onshore wind

Actions	Goals
The **Blue Creek** Wind Farm (Ohio) has a habitat conservation plan for the Indiana bat (*Myotis sodalis*) and the northern long-eared bat (*Myotis septentrionalis*). The plan includes measures to monitor and reduce bat mortality by reducing the speed of the turbines in spring and autumn.	Indiana Bat and Northern Long-eared Bat Protection.
At the **Manzana** wind farm (California), minimisation strategies are implemented, as well as corrective actions, such as obtaining an incidental capture permit. During the validity of the permit, a conservation strategy is being implemented that includes technological monitoring through radio frequency transmitters and geofences, with the aim of establishing when the wind turbines should be stopped to avoid collisions.	Conservation and protection of the California condor.

Actions	Goals
An **Avian Protection Plan** (APP) has been implemented, which incorporates the Avian Power Line Interaction Committee's (APLIC) *Suggested Practices for Avian Protection on Power Lines* (APLIC 2006). The APP describes practices to reduce potential impacts to birds and other wildlife on power lines. Avangrid promotes practices to protect birds and other wildlife that may interact with these infrastructures and to improve system reliability and operations in the construction and operation phase of the project.	Protection plan for all wildlife, with special attention to birds.
At the **Lempster** Wind wind farm in New Hampshire, actions were taken to reduce risks to the common nightjar (*Chordeiles minor*) by implementing operational modifications during the nesting period of the nightjar, a state-listed species in New Hampshire. In 2022 and 2023, acoustic and visual monitoring was conducted to better understand when these birds are active at the facility. Black cloth mats were also placed in selected areas to discourage common nightjars from nesting near the turbines.	Protection of the common nightjar. 

Offshore wind

Actions	Goals
At **Vineyard Wind 1**, **New England Wind** and **Kitty Hawk Wind**, rigorous measures are applied during geophysical surveys and pile installation with the goal of minimising the impacts that underwater noise generation has on marine wildlife, particularly mammals and turtles. These mitigation measures include direct observation by experts, visual monitoring performed before the use of acoustic sources, sound field verification, observations prior to the start of maneuvers, shutdown zones, monitoring requirements, and reporting requirements.	Underwater noise mitigation.
Six acoustic telemetry receivers have been installed within the **New England Wind** wind farm lease area, transmitters have been placed on 15 fish, and subsequent data collection, analysis and reporting are planned over a five-year period.	Monitoring of migratory fish.

Actions	Goals
ECOncrete marine mattresses deployed at **Vineyard Wind 1** mentioned above will encourage the growth of local marine fauna and reduce invasive species.	Protection of ecosystems and improvement of biodiversity. 
All vessels used in the **Vineyard Wind 1**, **New England Wind** and **Kitty Hawk Wind** marine park projects follow prescribed mitigation measures to avoid collisions with protected species. These measures include speed restrictions, surveillance requirements, separation distances, detouring, and reporting.	Collision prevention on species.

Networks

Actions	Goals
In the transport and distribution networks, a procedure is carried out to minimise the impacts on the osprey in the nesting or nest abandonment phase: • Special care is taken not to work during the breeding and breeding periods. • Installing bird deflectors on the crossbars of supports in the shape of owls or turkeys to prevent nesting. • Relocation of nests to safer prepared platforms. • Collaborations with local and state organisations in recovery work. • Elimination only of unoccupied nests and outside critical periods.	Protection of ospreys. 

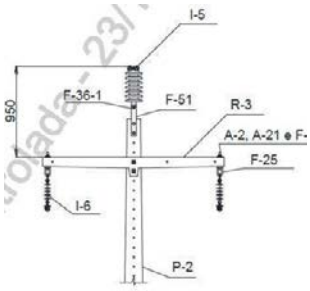
Neoenergia

At Neoenergia Group, actions and control measures are adopted with the aim of **protecting local fauna**, mainly avoiding accidents with our structures that could cause death or injury to the animals that occupy the surroundings of our facilities.

Solar photovoltaic and terrestrial wind

Actions	Goals
At the Oitis Wind Complex (Piaui), a programme is being carried out to rescue, deter and relocate fauna due to construction. 2,980 removals, 2,126 rescues and 119 relocations have been carried out, following all relevant procedures and legislation for wildlife management. This same programme was also carried out at the **Luzia** Photovoltaic Complex (Paraiba) and 150 scare-offs, and 810 rescues were carried out, following all relevant procedures and legislation for wildlife management.	Minimise impact on wildlife.

Networks

Actions	Goals
Work has been carried out in distribution and transmission facilities to avoid affecting wildlife in concession areas: • Homologation of biological repellents following the efficiency results of the pilot project in the regions of Porto Seguro and Vitória da Conquista, in the state of Bahia, to inhibit the construction of ovenbird nests (Furnarius rufus) in the distribution network. Since 2021, Neoenergia Coelba has installed more than 300 repellents in the regions and the technology became part of the corporate catalogue of biodiversity protection materials available in all distributors in the country for new network projects, thus minimising the impact on this endemic species. • Installation of signaling mechanisms on sub transmission and distribution lines to avoid accidents with birds. • Installation of protectors in distribution networks in places with high levels of biodiversity to avoid possible incidents with wild animals. • Installation of physical barriers to prevent accidents with wild animals in substations, such as protection of insulators, bushings and conductors, installation of sound repellents and barriers to prevent animals from climbing.	Minimise impact on wildlife.  
• In addition, at **Neoenergia Coelba**, measures were implemented for the sustainable coexistence of the Lear's macaw (*Anodorhynchus leari*), an endemic species of Caatinga, with the electrical distribution network, as well as the creation of a broad conservation programme for the species in the area of the Raso Catarina Ecological Station, focused on environmental, social, educational and technological aspects. • A distribution network construction standard has been created for the protection of birdlife with measures to avoid accidental contact with species and contribute to the conservation of fauna in general. Neoenergia Coelba has already adapted 1,762 structures in a total of 128 kilometres in length in the Raso da Catarina region, in the state of Bahia. • In 2023, Neoenergia Coelba has installed bushing protectors in the network, to avoid accidental contact with wildlife species that also trigger power outages in the North Coast Environmental Protection Area, in the municipality of Camaçari, in the State of Bahia. This initiative has made it possible to protect 40 km² in an area of high value for biodiversity, benefiting the conservation of the Atlantic Forest species that are concentrated in the region.	Studies and actions to protect the Lear's macaw (*Anodorhynchus leari*). 

Actions	Goals
In 2023, **Neoenergia Pernambuco** implemented these strategies to minimise impacts on fauna in 2.5 kilometres of insulated cables in sections located in a conservation unit, in the Aldeia Beberibe Environmental Protection Area, in the state of Pernambuco.	Prevention of species in network cables.

Hydroelectric generation

Actions	Goals
Mechanisms have been installed in the plants to prevent the concentration of fish at the water outlet of the generating units, thus preventing the entry of fish during maintenance activities and machine shutdowns. In addition, actions have been carried out to rescue ichthyological fauna in turbines during maintenance activities. The following actions were carried out at the **Teles Pires** Hydroelectric Power Plant: • Rescue of terrestrial fauna that may be found in the facilities, adjacent structures, accesses, and accommodations. • Preventive measures to reduce the number of fish accessing the pipelines, such as: ensuring the proper functioning of anti-entrapment nets, stopping the machines outside the spawning period, operating adjacent machines and activating the spillway to attract fish to other points and injections of air during duct insulation, among others.	Protection of fish fauna. 

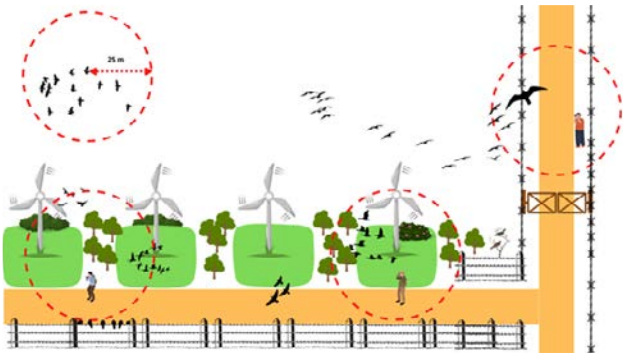
Iberdrola Mexico

Solar photovoltaic

Actions	Goals
Monitoring, rescue and relocation of birds and wildlife is carried out in the operation stage of all photovoltaic plants in Mexico, with the aim of safeguarding the greatest number of individuals possible, safeguarding the fauna resources of the area. As examples of species on which the focus is placed for rescue and relocation we find: *Barisia imbricata, Canis latrans, Lepus californicus, Peromyscus levipes,Pituophis deppei, Sceloporus torquatus, Spea multiplicata, Sylvilagus floridanus*.	Wildlife protection.

Onshore wind

Actions	Goals
In the **Venta III**, **La Ventosa**, **Bee Ni Stipa**, **Dos Arbolitos**, **Pier B**, **Pier II** and **Pier IV** wind farms, Iberdrola México has implemented a protocol for stopping wind turbines in the event of a risk of collision between birds and bats, which considers more than 50 species. To this end, wildlife monitoring has been carried out in seasonal campaigns to determine the main ecological parameters such as composition, species richness, abundance, and migratory flow, and measure the impact during the operation stage (see Section 5.2).	Bird and wildlife protection.



Thermal generation

Actions	Goals
At the combined cycle plants of **Topolobampo III, Noroeste, Tamazunchale, El Carmen, Altamira III and IV and Tamazunchale**, wildlife rescue and relocation programmes have been carried out, achieving 100% survival. The main wildlife individuals protected in this way in Mexico's thermal projects are birds, reptiles and small mammals. For example: • In **Altamira**, feline distribution ranges have been recognised within the industrial port. See Section 5.2 for more details. • At the **El Carmen** plant, a rescue and relocation action has been carried out for the protected species of rattlesnakes (*Crotalus atrox*) to transfer them to an equivalent ecosystem, ensuring their survival.	Wildlife rescue and protection.

Iberdrola Energy International

France

Onshore wind

Actions	Goals
Measures have been implemented to reduce bird-bat strikes and reduce the impact on local fauna at the **Chambonchard, Herbitzheim, Plemy, Soeurettes** wind farms. This includes slowing or stopping wind turbines, if necessary, as well as weekly inspections of the site to identify and collect possible bird and bat carcasses.	Reduce the risk of collision between birds and bats.

Offshore wind

Actions	Goals
Saint-Brieuc[14] is the first large-scale offshore wind farm in Brittany and one of the first in France in operation. During its construction, Iberdrola has applied numerous protection and restoration measures, as described in previous reports. In addition, several monitoring and research actions have been developed in order to obtain knowledge about the area (see Section 5.2). As part of a global ecological restoration project on Tomé Island, actions have been carried out to eradicate invasive species. Specifically, the American mink which is an invasive species on the island, preying on the eggs of various colonies and preventing any nesting. This is a big problem for the islet and could eventually threaten the colonies of the Seven Islands if this species spreads. Another initiative in Saint-Brieuc has been the fight against the predation of black crows on seabirds. This measure, implemented since 2012, aims to limit predation on eggs, especially by the black guillemot and the kittiwake. This compensation measure has resulted in an increase in the number of breeding pairs. All high-risk species reached an all-time high in numbers at Cape Frehel during the monitored period.	Ecologic restoration and protection of autochthonous fauna.  

14 https://ailes-marines.bzh/

Actions	Goals
During construction activities, a Marine Mammal Protection Protocol was implemented to mitigate potential impacts of underwater noise on marine mammals and fish through standard or good practice actions. This included an observer to monitor the presence of marine mammals in the mitigation zone around the construction activities and initiate necessary protective measures, for example, stopping activities in case of presence of marine mammals in the mitigation zone.	Protection of marine mammals.

In Saint-Brieuc, actions were carried out specifically aimed at the personnel of the vessels (CTV – Crew Transfer Vessels) of the wind farm. Among these, CTV staff were briefed before the start of the work. The captains and crew members were trained in species recognition. If a flock is detected, the captain of the vessel is obliged to transmit the position of the Balearic shearwaters (*Puffinus mauretanicus*) found (so that the information can be circulated to all maritime navigation personnel of Ailes Marines and to avoid them to limit its inconvenience.

Reducing disturbance of the Balearic shearwater.

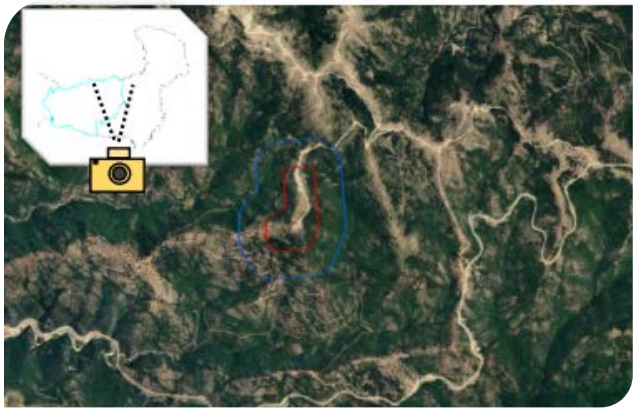
Portugal

Solar photovoltaic

Actions	Goals
During the construction phase of the **Algeruz II** photovoltaic plant (Setúbal), several actions were carried out to protect the fauna and terrestrial and aquatic birds: the duration of the work was carried out by minimising the disturbance to the species and marking the heritage areas, trees or other areas to be preserved, in order to prevent them from being affected by the works.	Wildlife protection.

Greece

Onshore wind

Actions	Goals
Bird protection systems have been installed at the **Kerveros, Patriarchis and Mikronoros** wind farms. These systems include cameras and speakers to detect the approach of any bird and deter it, or even stop the wind turbines to avoid possible collisions. The video recordings are filtered and corrected by a specialist ornithologist to export the reports and obtain the identification of the species.	Surveillance and protection of poultry fauna. 

Italy

Solar photovoltaic

Actions	Goals
At the **Montalto Di Castro** photovoltaic plant (Tuscany) different measures have been taken to protect the facility's fauna. The mesh of the perimeter fences allows small fauna to pass through and there is an emergency lighting system that minimises light pollution.	Wildlife protection.

Australia

Onshore wind

Actions	Goals
In 2023, Iberdrola Australia developed a programme to reintroduce the shiny black cockatoo and the gang-gang cockatoo to an area northeast of Canberra, near Bungendore, in the vicinity of the **Capital** and **Woodlawn** wind farms. It is estimated that approximately 40% of the species' range perished in the 2019-2020 wildfires. So, the programme includes; • *Allocasuarina Littoralis* trees, a preferred food source for cockatoos. • Installation of 30 specific nest boxes to meet the needs of the target species. • Installation of a small dam, with the dual purpose of providing a water source for the target species and minimising erosion risks for newly planted trees.	Recovery of the glossy black cockatoo and the gang gang cockatoo.  
In 2022, Iberdrola Australia and representatives from green innovation group Habitech used the results of a field study conducted during 2020 to design improvements to an area of land at the arboretum to improve its attractiveness to target species. Nest boxes were installed for brown nuthatches, sheath-tailed bats and wedge-tailed eagles. A feeding area was also created for the Grey-crowned Babbler.	Installation of nest boxes and habitat improvement.

5.1.3 Flora protection and vegetation management actions

Iberdrola companies carry out **vegetation management and flora protection plans** with the aim of conserving and promoting protected flora species, reducing impacts on vegetation, controling invasive species, minimising the risk of fire and applying the best pruning and pruning practices. In total, more than 270 actions were carried out aimed at managing vegetation and protecting flora. In addition, throughout the year the Network's Business manages and maintains the vegetation on the streets of the overhead powerlines to avoid contact with drivers.

Iberdrola Spain

Iberdrola encourages photovoltaic plants to house a great diversity of flora."

Solar photovoltaic

Actions	Goals
In all photovoltaic plants, the impact on vegetation is minimised and the regeneration and diversity of herbaceous vegetation is promoted: • Earthworks are avoided, with direct driving of the posts prevailing, which avoids making foundation trenches. This means that the impact on the original vegetation is minimal. • Non-use of herbicides and vegetation management with sheep. Sheep also make it possible to fertilise the soil and disperse seeds, favouring the improvement of flora. A study carried out by the University of Castilla la Mancha[15] on several photovoltaic plants installed on degraded soils shows how the number of plant species increases in the environment of the photovoltaic plant. Correct management of sheep allows the recovery of the soil and the development of the cycle of agricultural birds, respecting areas for their nesting in the months of April, May and June.	Vegetation improvement. 
At the **Núñez de Balboa** photovoltaic plant (Badajoz), the 7-hectare flora reserve created for the protection of orchids is maintained.	Protection of endemic flora of the peninsula.

15 2021 Report on Environmental Impacts associated with the construction of photovoltaic solar plants in Castilla La Mancha. Castilla-La Mancha university.

Networks

Actions	Goals
The forest fire prevention plan has been put into practice in Iberdrola's electricity distribution areas. A Plan is carried out annually that includes different actions in existing infrastructure, such as vegetation management; renovation of high-risk facilities, inspections, and thermography to identify hot spots, design and construction of facilities in accordance with prevention criteria and awareness-raising and information actions for own personnel and contractors. During vegetation management work, the regulatory distances between drivers and vegetation are respected, carrying out selective pruning and avoiding felling in areas of high ecological value. Thus, the tree mass and the shrub layer are preserved, as far as possible. In addition, the use of radials has been prohibited in any type of work and alternative cutting tools that do not generate sparks are used to prevent accidental fires.	Forest fire protection. 
Aerial inspections: these inspections consist of an exhaustive analysis of all power lines using helicopter flights equipped with the latest technology that includes a thermal imaging camera to detect possible hot spots and a LIDAR (Laser Imaging Detection and Ranging) sensor that scans the terrain using a laser that, together with the images taken during the flight, allows obtaining precise and georeferenced information about the facilities, the terrain and the existing vegetation in the environment. This allows better management of vegetation and ultimately reduces the risk of fire.	Protection of vegetation and fire risk reduction.

Hydroelectric generation

Actions	Goals
During 2022 and 2023, several flora protection and vegetation management measures have been carried out, such as: • Construction of perimeter firewalls. • Placement of anti-weed meshes. • Cleaning of channels below dams.	Fire prevention measures. 

Actions	Goals
During the construction of the **Tâmega** Hydroelectric Power Plant, the following actions have been carried out to protect the flora and the management of the vegetation: • Rehabilitation of *Arnica montana, Drosera rotundifolia* and *Sphangum spp* peatlands. • *Armeria humilis* plantation on 6 hectares Protection and improvement of populations of *Veronica micrantha, Queroides arenaria, Sedum pruinarum, Narcissus triandrus* and *Narcissus bulbocoidum*, treating more than 10 hectares in total.	Flora protection and vegetation management.

ScottishPower

Onshore wind

Actions	Goals
In 2023, grassland management activities have been carried out at the **Beinn Tharsuinn** (Strathclyde, Scotland) and **Lynemouth** (North East, England) wind farms. Grassland management is carried out where potential benefits are identified by improving existing grassland habitat for the benefit of both birds and livestock species.	Grassland management.
Grazing management has been carried out at 32 sites to promote the recovery of habitat and vegetation damaged as a result of overgrazing, especially in sensitive peatland habitats. Grazing levels are set in response to monitoring and livestock will be excluded or reduced as necessary.	Grazing management.

Networks

Actions	Goals
A five-year management plan for invasive alien species was developed for implementation at the **Erskine** substation (Scotland) following the discovery of Japanese knotweed during pre-construction studies.	Control of invasive species.

Avangrid

Solar photovoltaic

Actions	Goals
Annual vegetation management and monitoring of noxious weeds is carried out at **Avangrid Renewables** operational solar plants.	Vegetation management.

Neoenergia

During the construction of the projects, some of the flora species that had been eliminated were relocated and several species were planted to minimise the impact and restore the present ecosystems. During the operation phase, monitoring and maintenance measures were carried out in the restored areas.

Offshore wind

Actions	Goals
Within the framework of the implementation of the Oitis wind complex (Piaui), it was necessary to remove vegetation for the implementation of structures and road openings. Within the framework of the Flora Rescue and Germplasm Rescue Programme, activities were carried out to rescue, reintroduce, and monitor the flora in the intervention areas through the translocation of vegetation in the project and adjacent areas, in order to minimise the impacts on the flora of the region during project implementation activities. Throughout the Programme, more than one million seeds were collected, processed and stored. All seeds were donated to the state environmental agency (SEMAR, Piauí), with the aim of being used in restoration projects of degraded areas in the state. In addition, more than 1,000 individuals, including bromeliads and cacti, were rescued and reintroduced.	Flora and Germplasm Rescue.  

Networks

Actions	Goals
Distribution and subtransmission line construction projects prioritise avoiding legally protected areas in the definition of the route. The route alternatives are studied from the planning and design phase, through a careful selection of the location or moment of implementation of the infrastructure elements. Below are some of the activities carried out to minimise the impact of the networks on the vegetation: • Studies and use of technological resources during the previous phase to define the most strategic layouts, which result in a smaller volume of suppressed vegetation • Drone cable launching, flyovers and engineering techniques in the selection of towers and elevation of structures. • Enhancement of towers to minimise the impact on vegetation. • Plant Germplasm Rescue Programme: collection of fruits and/or seeds, rescue and transplantation of epiphytic and terrestrial species and marking of tree species in some state of threat. • Vegetation management and pruning actions to avoid contact between trees and network structures. This process generates organic waste that is sent for reuse by partners in other sectors of the economy, such as composting, soil recovery, use in orchards and nurseries, biogas production, among others. To further strengthen the process, Neoenergia Brasilia partnered with the State Secretariat of Agriculture, Supply and Rural Development of the Federal District (SEAGRI), in order to make this rich organic material available to rural producers for free throughout the federal territory.	Minimise the impact of network structures on vegetation; Avoid incidents with trees.

Sustainable Pruning Programme at Neoenergia Elektro.

Sustainable Pruning Programme: Neoenergia Elektro has begun the implementation of the Sustainable Pruning Programme in approximately 20 municipalities in the state of São Paulo. The objective is to identify trees incompatible with electrical wiring and replace them with more suitable species. In addition, the distributor has participated in events promoted by the mayor's offices, with the aim of raising awareness among the population about the risks and necessary precautions in relation to vegetation near the electrical grid. This programme is expected to improve operational indicators, reinforce the security of the population and promote an effective readjustment of urban forestry.

Hydroelectric generation

Actions	Goals
A flora rescue programme was carried out at the **Baixo Iguaçu** hydroelectric plant (Paraná), with relocation of species to affected areas. The objective was to conserve the germplasm and, therefore, the botanical biodiversity of the affected area. In the initial monitoring activities, of the 29 relocation areas, 27 were monitored. In total, monitoring data were collected from 541 specimens, belonging to 9 families represented by 37 taxa.	Flora Rescue and Genetic Conservation.

Actions	Goals
During the execution of the project, the relocation, isolation, implantation and monitoring of epiphytes in **Permanent Preservation Areas** (PPA) was carried out. In addition, PPas were isolated and firebreaks were created to protect forest areas from fires. Also, the proliferation of macrophytes in reservoirs was controlled, eliminating them preventively so as not to harm the multiple uses of the reservoir.	Protect forest areas against fires and control the proliferation of aquatic plants in reservoirs.
The germplasm rescue programme has also been carried out at the **Teles Pires** hydroelectric plant (Pará - Mato Grosso). In addition, a nursery of native seedlings has been created for reforestation. Forest recovery and natural regeneration management actions have also been carried out.	Flora Rescue and Genetic Conservation.

Iberdrola Mexico

Solar photovoltaic

Actions	Goals
At the **Hermosillo** photovoltaic plant (Sonora), maintenance actions continue to be carried out on more than 10 hectares to maintain the flora species rescued and relocated from the plant.	Reforestation maintenance.
The maintenance of the flora rescued and relocated to the **Santiago** photovoltaic plant (San Luis de Potosí) has been carried out with the objective of protecting and mitigating impacts on the species (mainly agaves, nopales and cacti) in a total of 53 hectares.	Rescue and relocation of wild flora.  

Thermal generation

Actions	Goals
The rescue, relocation and conservation programme of flora species that were affected by the depalming activities, as well as reduction and compensation of the effects on wild flora derived from the construction of the project, has been carried out at the **Tamazunchale** combined cycle power plant (San Luis de Potosí). During the operation, monitoring of activities continues.	Rescue and relocation of flora species affected by the construction of the facility.
At the **La Laguna** plant (Durango) an action has been carried out to control vegetation and the preparation of a Silvopastoral Management Plan for the protection of the Fernández Canyon. See details in Section 5.3.	Vegetation management.

Iberdrola Energy International

Portugal

Solar photovoltaic

Actions	Goals
In **Argeluz II** (Setúbal), several conservation actions have been developed during the construction of the photovoltaic plant: • The tree vegetation cover has been preserved, reducing the intervention areas to the minimum for the implementation of the plant, avoiding the elimination of natural vegetation in areas not necessary for construction and protecting the tree patches of protected species. • The reuse of plant biomass and other waste resulting from deforestation has been encouraged, and when it has not been possible to reuse them, they have been removed and sent appropriately to the final destination. • Deforestation operations have been carried out by raking, mixing the cut weeds into the top layer of soil. This layer of soil must be stored in snappers and is suitable to subsequently cover the recovery areas of cable trenches, or other intervened areas that need recovery, since it contains a volume of seeds that will contribute to the natural regeneration of the intervened surfaces. • Once the construction work was completed, requalification work was carried out on the soil in the areas affected by the construction activities, in order to create favourable conditions for the regeneration of the pre-existing herbaceous and shrubby vegetation cover.	Protection of soil, flora and vegetation management. 

Italy

Solar photovoltaic

Actions	Goals
Maintenance work has been carried out on the cork oaks (*Quercus suber*) present in the eastern part of the **Montalto Di Castro** photovoltaic plant (Tuscany).	Cork oak maintenance.

5.1.4 Actions to prevent indirect impacts to the soil and water environment

In the construction of all projects, as well as in the processes derived from their operation, there are physicochemical parameters of the water environment and the soil that are evaluated and management. Actions are carried out aimed at **maintaining a quality habitat** capable of hosting resilient ecosystems.

Iberdrola Spain

Solar photovoltaic

Actions	Goals
Inside the photovoltaic plants, livestock is used to control the vegetation, avoiding in any case pesticides that would contaminate the soil. If there is no possibility of using livestock, the vegetation is controlled mechanically.	Vegetation control avoiding negative impacts on the soil. 

Networks

Actions	Goals
For several years now, the company has implemented a plan for the construction or repair of oil leak containment receivers in substations and pits/bunds in transformation centres to contain the oil in the event of an accidental spill and prevent contamination of the edaphic environment and groundwater. Currently all new substations are built or installed with receivers and transformation centres with pits/bunds for oil collection. Annually, awareness-raising and information actions are carried out to prevent spills and drills at the different facilities.	Soil/groundwater contamination prevention.

Hydroelectric generation

Actions	Goals
Actions have been carried out to prevent contamination: such as the construction and waterproofing of tanks, replacement with dry transformers, decontamination of oils and equipment with polychlorinated biphenyls, reinforcement of septic tanks, oil separators, replacement of lubricating oils with less polluting substances, maintenance and improvements in leak collection and containment systems, as well as acquisition of spill kits or absorbent elements and equipment for retention and collection of liquids in water to prevent impacts to the soil and the water environment.	Prevention of pollution and its possible effects on flora and fauna. 

Thermal generation

Actions	Goals
During the period of 2022-2023, maintenance and modifications to the equipment have been carried out in the combined cycles to avoid possible leaks and spills of oil or diesel.	Avoid oil or diesel leaks.
At the **Santurce** plant (Vizcaya) an adaptation of the plant's drainage system has been carried out, reducing by 50% the effluents produced in the sampling rack of the closed cooling system. In addition, the by-pass from the neutralisation pond to the effluent settler has been eliminated to achieve greater control of the quality of the water that goes to the control manhole. An analysis of the pits has also been carried out, rerouting drainage and eliminating unnecessary ones, as well as adaptation after the sale of part of the site occupied by the fuel storage tanks and earth filter.	Adequacy of the drainage system. 

Nuclear generation

Actions	Goals
At the **Cofrentes** nuclear power plant (Valencia), a hydrobiological programme is carried out to monitor the aquatic systems in the surrounding area, in order to establish and control their impact on the environmental and biological conditions of the rivers and the reservoir.	Monitoring of aquatic systems.
At the **Almaraz** nuclear power plant (Cáceres) ichthyological and limnological surveillance programmes are carried out, including ecological monitoring of the Arrocampo and Torrejón reservoirs.	Ichthyological and limnological surveillance programs.
At the **Trillo** plant (Guadalajara), a bypass has been fitted to the diesel solenoid valve of the diesel generator, with the aim of reducing the risk of a potential diesel spill due to a leak.	Avoid diesel spills.

ScottishPower

Networks

Actions	Goals
In collaboration with Shropshire Wildlife Trust and Canal and River Trust ScottishPower has carried out a series of plans to improve natural habitats and corridors and promote populations of invertebrates and riverine mammals. These include creating otter dams, restoring ponds, creating wetlands and wildflower meadows, planting and restoring hedgerows, improving river corridor habitat and reshaping banks.	Restoration of hedgerows, ponds, wildflower meadows, wetlands.

Avangrid

Cogeneration

Actions	Goals
At the **Klamath** (Oregon) cogeneration facility, a cooling process is performed that results in the evaporation of 2/3 of the water that would normally be discharged into the Klamath River. Secondary effluent from the Klamath Falls Municipal Wastewater Facility is used to cool the plant. This significantly reduces the impact of increasing aquatic habitat temperatures for fish in the Klamath River.	Protection of fish by reducing the heat load of the river.

Neoenergia

General

Actions	Goals
The **Neoenergia Group** has carried out a series of actions, in all its businesses, with the aim of avoiding indirect impacts on biodiversity, especially avoiding contamination of the soil, surface and underground water resources, and combating the formation of erosion and sedimentation of rivers, streams and urban drainage systems. These actions include: • Creation of containment areas and oil-water separators in substations and other areas with potential risk of hazardous product spills. • Waterproofing of facilities that house equipment that can discharge contaminants. • Programmes and actions for the recovery of the vegetation cover of the facilities, acting preventively to avoid the formation of erosive processes and sedimentation of the channel and drainage system. • Monitoring and recovery of embankments around reservoirs. • Solid waste management programmes that guarantee the proper disposal of the waste generated. • Acquisition of containment bars, absorbent blankets and ropes, skimmers for collecting oil from water, lined tanks and motor pumps.	Avoid contamination of soil and water resources. 

Iberdrola Mexico

Solar photovoltaic and terrestrial wind

Actions	Goals
Waste management plans have been implemented with the aim of minimising the risks of contamination of soil, water and groundwater, through specific actions that are developed in the different stages of the projects.	Waste and pollution management.

Thermal generation

Actions	Goals
At the **Tamazunchale** Combined Cycle Plant (San Luis de Potosí) a series of programmes have been carried out for waste management, with the aim of minimising the risks of contamination of the soil, water and groundwater table. A preventive maintenance programme for vehicles and machinery has also been implemented with the aim of reducing waste and pollution.	Waste and pollution management.
Also in Tamazunchale, a programme has been implemented that aims to standardise the methodology to monitor the quality of wastewater discharged into the Moctezuma River.	Wastewater monitoring programs.

Iberdrola Energy International

Portugal

Solar photovoltaic

Actions	Goals
Protocols have been defined at the **Algeruz II** photovoltaic plant (Setúbal) to avoid oil contamination. Oil handling operations are carried out in an area specifically designed for this purpose, and prepared (waterproofed and confined) to retain any spill, and the handling of oils and fuels is prohibited near the headwaters of non-permanent watercourses with torrential regime, respecting the 10 m protection strip of the water domain, in order to avoid accidental contamination. The site is equipped with appropriate equipment to contain, temporarily store, and eliminate oil and/or fuel spills.	Oil contamination.
Interventions have been minimised in the 10 m protection strips around secondary torrential water courses. In these areas, no changes are made to the terrain, with the aim of interfering as little as possible with the water regime and the stability of the banks and not interrupting the natural flow of the watercourse.	Maintain the natural flow of the watercourse.

Italy

Solar photovoltaic

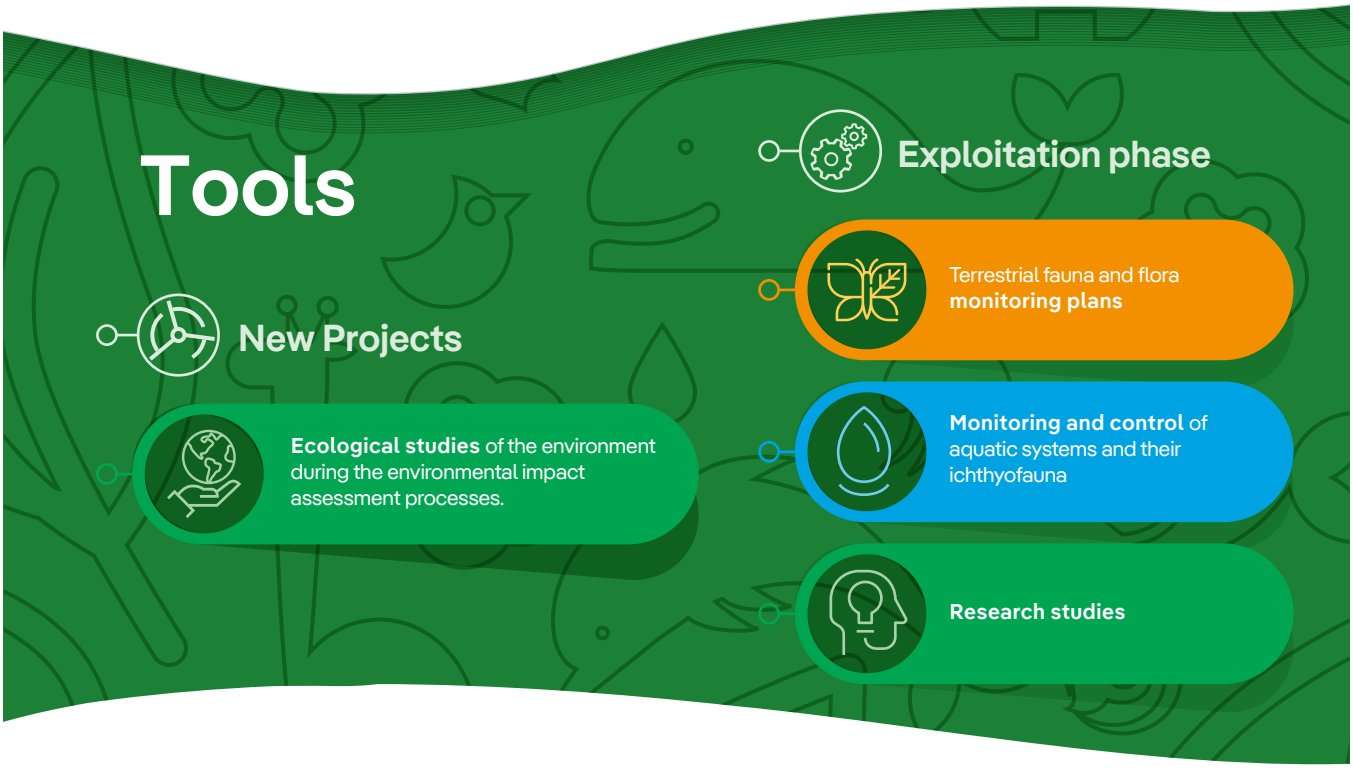
Actions	Goals
The management of waste produced during the project at the **Montalto di Castro** photovoltaic plant (Tuscany) is carried out through adequate on-site storage and final disposal. For example, most excavated soil and rock must be reused on site and any surplus must be sent to an authorised recycling plant.	Waste management.

5.2 Evaluation, knowledge and research

Iberdrola considers it essential to have quality information about the surroundings of its facilities to establish an appropriate line of work and thus be able to ensure continuous improvement in actions associated with biodiversity. It achieves this by collecting information and addressing existing knowledge gaps in relation to the species and their interaction with the facilities. In this way, direct, indirect, or cumulative impacts on ecological values can be identified.

Continuously identify, quantify and assess the impacts and dependencies of the Group's activities on natural capital with a focus on biodiversity throughout the life cycle of the facilities by promoting research and improving knowledge of the ecosystems of the environments of the territories where it operates."

During the environmental impact assessment process prior to project approval, numerous studies are carried out in the surroundings of the facilities, among others, and depending on the project, these may include bird watching studies lasting between 12 and 24 months, studies of endemic species or habitat characterisation studies. During the operation of the facilities, monitoring programmes are carried out on those species or habitats identified in the impact assessment to identify possible impacts and implement measures to reduce them.



In the search to expand internal knowledge, collaboration agreements are also established with prestigious universities and specialised organisations, which help understand the behaviour of species and ecosystems and thus have a solid base to, if necessary, implement the most appropriate corrective measures.

In this period, Iberdrola has carried out more than **500 monitoring programmes** and nearly **400 studies** and research projects.

5.2.1 Iberdrola Group

Through the international start-up programme "PERSEO", the **development of future technologies in the electricity sector is promoted with a focus on sustainability**. Every year, an average of ten challenges are launched with the aim of identifying proposals with solutions that improve operations and minimise environmental impact. This tool seeks to support innovation and improve the sustainability of the energy sector. Selected projects are provided with the necessary technical and financial support to prove the success of these pilot projects. In addition, Iberdrola offers companies the opportunity to expand the scope of the solution through commercial agreements or direct investments through PERSEO in the company.

In the years 2022 and 2023, the following **challenges** have been launched **to improve biodiversity**:

Start-up challenge: Oxygenation of turbined water flows

The objective of this challenge is to find new ideas that allow increasing the concentration of oxygen in the water flow that passes through the turbines of the hydraulic dams, so that the biodiversity of the area is protected, and all the requirements of the hydrographic basins are met.

Start-up challenge: Solutions for the responsible development of offshore wind projects

Vineyard Wind, Massachusetts Clean Energy Center and GreenTown Labs, through the Go Energize 2023 programme, have launched a new challenge that seeks to decarbonise the United States energy sector through the responsible development of the national offshore wind industry. The challenge seeks technologies for the following environmental solutions:

- Bird and bat deterrent systems at turbine level.
- Vulnerability and collision detection with bird identification systems.
- Low-cost buoys for collecting oceanographic and deep-sea data.
- Promotion of biodiversity close to turbines and designs inspired by nature.
- Drones for underwater inspection, mapping, measurement, and registration of biodiversity.

Start-up challenge: Offshore autonomous inspections

This challenge seeks to reduce costs, time, and risks for employees by automating different maintenance inspection processes using unmanned aerial vehicles (drones), including monitoring of fauna and flora carried out in offshore wind farms.

Start-up challenge: Introduction of inclusive solutions with nature in the design of offshore wind farms

In 2022, PERSEO selected the solution presented by the Norwegian company Spoor, specialised in monitoring the effect of wind farms on local fauna through AI software, to integrate design solutions that include nature in the infrastructure of wind farms which helps achieve a net positive impact on biodiversity.

Spoor has started working with the technical team at the Baltic Eagle offshore wind farm, where 5 cameras have been installed in the electrical substation. These cameras are connected to one of its control rooms with the purpose of documenting how seabirds interact with offshore wind turbines and gaining knowledge about their flight patterns and behaviour, as well as detecting and preventing possible collisions.

Start-up challenge: Fire detection in protected areas

The technology company Minsait has been selected as the winner of this challenge, which sought solutions that allow early detection of fires in the proximity of power lines, with the aim of reducing the environmental impact of the fire as well as the impact on the continuity of supply to the customers.

The start-up has developed a solution that will detect the presence of fire in the vicinity of power lines and notify Iberdrola's distribution operation centre. This, in turn, will allow the authorities and fire departments to be informed early, as well as to initiate preventive actions to minimise the impact on customers and disconnect the lines in the area to avoid further damage. In this way, we also seek to support environmental organisations with critical information that allows them to identify the origin of the fire.

5.2.2 Iberdrola Spain

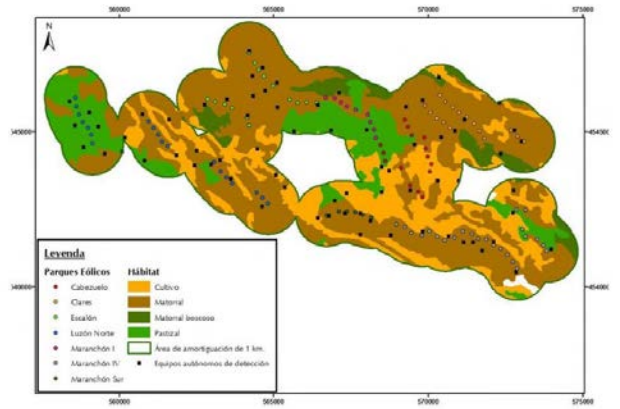
In this period, Iberdrola Spain has carried out more than 160 knowledge and research actions."

Solar photovoltaic

Actions	Goals
In the period of 2022-2023, comparative studies have been carried out on the fauna that inhabits three Iberdrola photovoltaic plants with that of their surrounding environments. The selected plants are: **Ceclavín** (Cáceres), **Núñez de Balboa** (Badajoz) and **Barcience** (Bargas). The studies have been carried out in two periods; spring and autumn, to coincide with the periods of reproduction and migratory steps. A total of eight visits have been made per facility over the two years, two visits in spring and two in fall. Along with the general reconnaissance and transects carried out during the visits, photo-trapping cameras have been installed at selected points of the facility.	Study of vertebrate fauna in photovoltaic plants. 
At the **Núñez de Balboa** photovoltaic plant, a detailed study of the steppe bird populations has also been carried out, including the construction phase and the seven subsequent years. The objective is to develop an ambitious conservation plan for the most endangered species during the rest of the exploitation phase (38 years). To understand populations, marking individuals is common. In **Ceclavín** (Extremadura) two black storks and two Egyptian vultures have been tagged.	Protection of birds and bats.

Onshore wind

Actions	Goals
In the wind farms in operation, **environmental monitoring of birds and bats** is carried out by an external consulting company. The data collected is used to analyse collisions, species censuses and assist decision making with the aim of preserving species.	Protection of birds and bats.



A study of the golden eagle has been carried out in the surroundings of the **Maranchón** Wind Farm Complex (Guadalajara), whose main objective is to increase the level of knowledge about the species in the area of influence of the wind farms. Photo-trapping cameras have been installed on breeding platforms to enable the study of their diet and the ringing of the chicks. In addition, two specimens of golden eagle have been marked with GPS to obtain data such as flight height, speed and direction that help to better understand these birds of prey, their behaviour and the movements they make in their territory throughout the year. The interaction of the species with the wind farms has also been analysed and the use of bat space in the complex has been monitored.	Golden eagle study.

Networks

Actions	Goals
A global study has been carried out, in collaboration with the Higher Council for Scientific Research, to reduce the impacts of the i-DE electrical distribution network on birdlife, especially focused on reducing mortality due to electrocution. The study allows Iberdrola to prioritise adaptation of the highest risk supports and thus be efficient with resources and generate less impact on birdlife.	Study "Coexistence of birdlife and power lines" carried out by the CSIC.

Hydroelectric generation

Actions	Goals
Hydraulic studies have been carried out on the fish ladders in the **Labastida** and **Cuevas** dams. Studies have also been carried out on the functionality of the fish ladders in the **Panzares** and **Anguiano** dams and in the fish ramp of the **Buicio** dam.	Evaluate the functionality of fish ladders. 

Thermal generation

Actions	Goals
In the combined cycle of **Aceca** (Toledo), an ecological study of the Tagus River has been carried out from a physicochemical, biological and hydromorphological point of view, composed of two annual river water sampling campaigns, a spring campaign and another in the autumn to configure the annual study.	Ecological study of the Tagus River.

Actions	Goals
At the **Santurce** Combined Cycle plant and in relation to the control of the impact on the aquatic environment around the plant, a new study of the dispersion of the thermal discharge in the receiving environment has been carried out to expand the knowledge of this impact and calculate the thermal jump in the conditions with various operating modes and in various load situations.	Improved knowledge of thermal discharge for conservation of the aquatic ecosystem.

5.2.3 ScottishPower

Onshore wind

Actions	Goals
ScottishPower Renewables has participated in the Wellcome Sanger Institute's innovative Bioscan project. The project consists of analysing the DNA of insects, with the aim of identifying the species present and, over time, monitoring how the diversity and abundance of the species is changing. The collection of insect DNA at the Whitelee wind farm contributes to biomonitoring in the UK and provides highly relevant information for peatland restoration methods.	Monitoring of invertebrates in the Bioscan project.

Malaise traps for capturing insects

In 2023, ScottishPower Renewables carried out peatland habitat monitoring at ten sites, with activities including immersion wells and vegetation measurement. These monitoring's serve to provide indicators of habitat quality, determine whether future monitoring will be carried out and whether, in areas where previous restoration work had been carried out, treatments have been successful or if more restoration work is needed. Other actions developed within the framework of peatlands restoration are described in Section 5.1.	Peatland habitat monitoring.

Actions	Goals
SPR is carrying out a wide range of bird monitoring activities at its wind farms. These include activity studies of specific species and general studies of typical upland birds. In 2022-2023, these activities were carried out in 16 sites.	Bird monitoring.
Livestock grazing levels have been monitored to assess whether livestock are having an impact on ecosystems and ensure farmers are meeting management levels set by ScottishPower.	Grazing monitoring.

Offshore wind

ScottishPower Offshore Renewables is a founding member of the Offshore Wind Strategic Monitoring and Research Forum (OWSMRF) alongside other industry representatives funding key priority research, aiming to better understand the impact of offshore wind development on large scale in seabirds.

The pilot phase focused on **understanding the effects of offshore wind turbines on seabirds**. Following the success of the pilot phase, the continuation of the OWSMRF identified other high priority species and knowledge gaps with the ambition to initiate further research. In addition, all offshore projects are monitored, from pre-construction studies to operational monitoring plans.

Actions	Goals
ScottishPower Renewables has monitored and carried out **studies of various species** including gannets, gulls, black-backed gulls, guillemots, razorbills, red-throated diver and others.	Monitoring of breeding birds, wintering birds and flight activity in wind farms.
Research has been carried out at the **East Anglia ONE** offshore wind farm to better understand the impacts of offshore wind farms on the porpoise population. Underwater recorders have been used to collect noise data before, during and after foundation installations with the aim of informing and discussing the true impacts of piling installation on porpoise. This study continues with an analysis of the impact of munitions detonations on the presence of harbour porpoises. This work is also being carried out during the construction of **East Anglia THREE**.	Analysis of underwater noise and its impact on porpoises.

Actions	Goals
In **East Anglia ONE** a study has been carried out on the possible nesting sites of the marsh harrier (*Circus aeruginosus*). Research prior to, during and after construction showed that marsh harriers continue to successfully nest and raise young near the project during construction, thanks to mitigation measures implemented by the construction team, such as exclusion zones and continuous ornithological review.	Research for the protection of the marsh harrier. 
At the **West of Duddon Sands** offshore wind farm in the Eastern Irish Sea, GPS swan monitoring has been carried out to determine the flight lines of a representative sample of whooper swans on their migration between north-west England and Iceland, across the Irish Sea, in order to better understand its interaction with offshore wind farms. In the first year of the study (2020), tracking devices were installed on ten adult female swans to follow their spring migration. Ten more swans were tagged in spring 2022 and the study was expanded to cover the spring migration in 2023. The final report of the study is expected in 2024.	GPS monitoring of whooper swan migration. 

5.2.4 Avangrid

Avangrid Renewables has a **wildlife surveillance and documentation system** that includes long-term monitoring of its operational assets by staff. Operations staff report internally on wildlife-related incidents detected during standardised inspections and those incidents inherent to their daily work. The data is reviewed internally and serves as a basis for risk management.

In the period 2022-2023, many **innovative actions** have been carried out, especially in offshore wind sites. Below is a non-exhaustive list of examples:

Solar photovoltaic and terrestrial wind

Avangrid Renewables Corporate Wildlife Protection Plan (CWP) is implemented using a phased approach based on the U.S. Fish and Wildlife Service Onshore Wind Energy Guidelines (WEG).

The WEG approach involves **1)** preliminary site assessment, **2)** site characterisation, **3)** field studies to document fauna and habitat and predict impacts, **4)** post-construction studies to assess the risk of mortality and effects on species of concern and habitat, and **5)** other post-construction studies and investigations (e.g., species-specific studies). Throughout this process we work in coordination with the competent organisations.

Additionally, Avangrid Renewables implements a **Wildlife Protection Programme** that includes long-term monitoring, research studies and risk management. Some actions have already been mentioned in Section 5.1.3. Other examples are:

Actions	Goals
The **Montague** Wind Farm (Oregon) has funded as a mitigation measure, the study "The role of rehabilitated birds of prey in compensating for anthropogenic mortality: a demographic analysis of post-rehabilitated birds in North America."	Study on birds of prey.
At the **Deerfield** wind farm (Vermont), the Vermont Agency of Natural Resources has prepared a report on the study of possible impacts and displacements on the black bear (*Ursus americanus*).	Black bear study. 
Post-construction monitoring has been conducted at the **Groton, Hoosac, Deerfield** and **Roaring Brook** wind farms. These have included annual monitoring to document that stormwater structures are in their correct location and in good condition, to prevent erosion. Additionally, monitoring of impacts on agricultural lands within the project area has been conducted at Roaring Brook.	Post-construction monitoring.

Offshore wind

Actions	Goals
Vineyard Wind 1 has created the $3 million 'Wind and Whales' fund to develop and demonstrate innovative methods and technologies to improve the protection of marine mammals as the Massachusetts and United States offshore wind industry grows. This fund provides opportunities to analyse new methods and technologies in the project or to establish infrastructure, facilities or programmes that improve regional monitoring of marine mammals or serve as documentation for marine mammal research.	Wind and Whales' background. 
Additionally, pre- and post-construction studies related to fishing activity, disturbance and recovery of benthic and bird habitat have been conducted at **Vineyard Wind 1** to support ecosystem conservation, restoration and regeneration. These studies aim to measure the effect of the project on certain resources. During the 2022-2023 period, pre-monitoring and studies were completed and, when the construction of the project is completed, post-construction monitoring will begin. All offshore wind projects will follow this approach for pre- and post-construction monitoring.	Pre- and post-construction studies.
Also, at **Vineyard Wind 1** the extent of the seagrass beds surrounding Cape Poge has been mapped before and after the installation of the export cable. The area is being mapped through a variety of methods, including visual observation, sonograms, underwater video and still images, as well as the use of divers. Data collected through these methods will allow any changes in the distribution and density of seagrass beds to be assessed before and after cable installation.	Study of seagrasses.
At **New England Wind**, a study of sea snails has been conducted in collaboration with the University of Massachusetts Marinse School of Science and Technology. The objective of this project is to determine the age of maturity and fecundity of canalised snails (*Busycotypus canaliculatus*). To do this, samples have been collected over a period of two years. The study has been extended until 2024 to continue carrying out dissections and introducing additional baits to the snail traps to record seafloor temperatures.	Study of sea snails. 

Actions	Goals
An extensive geotechnical investigation has also been completed at **New England Wind**. The research has involved physical sampling of materials deep in the seabed, in the shallow subsoil and beyond the boundaries of the foundation. With the results of these samplings, the design of foundations and cables was carried out, among other things.	Comprehensive geotechnical investigation.

5.2.5 Neoenergia

The Neoenergia Group, during the implementation and operation of its projects, develops environmental studies and programmes that allow for a deeper understanding of the composition of the fauna and flora that surrounds its facilities. This information and knowledge serve as a basis for decision-making by the Neoenergia group companies, in order to use their assets in the most efficient way and with the least impact on biodiversity and, whenever possible, promote the improvement of the environmental quality of the areas in which we carry out our activities.

Solar photovoltaic and terrestrial wind

Actions	Goals
In 2023, the preparation of a diagnosis on the impact and dependency relationships of the **Oitis** Wind Complex and the **Luzia** Photovoltaic Plant with the ecosystems and biodiversity began.	Evaluation of environmental management with a focus on biodiversity.

Actions	Goals
Fauna monitoring programmes have been executed, through quarterly campaigns to study the occurrence, activity and interaction of fauna during the operation phase of the wind farms and through monthly campaigns for the standardised search of carcases resulting from collisions and barotrauma with wind turbines. These monitoring allow us to keep a record of the threatened species found in the Neoenergia group's wind farms. For example, in 2023 specimens of Penélope jacucaca, classified as vulnerable, were recorded in the **Lagoa**, **Canoa**, **Chafariz** and **Ventos do Arapuá** wind farms.	Wildlife monitoring.   

Networks

Actions	Goals
Monitoring has been carried out in the areas of influence of the transmission lines to carry out studies on their impact on fauna and take the necessary measures to reduce them.	Wildlife rescue and monitoring.
A record has been made of incidents in the electrical system due to animal causes, seeking to reduce the number of power outages and the risks of electrocution of species. Also, pilot projects have been carried out in areas with the highest occurrence of accidents, with monitoring of key performance indicators that support the evaluation of stocks and decision-making on possible corrective actions.	Study of affected populations.
As part of the BirdTeam project, beacons were installed and monitoring continued to mitigate the impacts of the distribution network on migratory birds of the species Trinta-réis-rosa (*Sterna dougalli*) and Trinta-réis-boreal (*Sterna hirundo*).	Study of the impact of nets on migratory birds. 

Actions	Goals
A project has been carried out for the coexistence of the Lear's macaw. The objective is to develop sustainable and eco-efficient solutions for the coexistence of the Lear's Macaw (*Anodorhynchus leari*) with the electrical distribution network. In addition, a programme has been created for the conservation of this endemic species of the Bahian Caatinga, which is in danger of extinction.	Lear's macaw protection. 

Hydroelectric generation

Hydroelectric generation companies develop a series of monitoring programmes that provide data of utmost importance for the development of Iberdrola's activities. Drones contribute to this work by providing high-resolution images for area monitoring. Below, we highlight some of the programmes carried out:

Actions	Goals
Fauna monitoring programmes are carried out, which aim to obtain information that allows evaluating changes in the structure, distribution, abundance, biology, and ecology of the species that occupy the environment of the facilities, thus providing fundamental information to adopt the best strategies to minimise the impact and promote the improvement of environmental quality in the regions where the Neoenergia group carries out its activity. In 2022 and 2023, studies and monitoring of ichthyofauna, avifauna, herpetofauna, bioindicator entomofauna, mammals and bats have been carried out, as well as research and genetic conservation programmes. In particular, at the **Baixo Iguaçu** Hydroelectric Power Plant (Paraná), monitoring was carried out using telemetry technology with the aim of monitoring the migratory habits of the surubim-do-Iguaçu (*Steindachneridion melanodermatum*), a species endemic to the locality considered threatened with extinction on the list. regional in Brazil.	Wildlife research and monitoring programmes.   

Actions	Goals
Flora monitoring programmes, in general, aim to verify and control the forest succession of the remnants of vegetation cover surrounding the areas altered by the implantation and operation of our plants, and to define the best strategies for the conservation of flora species. This monitoring, in addition to providing extensive cataloguing of great botanical use, serves to identify Permanent Preservation Areas (PPAs). On the other hand, monitoring of the relocated flora has also been carried out to verify its adaptation to the new environment.	Flora monitoring and research programmes.  *Catasetum telespirense*
The objectives of the limnology and water quality monitoring programmes are to monitor changes derived from the implementation and operation of our plants in limnological and water quality aspects, monitor natural seasonal variations in the main physicochemical and biological components of water and characterise and monitor the evolution of water quality in the reservoir and the rivers that feed them.	Limnology and water quality monitoring programmes.
The Macrophyte Monitoring and Control Programme is an integral part of the Basic Environmental Plan of the **Itapebi** hydroelectric plant. The programme aims to monitor the growth of macrophytes in the plant's reservoir. In addition to controlling and removing macrophytes preventively to prevent the banks from compromising the multiple uses of the reservoir, macrophytes have been deposited on the banks of the reservoir to promote the recovery of the surrounding areas by increasing the amount of organic matter and favouring regeneration dynamics resulting in benefiting the local biodiversity.	Macrophyte Monitoring and Control Programme.

5.2.6 Iberdrola Mexico

Solar photovoltaic and terrestrial wind

Actions	Goals

In **Santiago** (Guanajuato) a programme has been carried out with the following actions:

- Analysis of richness and abundance of the present ornithofauna.
- Quantification of diurnal interactions of birds with wind turbines through the focal method.
- Identification of wind turbines that represent the greatest risk to birds.
- Studies to identify if resident birds use the site for reproduction and/or there is migratory activity.
- Determination of the richness, abundance and occurrence of the chiropterofauna present and the species of insectivorous bats that feed in the wind turbine service areas.
- Estimation of bat mortality through the carcass search method.
- Determination of the species of birds and bats that collide with wind turbines.

Fauna study in Santiago wind farm.

Actions

In 2023, a study was carried out at the **La Ventosa** wind farm (Oaxaca), located on the Isthmus of Tehuantepec. This area is a migratory passage for many species and it is estimated that it is home to approximately 350 species of birds, both resident and migratory. The main objectives of the monitoring carried out are:

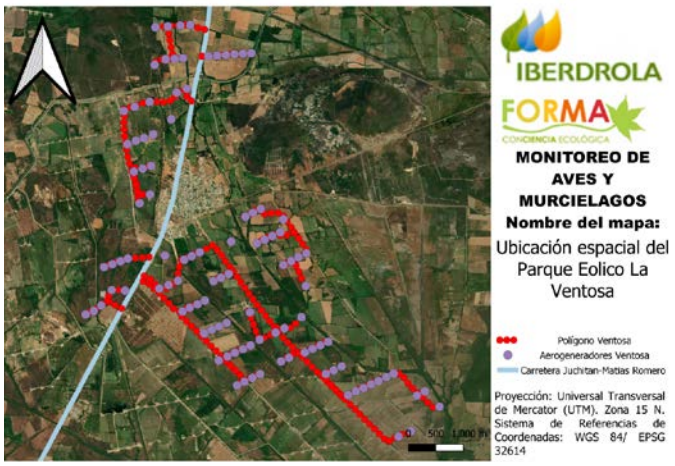
- Determine the diversity, distribution and abundance of resident and migratory birds and bats throughout the study cycle
- Identify the flight behaviour of the species (flight height, flight directions, etc.) and propose actions and/or measures to be carried out to minimise the impacts on the populations of said species.
- Identify nesting areas and activities such as perching and feeding within the project area
- Estimate the risk of collisions in wind turbines and other infrastructure required for the operation of the project (transmission lines, electrical substations, etc.)

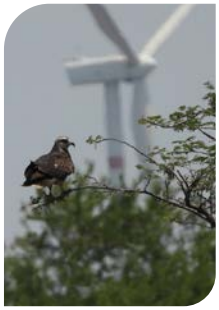
In the monitoring carried out by Iberdrola México in 2023, 114 species of birds were recorded. These species include different types of hawks, sandpipers, swallows, flycatchers, cypresses, herons, hummingbirds, and kestrels, among many others. Of these 114 species, one is in the threatened category; Aramus guarauna (carrao), an endangered species; Peucaea sumichrasti (Isthmian zacatonero) and 10 subject to special protection, among them; the *Geranoaetus albicaudatus* (white-tailed hawk) and the *Rostrhamus sociabilis* (snail hawk).

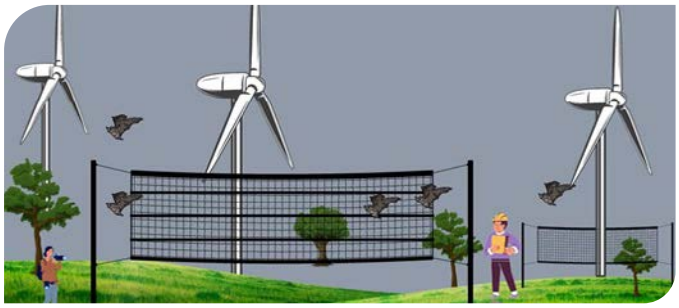
During the monitoring of bats in the different seasons, 72 individuals of six different species were observed; *Artibeus jamaicensis* (fruit bat) and *Dermanura azteca* (Aztec fruit bat). None of the six species are under any at-risk category.

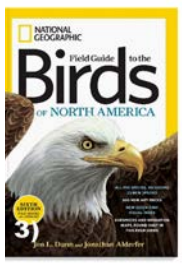
Goals

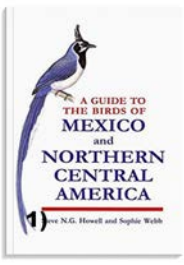
Bird study in La Ventosa wind farm.

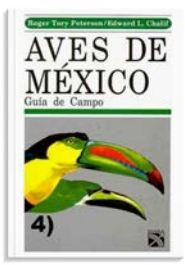












Actions	Goals
Noise monitoring programmes have been carried out at the Santiago photovoltaic plant and at the **Santiago, Bee Ni Stipa, Dos Arbolitos, Pier B** and **Pier II** wind farms.	Noise analysis.

Thermal generation

Actions	Goals
Monitoring and monitoring of parameters has been carried out in the **Estero Garrapatas** ecosystem, located in a wetland system in the southern strip of Tamaulipas, in actions related to the **Altamira III** and **IV** Combined Cycle Plant.	Monitoring and realisation of parameters of the Estuary Garrapatas.
At the **Tamazunchale** Combined Cycle plant, a series of programmes have been carried out for waste management and noise and air quality monitoring, with the aim of minimising the risks of air pollution.	Noise and air quality analysis.

5.2.7 Iberdrola Energy International

Germany

Offshore wind

Actions	Goals
At **Baltic Eagle**, a study of harbour porpoise habitat use was carried out throughout the construction phase to understand the influence of the works on marine noise. The study was carried out using acoustic click detectors, known as C-POD. Four C-PODs deployed at two monitoring stations close to the offshore wind farm.	Study of harbor porpoise habitat use during construction.

Actions	Goals
In the **Westlich Adlergrund** Cluster area, which includes the **Baltic Eagle** wind farm, aerial surveys were carried out to determine the abundance and distribution of seabirds and marine mammals in the area in order to assess the possible impacts of the construction works. Ten aerial surveys and twelve from ships were carried out for each year of construction.	Study of the abundance and distribution of birds and marine mammals during construction.
Every year radar bird watching days are held in the **Baltic Eagle** Park. Sampling should be carried out during the main migratory period of birds (spring and autumn) to evaluate the impacts on bird movements due to construction (evasive behaviour, attraction, etc.).	Study of the movements of migratory birds during construction. 

France

Offshore wind

Actions	Goals
In **Saint-Brieuc**, a study has been carried out on the reduction of photoattraction in construction. The impact study showed that some species of birds in flight were more sensitive to light than others. In the absence of mitigation measures, the potential effects of light attraction were rated as moderate for petrels and shearwaters and low to negligible for other bird species, although little information is available on their migratory behaviour. This measure aims to reduce the impact of the lights of ships in the construction phase. The effects of light attraction can and should be mitigated: • Turning off any unnecessary light sources. • Minimising light intensity. • Directing light sources downward if possible.	Reduction of photoattraction and conservation of fauna.

Actions	Goals
In addition, scientific campaigns have been carried out to monitor fishing activities for benthic and demersal species (scallops, whelk, crab, bivalve...) to evaluate the impact of the construction and exploitation of the wind farm.	Monitoring of fishing activities.

Greece

Onshore wind

Actions	Goals
Periodic monitoring of fauna and birds is carried out in all areas of the wind farms to record any injured or dead species. In the event of an incident, the animal is reported and removed so that birds of prey are not attracted to feed near the wind turbines.	Monitoring and notification of fauna/avifauna.

Italy

Solar photovoltaic

Actions	Goals
At the photovoltaic plant in **Montalto di Castro** (Tuscany), in winter and spring, annual monitoring of nesting and wintering birds is carried out. These monitoring began the season before construction to establish a baseline of data. In addition, carrying out monitoring to compare the impact of the habitat and associated species due to the photovoltaic plant.	Bird monitoring.

Cyprus

Onshore wind

Actions	Goals
Monitoring and reports of fauna and bird mortality are carried out at the **Agia Anna** wind farm. To this end, periodic searches are carried out in the site to record any possible species of injured or dead fauna and report it. Reports are submitted to the Cyprus Department of Environment twice a year.	Wildlife monitoring and reporting of avian mortality. 

Poland and Romania

Onshore wind

Actions	Goals
In Poland, at the **Korytnica 2**, **Podlasek** and **Wolka Dobrynska** wind farms and in Romania at the **Mihai Viteazu** wind farm, monitoring and reporting of fauna and bird activity have been carried out. To this end, periodic searches are carried out in the sites to record any possible injured or dead fauna species and report it and evaluate the activity in the surroundings.	Wildlife monitoring. 

5.3 Collaboration with interest groups to improve biodiversity

Collaborate with interest groups, considering their needs and expectations regarding biodiversity and participating in projects to improve biodiversity, protection and respect for animals."

Iberdrola's commitment to biodiversity extends to important actions such as supporting programmes for the conservation of threatened species and the restoration of protected habitats, and collaboration and participation as a member of organisations sensitive to the environment and nature. Through the different businesses of the Group and the Iberdrola Foundations in the different countries in which it operates, various projects are sponsored that are developed together with the collaboration of different organisations (NGOs, associations, etc.).

5.3.1 Iberdrola Group

Alliance with BirdLife International


Iberdrola y BirdLife organizan un foro sobre renovables y biodiversidad en la COP28

En una ponencia de "alto nivel" se han mostrado "experiencias exitosas" sobre el impacto positivo en la biodiversidad de una transición renovable acelerada

Iberdrola and Birdlife International have signed a three-year alliance to work together on a renewable deployment that enhances the contribution to biodiversity. They will collaborate in the following lines of action:

- **Policies:** Support ambitious climate and biodiversity policy approaches and set the standard for the industry to implement international best practice.
- **Nature Positive Energy:** Driving industry advancement in understanding and implementing nature positive solutions as standard practice in renewable energy deployment.
- **Nature-based solutions:** Establish an industry-leading position to address climate and biodiversity crises through the delivery of high-integrity nature-based solutions with multiple socio-economic and biodiversity benefits.

Exchange of knowledge and communication, including the dissemination of good practices, methodologies, new research and any other relevant information on positive actions for nature in the energy sector, promoting their adoption by other agents.

World Business Council Sustainable Development (WCSD)

Iberdrola has taken part, along with other energy companies, in the TNFD pilot working group of the WBCSD and is part of the roadmap working group towards a positive nature. The objectives of these working groups are to analyse, share and provide feedback to organisations that are generating relevant documentation such as beta versions of the TNFD recommendations, ENCORE tool among others, in addition to working on sector publications such as the Nature Positive Roadmap. Iberdrola is the only energy company with a case study in the first publications of the TNFD and WBCSD.

TNFD Forum

Iberdrola is part of the TNFD Forum and has registered as an 'early adopter', committing to comply with these recommendations for the 2024 report. In this way, it becomes one of the first Spanish and energy companies to adopt the TNFD and report on the matter of nature and biodiversity.

TNFD Taskforce on Nature-related Financial Disclosures

Commitment and Corporate Alliance 1t.org

Iberdrola is a member of the corporate alliance with the One Trillion Trees platform for the conservation and promotion of biodiversity in the development of clean energies, acting responsibly with nature as a source of sustainable development. As part of this alliance, Iberdrola are committed to developing the Iberdrola Tree Programme under the principles and monitoring programme of 1t.org.

1t.org

In 2020, Iberdrola launched the **Iberdrola Tree Programme**, in which we commit to promoting the planting of 20 million trees by 2030.

Business for Nature

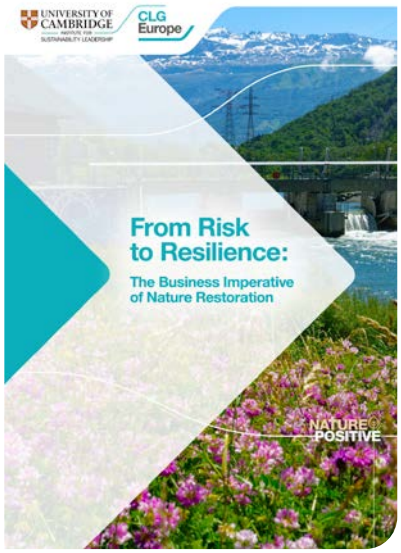
Iberdrola has joined the Business for Nature platform initiative "Make it mandatory" where more than 400 companies from 53 countries helped convince governments at COP15 of the Convention on Biological Diversity to adopt Goal 15 of the Global Framework of Biodiversity.

BUSINESS FOR NATURE

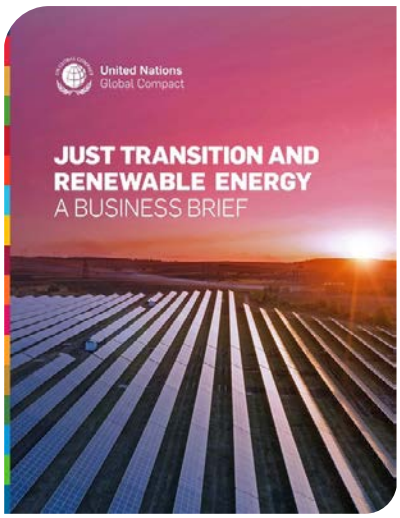
Other collaborations

Throughout 2022 and 2023, different international organisations have shown special interest in Iberdrola's actions in the area of social and environmental acceptance of renewable energies. Thus, Iberdrola has contributed with case studies in various publications. In addition to those mentioned above from the TNFD, the following documents have been contributed:

From risk to resilience: the business imperative of nature restoration. 2003 Cambridge University Corporate Leaders Group[16].



Report on just transition and renewable energy with a case study of the Biodiversity Plan and the CONVIVE Programme of Iberdrola. 2023 United Nations Global Compact [17].



Good Practices Guide 'Agrisolar'. 2023 SolarPower Europe.

16 https://www.corporateleadersgroup.com/reports-evidence-and-insights/business-briefings/business-briefing-risk-resilience-business

17 https://unglobalcompact.org/library/6143

5.3.2 Iberdrola Spain

CONVIVE Programme

In 2021, Iberdrola launched the CONVIVE Programme, a continuous improvement programme that integrates all initiatives and alliances with the aim of developing action plans to improve the adaptation of Iberdrola's renewable projects to the reality of local communities and environmental and biodiversity demands.

This programme integrates specific actions for each project and its location, as well as actions of a global nature. There are 3 main areas of action:

- **Contribute to socioeconomic development:** initiatives that make possible the contribution of projects to economic and social development at the local level, as well as at the national level.
- **Protect and improve biodiversity:** actions that contribute to the integration of facilities in the territory and landscape, improving their contribution to biodiversity and their environmental impact.
- **Learn from experts:** improving the impact of renewables and social acceptance of the energy transition through collaboration with third parties.

An example of coexistence is the solar plants in Spain where the use of the ecosystem services generated is promoted in order to promote local employment in rural areas:

- Use of livestock resources, with extensive sheep farming
- Beekeeping use- beehives are placed in solar plants and “ecological solar honey” is generated
- Promotion of cultural services and generation of knowledge.

Likewise, the hydroelectric facilities have also joined this initiative, with actions aimed at maintaining and improving good social relations and ties of belonging between Iberdrola and the surroundings of its facilities, highlighting the actions that are being carried out and disseminating them, in a manner aligned with Iberdrola’s Stakeholder management model.

PROVINCIA

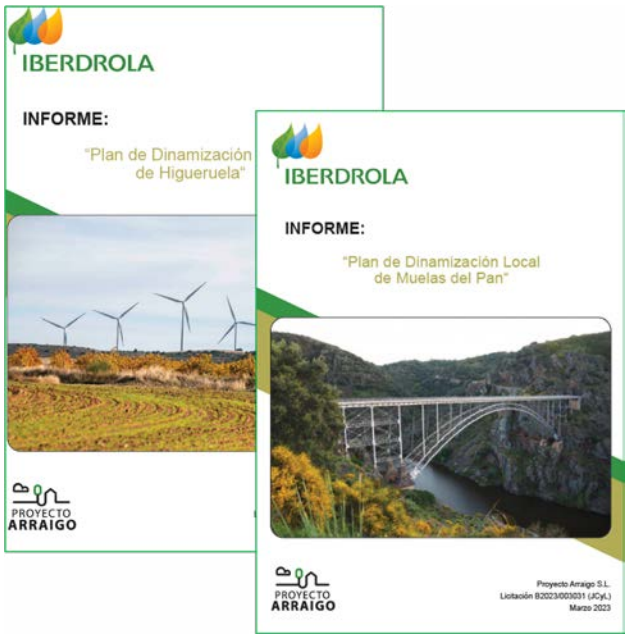
Iberdrola dona la primera cosecha de setas de su planta solar

P.C.P. / Revilla Vallejera - martes, 24 de octubre de 2023

El alcalde ha recibido esta mañana los frutos iniciales de este proyecto piloto, que degustarán los mayores de la residencia de Los Balbases

In addition to the actions described in previous sections to improve biodiversity, other actions have been carried out focused on interest groups, among which it is worth highlighting:

'**Photovoltaic energy and biodiversity**' meeting, held in Trujillo in 2022 and organised by the University of Extremadura, Junta de Extremadura, Fundación Biodiversidad and Iberdrola.



Pilot collaboration project with **Proyecto Arraigo**. Proyecto Arraigo is a private entity that helps move families from urban environments to the rural world. To do this, they advise both families or entrepreneurs who want to change their lives and the people who want to receive them. The result translates into new opportunities for everyone and the sustainable development of people. Iberdrola's collaboration with Proyecto Arraigo is currently taking place in three municipalities: Higueruela (Albacete), Revilla Vallejera (Burgos) and Muelas del Pan (Zamora) where Iberdrola has wind farms, a photovoltaic plant and a hydraulic power plant respectively.

"**Iberdrola Convive Awards**" launched in 2023 by Iberdrola in collaboration with the Centre for Innovation in Technology for Human Development of the Polytechnic University of Madrid, within the framework of the Chair for Sustainable Development Goals. These awards recognise and give visibility to initiatives, alliances, companies, actions or local entities that exemplify the integration of renewable energies with socioeconomic development and nature in Spain. Prizes were awarded in the following categories:

- Local entities: Pueblo Solar Cedillo, Revilla Vallejera City Council.
- Citizen participation: Foral Government of Navarra.
- Research, knowledge and innovation: International Institute of Law and Environment.
- Social and business entrepreneurship: Faramax.
- Communication and awareness: EFEverde, SEO BirdLife.

LIFE KANTAURIBAI Project

Iberdrola participates in the LIFE KANTAURIBAI project, led by the Government of Navarra through its public company GAN-NIK, for the ecological improvement of the Natura 2000 river network in the Bay of Bizkaia.

This European project has the general objective of improving the conservation status of the species and habitats linked to the river ecosystem, in 15 places in the Natura 2000 Network, of the rivers and tributaries that flow into the Bay of Biscay in 5 river basins shared between 3 regions (Navarra, Gipuzkoa and Aquitaine).

Among the actions to be developed by the project are:

- Restoration and improvement of habitats related to the river ecosystem: elimination and permeabilisation of obstacles and restoration of the Cantabrian alder forests.
- Improvement of the conservation status of migratory fish species (salmon, eel, tarpon, lamprey...).
- Improving the conservation status of the river mussel (Margaritifera margaritifera).
- Improvement of the conservation status of Iberian desman and European mink, and control of invasive exotic species such as American mink, coipu, muskrat, and different species of flora.
- Monitoring and evaluation.
- Communication, dissemination, sustainability, replication and exploitation of results.

Iberdrola participates in the project by collaborating in the improvement of the river connectivity of the Urumea River, on the border between Navarra and the Basque Country, with the construction of a new fish ladder in the Santiago Urumea weir, associated with the same hydroelectric plant. name. These “steps” or “ladders” serve to facilitate the movement of fish from one side to the other of the infrastructure in the rivers.

In addition, Iberdrola’s Hydroelectric Generation unit will develop a novel system to monitor, through video counting, the correct functioning of the infrastructure itself, as well as the behaviour of the salmonid species so representative of the area.

Energy and Natural Capital Working Group

Iberdrola has joined forces and experience with seven other Spanish energy companies to lead a collaborative project unique in the world, creating the first working group on natural capital and energy. Its purpose is to work on the application of the Natural Capital Protocol in the energy sector, exchanging knowledge and experiences necessary for the development of a common methodological framework for the identification, measurement, and valuation of natural capital. This initiative aims to serve as a reference and motivate other companies and sectors to undertake similar collaborative learning and share good practices to expand action in favor of sustainable development.

In November 2022, the results report was presented. A pilot and testing of its own methodology for quantifying natural capital has been carried out, applying the principle of mitigation hierarchy, requiring a scalable and consolidable methodological framework.

Migra Project

The Iberdrola Spain Foundation has collaborated since 2011 with the Spanish Society of Ornithology (SEO/BirdLife) in the Migra Project, aimed at studying the movements of migratory birds. This ambitious project responds to Iberdrola's commitment to working for bird-friendly energy.

The programme seeks to preserve the Spanish birdlife by expanding knowledge of the migratory and breeding habits of birds through the latest technologies in geolocation and remote monitoring systems. In order to obtain all the details about their migratory journeys, the duration, what route they follow, at what speed and height they fly, where they rest and feed or if the routes are the same year after year, different species have been marked with GPS devices. This makes it possible for their movements to be accessible to everyone at www.migraciondeaves.org and also help in preventing possible threats that could put them in danger, while providing fundamental information to carry out relevant scientific studies.

Currently, the MIGRA programme has 1,385 marked birds of 40 different species. In addition, it has more than 358 collaborators and 61 collaborating entities in Spain and abroad.

In 2022, SEO/BirdLife continued to mark red kite and black vulture in long-term tagging projects, and also began tagging Iberian sandgrouse and little bustard.

The priority objective of the Migra programme in 2023 has been to mark several specimens of the Iberian sandgrouse (a steppe bird) with GPS, in order to learn more about their movements and the problems they have in their breeding, wintering, study what use they make of the land and all the aspects that determine their area of occupation during the year, especially how the thousands of hectares of their habitat that will be occupied with new renewable energy plants can affect the biology of the species. A total of 13 specimens have been marked in Castilla-La Mancha, Castilla y León and Extremadura. In addition, there are specimens marked by the CSIC-IREC in Aragón, Extremadura and Andalusia.

Migres Foundation Agreement

The Iberdrola Spain Foundation has renewed in Valencia the agreement with the Migres Foundation for the project to reintroduce the osprey in the Valencian Community, which will analyse and evaluate actions for the reintroduction and recovery of this bird of prey at risk of extinction in the Iberian Peninsula. The purpose of this collaboration is to obtain young ospreys from different donor countries for their transfer to the Valencian Community, for their release using hacking techniques, common in this type of reintroduction projects.

For its reintegration, breeding pairs will be monitored in the donor countries of young ospreys. Once this monitoring is done, they will be transferred to Spain for the release of approximately 20 chicks, which add to the dozen already transferred in 2022 from Scotland following the agreement with the Roy Dennis Wildlife Foundation. The final objective is the recovery of a self-sufficient breeding population in the Valencian Community after more than 50 years of its disappearance in the area.

Grazalema Biosphere Reserve

The Iberdrola Spain Foundation develops a project with the collaboration of Territories living in the **Grazalema Biosphere Reserve** (Andalusia), which was created in 1977 and the first declared in Spain.

One of the main values that motivated its declaration are the existing populations of Spanish fir (*Abies pinsapo*), a fir endemic to the Iberian Peninsula and with a very restricted presence, reduced to some pockets of the Sierra de las Nieves, Sierra Bermeja and Sierra del Pinar, these species live in the shadiest and most humid areas, between 1,200 and 1,600 metres high. In recent years its populations have been expanding thanks to the decrease in pressure on these forests, but its relict nature and associated with very specific humidity and temperature conditions make it extremely vulnerable to climate change.

It currently occupies about 8,100 hectares, identifying about 700 hectares of surface where the Spanish fir is currently missing, and which are considered priorities for its recovery.

The Spanish fir has been historically linked to numerous traditional uses, constituting a landscape reference for local populations. However, the progressive disappearance of land uses together with the gradual depopulation suffered by rural areas and especially mountain areas in the Mediterranean area, have been accompanied by a progressive emotional disaffection of the population with the territory they inhabit.

For all these reasons, **the objectives of the project** are:

- Recover old areas occupied by the Spanish fir where it is currently missing
- Promote the creation of corridors that connect the main existing Spanish fir populations
- Strengthen the resilience of Spanish fir populations in the face of the threat of climate change
- Bring the local population (especially children and older people) closer to the conservation of the natural environment and give them the opportunity to actively participate in its improvement
- Create a bridge for the transmission of culture related to the territory from the elderly to the children
- Open a framework for the recovery of memory related to the territory
- Give the opportunity to better understand the values that have motivated this territory to have the status of Natural Park and Biosphere Reserve.

During the period 2022-2023, reforestation has been carried out on an area of between 6 and 10 hectares in several days of participatory reforestation of fir trees aimed especially at children and seniors, with native plants and seeds in one of the areas identified as a priority for the expansion of fir trees.

As part of the project, a permanent pond has been built with the help of the O-Live Medioambiente association, which will be fed with excess water from a fire pond. Despite the high rainfall in the area, these water points are scarce due to both the limestone nature of the soil and the channelling of springs for human use. However, they are essential for fauna, particularly amphibians that depend on these habitats for their survival and are one of the most unknown and vulnerable faunal groups to climate change.

In addition, the Iberdrola Foundation participated, at the invitation of the El Burgo City Council, in the “Pinsapo Suma” Conference, in which it collaborated with people who are passionate and want to facilitate the expansion of this Iberian treasure and the great work that is being done.

Iberdrola Defense Forest

In 2018, Iberdrola signed a collaboration agreement with the Ministry of Defense and the General Directorate of Infrastructure for the development of joint initiatives for the improvement, protection, and conservation of the environment in different areas. One of the areas of action indicated was the conservation of the natural environment. To this end, both entities agreed to develop a programme for the reforestation of military manoeuvre fields, property of this Ministry. Iberdrola, through its Foundation, is responsible for undertaking these works on the land selected by the administration, with the commitment to carry out at least one each year.

Within the framework of this collaboration and the Iberdrola Trees Programme, whose objective is to promote the planting of 20 million trees and absorb 6 million tonnes of CO_2 emissions until 2030, more than 167 hectares have already been reforested, which will represent the absorption of more than 12,000 tonnes of CO_2. In 2022 and 2023 several reforestations have been carried out:

Villatobas Air Surveillance Squadron (Toledo)

This reforestation has involved the planting of 17,000 native trees across an area of nearly 10 hectares. 70% of them are pine trees and the remaining 30% are holm oaks which, together, will prevent the emission of 2,516 tonnes of CO_2 into the atmosphere throughout their life. This action has had the involvement of professionals from companies in this area in the province of Toledo, both in the plantation and in maintenance work.

Coronel Sánchez Bilbao Base in Almagro (Ciudad Real)

This reforestation has concluded with the planting over an area of nearly 47 hectares of 40,000 native trees, of which 70% are Aleppo pines, 15% are wild olive trees and the remaining 15% are holm oaks. Throughout their life they will avoid the emission of 3,326 tonnes of CO_2 into the atmosphere.

The Noia Air Surveillance Squadron (Galicia)

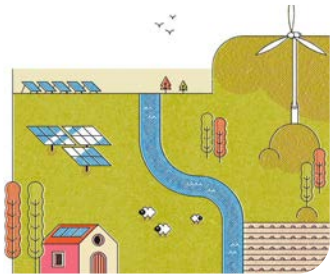
This reforestation has involved the planting of 10 hectares with more than 7,000 native trees, with 1,175 alders, 2,317 birches, 1,930 oaks, 1,544 hollies, 386 wild pear trees and 386 hawthorns. This will avoid the emission of 1,145 tonnes of CO_2 into the atmosphere. The AMICOS Foundation, as well as people and workers in the area, have participated in this initiative by helping in the reforestation work.

Conde de Gazola Base in Ferral del Bernesga (León)

This reforestation has involved the planting over an area of nearly 30 hectares of 25,800 native trees (pine, oxbow, hunters' rowan and birch) – which will prevent the emission of 3,708 tonnes of CO_2 into the atmosphere in their life cycle.

Other collaborations

Collaboration with ECODES and the Rey Juan Carlos University in the report 'Analysis of the key aspects of biodiversity protection and socioeconomics to guarantee harmony between renewable energy projects and the territory[18].



Collaboration with the REDS Project with case studies for the publication 'Renewables and territory, inspiring cases to improve their deployment in the territory[19].

18 Rey Juan Carlos University and ECODES. https://ecodes.org/hacemos/investigacion-ambiental-2022/knowledge-y-defensa-de-la-biodiversidad-2022/proteccion-de-la-biodiversidad-y-la-socio-economia-en-los- renewable-energy-projects

19 2023 Spanish Network for Sustainable Development (REDS-SDSN Spain). https://reds-sdsn.es/wp/wp-content/uploads/2023/04/Renovables-y-Territorio-REDS.pdf

5.3.3 ScottishPower

Conference on marine ornithology

In 2022, ScottishPower Renewables (SPR) hosted its seventh Ornithology and Offshore Wind Conference. The conference brings together key industry players to review current activity, challenges, and future opportunities in harmonising offshore wind and ornithology, focusing on identifying and understanding at-risk species in new offshore wind regions, as well as existing evidence and emerging gaps in the ecology and biology of species and population dynamics.

The conference was held virtually and was attended by more than 120 people each day, representing 63 organisations, who were able to contribute knowledge and experiences from various sectors of the industry.

Marine Mammal Conference

The Marine Mammal Conference is a continuation of SPR's successful events on ornithology, bringing together stakeholders from across the global renewable energy industry and marine mammal experts to present an industry update, current research, monitoring programmes and future works.

The event aims to bring together key global industry players to review current activities, challenges, and future opportunities in harmonising offshore wind and marine mammals, in the broader context of meeting the Sustainable Development Goals and meet the objectives of the Paris Climate Agreement.

Southern North Sea Offshore Wind Forum (SNS SAC) Underwater Noise Subgroup

This activity seeks to bring together the industry with projects in the SNS SAC to discuss the challenges of underwater noise and share schedules of noise activities. This is particularly useful for managing the cumulative impacts of multiple projects on marine mammals and fish species.

Meetings are held every 6 weeks, chaired by SPR. There are currently a total of 6 developers enrolled in the group.

Knowledge exchange between Blacklaw and Whitelee wind farms

SPR has hosted stakeholders in the Blacklaw and Whitelee onshore wind farm areas in Scotland to share knowledge and training on habitat restoration. This includes organisations such as NatureScot, RSPB (Royal Society for the Protection of Birds), the Chartered Institute of Ecology and Environmental Management and Forest and Land Scotland. In 2022, SPR organised visits to Blacklaw and Whitelee with members of the different organisations. In addition, SPR has actively participated in industry forums and has held regular meetings with key stakeholders to discuss policies related to green issues related to land-based energy development, covering the development, operation, and decommissioning phases.

In 2023, SPR has attended annual meetings with NatureScot and quarterly meetings with Forest and Land Scotland to discuss strategies and policies related to ecological issues related to land energy development, covering the development, operation, and decommissioning phases.

Scottish Wildlife Trust

Action for Nature in Ayrshire

The current aim of Action for Nature in Ayrshire, Scotland is to reach new audiences and expand the reach of activities carried out by volunteers and community groups. This project seeks to promote biodiversity and improve access to green spaces. It is also improving community wellbeing and building the capacity of local people to protect nature in their neighbourhood.

During 2023, the biodiversity and accessibility of at least 15 green spaces across Ayrshire has been improved through community action. More than 50 people gained conservation skills by participating in volunteer sessions or "Time Out Thursday" sessions.

The Froglife Trust

Fife Living Water

During 2022, the Cowdenbeath Wetland has been restored and a freshwater pond has been created at Swan Pond, Cowdenbeath, Scotland. The wetland no longer functioned as a wetland, since the freshwater bodies had a lot of vegetation and prevented them from retaining water.

The objective of this project was to create a new habitat, restore the wetland and promote community participation, organising 6 sessions with local groups, with a minimum of 15 people per session.

Cheshire Wildlife Trust

Wasted spaces, an urban transformation

"Wasted space, an urban transformation" supports volunteers and community groups to carry out activities that boost biodiversity and transform otherwise wasted community spaces into wildlife refuges. This measure improves the wellbeing of a wide range of local people and equips them with the skills and knowledge to protect nature in their neighbourhood.

During 2022, 200 wasted spaces were identified and mapped and more than 10 areas were transformed by the communities. 1,200 people from the community participated in the transformation of the spaces.

Keep Britain Tidy
Ocean Recovery Project

This successful pilot project aims to prevent the dumping of abandoned fishing nets at sea in the south-west of England. These "ghost nets" are very harmful to marine ecosystems and habitats. SPR is developing a viable long-term solution through a UK-based recycling system. This will promote the health and resilience of marine ecosystems, habitats, and native species.

The objective of this project during 2022 was to establish net recycling systems for at least four fishing ports, ensuring that at least 50 additional tonnes per year are not discarded at sea, but are reprocessed and contribute to the circular economy. In addition, 10 extra volunteer beach cleaning groups were supported to collect and segregate nets and other marine plastics for reprocessing.

Ocean Conservation Trust
Seagrass Restoration Cooperative

Seagrass meadows are one of the most valuable habitats on the planet, they absorb carbon, provide fish breeding grounds and reduce coastal erosion. UK seagrasses are declining. This project seeks to test an innovative and holistic process to enable large-scale restoration. The goal is to establish a plan to increase carbon sequestration and biodiversity, as well as supporting fisheries and coastal communities.

During 2022, the area to be restored was selected, the carbon baseline was completed as well as undertaking biodiversity studies. In addition, 5 advanced mooring systems and protection buoys were installed that delimit the restoration area.

Buglife The Invertebrate Conservation Trust
Pollinators along the Tweed

This project helps protect threatened insect pollinators, such as bees and butterflies, within the River Tweed catchment, which crosses the border between England and Scotland. By restoring wildflower meadows and grasslands, Buglife will protect biodiversity and allow insect populations to recover and flourish. The project will support communities, schools, and businesses to improve local green spaces for wildlife and contribute to people's health and wellbeing.

10 hectares of land were improved for pollinators and 5 community events, talks and volunteer workdays were organised. Additionally, 10 communities became involved with the project, raising awareness of the needs of pollinators along the River Tweed.

Glasgow Science Center
Earth Allies

The Earth Allies programme is an engaging course for youth ages 16-24 from disadvantaged communities, which aims to equip them with the tools to be advocates for climate action. Over twelve weeks, participants develop their knowledge on key topics while learning transversal skills.

During 2023, 60 young people aged 16-24 from disadvantaged communities completed climate advocacy learning modules, gaining essential skills such as public speaking, online campaigning, and video editing.

5.3.4 Avangrid

Avangrid Renewables maintains collaborations with 19 wildlife recovery organisations, making it possible for partners to intervene to rescue, transport and care for injured animals, particularly birds and bats, if they are on the premises. In 2023, Avangrid Foundation also awarded grants to 15 wildlife rehabilitation centers as part of its Wildlife Rehabilitation Programme.

Additionally, Avangrid has signed several agreements and permits with various organisations such as the National Fish and Wildlife Foundation and the Minnesota Public Utilities Commission (PUC) to protect biodiversity.

Some of the actions carried out in 2022 and 2023 are described below:

Maine Marine Mammals

This organisation takes care of stranded sea mammals and turtles in southern and midcoast Maine (east coast of the United States). With donations from Central Maine Power and the Avangrid Foundation, Maine Marine Mammals cares for sick, injured and abandoned seals throughout New England, studies East Coast marine mammal populations, and educates about global marine mammal conservation.

Liberty Wildlife

This Phoenix, Arizona-based wildlife rehabilitation organisation has received funding from Avangrid and the Avangrid Foundation. Liberty Wildlife cares for more than 11,000 sick, injured, and orphaned wildlife each year. In addition to rehabilitation, Liberty Wildlife participates in environmental and natural history education and awareness programmes for the public and school-age children. Liberty Wildlife also collaborates with partners to conduct wildlife research and conservation efforts, and through the United States Department of the Interior operates one of only two licensed Pluma Repository centres in the country, providing Registered Native Americans a free, legal source of feathers for religious and spiritual practice.

Oregon Zoo Foundation

Founded in 1888, the Oregon Zoo empowers people to create a better future for wildlife by inspiring the community to respect animals and act on behalf of nature. Avangrid and the Avangrid Foundation provide donations to the zoo to support the organisations commitment to creating engaging experiences and promoting animal welfare, environmental education and biological conservation. The Oregon Zoo is saving species and preserving ecosystems through recovery efforts, research, and education.

Ocean Climate Research and Community Capacity for Science-Based Decision Making with the Gulf of Maine Research Institute (GMRI)

The GMRI in Portland, Maine is a world leader in marine and climate research, a national innovator in citizen science for education, and an essential collaborator in engaged, science-based fisheries management. This five-year collaboration seeks to advance regional climate science and provide support to GMRI scientists focused on climate resilience issues in fisheries and other coastal industries in the Gulf of Maine region.

The collaboration includes interdisciplinary research objectives in ocean science, fisheries management, and business and community resilience, focusing on community engagement and social impact in the Gulf of Maine region. The funding will boost new research into changing fish stocks, vulnerability assessments of northeast fishing ports, and development of new fisheries management methods.

Go Energize

Avangrid, through Vineyard Wind 1, has partnered with Greentown Labs, the largest climate technology incubator in North America, to offer an accelerated promotion programme for innovations in the responsible development of offshore wind energy, with the support of the Massachusetts Clean Energy Center.

Go Energize 2023 aims to find startups with solutions for marine turbine monitoring and green data collection and digital solutions to improve turbine efficiency and longevity.

After a highly competitive selection process, which included more than 60 applicants from a dozen countries, five cutting-edge startups have been selected:

- Blue Atlas Robotics (Odense, Denmark), who has developed and commercialised a robotic platform that eliminates operational and data limitations for underwater inspections.
- FutureOn (Oslo, Norway): FutureOn's FieldTwin creates a dynamic, 3D geospatial data environment of surface and subsea areas, with open API connectivity to third-party tools and existing customer workflows.
- HyperKelp (Encinitas, California) – The Kelp smart buoy is a hosted payload platform capable of carrying hundreds of sensors, collecting, and transmitting sea-level data to wind producers, climate scientists and military intelligence officers.
- Lobster Robotics (Delft, Netherlands): Lobster Robotics develops lightweight, fast, low-cost robots for visual inspections to reduce the cost of surveying in offshore wind projects.
- SeaDeep (Somerville, Massachusetts): SeaDeep revolutionises underwater assessments with AI-powered underwater vision to inspect marine environments and substructures in real-time and with high fidelity using low-cost cameras.

During the six-month long programme, Avangrid worked with programme partners to provide advice, business training and access to resources to advance technological and business development while working towards mutually agreed upon goals. In November 2023, during the final presentation of the programme, the progress was presented.

5.3.5 Neoenergia

The Neoenergia Group, in its commitment to the preservation of the environment and aware that the private sector is essential to stop the loss of biodiversity, works on the incorporation and dissemination of good practices and strategies, collaborating with its interest groups to improve synergies between different actions and initiatives.

Neoenergia actively participates in the Thematic Forum on Biodiversity, organised by the Brazilian Business Centre for Sustainable Development, where joint actions and strategies between different segments of the private sector are discussed. This forum follows international debates within the scope of the Convention on Biological Diversity and develops actions to promote, train and disseminate issues related to biodiversity and services.

The group also participates in working groups of the Brazilian Wind Energy and Photovoltaic Solar Energy Associations, discussing issues related to the environmental effects of wind and photovoltaic parks and the best mitigation strategies.

Regarding offshore wind energy projects, Neoenergia has been discussing with the Brazilian Institute of the Environment the work plan for the preparation of the Environmental Impact Study for offshore wind energy projects. In addition, the company has been carrying out internal work to meet the highest international standards in biodiversity with the aim of incorporating them into the development of its maritime projects.

Flyways Brazil
Neoenergia Institute

Flyways Brazil, an initiative of SAVE Brazil (Society for the Conservation of Birds of Brazil) in collaboration with the Neoenergia Institute, is a preservation and protection project aimed at shorebirds and their habitats. Flyways Brazil aims to understand what species of shorebirds there are in the region, their abundance and how they use the area throughout the migratory cycle, generating technical support for the recognition of the Hemispheric Shorebird Reserve Network (WHSRN) 8, in addition to promoting the involvement of different social actors for the conservation of these birds and their habitats. The project is developed in the municipalities of Galinhos, Guamaré and Macao, in the state of Rio Grande do Norte.

In execution since 2015, Flyways Brazil is aligned with the National Action Plan for the Conservation of Migratory Shorebirds, the Pro-Landbird Initiative on the Atlantic Flyway and the actions of the Migratory Routes Task Force of the CMS of the Americas.

The project has four areas of action, which are: education, through the training of municipal basic education professionals to incorporate shorebirds into the school curriculum; involvement, through the training of youth and adults who live in traditional communities with a focus on conservation; science, with the monitoring of resident and migratory birds along more than 25 kilometres of coastal wetlands and protection in conjunction with national and international actions in the search for habitat protection measures.

Censuses are conducted monthly by a team of ornithologists and biologists who go out into the field to observe shorebirds in the project region. The results of these monitoring are fundamental to understanding animal behaviour. In 2022 and 2023, around 44,000 birds of 19 different coastal species were sighted, five of which are on the list of threatened with extinction, according to the International Union for Conservation of Nature (IUCN):

- Whimbrel (*Numenius hudsonicus*).
- Arctic Sandpiper (*Calidris canutus*).
- Beach puppet (*Charadrius wilsonia*).
- Short-billed Woodcock (*Limnodromus griseus*).
- Semipalmated sandpiper (*Calidris pusilla*).

Arctic Sandpiper (*Calidris canutus*).

Environmental education actions are carried out annually in educational centres, promoting the conservation of fundamental natural habitats for shorebirds. The knowledge shared with students and teachers, through workshops, thematic circles, meetings, events and distribution of newsletters, is already observed with the population of the municipalities demonstrating greater care for the environment. In 2022, 624 people were positively impacted and in 2023 this number increased to 1,034 people.

Until 2023 there is the following panorama of monitored shorebirds:

- 20 shorebird species recorded.
- 15 species of migratory shorebirds.
- 5,620 shorebird records (2017-2023).
- 5 species of shorebirds threatened with extinction.

The work carried out by the project in the Potiguar Basin is about to receive international recognition from the WHSRN. The identification of the site as an ecological sanctuary is of utmost importance for these species and will encourage the strengthening of public policies aimed at the comprehensive conservation of biodiversity and the network of local ecosystems.

Coralize Project

Coralizar is a project carried out in alliance with the startup Biofábrica de Corais, which restores, maintains and adapts the corals *Millepora alcicornis* (Fire Coral) and *Mussismilia harttii* (Flower Coral of Caution), native species that are fundamental builders of local marine biodiversity. Its objective is to contribute to the restoration and resilience of these corals, in addition to involving various social actors in favour of the preservation of the oceans. Furthermore, this initiative considers the people integrated into the reef environment as a fundamental element for the success of the proposed actions, which are also complementary to the actions of the National Action Plan for the Conservation of Coral Environments. This promotes the objectives of the UN 2030 to meet the perspectives of the Ocean Decade and the Ecosystem Restoration Decade.

The project constitutes a pioneering activity in the region through an innovative methodology of active management and coral transplantation (where fragments of these animals, detached from their colonies by human action or currents and condemned to death, are collected and managed in nurseries built in natural pools and laboratories), which can be regenerated again.

In 2023, educational actions reached 45 volunteers from the local community and 11 rafters. In addition, more than 18 training sessions were carried out for the community involved in coral restoration tourism and 8 articles were published in the media. In total, 0.42 km² were impacted by the restoration, with around 2,304 seedlings in total, with an average survival rate of 93.22% in the Porto de Galinhas nursery.

Currently, restoration activities continue in the municipality of Porto de Galinhas and activities have begun in the municipality of Tamandaré, involving the construction of a laboratory for ex situ cultivation in CEPENE. In addition to the activities in the territory, the construction of the Coralizão Network was supported, a multi-sector coalition for the restoration and conservation of corals that aims to influence national public policies.

5.3.6 Iberdrola Mexico

Conservation project to support felines in the Altamira region

The feline support project is an initiative between the Iberdrola Mexico Foundation, the "Arturo Narro Siller" Engineering Faculty of the Autonomous University of Tamaulipas, the Altamira Tamaulipas City Council, Grupo Seisa and Ecology and Environment Advisors. Its main objective is to preserve the populations of jaguars, jaguarundis, ocelots and wild cats found in the region through the proposal and delimitation of biological corridors that adapt to the habits and quantity of these felines typical of the Altamira region.

This project has remained in force in 2022 and 2023 with the recognition of feline distribution ranges within the industrial port. This programme consisted of the creation of the Potosino-Tamaulipeco feline biological corridor, which allowed for better observation of the population dynamics of these species in their habitat, with the main objective of helping their preservation.

Iberdrola México's participation in the project ended in 2023 after obtaining and analysing a series of data on the biological corridor. With the installation of camera traps (devices to capture images of animals in the wild) and the identification of physical evidence of footprints and excreta, five species of felines were detected, with the ocelot (*Leopardus pardalis*) being the most abundant. Other specimens detected were the jaguar, the hoofaisán (*Crax rubra*) - of which there was no record in the south of the state of Tamaulipas - and the anteater (*Vermilingua*). This will allow Iberdrola Mexico to generate new action guides for the correct treatment and protection of these species.

Project for the conservation of the Fernández Canyon

The Iberdrola México Foundation, in alliance with Pronatura, the government of Durango and its Secretariat of Natural Resources and Environment, signed a collaboration agreement in 2019 to conserve and protect the Fernández Canyon (Durango), one of the most important in northern Mexico, as it is home to more than 580 species of flora and fauna in 17,000 protected hectares. The park has been affected by the lack of control in recreational activities, the arrival of invasive species of flora and fauna, erosion, overgrazing and lack of assurance of the ecological flow of the Nazas River.

The plan includes the ecological restoration of ancient juniper forests and riparian vegetation, the control of invasive exotic species and training for communities to regulate tourist activities in the park.

In the period 2022-2023, several initiatives have been carried out:

- State park conservation programme to preserve its ancient juniper ecosystem. To this end, a pre-diagnosis of the park has been carried out and the project has been socialised with the owner communities, in order to reinforce their participation and appropriation of the project.
- Action to control the giant reed (Arundo donax) through vegetation characterisation and application of the bull's eye method in a pristine section of the Nazas River.
- Silvopastoral management plan for the protection of 6 hectares of gallery vegetation.
- Reforestation day with volunteers from Iberdrola México, together with family and friends and students from the Industrial and Services Technological Baccalaureate Center 5959. Specifically, 500 specimens of two species were transplanted: 263 huizahe (Acacia berlandieri) and 237 mesquite (Prosopis glandulosa).
- Workshop to exchange tourism experiences as part of awareness and communication measures.

5.3.7 Iberdrola Energy International

Portugal

Conde and Algeruz II photovoltaic plants

In 2023, Iberdrola established a collaboration agreement with a local beekeeper (Coolbelha) to install hives in its photovoltaic plants in operation. In total, 30 hives have been installed, distributed equally between the Conde and Algeruz II photovoltaic plants, located in the district of Setúbal.

Previously, a feasibility study was carried out with the beekeeper to identify the best location for the hives, in close coordination with the safety of the plant equipment and operation and maintenance workers. The installation of the hives was carried out during the night period, in order to maintain the safety of the bees.

In addition, sheep grazing was introduced in the areas of photovoltaic panels for the local production of cheese and wool. There are currently almost 300 sheep that use Iberdrola's photovoltaic parks in Portugal as a grazing place. "Solar grazing" benefits livestock farmers, who gain new spaces for their activity; It is positive for the solar park, since it ensures the ecological maintenance of the land and reduces the risk of fires; and benefits the animals who, in addition to access to food, find protection from the sun, rain and wind in the solar panels.

These types of projects (beekeeping and grazing) are part of the implementation of Iberdrola's Environmental Plan, a global commitment to mitigate impacts, promote local development, respect natural resources, biodiversity, and promote the circular economy.

Australia

Pilot study at Bodangora in partnership with the University of New South Wales (UNSW)

Iberdrola Australia together with UNSW have committed to undertaking a biodiversity project using the Bodangora onshore wind farm as a pilot project. The pilot project seeks to develop a comprehensive plan to revitalise native biodiversity in Bodangora, New South Wales.

The pilot project will identify:

- Appropriate biodiversity enhancement objectives for the ecosystem
- The key factors and challenges (e.g., strikes, feral predators, fires, etc.) to successfully reintroduce native plant and animal species within existing renewable energy infrastructure sites, and how they can be mitigated
- Any differences between biodiversity improvement targets for wind, solar and transmission infrastructure.

The results of this pilot study will be used to prepare a plan or protocol for implementation across all Iberdrola Australia assets and will be incorporated into the planning of new facilities, including rehabilitation and regeneration projects to achieve the net positive biodiversity target.

5.3.8 International Corporate Volunteer Programme

Spain

Through the Iberdrola Group's International Corporate Volunteering Programme, employees participate, in collaboration with conservation entities and vulnerable groups, in nature restoration and protection projects, contributing to the improvement of the environment and people's quality of life.

The Iberdrola Group's International Corporate Volunteering Programme was created in 2006 and today it is a global project aligned with the Group's values, its Sustainability Policy and the SDGs.

A multitude of reforestation and recovery actions have been carried out, adaptations and cleaning of natural spaces and creation of supports for the protection of biodiversity (refuges for endangered species, bird feeders, pollinators, insect hotels, eco-columns...). Education and awareness about caring for the environment have been promoted through awareness campaigns, training talks, workshops, recycling and responsible consumption video tutorials. With all the reforestation actions in 2023, Iberdrola Group volunteers have managed to plant 14,550 trees.

On Forest Day, the "Magical Forest" initiative was carried out, in which the children created a tree with recycled materials and for each participation the Lurgaia Foundation planted a tree in the Urdaibai Biosphere Reserve. In addition to tree planting in a remote format at the national level and reforestation days in Madrid, Bilbao and Valencia.

For International Plastic Bag Free Day, a talk was given to raise awareness about the need to reduce their use by a biological oceanographer who showed how the discovery and global mapping of marine plastic pollution has been. What do the so-called "plastic islands" look like, how they move and how they are evolving. In addition, recycling and environmental education workshops were held.

On the occasion of World Environment Day, Iberdrola launched a campaign to reflect on its impact on nature, and also on how it can be reduced, proposing various environmental education and awareness activities. We joined the Seo BirdLife Libera Project "1m² against garbage" activity for cleaning natural spaces, "Environmental Education and Recycling Workshops" and "Solidarity Recycling".

For the Day Against Climate Change, different initiatives were carried out: autumn reforestation in Undabaso, Muxika, online talk on urban biodiversity, workshops on climate change, making feeders/waterers for birds or butterflies, pollinators, insect hotels with recycled materials, spreading seed bombs, actions to calculate and reduce plastic consumption and Bingo without plastics.

The global annual milestone is the International Volunteer Week which, under the motto 'Together we build the world we want!', has brought together more than 9,000 participants in 2023 in 127 initiatives carried out in 24 countries where Iberdrola operates aimed at the fight against climate change, the inclusion of vulnerable groups, raising awareness of diversity and the social emergency. In Spain, participation has increased 38.92% more than in 2022.

One of the main pillars of the International Volunteer Week has been to take care of the environment and protect biodiversity with various reforestation actions. For example, in Spain, the recovery of a burned land in the area of Navalacruz, in Ávila, or the plantations in Casa de Campo (Madrid). In addition, at a global level, adaptations and cleaning of natural spaces were carried out. Volunteers from around the world have freed 282,000 square metres of garbage by cleaning fields, mountains and beaches. Education and awareness about the environment have also been promoted through workshops about recycling and responsible consumption and talks on Urban Biodiversity. There have also 723 supports for the protection of biodiversity, including refuges for endangered species, bird feeders, pollinators, insect hotels, eco-columns, etc. has been manufactured.

It is worth highlighting the awareness project on the fight against climate change in schools, a project that was established in Spain in 2017 to raise awareness about the consequences of climate change, with talks and workshops in schools and entities this project has now extended to Brazil and Mexico.

ScottishPower

In 2022 and 2023, ScottishPower professionals and volunteers were involved in a wide range of projects related to the protection and restoration of natural capital.

Trees for life - Riverwoods Enrick Restoration

The Affric Highlands initiative aims to facilitate a partnership between communities and landowners, to increase natural capital by rebuilding and creating sustainable nature-based economies. The project seeks to achieve an innovative model for ecological restoration that increases carbon sequestration capacity, preserves the economic value of land within local communities, and demonstrates the potential to be replicated and adapted elsewhere.

Some of the actions carried out during 2023 include: the creation of 2 kilometres of forest along the Enrick River, the installation of riparian zones on 15 hectares of watercourse, including water gates along two sections of the river, the planting 8,000 trees within fences and community tree planting events.

USA

AVANGRID employees devote themselves to caring for their communities with more than 2,200 hours of volunteering during Earth Week. 200 volunteers participated in 19 activities from Texas, Arizona, Massachusetts, Oregon, New York, Maine and Connecticut. AVANGRID employees rolled up their sleeves to carry out work to benefit their communities. A key activity to highlight was the cleaning of the Mystic River as it passes through Blessing of the Bay Park in Boston, an initiative to protect natural resources and promote clean and safe spaces for the community.

Neoenergia

Impactô SDG Social Acceleration Programme

Impactô ODS is a social acceleration programme aimed at civil society organisations and social companies, in alliance with the Ekloos Institute, which seeks to generate positive impacts in the areas of vocational training, social inclusion of people with disabilities or serious illnesses, education and other areas of activity as long as they have education as a transversal theme. The programme aims to promote initiatives, projects and businesses that can be developed, improve their management processes and maximise their social impact, through online mentoring. Institutions will be able to receive a financial incentive of up to 100,000 Brazilian reais at the end of the acceleration. In addition, the programme allows voluntary action by employees who occupy management positions within the Neoenergia group at different stages and with different degrees of intensity throughout the process and includes a new stage: impact measurement, in which the impact is evaluated of the programme from previous editions.

Impactô Verde Social Acceleration Program: The Impactô Verde programme, executed in the period 2022-2023, trained eight organisations with a focus on SDG 15 "Life in terrestrial ecosystems", which generate positive impacts on mountain ecosystems and the fight against climate change, in particular, in the areas of biodiversity, sustainable tourism, sustainable agriculture and environmental technology. Throughout the programme they have achieved:

- 26 managers participated in the acceleration.
- 2,784 direct beneficiaries were served.
- 13,920 indirect beneficiaries were served.
- 12 Neoenergia volunteers registered.
- 658 hours of mentoring was delivered.

The companies that participated in the acceleration were:

Organisation	Location	Description
BioFas	Bahia - Cruz das Almas	BioFas aims to transform solid and liquid waste from rural owners into biofertilisers and energy through composting and biodigestion technologies, reducing the use of fertilisers.
Documentation Center and Popular Communication (CECOP)	Natal – Rio Grande do Norte	CECOP implements environmental biotechnologies, agroforestry, and bioconstruction actions to preserve native forests and cultural, educational, and environmental projects.
Formigas Community	Natal - Nísia Floresta	Agroecological popular education centre that promotes natural agroforestry-based crops and provides training in environmental technologies and implementation of ecological sanitation systems.
Terra Luminous Institute	São Paulo - Juquitiba	Socio-environmental institute focused on the preservation, conservation, research, and regeneration of the Atlantic Forest Biome, with educational and environmental tourism actions, reforestation, seed banks and water treatment.

Organisation	Location	Description
Reflorar Papelaria Sustentável	Pernambuco - Recife	Impact business that, through sustainable technology, transforms waste into recycled paper and handmade with flower or vegetable seeds that can be planted directly in the ground.
Kapi'wara	Pernambuco - Recife	Kapi'wara provides services such as popular technical assistance for community gardens and living pharmacies, they carry out ecological construction and bioconstruction projects, training youth, among others.
Nucleus of Popular Educators of the Sertão of Pernambuco (NEPS)	Pernambuco - Dormentes	NEPS offers services such as popular technical assistance to community gardens and living pharmacies, they carry out ecological construction and bioconstruction projects, training for young people, among others.
Madeira da Terra Institute (IMT)	Pernambuco - Ouricuri	IMT works with the training of women leaders using the creation of high-production bees and the introduction of new honey production technologies in the region as an educational tool.

Iberdrola Mexico

In collaboration with the Iberdrola Foundation and the volunteer initiatives of Iberdrola México, numerous reforestation actions have been carried out, with more than 12,000 specimens planted. For example:

- 1,000 trees in Pesquería (Nuevo León). The restoration consisted of the transplant of two oak-type species (*Quercus spp*) that, due to their properties, will benefit the soil by providing deep roots and a growth of forage and organic matter.
- 1,000 trees in San Pedro Almoloya, Municipality of San Felipe (Guanajuato), in conjunction with INDESA. During the day, the transplant of two species was carried out: white cedars and pines that, thanks to the type of evergreen species, over a period of 4-5 years will benefit the restoration of the soil due to their deep and extended roots.

- 1,000 trees at the Universidad del Istmo campus Juchitán (Oaxaca) in which the students and teachers from the university participated in the activity. The transplantation of the spring, golden rain and oak species will create biodiversity in the ecosystem and long-term soil rehabilitation.
- 2,000 trees at the Tecnológico de Estudios Superiores de Chalco (State of Mexico). The reforestation was carried out by volunteers from Mexico City along with family and friends.
- 2,000 trees in Santa Rosa Xajay (San Juan del Río Querétaro). Within the Sustainable Alliances programme, the activity was carried out with the client Kimberly Clark. In total, 1,000 mesquites, 500 huizaches and 500 other species were planted.

- 1,000 trees in Ejido de Xaltipanapa, municipality of Tepeyahualco (Puebla). Aligned with the Iberdrola Mexico race, 500 stone pines and 500 yuccas were planted together with family and friends.
- 1,000 trees in El Fuerte Viejo, Municipality of San Felipe (Guanajuato). 716 stone pines, 100 mesquites and 184 pirules were planted.
- 1,000 trees of various species at the Universidad del Istmo Campus Juchitán (Oaxaca). Some varieties were: lemons, guanacastes, guavas, pistachios, tamarinds, mangoes, primroses, moringas, almond trees, oaks, among others.
- 2,000 trees in Libres (Puebla), in collaboration with the Louis Dreyfus Company.

In addition, in the Tamazunchale region, several reforestation activities have been held together with students and teachers from various entities (Tecnológico de Tamazunchale, Hermenegildo Galeana Primary School and Telesecundarias Benito Juárez and Guadalupe Victoria in Tepetate) for the planting of more than 500 Valencian orange trees. A similar action was carried out in the Monterrey region to plant 61 citrus trees in San Nicolás de los Garza. This action will generate direct benefits to the student community by being able to grow and consume the fruits of the trees.

It is worth highlighting the volunteer initiatives and the reforestation days of Iberdrola México in the Fernández Canyon previously mentioned.

5.4 Awareness and communication

Highlight and raise awareness about the relevance of the protection and conservation of biodiversity with training activities, internal and external education, awards, publications, as well as sponsorship actions, and communicate internally and externally the impact of the Group's activities on this matter."

5.4.1 Training and awareness

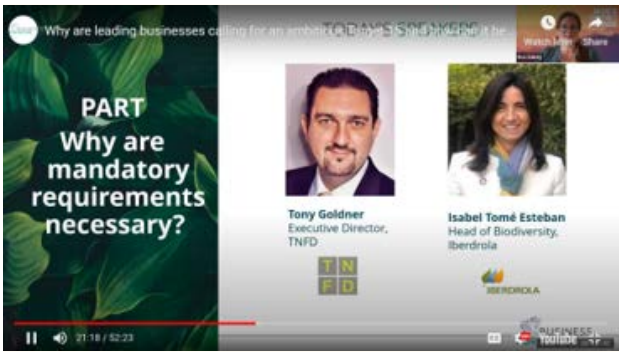
More than **70,000 hours** of environmental training were provided to employees. In addition, internal and external awareness was promoted to clients, suppliers, and the community through webinars, talks and a large amount of awareness and knowledge news on aspects related to the protection and improvement of biodiversity.

Iberdrola Group

Iberdrola supported the adoption of the objectives of the Global Biodiversity Framework by presenting its Biodiversity Plan for 2030 at the CBD-COP15 in Montreal. In the context of the conference, Iberdrola launched an awareness campaign on the objectives of the Global Biodiversity Framework that were adopted in Montreal.

Iberdrola is carrying out a Training Plan in all of the Group's companies on the metrics of the biodiversity accounting framework with the support of the company Ecoacsa, who has developed Iberdrola's biodiversity accounting framework.

In addition, Iberdrola has participated in numerous conferences, webinars and external events.



Iberdrola Spain

The company has established mechanisms to guarantee the environmental training of all employees appropriate to the position profile, through specific environmental training programmes for the different businesses.

In addition, training talks have been given and various environmental trainings have been carried out for workers. Also, theoretical and practical drills on environmental emergencies have been carried out in many of the plants, with the aim of improving the environmental management process and promoting its use and knowledge.

Also, local environmental education campaign with schoolchildren is carried out at the photovoltaic plants.

In the **Tâmega** hydroelectric complex in Portugal, a specialised centre has been created for dissemination and awareness and to promote the reproduction of river mussels (*Margaritifera margaritifera*).

In addition, Iberdrola has participated in numerous conferences, webinars, and press interviews to raise awareness of the need to act on the loss of biodiversity.

ScottishPower

In 2023, the **East Anglia ONE** team held a toolbox talk for contractors and vessel masters working on site to raise awareness of the conservation status of the red-throated diver and presented a set of best practice guidelines to minimise the impact of the boats.

The biannual publication of the East Angle newsletter aims to increase awareness and knowledge sharing through communication between environmental teams and the wider business sector. The East Angle Newsletter also provided updates on the East Anglia project to internal and external audiences, including environmental studies and community initiatives.

USA

Avangrid Renewables operations staff have received an environmental training course with a curriculum for wildlife and operations coordinators delivered through webinars, online learning, and site visits.

Training is designed to address current wildlife laws and regulations, project-specific requirements and emerging issues, including general environmental instruction with annual updates, on-site training sessions, webinars, emails, posters of plants, publication on websites, sightings of threatened and endangered species and manipulation of nests on power lines.

At **Vineyard Wind 1, New England Wind** and **Kitty Hawk Wind**, environmental awareness training was provided to all external vessels operating on US projects. The training covers:

- Protected marine species.
- Shock prevention.
- Reports.
- Marine debris.
- Discharges and discharges.

Additionally, in collaboration with the Massachusetts Lobstermen's Association and Net Your Problem, Avangrid organised a change initiative in the art of fishing. This programme was launched in response to updated fishing regulations, which now require ropes with a specific breaking strength. The goal was to minimise the risk of life-threatening entanglements for the endangered North Atlantic right whale. Through this programme, fishermen had the opportunity to obtain new equipment at no cost or at a significantly reduced price to ensure compliance with new regulations and mitigate marine mammal entanglement. Net Your Problem facilitated the collection of equipment handed in by fishermen as part of the programme and the reuse or recycling of refurbished ropes and other gear.

In 2023, several osprey nesting platforms were installed along transmission lines on the central coast of Maine as part of an initiative led by the Avangrid Foundation, using platforms made by high school students. This effort has been very successful and its continuation in the future is planned.

Also in 2023, Avangrid Renewables hosted an educational programme presented by the University of Minnesota Raptor Center for employees at nine Midwest wind facilities. The Bird of Prey Center brought several "ambassador birds of prey" to a wind facility, presenting their history, tips for identification in the field, and conservation status. This up-close-and-personal experience with live raptor species enhances the training of operations personnel through awareness and exposure to raptor conservation experts.

Identification and awareness brochures have been created for the California condor, bald and golden eagle, whooping crane, and common and sensitive bat species. These brochures have been distributed in the areas where onshore wind farms are located and where these species exist.

Neoenergia

The Environmental Education Programs and Social Communication are part of the set of socio-environmental programmes proposed by the environmental agency and are justified, not only by the potential impacts identified, but, above all, by the search for a new relationship between the entrepreneur and the local society. The objective is to raise awareness among the population and promote educational processes in the localities located in the area of influence of the project, based on their socio-environmental problems and potential.

Celebrate Caatinga

The "Festeja Caatinga" event was held in Santa Luzia (Paraíba) involving the Community of Pinga and Serra do Talhado, to promote content and activities about the Caatinga Biome among the local community. The theme of the event was Caatinga Culture, and the day of the event was organised considering the date referring to the National Caatinga Day, celebrated on April 28. To do this, the participants were sensitised by approaching the historical context of the Caatinga, followed by listening and dialogue with local residents.

The 2nd edition of Festeja Caatinga was held in the community of Barra. The target audience of the activity was made up of the communities of Barra, Pinga and Serra do Talhado, located in the municipality of Santa Luzia and the community of Brejinho, located in the municipality of São José do Sabugi. The event aimed to raise awareness about birds threatened with extinction in the territory and the legal and environmental sanctions of hunting, in collaboration with the Wildlife Monitoring Programme.

The event also aimed to promote meetings, workshops with communities and appreciation of local crafts and culture, in order to value and strengthen the identity, stories and social practices of the territory itself. To do this, it had several partners to carry it out, namely: Santa Luzia City Council, São José do Sabugi City Council, Central Associations, Santa Luzia Rural Union, National Rural Learning Service, Brazilian Support Service for Micro and Small Company (SEBRAE) and the NGO Café Cultura. In total, 8 hours of activities were carried out with 47 participants in the workshops and an estimated audience of 150 visitors.

With the aim of mobilising, energising and enthusing the community members of the Brejinho community, in São José do Sabugi, to massively participate in the third edition of the Festeja Caatinga, in December 2023, in the Pinga community, the Caatinga Pre-Celebration November 25 at the sports field of the Brejinho community. The event was in collaboration with the Municipality of São José de Sabugi, the Community Association of Brejinho and SEBRAE.

On the occasion, among other sports and cultural activities on the event programme, a Caatinga Bingo (with prizes) was held to raise awareness about birds in danger of extinction in the territory, in alliance with the Wildlife Monitoring Programme. The Bingo cards were created with endangered birds and for each number sung, awareness was raised related to the species. In total, 8 hours of activities were carried out with 103 participants and an estimated audience of 250 visitors.

The 3rd edition of Festeja Caatinga was held in the Pinga community of Santa Luzia. The event had the collaboration of institutions already consolidated in the 2nd Festeja and aimed to promote meetings, workshops with communities and appreciation of local crafts and culture, in order to value and strengthen the identity, stories and social practices of the territory itself. In addition to raising awareness about the impacts on the fauna in the territory.

As an appreciation of local culture, suggested in a planning meeting with the community, the program of the III Festeja Caatinga included the festival of the repentista poets and the pé de serra trio. In addition to four training workshops, namely: Quality of life and nutrition workshop for older people; Basic home electrical maintenance workshop; Entrepreneurship Workshop in gastronomy and beauty for women; and Painting Workshop on artisanal artifacts. For this last workshop, the paintings focused on figures of the local fauna, and the painted pieces were distributed to the public present.

The event also featured the region's Repentista Poets Festival, which is a reference for the identity of the Northeast region, as it is also known as song and is based on verse, rhyme and prayer. It is a tradition of the region and the Pinga community. The festival challenged repentistas to formulate verses, rhymes and prayers aimed at raising awareness about local fauna. In total, 8 hours of activities were carried out with 100 participants and an estimated audience of 400 visitors.

Environmental Education and Ecological Trails Programme

Educational actions have been carried out to protect the Caatinga biome with an environmental education team from the forest nursery, the Luzia Ecological Trail 2 and 3 to achieve the goal of planting 100,000 seedlings of native species of Caatinga. These plantations are intended, in part, for forest restoration of the park facility and in part for socio-environmental activities in the community.

The Luzia Ecological Trail 2 and 3 was created with the objective of providing environmental experiences to project collaborators and visitors such as students from educational institutions in the municipality of Santa Luzia and the region. It is a socio-educational space that contains demarcation of mother trees, such as catingueira (*Cenostigma nordestinum*), angico (*Anadenanthera colubrina*) and other species of the biome. When visiting the space, the Trail guides guide visitors through the entire environment, providing explanations about the flora, fauna and soil. For the soil example, the "energy stone" is used, which is in the process of disintegration due to natural physical and chemical weathering.

The Caatinga Week in 2023 was organised within the framework of visits to the Ecological Trail and featured an exhibition of animals and soils from the laboratories of the Federal University of Campina Grande (*Campus Patos*). The target audience was made up of students from public schools in three cities in the Santa Luzia region.

Oitis Wind Complex

Environmental Education Programme in implementation phase

The Programme aimed to promote, through participatory action tools, educational actions that contribute to the awareness of the social groups involved in the project - population residing in the Area of Direct Influence and collaborators of the work - towards environmental issues, focusing on the importance of environmental conservation measures, prevention/mitigation of socio-environmental impacts and knowledge of environmental legislation.

During the period 2022-2023, six sustainable production workshops were held with a focus on promoting beekeeping in the communities of Bonfim (Casa Nova, in Bahia), Sítio do Meio (Lagoa do Barro, in Piauí) and Vazante (Dom Inocêncio, also in Piauí).

Beekeeping is characterised as a sustainable activity, as it contributes to the preservation of nature, the maintenance of native vegetation - which is the main supplier of nectar and pollen for bees - in addition, bees promote the diversity of agriculture production and flora species through pollination. These are important factors in maintaining local and regional biodiversity.

One of the specific objectives of the project is to reinforce the importance of the Caatinga biome for the conservation of biodiversity, in order to encourage the preservation of native vegetation, in addition to clarifying the relationship between natural resources, bees and the quality of the Honey.

Fire campaign

The Fire Campaign, started in 2009, aims to prevent losses to the company and society due to the use of fire under power networks and lines, in addition to promoting the preservation of ecosystems. In 2023, Neoenergia Pernambuco promoted preventive inspections in sugar cane plants and awareness-raising actions aimed at students. Neoenergia Pernambuco and Neoenergia Coelba promoted a campaign on the topic on social networks, with more than 15.3 million impressions.

Published scientific articles

In the context of the Luzia project, scientific articles were approved to be presented at the 73rd National Botany Congress between October and November 2023 in Belém, in a conference on the topic: Sociocultural challenges in the relationship between man and our flora. Furthermore, in relation to the theme, the scientific articles were built from the environmental experience in the Luzia photovoltaic plant project.

The titles of the scientific articles chosen are:

- Ecological trail in a Photovoltaic Plant as a tool for teaching Environmental Education with emphasis on the flora of the Caatinga.
- Herbaceous flora of a Caatinga fragment on an ecological trail at a photovoltaic plant in the state of Paraíba.

Hydroelectric power plants

Teles Pires actively works to raise awareness among its employees and visitors, both internal and external, about the care of local fauna in the event that an animal is found in the plant structures and the need for rescue.

Iberdrola Mexico

In 2022 and 2023, annual environmental training sessions were held for all operational staff at Iberdrola's wind and photovoltaic plants in Mexico. Some of the topics taught were: awareness of the specific environmental obligations of each plant; air quality training; training to control and reduce noise emissions; water training; training in prevention and control of soil and subsoil pollution; training in waste management and control; training in natural resources, wildlife and forest resources.

Environmental Awareness Days

Several awareness days have been held with Iberdrola volunteers from the **La Laguna** combined cycle plant. The first, under the motto "I am also the environment" at the Lázaro Cárdenas Primary School for 4th grade children and at the Emiliano Zapata Primary School for 3rd and 4th grade children. Training has also been provided to the inhabitants of the Juan E Garcia community on how to make an urban garden. A Tourism Experience Exchange workshop was also held with the aim of sharing experiences between local inhabitants of the Cañón de Fernández State Park and Mapimí Biosphere Reserve on the tourism and surveillance actions carried out in the two Protected Natural Areas.

Waste collection

More than 2,000 kg of waste have been collected during cleaning actions in Sapioriz, Durango, and the San Juan River, Querétaro through the Iberdrola Foundation.

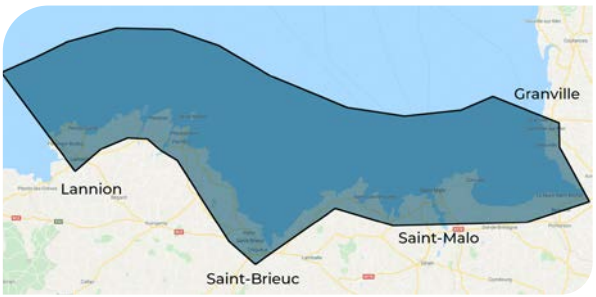
Iberdrola Energy International

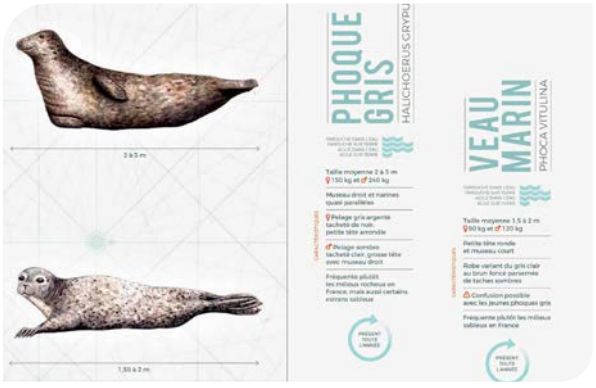
France

In Saint-Brieuc, actions were carried out specifically aimed at the personnel of the vessels (CTV – Crew Transfer Vessels) of the wind farm. Among these, CTV staff were briefed before the start of the work. The captains and crew members were trained in species recognition. If a group is detected, the captain of the vessel is obliged to transmit the position of the Balearic shearwaters found (so that the information can circulate to all Ailes Marines maritime navigation staff) and to avoid said group to limit their nuisance.

In addition, several measures have been carried out to promote communication and awareness at the offshore wind farm:

- Creation of an awareness zone, active from March 2021 to October 2023, to reinforce the peace and tranquillity of marine mammals during the construction phase of the wind farm.
- Publications on social networks and websites related to these articles and environmental news about the project: marine mammals, biodiversity, environmental monitoring programmes, etc.
- Creating an environment-focused video to respond to external stakeholders.
- Organisation of press and media visits to the park with environmental specialists and Ailes Marines staff.
- Creation of brochures dedicated to biodiversity and marine mammals to raise awareness among sea users about the respectful approach to marine mammals in case of accidental encounters.
- Distribution of an information and awareness brochure to the public and those involved in the nautical industry at local events. This document was also transmitted by tourist offices, sailing schools or even by certain maritime operators.
- Improve fishermen's fishing buoys (GPS tracking) in order to limit the loss of materials to the environment.
- Two annual awareness days.





Portugal

In **Algeruz II**, to promote awareness, heritage areas, tree cover or other areas that must be preserved have been marked on the ground to prevent fauna and flora from being affected by the works.

Greece

Environmental trainings have been organised for operation and maintenance personnel on biodiversity and protected areas in Greece. A total of 22 workers participated and received a training certificate. In addition, fire awareness training has been carried out lasting 8 hours per participant.

Italy

To promote awareness of the benefits of operating the Montalto Di Castro photovoltaic plant for energy purposes, the company installed an electronic board at the main entrance that indicates the plant's energy production in real time. In addition to electricity production data, the display panel also provides information on:

- The total tonnes of oil equivalent (TOE) saved.
- Reducing CO_2 emissions.
- Other data at the discretion of the company.

5.4.2 Awards

Iberdrola Spain

Climate Action Best Business Practices Award

The foundation for sustainable development Ecodes has included Iberdrola's Convive Programme among the best business practices of climate action in Spain, through its 10+10 Business Examples #PorElClima 2023. This diploma recognises Iberdrola as one of the 10 large Spanish companies that promote a true roadmap for the decarbonisation of their activity.

UNEF Certificate of Excellence for Sustainability and Biodiversity Conservation

The Andévalo facility, in Huelva, has obtained the Spanish Photovoltaic Union certificate of Excellence for Sustainability and Conservation of Biodiversity in photovoltaic plants, which recognises projects carried out under the best criteria of social and environmental integration.

Aspects of socioeconomic excellence are taken into account, such as the positive impact on local employment, dialogue with local actors, or the driving effect on the economy at a national, regional and local level, as well as compatibility with economic activities or the benefit to the community and biodiversity.

In Andévalo, among other initiatives, the livestock sector has been promoted through the use of herbicide-free land for grazing with sheep. Iberdrola has also placed 162 hives at the plant to help preserve the biodiversity of the environment and protect a species as vital to nature as bees. Added to this is the launch of an initiative to study how the cultivation of aromatic plants increases the quality of honey produced in the vicinity of the plant.

Rey Jaime I Awards

The Rey Jaime I Awards are awarded to people who stand out in their field of work and who have developed most of their professional activity in Spain. The Iberdrola Spain Foundation has been collaborating with this institution for years, being a member of the Jury and promoter of the Environmental Protection award, one of the six award categories.

Emilio Chuvieco Salinero has been awarded the Environmental Protection category in 2022. The objective of his project is to improve the consistency of data on burned areas using better algorithms, both for preprocessing and for the detection of burned areas from of global satellite data that are consistent, stable, and characterised by errors. It incorporates observations of active fires as a complementary variable to improve the detection of the burned area in different biomes.

In 2023, the Environmental Protection award has gone to the doctor in Marine Sciences, Carlota Escutia Dotti, whose research focuses on establishing the impact of changing environmental conditions on the Antarctic ice sheets, the Southern Ocean and the biota and its impact on the global climate system.

enerTIC Awards 2022

The Iberdrola project “Preservation of protected birds in wind farms” in the Smart Solutions and Services category has been awarded in the tenth edition of the “enerTIC Awards 2022”. These awards recognise the work of companies committed to innovation and improving energy competitiveness through digitalisation.

Iberdrola’s project, awarded among more than 70 applications submitted, makes it possible to detect the presence of birdlife in its wind farms and identify bird families to act on the wind turbines. The technology used consists of the installation of a combination of radar, cameras, and artificial intelligence that identify the species that fly over the wind farms and their trajectory.

ScottishPower

ScottishPower Renewables' Whitelee wind farm has received the international Green Flag Award for the third consecutive year. It is the only wind farm to receive this award, which recognises spaces that meet the needs of the communities they serve. ScottishPower received the award for its work with the Whitelee Countryside Ranger Service to deliver a positive environmental legacy by improving ecological habitats for native bird species and restoring natural peatlands. The International Green Flag Award is administered in Scotland by Keep Scotland Beautiful and acts as a benchmark for outdoor recreational spaces.

Avangrid

Avangrid Renewables offers annual awards to wildlife coordinators and operating facilities that embody the spirit of the Wildlife Protection Program. Annually, a notable achievement is recognised for a field technician and for an operating facility that has demonstrated outstanding performance in implementing the Wildlife Protection Program.

Neoenergia

In 2023, Neoenergia received the "Friendly Company of the Atlantic Forest" award for contributing to the conservation and sustainable use of the Atlantic Forest, through actions to support the actions of the Atlantic Forest Biosphere Reserve, linked to the MaB (Man and the Biosphere) of UNESCO, reinforcing its actions in support of the Sustainable Development Goals and the Global Goals for 2050 and directly linked to the Biodiversity Policy of the Iberdrola Group.

Iberdrola México

Iberdrola México's thermal power plants participate in the National Environmental Audit Programme administered by the Federal Attorney General's Office for Environmental Protection. This voluntary programme aims to recognise companies that demonstrate continuous improvement in environmental performance and are committed to preserving the environment.

During 2022 and 2023, the plants that received a Clean Industry certificate were: Central Tamazunchale, Altamira III and IV, Enertek, Cogeneración Ramos, Baja California III, and Cogeneración Altamira.

Iberdrola
Biodiversity