WBCSD TNFD pilot use case: *Iberdrola*

Locate & Evaluate phases of LEAP

World Business Council *for Sustainable Development*

The LEAP approach is TNFD's voluntary nature-related risk and opportunity assessment approach for corporates and financial institutions

LEAP has been designed and developed with three overarching considerations in mind:

1. The LEAP approach encourages users to carefully **consider the scope** of their assessment before commencing;

2. Analysts and preparers are encouraged to **consult with relevant stakeholders** as they work their way through the LEAP approach; and

3. LEAP is designed as an **iterative process** – across business locations, business lines for corporates, and across investment portfolios and asset classes for financial institutions – in line with enterprise risk management processes and reporting and disclosure cycles.

LEAP is **not, in itself, a recommended disclosure or a mandated process** to adhere to the disclosure recommendations put forward by the TNFD.

As such, not everything that is identified, assessed and evaluated using the LEAP approach needs to be disclosed.

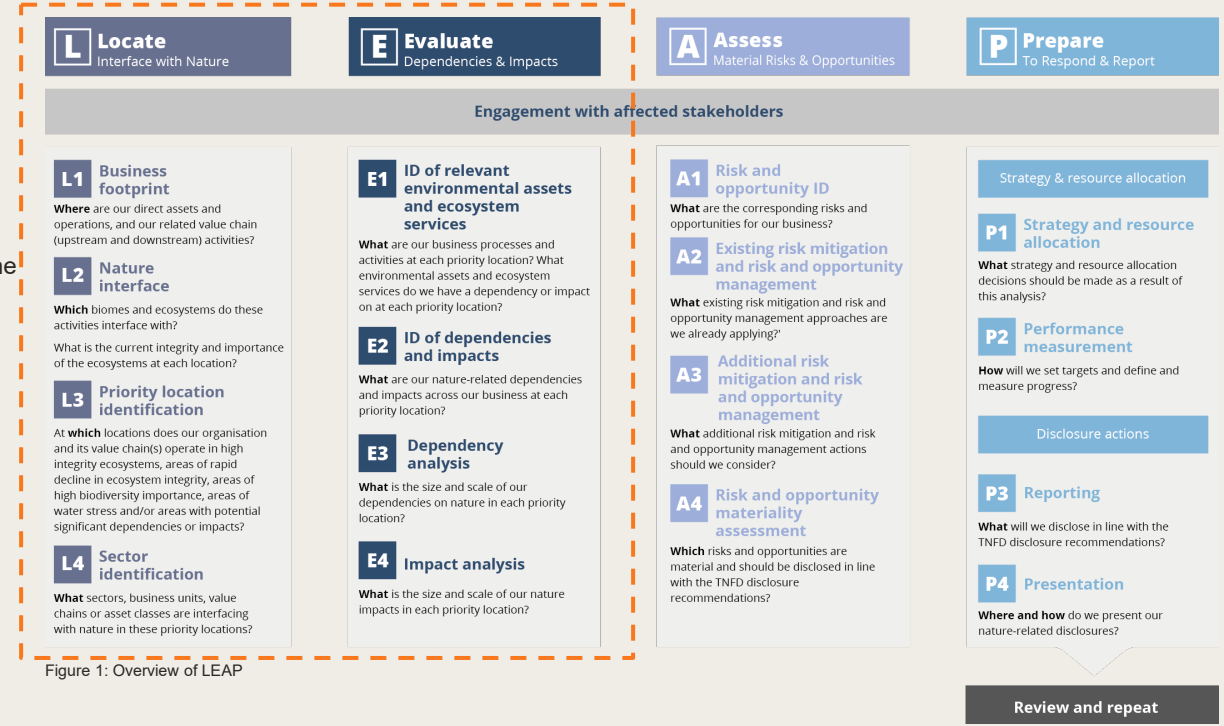

Figure 1: Overview of LEAP

Context/Disclaimer

The following Use Case report shows an example of how a company's previous approach to assessing nature impacts, dependencies, risks and opportunities, can be aligned with the Taskforce for Nature-related Financial Disclosures (TNFD)'s LEAP approach. It is important to note that Iberdrola has been publishing comprehensive biodiversity reports since 2007 and have been performing nature and biodiversity analysis as part of this. Their methodology and results pre-date the TNFD LEAP approach, and therefore the mapping to the LEAP steps gives an indication of how their practices are already aligned to the TNFD's latest recommendations.

Iberdrola announced last December their 2030 Biodiversity Plan and their goal to have net positive impact on Biodiversity by 2030. The Plan is aligned with TNDF and SBTN principles and Iberdrola's approach to managing nature related risks will continue to evolve as the TNFD framework is finalized. Iberdrola are now adapting their approach to further align with the latest version of the LEAP approach, and emerging guidance.

This use case covers Iberdrola's approach to the *Locate* and *Evaluate* phases of LEAP, and how findings inform the *Assess* and *Prepare* phases

Scoping

Before carrying out the Locate and Evaluate phases, Iberdrola analyses their business operations to identify which activities have the most material interaction with nature and ecosystem services.

To do this, Iberdrola conducts a high-level impact and dependency assessment on nature and ecosystem services per activity type (generation type, distribution, etc.). This analysis together with its business strategy informs Iberdrola regarding which activities are most material and therefore which should be the focus of the LEAP assessment.

L Locate
Interface with Nature

L1 Business footprint
Where are our direct assets and operations, and our related value chain (upstream and downstream) activities?

L2 Nature interface
Which biomes and ecosystems do these activities interface with?

What is the current integrity and importance of the ecosystems at each location?

L3 Priority location identification
At **which** locations does our organisation and its value chain(s) operate in high integrity ecosystems, areas of rapid decline in ecosystem integrity, areas of high biodiversity importance, areas of water stress and/or areas with potential significant dependencies or impacts?

L4 Sector identification
What sectors, business units, value chains or asset classes are interfacing with nature in these priority locations?

Iberdrola maps their locations and operations with the different ecosystems they interface with. 1.

Iberdrola identifies the nature interface of their assets to support which locations should be prioritized. Then, Iberdrola identifies their priority assets based on the state of nature at those locations and local impact data on species. This is performed in an iterative process. 2.

Iberdrola categorizes its priority assets by activity type and location. 3.

E Evaluate
Dependencies & Impacts

E1 ID of relevant environmental assets and ecosystem services
What are our business processes and activities at each priority location? What environmental assets and ecosystem services do we have a dependency or impact on at each priority location?

E2 ID of dependencies and impacts
What are our nature-related dependencies and impacts across our business at each priority location?

E3 Dependency analysis
What is the size and scale of our dependencies on nature in each priority location?

E4 Impact analysis
What is the size and scale of our nature impacts in each priority location?

Iberdrola identifies ecosystem services they are reliant on and key actions impacting biodiversity. 4.

The Corporate Environmental Footprint (CEF) allows Iberdrola to quantify the impact of its activities on the environment from the Life Cycle Perspective. This allows Iberdrola to understand the scale and type of impacts across the value chain. 5.

Iberdrola maps the locations of their own operations, including activity type and region

Process

- Iberdrola identifies the countries in which it operates. It operates in multiple countries, focusing its activity on six regions:
  - Spain, United Kingdom, United States, Brazil, Mexico
  - International (which includes, among other countries: Australia, Germany, Portugal, France, Italy, Ireland and Japan)
- For each of these six regions, Iberdrola maps the activities and facilities of Iberdrola Group, including:

Main offices

Area of electricity distribution (where relevant)

Areas of influence

Length of power lines (km^2) (where relevant)

Projects under construction (including the type of project)

Output

Iberdrola provides maps for main countries of operation to show asset locations, asset type and their level of influence by region.

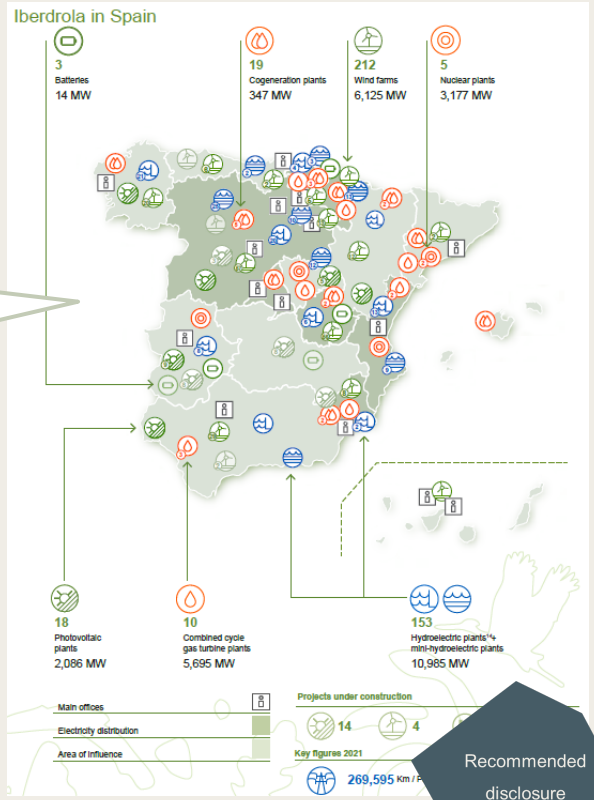

Figure 2: Iberdrola biodiversity report 2022, Spain case study.
Source:
Iberdrola Biodiversity Report 2022 p.34

Recommended disclosure **Strategy D.**

Iberdrola identifies the nature interface for their key assets to support which locations should be prioritized

At this stage, organizations can choose from multiple data sources which may inform which locations should be prioritized.

Datasets will vary in terms of granularity as well as their relevance to sectors and biomes.

Process

Once their key assets have been identified, Iberdrola combines asset data with nature-related datasets e.g. Ramsar wetlands and Natura 2000 to identify their priority locations. Iberdrola also looks at water stressed regions as a way to prioritize location, using the Aqueduct Water Risk Atlas. To do this, Iberdrola:

- Collects data on the environmental surroundings (e.g. Ramsar wetlands, Natura 2000) and calculates the area/length of ecosystem affected by their assets, as well as identifying the technology type of the asset;
- Monitors the IUCN Red List, national and regional lists, to identify threatened species and associated threat categories for its facilities in the 6 regions (see Figure 3)
- Conducts studies around their facilities prior to the approval of the project. These studies vary depending on the project, and may include bird sighting studies, endemic species studies and habitat characterization studies.

Output

Iberdrola provides a table to show how assets interface with threatened species. This allows Iberdrola to see which of their regions converge with hotspots for threatened species.

IUCN Red List of Threatened Species	Critically endangered (CR)	Endangered (EN)	Vulnerable (VU)	Near Threatened (NT)	Least Concern (LC)
Spain	8	20	41	53	561
United Kingdom	2	4	8	12	120
United States - Canada	2	13	12	11	39
Brazil	4	17	33	34	584
Mexico	0	4	6	12	306
IEI	0	2	6	10	105
Totals	**16**	**55**	**100**	**113**	**1,393**

Figure 3: Protected species near facilities which could be potentially impacted (p 42). Source: Iberdrola Biodiversity Report 2022

Tamarino león de cabeza (*Leontopithecus chrysomelas*) - Brazil shutterstock

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

Image 1: Examples of endangered species near facilities (p 42). Source: Iberdrola Biodiversity Report 2022

NB: The presence of a protected species near to a site does not necessarily mean that the species is impacted by Iberdrola

Recommended disclosure **Strategy D.**

Iberdrola identifies which sectors are in operation at their priority locations

Companies should be thinking about what is the threshold for a priority location. Example criteria could involve whether there is overlap with a protected area, a protected species or area of water stress.

Process

Results from L1 and L2 are combined to inform which locations Iberdrola considers to be priority in order to conduct a full LEAP assessment (see Figure 4).

Iberdrola considers a sectoral lens and how business processes differ between sections of their value chain. For example, considering the value chain of their electricity and the green hydrogen sector.

Generation of electricity and green hydrogen

Construction, operation and maintenance of power generation plants; and purchase/sale of energy on wholesale markets

→

Transmission and distribution

Construction, operation and maintenance of electrical 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

→

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

End user supply of electricity, gas, 'smart' and innovative energy products and services

Output

Iberdrola provides a table to show how their assets interface with protected areas. This enables the organization to see which technology types to prioritize for further analysis based on their protection status.

Technology	Location with respect to the protected area	Affected Area/ Length	Degree of protection
Hydroelectric power plants - Reservoirs	interior	31,505 ha	Biosphere reserves, Ramsar Wetlands, Natura 2000 Network, national parks and natural parks.
Power lines	interior	19,315 km	Natura 2000 network, Ramsar Wetlands, National Parks, Natural Parks, Biosphere Reserves.
Substations	interior	131 units	Natura 2000 network, Ramsar Wetlands, National Parks, Natural Parks, Biosphere Reserves.
Transformer stations	interior	8,425 units	Natura 2000 network, Ramsar Wetlands, National Parks, Natural Parks, Biosphere Reserves.
Onshore wind farms	interior	568 ha	Natura 2000 Network, Important Bird and Biodiversity Areas
Nuclear power plants	interior	82 ha	Natura 2000 Network
	Adjacent	3 units	Nature 2000 Network and Important Bird and Biodiversity Areas
Thermal power plants	Adjacent	6 units	Natura 2000 Network, Protected Landscapes, Biosphere Reserves and Marine Protected Areas

Figure 4: Facilities within or adjacent to protected areas or high biodiversity value areas. Source: Iberdrola Biodiversity Report 2022 p.39

Recommended disclosure **Risk & Impact A.**

Iberdrola identifies where they depend on ecosystem services and which processes have key impacts on biodiversity

At this stage, companies should be thinking which methodology is best to identify their impacts and dependencies and whether they are using any external data sets.

Process

Identification of ecosystem services, dependencies and impacts

Iberdrola analyzes the business activities - rather than locations - of the group, to identify ecosystem services. After initially using ENCORE to do this, Iberdrola currently uses the CICES list of ecosystem services which provides more granular data and maps ecosystem services per technology. The materiality matrix developed by the Natural Capital Spanish Energy Sector Working group is used to identify high level dependencies and impacts on biotic/abiotic resources and ecosystem services per type of activity (e.g. distribution, transmission, onshore wind).

The ecosystem services identified include: waterway maintenance, climate regulation, land stabilization and erosion control and protection against floods and extreme weather. Iberdrola then refine this list using location-specific data from pilot projects and annual reporting data from the assets (e.g. MW installed), which are then aggregated to report material impacts and dependencies for reporting.

Dependencies: Material dependencies identified include abiotic supply resources, of which water, mineral and non-mineral resources are significant for Iberdrola.

Impacts: Iberdrola identifies which key business actions within the 4 stages of an asset's life cycle could have an impact on biodiversity (see right). From the identified actions, they distinguish the potentially significant impacts on biodiversity stemming from the group's activities, products and services.

NB: LEAP is an iterative process, which means that the Evaluate and Locate phases may be iterated to build a clear picture of both the company level dependencies/impacts, as well as the location-specific dependencies/impacts. For example, Iberdrola note that from their experience some impacts on species can occur in areas not identified as 'High Biodiversity value' and therefore performing 'L' before 'E' may miss some species out of their prioritization.

Output

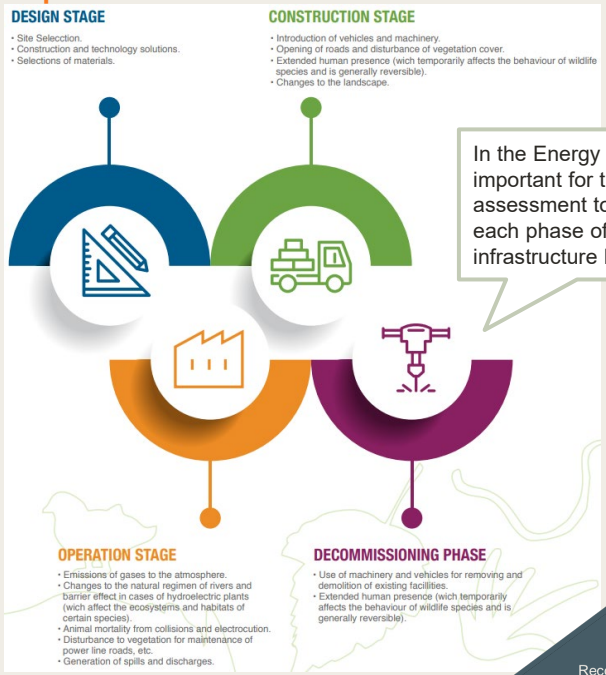

Figure 5: Iberdrola's Life cycle activities and impact on the environment. Source: Iberdrola Biodiversity Report 2022 p. 47

Recommended disclosures
Strategy A.
Risk and Impact A.

The Corporate Environmental Footprint (CEF) allows Iberdrola to quantify the impact of its activities on the environment

Impact pathways are useful to assess impacts on natural environment of your operations. Sector specific guidance on impact analysis and valuations can be found on the TNFD portal. The methodologies recommended by TNFD include: SBTN, Natural Capital Protocol, CDSB, ENCORE.

Process

- At the facility level, Iberdrola uses a variety of environmental assessments to assess new projects and monitor/control the impacts of their operations.
- At the corporate level, Iberdrola uses the Corporate Environmental Footprint (CEF) to objectively identify and compare the impact of its activities on the environment from a **Life Cycle perspective** and therefore have a sense on the impacts of the value chain.
- The CEF enables Iberdrola to trace their impact pathways and, identify the environmental aspects and the facilities, technologies and regions responsible. The ReCiPe12 methodology is followed, based on UNE-EN ISO 14040:2006 and UNE-EN ISO 14044:2006 standards. This was applied to Iberdrola applies this methodology to their products/services to quantitatively analyze their life cycle.

Output

The CEF scoring exercise quantifies impacts and enables Iberdrola to compare and prioritize

IMPACT CATEGORIES	DIRECT SCOPE (Points)	INDIRECT SCOPE (Points)	TOTAL
Climate change (Human health)	540,647,218	2,825,215,629	3,365,862,847
Ozone layer depletion	413	550,920	551,333
Human toxicity	305,421	361,056,180	361,361,601
Photochemical ozone formation	29,329	153,371	182,700
Particulate matter formation	47,143,431	622,070,455	669,213,886
Ionising radiation	0	10,027,455	10,027,455
Climate change (Ecosystems)	45,538,324	237,988,530	283,526,853
Soil acidification	37,072	373,976	411,047
Freshwater eutrophication	0	305,886	305,886
Soil ecotoxicity	386	369,040	369,425
Freshwater ecotoxicity	1	1,053,477	1,053,478
Marine ecotoxicity	5	179,942	179,942
Rural land occupancy	0	29,941,950	29,941,950
Urban land occupancy	50,233,504	2,529,455	52,762,960
Natural land transformation	0	13,841,954	13,841,954
Mineral resource depletion	0	158,021,217	158,021,217
Fossil fuel depletion	0	3,978,149,078	3,978,149,078
TOTAL Points	**683,935,103**	**8,241,828,516**	**8,925,763,619**

Figure 6: Impact scores of Iberdrola's activities.

Source: Iberdrola Biodiversity Report 2022 p. 50

Recommended disclosure
Risk and Impact A.
Metrics and targets B.

Iberdrola takes the outputs from Locate and Evaluate phases and incorporates them into their target setting process

Asses

- Iberdrola uses the outputs from Locate and Evaluate phases to identify their risks and opportunities in conjunction with its Comprehensive Risk Control and Management system.
- The risk / opportunity assessment detail and quantification vary depending on the data availability and understanding of the risk / opportunity. For example, certain aspects of nature (e.g. regulating ecosystem services) use a heatmapping approach, where others (e.g. water) use asset tagging or scenarios.
- Having identified the key risks, Iberdrola considers what risk management is in place already, and any additional measures that are needed. For example, they have location specific mitigation measures for each of their locations.

For example:

- For networks in Brazil, Iberdrola take into account the risk of vegetation loss. Two programs have been created to improve ecosystem health: 1) Degraded Areas recovery plan and 2) Forest compensation program.
- In Spain, the evaluation risk of impacts on species in networks and onshore renewables have resulted in several projects such as: the modification of the powerline poles to avoid electrocution in areas of higher risk; and the introduction of innovative mitigation measures for wind farms (painting blades, radar +AI, etc.).

Prepare

- Iberdrola has 2 overarching targets:
  - 2030 Target: Have a net positive impact on biodiversity
  - Commitment to no deforestation by 2025

Based on their site specific analysis Iberdrola also sets goals for their priority locations. To achieve these goals they have developed action plans. For example; in one of their locations in Brazil (Baixo Iguaçú Hydroelectric Power Station), their goal is to conserve, restore and regenerate the Atlantic Forest biome; and they have set an action plan accordingly.

Prepare output

Iberdrola provides images to show the effects on nature before and after their mitigation activities (planting in this case)

Target

Conservation, restoration and regeneration of the Brazilian Savannah biome.

1. Corumbá III_Before plantin
2. Corumbá III_After planting

Figure 7: Map comparing the area of Corumba before and after planting. Retrieved from Iberdrola Biodiversity Report 2022 p. 89

Recommended Disclosures
Risk and Impact B.
Metrics and targets C.