Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Redeia is the new brand to denominate Red Eléctrica Group (during the questionnaire we´ll refer to it as Redeia or RE). Redeia is a global operator of essential infrastructure, managing electricity transmission grids and telecommunication networks (dark fibre and satellites).-

The main society of the group is Red Eléctrica de España (Red Eléctrica), the Spanish TSO (transmission -system operator). It is the sole company in Spain that carries out this kind of activities. Red Eléctrica is the owner and manager of the transmission grid in Spain (building and maintaining transmission infrastructures: lines and substations) and is responsible for the technical operation of the Spanish electricity system. As the manager of the transmission grid, Red Eléctrica must guarantee that facilities are adequately developed and enlarged as needed, that they are maintained and enhanced on the basis of uniform and consistent criteria, that the transmission of power between external systems using the Spanish power system is properly managed, that the managers of other interconnected grids receive the information they need to guarantee safe operations and that third party access to the grid is guaranteed under non-discriminatory conditions. As the operator of the Spanish power system, Red Eléctrica's principal mission is to guarantee the continuity and security of the power supply and to properly coordinate the production and transmission system, performing its functions in coordination with the operators and clients of the Iberian power market based on the principles of transparency, objectiveness, and independence. Red Eléctrica is also responsible for electricity transmission and acts as system operator of the insular and extra peninsular power systems. Besides, Red Eléctrica is n charge of the energy storage activity in the Canary Islands, still in the project stage.

Red Eléctrica does not generate energy. In order to understand some of the answers provided it is important to mention that Electricity transmission in Spain is a regulated activity: the economic scheme is defined by government and regulated by law. Revenues are settled by the government according to defined criteria regarding investments, operational & maintenance costs and availability of the transmission grid.

Redeia also conducts other business in order to maximum the company's experience: Electricity activities abroad, which are handled by Red Eléctrica International (Redinter), Innovation activities (Elewit) and Telecommunications activities (Reintel- dark fibre- and Hispasat- a satellite infrastructure operator.) The information reported is mainly related to the facilities and activities in the Spanish power system which represent 90% of the total business operations, handled by Red Eléctrica de España (Red Eléctrica), but information about other companies in the group is also included.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

January 1, 2022

End date

December 31, 2022

Indicate if you are providing emissions data for past reporting years

No

C0.3

(C0.3) Select the countries/areas in which you operate.

Brazil
Chile
Peru
Spain

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

EUR

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-EU0.7

(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.

Row 1

Electric utilities value chain

Transmission

Other divisions

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	ES0173093024

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Board Chair	The ultimate responsibility for Climate Change Policy in RE is shared by the Board Chair (President) and the CEO. The chair, as an external director, has the responsibilities of supervision and control. The Sustainability Committee is the sub-set of the Board who is responsible for the Sustainability Policy (which includes Climate Change). The executive tasks are delegated to the Executive Committee, directly appointed by the Board of Directors. The Chief Sustainability Officer, who reports to the Board Chair (President) and is a member of the Executive Committee, leads de Sustainability Management Committee (an additional committee for sustainability issues) and the Corporate Sustainability and Research area, responsible for leading and promoting the definition and monitoring of climate change targets and the associated action plan. Examples of a decision taken by the Board Chair: the approval of short-term emission reduction targets (2025) in 2022, approval of the updated emission reduction targets (aligned with 1.5 global goal) in 2021. Besides, the Board chair approved in 2022 the issue of green hybrid bonds worth 500 million euros and in 2021 the update of RE Green Finance Framework and the second issue of green bonds (600 million euro).
Chief Executive Officer (CEO)	The ultimate responsibility for Climate Change Policy in RE is shared by the Board Chair (president) and the CEO. The CEO has the executive responsibilities for implementation of policies regarding Climate Change. The Sustainability Committee is the sub-set of the Board who is responsible for the Sustainability Policy (which includes Climate Change). The executive tasks are delegated to the Executive Committee, directly appointed by the Board of Directors. The Chief Sustainability Officer, who reports to the Board Chair

	(President) and is a member of the Executive Committee, leads de Sustainability Management Committee (an additional committee for sustainability issues) and the Corporate Sustainability and Research area, responsible for leading and promoting the definition and monitoring of climate change targets and the associated action plan. An example of a decision taken by the CEO is the approval of the new Climate Action Plan (2021-2030)-defined to incorporate the actions and projects to achieve the new emission reduction goals. In 2022, the offsetting strategy (including targets) for Redeia has been approved by the CEO.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan	Redeia' s decarbonisation strategy is set out in the Climate Change Commitment and in its emission reduction targets (2030-2050) approved by SBTi. Redeia's transition Plan is public and 1.5 º aligned. It comprises different approaches. The first approach is the contribution to the decarbonization of the economy: Redeia, as the key player in the Spanish electricity system is an essential agent in the transition towards an emissions-free energy model. - The company´s Business Plan is focused on this goal. Energy and climate change policies are the main drivers to define business strategy. In particular, the European policy framework for climate and energy & the Spanish Integrated National Energy and Climate Plan (NECP) has been the main references for the business plan (Strategic Plan 2021-2025) The Strategic Plan is mainly focused on the Spanish energy transition. Overseeing, guiding and monitoring the development of the Strategic plan, is addressed in every meeting of the board. - Redeia mayor capital expenditures are aimed to achieve the energy transition and are described in the Electricity planning (2021-2026), whose main objective is to integrate renewable energy into the electricity system and develop future interconnections with France.

		CAPEX is focused on the development of transmission infrastructure and in large scale storage: Chira Project. Oversight of these expenditures are scheduled for all meetings. - The revision of annual budgets is also included in all the regular meetings (once a month).
Scheduled – some meetings	Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing and guiding scenario analysis Overseeing the setting of corporate targets Monitoring progress towards corporate targets Overseeing and guiding public policy engagement Overseeing value chain engagement Reviewing and guiding the risk management process	Revision of the Climate Change strategy and corporate targets are scheduled in some specific board meetings. Performance objectives are usually set once a year and revision of climate change annual targets is addressed every three months, as they are considered “managerial targets” that determine CEO and other managers bonus (as described in the remuneration report). The revision of climate risks (including scenario analysis) is developed at least twice a year. Reviewing and guiding the risks management process is scheduled in specific meetings (at least twice a year) Other issues, such as overseeing value chain engagement is address at least once a year.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues

Row 1	Yes	One of the members of the board is an expert on climate-related issues. Skills and experience have been considered. Some of the skills (reported in his CV, available to the public in the RE website) are the following: - Current occupation (Professor of Atmospheric Physics at the Complutense University of Madrid, Researcher of the Instituto de Geociencias (CISC-UCM), Chair of the Atmospheric and Ocean Specialised Group of the Spanish Royal Physics Society, Evaluator of the Austrian Climate and Energy Fund (since 2007). - Former occupation (experience): involvement in different associations linked with climate and energy -Experience as a researcher on national and international projects. (For instance studies and works on climate variability and change & impact of climate on different socio-economic sectors; modelling of the variability of the wind and solar resources, both on a meteorological scale and in the long term; impact of extremes (heat waves and droughts) on the demand for energy, as well as on the relationship between weather extremes and the production of wind energy; analysis of the impact of climate extremes on health) - Publications and speeches, For example: contributing author and reviewer of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) and guest speaker in several international conferences (Royal Meteorological Society, Oxford University, Durham University, the Bermuda Biological Station, the National Oceanic and Atmospheric Administration (NOAA) and the Biennial Meeting of the Spanish Royal Physics Society).

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Chief Executive Officer (CEO)

Climate-related responsibilities of this position

Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)

Developing a climate transition plan

Implementing a climate transition plan
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets

Coverage of responsibilities

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

According to the Climate Changes Commitment, the approval of the Climate Change Action Plan (including climate-related targets) and its revisions, as well as monitoring its compliance and driving its implementation falls under the remit of the Executive Committee, led by the CEO. Redeia's transition Plan comprises different approaches. The first approach is the contribution to the decarbonization of the economy: Redeia, as the key player in the Spanish electricity system is an essential agent in the transition towards an emissions-free energy model. The company´s Business Plan is focused on this goal. Energy and climate change policies are the main drivers to define business strategy. The Strategic Plan (2021-2025) is mainly focused on the Spanish energy transition. Major capital expenditures are related to the construction of new energy infrastructure to make energy transition possible and they are managed by the Executive Committee, led by the CEO.

Position or committee

Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position

Developing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Monitoring progress against climate-related corporate targets

Assessing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

The Corporate Sustainability and Research area, leaded by the Chief Sustainability Officer, in collaboration with the relevant areas is responsible for promoting the definition and revision of Climate Change Commitment & the definition and monitoring of climate change targets and the associated action plan, and report progress to the Sustainability Committee (board) and the Executive Committee (both).
CSO has other specific responsibilities related to climate change such as conducting climate-related scenario analysis and assessing climate-related risks and opportunities (in cooperation with Internal Audit and Risk Control Management Area).
It must be noted that the CSO reports directly to the President (board).

Position or committee

Chief Financial Officer (CFO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

Annual budgets (including climate mitigation activities) and major CAPEX and OPEX are managed by the CFO, who reports to CEO. They are overseen by the Board every month.

Position or committee

Chief Operating Officer (COO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Implementing a climate transition plan

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

The organisational units within the Company are responsible for fulfilling their duties and responsibilities regarding Climate Change. They propose measures to be included in the climate change action plan aligned with the established objectives, implement the measures included in the plan, and periodically provide the necessary information for monitoring. They managed the unit budget for climate mitigation activities and the capital /operational expenditures according to the unit specific responsibilities.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive

Chief Executive Officer (CEO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Achievement of climate transition plan KPI
Progress towards a climate-related target
Achievement of a climate-related target
Implementation of an emissions reduction initiative
Reduction in absolute emissions
Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

Since 2015, Environmental, Social and Governance (ESG) criteria has been applied by Redeia in the calculation of the variable remuneration of the CEO and members of the senior management team. As established in the remuneration report, which is publicly available, managerial targets determine the CEO's bonus. This can make up for 15% to 25% of their annual bonus and around 10% of their multiannual bonus. Managerial targets always include some sustainability projects, in particular climate-related and emission reduction projects. In 2022 the managerial targets were: (1) "Reduce 15% of scope 1&2 from 2019 & reduce 21% of SF6 emissions compared to 2015 levels -and (2) "Progress of Sustainability Plan" (the plan includes different projects related to climate change, including risk management & implementation of emissions reductions initiatives). Both targets accounted for the 9% of the total managerial targets. (3)Permanence of the Company in the most relevant indices in the field of sustainability, in particular, in the Dow Jones indices (DJSI World y Europe) and Vigeo/Eiris (World 120, Europe 120 y Eurozone 120).

Besides, an additional 35% of the managerial targets were linked to projects for energy transition in Spain (achievement of climate transition plan KPI) .

In 2023 the managerial targets related to climate change are (1) "Reduce 21.5% of SF6 emissions compared to 2015 and reduce 20% of scope1&2 emissions from 2019 levels" and (2) "Progress of sustainability Plan" (the plan includes different projects related to climate change, including risk management and emission reduction initiatives. Both targets account for the 15% of the total managerial targets. Besides, the 35% of the managerial targets is linked to projects for energy transition in Spain (achievement of climate transition plan). 3)Permanence of the Company in the most relevant indexes in the field of sustainability, in particular, in the Dow Jones indices (DJSI World y Europe) and Vigeo/Eiris (World 120, Europe 120 y Eurozone 120).

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The incentives for CEO and senior management team are completely aligned with the implementation of Redeia´ s climate change commitment & climate transition plan:

- Energy transition in Spain
- Emission reduction targets (KPI: absolute emission reduction, implementation of emissions reduction activities)
- Sustainability Indexes: they take into account both the climate change commitment and the implementation of the transition plan. Climate change performance is very important to remain in those indexes.

Entitled to incentive

Corporate executive team

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Implementation of an emissions reduction initiative
Increased engagement with suppliers on climate-related issues

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

Since 2015, Environmental, Social and Governance (ESG) criteria has been applied by Redeia in the calculation of the variable remuneration of the CEO and members of the senior management team. The fulfilment of annual targets determines the bonus for directors and unit managers. Specific projects regarding climate change are always included as targets.
For 2022, the following projects were chosen:(a) Definition of Net-Zero targets and emission offsetting strategy, (b) Definition and approval of no deforestation commitment, (c) SF6 emission reduction projects.
For 2023, the following projects have been selected: (a) Definition of the sustainable procurement model (ESG criteria). Inclusion of LCA criteria (carbon footprint and circular economy) in tendering decision. Roadmap for implementation. (b) Implementation of no-deforestation commitment (c) SF6 emission reduction projects.

Explain how this incentive contributes to the implementation of your organization’s climate commitments and/or climate transition plan

These incentives try to encourage the development of Key projects regarding climate change. The implementation of this projects is necessary to progress towards climate change targets.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	1	3	This range has been chosen in order to be aligned with the interim short-term targets (2025), aligned with the Strategic Plan (2021-2025) and the Sustainability Plan of the company (2023-2025).
Medium-term	3	10	This range has been chosen in order to be aligned with the strategic plan of the company (it is defined for 5 years). This range has been chosen in order to be aligned with the Climate Change Action plan (2022-2030), the Science Based Targets for 2030 (emission reduction targets) and medium-term scenario analysis (2030).
Long-term	10	100	This range has been chosen in order to be aligned with our Net Zero Commitment (2050 Science Based Targets) and the scenario analysis carried out for physical risks (up to 2100).

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

When identifying or assessing climate-related risks, Redeia considers that an impact is substantive if it can have a considerable or relatively significant effect at the corporate level.

The effect contemplated can be financial or strategic. From a financial perspective, Redeia defines substantive financial impact, a potential annual impact higher than 1% of the Company's annual profit. From a strategic point of view, a risk is considered substantial when it has strong impact on the

activities (mainly electricity supply), company strategy or reputation (specific indicators – quantitative and qualitative- have been stablished to assess this kind of impacts. The main ones are: energy not supplied-ENS, level of impact on stakeholders requirements and impact on media).
Additional explanation:
The prioritisation of risks is done considering the following criteria: exposure to risks, sensitivity and adaptation capacity. Sensitivity is determined based on the potential impact the risk would have on the Company. This impact is analysed from both a financial perspective and from a strategic perspective (impacts on electricity supply - operational, company strategy and reputation). For the risks considered relevant, the economic impact is quantified and monetized. The relevance of the economic impact is determined by comparing the potential annual financial impact of the risk against the annual profit of the Company (average of the last years). Redeia's average annual profit of the last 3 years is 655 million euros. For 2022 we have considered that risks have a substantive financial impact on our business if their estimated annual impact is higher than 6.55 million euros (per year)- more than 1% of the Company's annual profit-.
Nevertheless, financial impact is not the only driver to consider a risk as relevant. A risk that doesn´t have a substantive financial impact can also be considered relevant from a strategical point of view (a risk might not be relevant from a purely financial perspective, but it may well be if its potential impact in the electricity system or the impact in terms of reputation is high). These two are generally interrelated for Redeia.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

1. Integration into company risk management process
RE has a comprehensive risk management system in place in order to facilitate the fulfilment of the Group's strategies and objectives, ensuring that the risks that could have an impact on them are identified, analysed, assessed, managed and controlled systematically, with uniform criteria and within the level of acceptable risk approved by the Board of Directors. RE has a Comprehensive Risk Management Policy (CRMP) and general Procedure for risk management and control, based on the Comprehensive Risk Management Framework of the Committee of Sponsoring Organisations of the Treadway Commission (COSO II). The BoD, via the audit committee, approves the CRMP, approve the criteria of the acceptable risk level, and periodically monitor the efficiency of the CRMP. All these apply for climate-related risks.
2. Coverage of all the value chain
Systems, policies and processes in place for identifying and manage climate-related R&O apply to:
- Direct operations: applies to all types of facilities and considers every geographic location. It also considers the impacts on the operation of the electricity system (which are sometimes independent of the impacts on the facilities).
- Upstream activities: includes impacts on power generation (upstream to transmission activity) and impacts on the supply chain. e.g., reduction in the availability of water resources for hydroelectric generation, decrease in the efficiency of thermal and photovoltaic.
- Downstream: includes impacts on electricity demand (downstream of transmission activity). e.g., variations in demand patterns. Additionally, impact on electricity supply is considered as a criterion for assessing sensitivity (impact on supply means impact on RE´s customers).
3. Identification &assessment procedure
A specific climate related R&O identification process is developed by a multidisciplinary team lead by Sustainability Department and Risk Management and Compliance Department. It´s done every 3 years, linked to the strategic planning periods.
The Sustainability and Risk Management and Compliance Departments work with business units in the assessment of the R&O identified. The complete assessment is carried out yearly and reviewed half-yearly, in accordance with TCFD recommendations.
Regarding the assessment
- Short, medium and long-term time-horizons are covered. The probability of occurrence is considered in 2020-2030-2050 for transition scenarios and 2020-2030-2050-2070 for physical scenarios.
- Impact (sensitivity) is analysed from both a financial and a strategic perspective (impacts on electricity supply - operational, achievement of

essential strategies, economic loss and reputation). Financial KPIs: revenues and expenditure (Capex and Opex), EBIDTA and cashflow. Non-financial KPIs: Energy not-supplied, renewable penetration, etc.
- R&O are assessed considering three criteria: company exposure to the risks, sensitivity and adaptation capacity and prioritized in four categories high-level, medium-high / medium-low-level and low-level risks.
4. R&O management
Relevant risks are included in the Risk Map of the company, which is prepared applying a bottom-up methodology, whereby risks are identified, analysed and assessed by the different organizational units before been escalated for validation by Directors until the final presentation to the Executive Committee, the Audit Committee, the Board of Directors and the chair of the group.
The opportunities also follow a bottom-up methodology for their validation, and they are finally approved by the Sustainability Committee and the Board of Directors.
According to the defined procedure, company's strategic plans must reflect the strategy regarding climate change, considering the identified risks and opportunities, detailing the lines of action, setting the objectives to be achieved, defining high-level responsibilities and establishing the acceptable level of exposure to risk. .
Business Areas establish in their operating plans actions regarding climate change in order to keep the exposure to these risks within acceptable levels. These plans will include specific objectives and responsibilities and are monitored to inform governing bodies.
5. Case study (physical)
Changes in physical climatic variables affect electricity generation and demand that involve some risks & opportunities for Redeia. One of them is the impact on outdoor facilities (electricity lines) due to extreme winds. This risk is likely to materialise in the short, medium and long term. After the prioritization process (that considers exposure, sensibility the company´s adaptation capacity) this risk has been classified as high-level risk. The risk has been included in the Company´s risk map. Besides, and according to the RE`s procedure, the financial impact of the risk has been quantified. Action plans and measures have been put in place to keep the risk at an acceptable level. The most important are: Improvement of transmission grid facilities, contingency plans and insurance policies. Some KPIs have been defined to monitor this risk, that are revised at least twice a year by the Sustainability and the Audit Commissions.
5.Case study (transition)
Legislation risks: due to RE`s main activity, aspects related to energy policies established within the framework of the European Union are especially relevant in the medium and long term, specifically those reflected in the draft National Energy and Climate Plan (NECP), whose scenarios have been taken as a reference for the analysis carried out. Emerging legislation around SF6 emissions is also a major issue that is being considered. After the prioritization process (that considers exposure, sensibility the company´ s adaptation capacity) this risk has been classified as medium-hight level risk. The risk has been included in the Company´s risk map. Besides, and according to the RE`s procedure, the financial impact of the risk has been quantified. Action plans were put in place to keep the risk at an acceptable level. The most important

actions are :(a) alliances with stakeholders to identify & prepare for future requirements. The main one is the SF6 Voluntary Agreement 2015-2020-2023 signed by all actors involved in its management: REE, Ministry, SF6 & equipment manufacturers, electricity & waste management companies. This is the main tool to manage possible changes in national regulation. Working in the European framework, through ENTSO-E working groups is also very important, (b) Achieving emissions reductions to prepare for any tax on SF6 emissions. Reduction targets & improvement actions are included in the CC Action Plan. KPIs have been defined & are reported regularly to the Sustainability Commission, & twice a year to Audit Commission (sub-sets of the board), (c) R&D activities.
KPIs have been defined to monitor this risk. They are revised at least twice a year by the Sustainability and the Audit Commissions.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	REE (main society in Redeia), as the sole Transmission of electricity System Operator in Spain, is a regulated company. For this reason, regulation is very important for the company and is always considered when identifying risks and opportunities, as it can have a direct impact on REE's business. For instance, the current European and national regulation framework for climate and energy has been deeply reviewed by Redeia in order to identify possible risks or opportunities. For example, the Spanish National Plan on Energy and Climate target to achieve 42% renewable energy in the final energy mix, which involves 74% of renewable energy in the electricity mix. This significant increase of energy in the energy mix affects directly RE through two risks: -Claims/grievances due to limitations to renewable production and incidents that may impact the security of supply in the Canary Islands. This risk has been classified as a medium-hight level risk and it is integrated into the company's risk map. - Difficulties associated with the monitoring and control of a system that has a higher penetration of renewable energy with high volatility in its production. This risk has been classified as a low level risk and it isn´t included into the company's risk map (it was included in 2019, but after the revision of the assessment, it was excluded).
Emerging regulation	Relevant, always included	Emerging and possible future regulation is taken into account in climate-related risks assessment and opportunities identification. One relevant example is the increasing concern about F-gases and, therefore, so are the related regulation initiatives (e.g. F-gas Regulation is currently being reviewed by the EU). Changes in SF6 regulation could affect the company through various ways:

		- Taxes on the gas bought or installed, taxes on the emissions: if taxes increase, operational costs increase - Fines in case of accident: also increase costs - New requirements regarding equipment (switchgears): can affect operational costs but also investments (new facilities with alternative gases will be more expensive) - New requirements regarding management or reporting: increase costs and human resources needs. This risk is integrated into the company's risk map and regularly assessed in line with the probability of it occurring and the potential impact it would have, not only financially but also from a strategic and operational point of view. As described in Risk 1, in 2022, this risk was determined a medium-high level risk, in line with our risk categorisation, and it is integrated into the company's risk map.
Technology	Relevant, always included	At Redeia, we take into account the risks associated with the technological improvements or innovations that support the transition to a lower-carbon economy. As an example of that, there is a risk that the use of fluorinated gases, including SF6, may become increasingly stringent, potentially requiring that SF6 is no longer used and therefore some alternatives are needed in order to be able to safely operate. This is included as a risk in our Corporate Risk Management Process and regularly assessed and monitored. As a result, Redeia is participating in innovation projects aimed at finding alternatives to SF6 gas. Since 2017, significant progress is being made in the study of alternatives to SF6 in GIS switchgear. As an example, two 66 kV gas insulated switchgear units using alternative gases were purchased which are available as mobile switchgear units in the Canary Islands and to projects using alternative gases in Gas Insulated Lines have been launched. Since 2019, RE is also working on the study of alternatives to SF6 in AIS switchgear, and three circuit brakers with alternatives solutions are going to be installed in 2023. The development of these projects is considered a priority for the Company. This risk was determined a medium-high level risk, in line with our risk categorisation, and it is integrated into the company's risk map.
Legal	Relevant, always included	Legal requirements are considered in the same way as regulation. Emerging and possible legal requirements are considered in climate-related risks assessment, being classified according to its probability vs. impact and regularly monitored at company level. An example, the increased and more stringent legal requirements regarding SF6, has been identified as a potential risk for RE and a priority issue (Risk 1). The company has, therefore, taken different courses of action aimed at better gas control and leakage reduction. It´s worth mentioning that, during 2020, RE leaded a technical working group with different TSO in Europe aimed to share and identify good practices and methodologies to control and reduce SF6 emissions. Additionally, Redeia continues working in collaboration with the public administration and other entities in the search for solutions aimed at controlling and reducing these emissions within the framework of the "Voluntary

		Agreement signed in May 2015 between the Ministry of Environment& Energy Transition, the manufacturers and suppliers of electrical equipment that use SF6, the electricity transmission and distribution companies and the waste managers of this gas and the equipment that contains it, for a comprehensive management of the use of SF6 in the electricity industry that is more respectful to the environment. This risk was determined a medium-high level risk, in line with our risk categorisation, and it is integrated into the company's risk map.
Market	Relevant, always included	Climate change could affect the price or availability of raw materials or equipment needed to develop Redeia´s activities. As an example, the greener alternatives to replace SF6 gas in GIS substations or circuit breakers are expected to be much more expensive than SF6, not only because of the technological novelty, but also because of the lack of competition (there will be few suppliers who will be able to propose a workable solution). In addition, the lack of supply could compromise the availability of the equipment in time for the development of the network. (Decrease in supply vs. similar or greater demand). This risk has been identified as a potential risk for Redeia (included in Risk 1) and the company has started working on innovation projects dedicated to finding alternatives to SF6 gas.
Reputation	Relevant, always included	As a listed company, a loss of reputation could have a detrimental impact to our business, affecting our share price and leading to a loss of influence amongst our stakeholders. Redeia includes reputation as one of the criteria for the assessment of ALL risks. Nevertheless, some specific risks regarding reputation have been identified. For example: failing to meet our public climate commitments or not being perceived as a key player in the Spanish low carbon transition could negatively impact Redeia's business, losing centrality and having a lower weight in the market. Although this risk has been classified as a low-level risk, due to its strategic importance some mitigation measures have been implemented anyway.
Acute physical	Relevant, always included	Acute physical risks are always considered in the risk assessment process. For example, increased severity of the extreme weather events and its impact both on our assets and on our ability to secure electricity supply have been included in Redeia's risk assessment process. For instance, and as described in Risk 2, acute phenomena (such as extreme winds) can affect our electric lines. This risk has been classified as a high-level risk and its economic impact has been estimated to be slightly higher than 1% of the profit at group level. Since this has and therefore some mitigation measures are being put in place such as improving vulnerable existing lines or establishing emergency plans to face emergency situations. This risk is integrated into the company risk map.

Chronic physical	Relevant, always included	Chronic physical risks are always considered in the risk assessment process. For example, an increase in the average temperature could affect outdoor equipment, which has a maximum operating temperature determined by manufacturers. In the specific case of power transformers, temperature increases above 40ºC could reduce its operating margins, precisely in heat waves, when they may be required to operate at the limit of their design. According to Redeia´s categorization methodology, the risk has been classified as a low-level risk. Nevertheless, some mitigation (adaptation) measures have been identified.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation

Mandates on and regulation of existing products and services

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

There is an increasing concern about F-gases and, therefore, so are the changes in regulation initiatives that can have a significant impact on Redeia. In particular, changes in regulations related to the use of SF6 could pose an important risk. SF6 is a dielectric gas used in very high voltage equipment. Redeia has currently 523.131 t of SF6 installed (and this amount is expected to grow). SF6 equipment is crucial for the operation of the transmission system and at the moment there are no alternatives for such a high voltage equipment (the kind of equipment needed for transmission infrastructures).

SF6 fugitive emissions are the main source of direct GHG emissions in the company (as Red Eléctrica do not carry out generation activities), as SF6 GWP is very high: 23500 (5th IPCC Report)

This risk of increased regulation of existing products and services can impact Redeia through the following ways:

- Increase in taxes on the gas bought or installed and taxes on the emissions, which can incur increases in operational costs and capital expenditures
- Fines in case of accident: also increasing operational costs
- New requirements regarding equipment (switchgears): can affect operational costs (if they are renewal obligations) but also capital expenditures- investments (new facilities, using SF6 alternatives, are expected to be more expensive)
- New requirements regarding management or reporting: increased operational costs and human resources needs.

Please note that the risks can affect both operational and capital costs (operational costs has been selected because only one option is available)

Time horizon

Long-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

56,000,000

Potential financial impact figure – maximum (currency)

62,000,000

Explanation of financial impact figure

Financial impacts are difficult to define due to the wide range of changes in regulation that could arise. Because of that, a complex model based in the combination of different scenarios and its probabilities has been developed to quantify them. Three main aspects have been considered:
(1) Taxes on emissions: 3 scenarios have been considered with different probabilities of occurrence. These 3 scenarios result from the combination of different possibilities in the evolution of SF6: different compliance with emission reduction targets (from 1,800 to 1,041 kg SF6 in 2030) and different taxes over SF6 emissions (from 100 to 120 €/kg)
(2) Taxes on installed gas: scenarios have been considered based on the taxes imposed over new equipment (we have used growth forecasts of the park: 555 t SF6 installed in 2030) combining different forecasted values.
(3) Renewal obligations: we have considered different scenarios considering different replacement scenarios based on their antiquity.
The three analyses are then combined considering the probability of occurrence (for example, a 85% probability that there is a concurrence of taxes on emissions and over new equipment but not over already installed equipment and no replacement obligations).
According to Redeia risks management procedures, impacts on financial statements for risks are estimated after taking the preventive measures/action plans (not before). The value expressed in the response is the estimated value of residual risk. The financial impacts have been estimated for a ten -year period.
The minimum value (56,000,000 €) corresponds to a slight increase on SF6 taxes, a good emissions reduction performance, and progressive prohibition of F-gases use (applicable to new equipment and without strong obligations to change old equipment before its life time) and the maximum value (62,000,000 €) corresponds to a stronger change in regulation, with bigger taxes on new equipment installed and strong prohibition of F-gas use, applying to both new and existing equipment.

Cost of response to risk

5,981,540

Description of response and explanation of cost calculation

RE responds & manage this risk by:
a) Establishing alliances with stakeholders (government, peers & suppliers) to identify risks &opp and be prepared for future requirements. Participating in regulation development processes (National& EU), discussing, and amending aspects that could have impacts on our business. E.g, in 2015 a "SF6 Voluntary Agreement" was signed by all actors involved in SF6 management in Spain. It was renewed in 2021 up to 2023 and it´s the main tool to manage possible changes in national regulation. Besides, RE works with other European TSOs to reach common positions regarding SF6 regulation. In 2022, the work has been focused on the contributions/amendments to the new F-gas EU regulation proposals (in public consultation phase).
b) Reducing emissions: better performance will allow to minimise the impact of any SF6-related taxes or penalties on emissions. Redeia Climate Action Plan (updated in 2021) includes improvement actions to achieve the emission reduction target (reduce 25% of SF6 emissions in 2030 compared to 2015). The most important ones are replacement of old SF6 equipment by lower leakage rate one, increase prevention & leakage control, improvement of repair methodologies and development of new designs to reduce the quantity of new installed gas.
c) Investing in R&D to improve gas management and support the development of alternatives to SF6.
Case study: Redeia has developed a new leak repair methodology for GIS substations. It enables the repair of breakdowns/faults without the need to dissemble the damaged sections, which significantly speeds up the reparation jobs. The effectiveness of the repair is proving to be more durable compared to other previously used techniques. Thanks to this project (developed from 2016-2020 in cooperation with one Redeia´s supplier), 14.000 t CO2 has been saved between 2019&2022.
Main costs of managing the risks:
o Equipment renewal: 2 million €/year.
o Leak reparation:225,000 € /year, new repair methodology 36,000 €/year
o Leak prevention measures (gas management devices, stock of spare parts for early acting, preventive maintenance, coverage of outdoor substations): 3,184,500 €/year
o Training: 178,000 €/year
o R&D: 268,040 € /year
o Human resources costs (actions to foster relationship with public authorities and participation in regulatory development processes) have not been considered
Total annual management costs = 2,000,000+ 225,000 +36,000 +3,184,500+178,000+268,040= 5,891,540 €/year.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Cyclone, hurricane, typhoon

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Greater severity of extreme weather events (acute) such as an increase in frequency and severity of extreme winds can have a severe impact on our facilities, particularly in our overhead lines. Wind is the main factor that can affect the pylons of REE's transmission lines, since wind can knock down the pylons when it is stronger than the one for which the pylon was designed (according to Spanish Regulation, 140 km/h).
REE (main society in RE Group) is the sole responsible for electricity transmission in Spain and therefore, the damage of electric lines would have severe consequences beyond its direct operations. The main expected impact is the increase of operational costs linked to reparation costs when an overhead line i affected. The failure in a transmission line can also affect grid availability (put a line out of operation) and sometimes energy supply. In general, as the transmission network in Spain is highly mesh, energy supply is not affected. Nevertheless, in some cases, this affection can occur. For example, in October 2018, the 132 KV main transmission line in Menorca (Ciudadella-Mercadall) was impacted by a tornado. It caused severe damage to the line and the electricity supply was cut off for 2 days in the island. The lost due to the outage amounted to 32 MW out of a total of 55 MW at the time of the incident occurred. (Balearic Island System, although is interconnected to the mainland, is not a nested system and electricity supply relies on a main transmission line).
According to the climate scenario analysis, in particular in the scenario RCP 8.5 carried out, we expect that in the long term, the probability of these phenomena and their impact will increase.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

73,000,000

Potential financial impact figure – maximum (currency)

82,000,000

Explanation of financial impact figure

The financial impact of the risk has been calculated considering the different financial impacts that can be generated by a strong wind event:
-Damage to Red Eléctrica facilities (reparation costs). They can be covered by the company's insurance or other insurances (if the event is classified as force majeure). Estimation of financial impact based on historical data, considering the average cost not covered by the insurance policy: 66,000 Euros.
-Cost associated to grid availability. A % of RE's remuneration can be affected if there are availability problems. Estimation of financial impact is based on historical data, considering the average cost reported: 300,000 Euros
-Costs associated with non-supplied energy. Some of these costs can be covered by civil responsibility insurance, but not all, i.e., fines. The estimation of impacts is a combination of both possibilities & is based on historical data. The sum of the insurances franchises for each related concept & the average value of potential fines have been considered, based on historic data: 1,750,000 Euros
-Possible increase of insurance policies' price (no potential increase identified)
-The cost of the preventive & corrective measures has not been included in the financial risks.

-Discount rate & inflation (estimations have been made)
A probability of the occurrence of extreme winds has been also considered. The calculation is based on an estimation of number of events/year, based on historical data & in the scenario analysis (RCP 4.5 & 8.5). For the period 2022-2032, 3.6 events/year have been forecasted. According to Redeia risk management procedures, impacts on financial statements are estimated after taking the preventive measures/action plans. Therefore, it corresponds to the estimated value of residual risk. Due to insurance policies, potential impacts are significantly reduced. The financial impacts have been estimated until 2100, but the range reported corresponds to a 10-yr period. The minimum value of the threshold is = num. of events per year * num. of years considered*annual costs= 3.6*10*(66,000 +300,000+1750,000) = 76,176,000 €. This value is then recalculated considering the discount rate & inflation & the total value amounts to 73,000,000 €.
Since we have historical data available & the calculation has been done based on average impact registered, we assume 73,000,000 € to be in percentile 50%. The maximum value range corresponds to the value of the percentile 99% = 82,000,000 €

Cost of response to risk

14,700,000

Description of response and explanation of cost calculation

Redeia manages this risk through:
a. Improvement and strengthening transmission grid resiliency:
i) Studies for adaptation and reinforcement of lines. Development of wind maps and revision of design parameters vs. new wind hypothesis. (0.1 million €/year)
ii) Projects to reinforce vulnerable lines (13.7 million € /year)
iii) Contingency plans (to be able to respond adequately to a disaster, crisis or emergency, such us extreme winds): improvement of decision-making processes and response procedures and implementation of means to deal with critical situations.
Case study: The Balearic and Canary Islands systems (operated by Red Eléctrica) are not as resilient as the mainland system due to different reasons (Canary Islands system is an isolated system not interconnected to the mainland, Balearic Island System, although is interconnected to the mainland, is not a nested system and electricity supply relies on a main transmission line). -For example, one of the most recent events have been the partial outage in the electricity supply occurred in the western part of the island of Menorca in October 2018. The incident was caused by a waterspout that hit Menorca from north to south. The storm and heavy rains caused severe damage to the two high voltage lines in the island. The demand lost due to the outage amounted to 32 MW out of a total of 55 MW at the time of the incident occurred. The electricity supply was restored two days after.- For these systems, emergency pylons have been acquired. In case that one line is affected by strong events, these pylons allow a quicker reposition of the service and the line can be available without completing reparation works. Total cost of the

pylons: 0.9 million €.
b. Optimization of the management of transmission grid assets (i.e., MANIT project). The cost of these kind of projects are not included in the global cost of this risk management, because this is a global project in the company (not specific to manage this risk)
c. Insurance policies (covering damages to the facilities and damages to third parties). These costs are not included in the global management costs because they are not specific to manage this risk.
Total management annual costs are approximately = 0.1 million€+13.7 million€+0.9 million€= 14.7 million € per year.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical
Wildfire

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Changes in weather conditions (temperature, soil dryness, and water scarcity) are expected to intensify desertification in Spain leading to an increase in the probability of fires and in their impacts. On the other hand, it is also worth mentioning that a high increase in temperatures involves changes in the properties of the conductors and, therefore, can increase the sag (the different in level between points of supports and the lowest point on the conductor), affecting security distance between conductor and vegetation and, consequently, increasing the risk of fire. This could lead to an increased fired risk in RE's lines and in the vicinity of electricity substations, potentially severely affecting the facilities (substations and line areas), involving reparation costs, and even putting the operation of the infrastructures at risk (although, in general, as the

transmission network in Spain is highly mesh, energy supply is not affected).
Besides, fires can involve damage to third party's properties and damages to the environment.
The risk refers to both the fires that may be caused by RE's activities as well as those generated by other causes but occurring in our infrastructure area. In both cases the reputation of the company could be severely affected.
The risk has been identified for the 100% of RE´s facilities in Spain, as the transmission lines are located in high fire risk areas (mainland, Canary and Balearic Islands).

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

9,000,000

Potential financial impact figure – maximum (currency)

24,000,000

Explanation of financial impact figure

The financial impact of the risk has been calculated considers:
-Damage to RE facilities (reparation costs). They can be covered by the company insurances or other insurances (if the event is classified as force majeure). These costs are estimated to a max. of 100,000€.

-Damages to the environment: Inherent risk could be very high, but due to insurance policies the financial implications are reduced to a max. of 100,000€.
-Costs associated to non-supplied energy: Some of these costs are covered by civil responsibility insurance, but not all, i.e. fines. The estimation of impacts is a combination of both possibilities & is based on historical data (250,000- 750,000€)
-Fines in case that the fire is caused by RE activities, estimated according to historical data & regulation (44,000-45,0000€)
-Possible increase of insurance policies' price (no potential increase has been identified)
-Discount rate & inflation (estimations have been made)
-The cost of preventive & corrective measures has not been included.
In general, for those costs covered by the insurance policies, the insurance franchise is taken as a reference for the maximum impact. (Insurance franchises values are from 100,000 to 500,000€ per event)
A probability of the occurrence of fires has been also considered. The calculation is based on a estimation of num. of events per year –based in historical data & scenario analysis (RCP 4.5 & 8.5). For the next 10-yr period, 2 events per year have been forecasted
According to Redeia's risk management procedures, financial impacts are estimated after taking the preventive measures/action plans. Therefore, it corresponds to the estimated value of residual risk. Due to insurance policies, potential impacts are significantly reduced.
The financial impacts have been estimated up until 2100, but the range reported corresponds to a 10-yr period.
The minimum value of the threshold is the sum of all impacts listed above = num of events per year*num of years considered*annual costs= 2*10*(100,000 +100,000+250,000+44,000) = 9,880,000€. This value is then recalculated considering the discount rate & inflation & the total value amounts to 9,000,000€.(aprox)
The maximum value of the threshold is the sum of all impacts listed above = num of events per year * numb of years considered*annual costs= 2*10*(100,000+100,000+750,000+450,000) = 24,400,000€. This value is then recalculated considering the discount rate & inflation & the total value amounts to 24,000,000€

Cost of response to risk

14,710,000

Description of response and explanation of cost calculation

The main way to reduce this risk is by improving RE work in vegetation management, which means an increase in the company`s OPEX. In that regard, some key actions are undertaken:
-Annual cutting & pruning works to maintain safety corridors of electricity lines, as the main fire prevention measure, covering about 60 million m2 a year–14 million € /yr

-Forest management procedures (for fire prevention), including training and awareness programs for RE workforce and contractors – No relevant costs identified.
- R&D. Case studies:
a. VEGETA (2016-2021): definition of an algorithm, based on the analysis of different variables and on detailed inventories of vegetation in the safety corridors, identifying precisely compatible and non-compatible species. Its full application allows cutting & pruning works to be more effective (major control of vegetation growth to keep safety distances, reducing fire risk) and efficient (savings between 0.75 and 1 million euros/yr)
b. PRODINT: system for the early detection of forest fires using the towers of the transmission lines and by means of sensors based on IoT, which captures the radiation emitted by the fire and automatically sends warnings to the system operator. This makes it possible to reduce the reaction time of firefighting agents, reducing costs and environmental and personal damage.
c. Bseed WATCH® : forest fire risk management tool capable of calculating the risk of fire and its destructive potential up to 10 days in advance.(Testing stage)
Total costs R&D: 450,000 € /yr
As a result of the application of these measures, incidents related to wildfires in the vicinity of RE´s facilities remain as not relevant.
Other responses are:
-Cooperation agreements with public administrations responsible for forestry management (10 in force), that include actions to prevent and fight forest fires (training for environmental agents and State Security Forces and awareness campaigns). 260,000 €/yr
-Emergency plans. No relevant cots identified
-Optimization of the management of transmission grid assets: MANIT project. Cost not included in the global management costs, as this project is not specific to manage this risk.
-Insurance policies covering damages to the facilities, to the environment and to third parties). Costs not included in the global management costs because they are not specific to manage this risk.
Total annual management costs are approximately = 14,000,000+ 450,000+260,000= 14.71million € per yr.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Development of the existing network to make the energy transition possible (new investments in the transmission grid). The fight to curb climate change implies a deep transformation of the energy model, and a key part of it will take place in the electricity sector. The changes arising from the new model, many of them linked to new regulation, represent some important opportunities for the Redeia, which must promote its activities

and reinforce its unique role as a critical player in the electricity system.
The most important opportunity for Redeia is the possibility to invest in new transmission facilities in the short, medium and long term. Red Eléctrica (main society in Redeia) is the only company that is authorized to build and operate these infrastructures in Spain.
Red Eléctrica is a regulated company, whose remuneration is set in accordance with its regulated asset base. This remuneration is directly and mainly related to the assets in operation. Redeia has the opp. to increase its investments through the construction of new lines and substations, aimed to integrate new renewable power, to develop the high-speed train, to interconnect the different transmission systems (international and submarine cables to connect different islands in the isolated systems) and to support the greater electrification of the society.

Time horizon

Long-term

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

1,500,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Financial quantification of this opportunity has been calculated reproducing Red Eléctrica's retributive model established by the national regulatory authority, which is complex and depends on many factors. The main ones are annual investment and retribution fee.

We include a simplified calculation:
- Investment for 2021-2030: 8,975 million € = 3,349 million€ for the 2021-2025 period (according to the company's Strategic Plan) and 5,626 million€ for the period 2026-2030. We assume a uniform investment during these periods. The retribution fee (5,58%) is applied one year after the infrastructure is at service and it's maintained throughout its lifetime (40 yrs) .For the quantification of the impact, we have considered a 10 years period.
• Therefore, if in 2021, 3,349 / 5= 669.8 million€ are invested, in 2022 we would start being retributed at 669.8 million€ x retribution fee (5.58%) and so on until 2031
• In 2022, another 669.8 million€ will be invested, from which we would start being retributed in 2023.
• Therefore, the calculation is as follows = 669.8 *5.58%* (1+2+3+4+5+6+7+8+9+10)= 2,055.62 million€ (that corresponds to the total investment of 3,349million€ in 2021-2025 and retributed from 2022-2031).
- From 2026 to 2030, there is an annual investment of 5,626 million€/5=1,125.2 million€ that generates profit from 2027-2031. Therefore = 1,125.2*5.58% *(1+2+3+4+5)=941.79million€.
Then OPERATION PROFIT= 2,055.62+914.79= 2,997.41million€.
Impact of depreciation (approx. 7%) of operation profit AFTER DEPRECIATION & AMORTISATION = 2,997.41*(100%-7%) =2,787.59 million€
Impact of inflation and discount rate (approx. 28%) PRESENT VALUE of profit before taxes =2,787.59*(100%-28%) = 2,007.06million€
Taxes on company profits (25%): present value of PROFIT AFTER TAXES = 2,007.06*(100%-25%)=1,505.3 million€.
We have considered a rounded total for the provision of financial impact= TOTAL= 1,500 million€. (Maximum value of the opportunity).

Cost to realize opportunity

8,975,000,000

Strategy to realize opportunity and explanation of cost calculation

As electricity transmission is a regulated activity in Spain, the process to realize investment opportunities is defined by low.
Red Eléctrica, main society of Redeia works with National, European and international bodies (authorities and other stakeholders) to identify drivers (i.e., future requirements, energy scenarios) that must be taken into account to design the future infrastructure planning. RE identifies the different infrastructures that could solve each of the current or future requirements and works with regional and national authorities to find the best options that fulfil technical and social requirements. The Planning department in RE in charge of this process, drafts the proposal to the Spanish Ministry, who, according to the Spanish regulation, is the body responsible to define the Energy Planning, which must be approved by the government.
Once the Energy Planning is approved, the development of the infrastructures included in it is mandatory for RE, that is the sole company

authorised to build and operate electricity transmission infrastructures in Spain. The total cost to realize the opportunity corresponds to the investment to implement the projects including in the planning (human resources cost are not included as they are not material compared to the investment).
Case study: after having completed all the process described above, the Energy Planning 2021-2026, was approved in March 2022.
Its objective is to reinforce the existing grid to integrate 37,000MW of new renewable energy facilities, strengthen both the link between the transmission and distribution grids and the supply of large industrial demands (new consumers) or railway lines (it will enable supply to 13 new railway lines).
This Plan also includes the development of international interconnections, which are essential to strengthening the quality and security of our supply and to consolidating the integration of Spain into Europe's Internal Electricity Market (needed for the European Energy Transition). The investment (7,000 million €) will be dedicated to improving 8,000 km of existing lines and building 2,700 km of new lines and 700 km of submarine interconnections.
Estimated cost to realize the opportunity: the figure provided corresponds to the total investment estimated over the ten years (2021-2030), which amounts to 8,975 million €. (This figure includes the investment to develop the energy planning 2021-2026 but also other expected future investments).

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Development of new functions and services to balance and integrate the increasing amount of renewable energy and the new elements of the electricity system: technical solutions, including the construction and operation of electricity storage infrastructures in extra-peninsular systems (islands).

The integration of an increasing renewable generation (74% renewable energy by 2030) and the success of the new elements of the system (new technologies, digitalization, distributed generation, self-consumption…) while maintaining the security and quality of supply (this is one of the exclusive and key functions of Red Eléctrica, main subsidiary of Redeia), will only be possible through the development of new functions and services by RE, such the development of energy storage systems and other technical solutions (protection systems, Flexible AC Transmission Systems equipment (FACTS) and other control and monitoring equipment).

The opportunity for Redeia is linked to the retribution that the company would obtain for the construction and operation of the storage infrastructures in the extra peninsular systems, as the development of other technical solutions are not considered material compared to storage.

Time horizon

Long-term

Likelihood

Virtually certain

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

82,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Red Eléctrica, main society of Redeia, is a regulated company and therefore all its revenues are fixed by the Spanish regulator. Financial quantification of this opportunity has been calculated by reproducing RE's retributive model, that is complex and depends on many factors. The main ones are annual investment and retribution fee.

To estimate the financial impact, the investment related to the development of new storage facilities in the Canary Islands have been considered - Total storage investment (590million €). Although the investment is expected to be distributed in different years, the assumption that all the investment will be in 2027 has been taken. As we are studying a 10 yrs period, it will generate profit from 2028-2032.

For the construction and operation of electricity storage infrastructures, retribution fee for transmission activities is considered :5.58%

Therefore the OPERATION PROFIT = 590*5.58%*5=164.61 million €.

Impact of depreciation (approx. 7%) of operation profit AFTER DEPRECIATION & AMORTISATION = 164.61*(100%-7%) =153.09 million €

Impact of inflation and discount rate (approx. 28%) PRESENT VALUE of profit before taxes =153.09*(100%-28%) = 110.22 million €

Taxes on company profits (25%): present value of PROFIT AFTER TAXES = 110.22*(100%-75%)= 82.67million €.

A rounded total for the provision of financial impact have been considered= TOTAL= 82 million €.

Cost to realize opportunity

590,000,000

Strategy to realize opportunity and explanation of cost calculation

Red Eléctrica, main society of Redeia, works with National, European and international bodies (authorities and other stakeholders) to understand and identify drivers (i.e. future requirements, energy scenarios) to draft the future of the electrical infrastructures The planning department works to define the different infrastructures (mainly lines and substations) that could solve each of the current or future requirements but there are other units that are also working to propose different solutions to fulfil the requirements for the electricity. system and to assure the energy supply in the future. (New services and new infrastructures). RE also works with the Spanish government, making technical proposals for the development of the regulatory and financial framework applicable to the new services and infrastructures such us (storage).

Case study: After having completed all the process described above, the development of pumped storage hydroelectric station in Gran Canaria (Salto de Chira) has been approved. Its main purpose is to guarantee supply, system security and integration of non-manageable renewable

energy in the isolated electricity system of Canary Islands. With an investment of over 590 million euros, the Salto de Chira will have 200 MW of turbine power capacity (which represents around 36% of the peak demand in Gran Canaria) and 3.5 GWh of energy storage capacity. The project includes the construction of a seawater desalination plant, and the associated marine construction works, as well as the facilities necessary for its connection to the transmission grid. In 2021, the project obtained the Environmental Impact Statement, so, the works have been launched in 2022. The projected execution period is 70 months.
Estimated cost to realize the opportunity: the figure provided corresponds to the total investment estimated over the ten years (2021-2030) that correspond to the development of new storage infrastructures in the Canary Islands (590 million €)
Human resources cost haven´t been estimated as they are not material compared to the investment.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Markets

Primary climate-related opportunity driver

Other, please specify

Reputation benefits

Primary potential financial impact

Other, please specify

Increased share price

Company-specific description

Redeia, through its subsidiary, Red Eléctrica, is a key player and an essential agent in the transition towards a new energy model in Spain. Its main purpose is that of ensuring overall efficiency of the electricity system, the electrification of the economy, the maximum integration of renewables into the energy mix, all while guaranteeing security of supply at all times. This position of the Company is reflected in its 2021-2025 Strategic Plan, whose central pillar is to make the energy transition a reality in Spain by boosting the digital and green transition. The 2021-2025 Strategic Plan also envisages the development of telecommunications so as to promote digitalisation and improve connectivity, elements that also contribute significantly to the process of decarbonisation of society.
As a listed company reputation is essential for Redeia. Being recognized as a crucial agent for energy transition in Spain and reaching leadership regarding climate change, is an opportunity to improve the reputation of the company. Better reputation can involve opportunities such as:
- Increase the price of the shares (affecting Redeia's market capitalization, 541,080,000 shares) or improvement of funding opportunities (very relevant for the company due to the large investments it needs to undertake for the development of the transmission network necessary for the energy transition: total investment estimated over the ten years (2021-2030) amounts to 8,975 million €.)
- Improvement of authorization processes for new infrastructures (better perception of Red Eléctrica's activities by stakeholders, society and government, could reduce permitting times (which are now very long) and accelerate the construction of the infrastructures planned for the energy transition).

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

580,240,000

Potential financial impact figure – maximum (currency)

864,700,000

Explanation of financial impact figure

The estimation of financial impact figure only takes into account the impact in the price of the share (as the other positive impacts are quite difficult to quantify in this moment). According to a study by Deloitte – “Finding the value in ESG performance”, there are signs that if investors respond to positive environmental news, there is a 0.84% increase in stock returns. If Redeia continues to demonstrate good practices and is able to maintain high standings in Sustainability Indexes and ESG rankings, a potential gain of market value can be faced. The maximum potential financial impact (786 million Euros) has been calculated considering an increase of 0.84% over RE's market capitalization for the period 2022-2032. The profits reported have been calculated for a 10 years’ timeframe.

- Maximum value: The increased Redeia's market capitalization for the period 2022-2032 is calculated as follows = (0.84%) * Share price (reference 2021) x Number of shares traded *number of years = (0.84%) x 19.025 x 541,080,000 x 10= 864.7 million €. This value corresponds to the 50% percentile.
- Minimum value has been calculated as the percentile 1% = 580.24million€. This has considered a typical deviation of capitalization of 20%.

Cost to realize opportunity

8,850,000

Strategy to realize opportunity and explanation of cost calculation

Redeia works to improve reputation:

- Redeia is continuously working with stakeholders to identify their requirements. e. g. Redeia develops an annual survey to stakeholders.
- Redeia evaluates Sustainability Indexes requirements and results from the evaluation processes in order to identify improvement opportunities. e. g. Benchmark works with other transmission companies and specific studies about the results obtained in DJSI

-Redeia works to improve information to stakeholders, (better information and verified data): e.g. Verification of Sustainability report, verification of GHG inventory; participation in seminars and conferences; traveling exhibition "A highway behind the wall socket"; organization of technical visits to CECRE (Renewable energy control centre)

- Redeia works to improve its performance. e. g. Redeia has developed a Climate Change Action Plan, updated in 2021, where targets and actions to achieve them have been established.

-Redeia develops projects that improve relationship with stakeholders (e.g. Redeia Forest)

Different management costs can be considered (some examples have been considered in order to estimate a figure, but it is very difficult to identify all the costs related to reputation improvement):
i. Dedicated technical units 400,000 Euros /year
ii. Costs related to reporting. (i.e. Verification of the GHG inventory: 25,000 €/year; benchmark 60.0000 €/year)
Iii Climate Change projects to improve relations with stakeholders and reputation e.g. Redeia Forest 200,000 €/year
iii. Other Costs 200,000 € /year
The figure reported corresponds to the total estimated costs for a 10 years' time frame = 10years x (400,000+85,000+200,000+ 200,000) = 8,850,000 €

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan

Yes

Mechanism by which feedback is collected from shareholders on your climate transition plan

We have a different feedback mechanism in place

Description of feedback mechanism

Climate Change issues,(Commitment to combat Climate Change, Transition Plan highlights: emission reduction targets, Climate Change Action Plan and progress against targets; Risks and Opportunities) are included and disclosed every year in relevant reporting documents: Non-Financial Information report and Sustainability Report.
- Non-Financial Information is included in the AGMs agenda as a "Matter for Approval"
- Sustainability Report and Sustainability Plan are included in de AGMs agenda as a "Mater for information"
So, although the Climate Transition Plan is not directly voted, there are mechanisms in place that allow stakeholders to give feedback on the most relevant issues regarding Climate Change.

Frequency of feedback collection

Annually

Attach any relevant documents which detail your climate transition plan (optional)

https://www.redeia.com/sites/webgrupo/files/downloadable/Net_Zero_Transition_Plan.pdf

Net-Zero Strategy_fv.pdf

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy
Row 1	Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios IEA NZE 2050	Company-wide		• Incorporates the most ambitious climate goals of the countries, that require very ambitious actions (more than those established for the SDS).

			• Universal access to energy should be achieved by 2030 • The world economy grows by 40%, however, energy demand falls by 7% between 2020 and 2030 and remains at these levels in 2050 (energy efficiency) • Electricity demand should double between 2020 and 2050. In 2030 electricity should account for more than 25% of final energy and 50% in 2050. • Renewables should account for 61% of electricity generation in 2030 and 88% in 2050. • Some of the technologies needed to achieve net zero are not yet available, so a major innovative effort will be required. • Investment in power grids would increase from 2019 to 2030 and remain high until 2050. Due to the electrification of the economy, security of supply will be even more critical than it is today. The flexibility of the electrical system will be fundamental in a system with a high penetration of renewables and with a reduced capacity of conventional sources of flexibility. Battery development, demand management, and a smart, digital grid are required. The resilience of the electricity sector to cyber-attacks must be strengthened
Transition scenarios IEA SDS	Company-wide		• It is based on a sustainable recovery plan to get out of the COVID 19 crisis • The scenario is aligned with the requirements to achieve the Sustainable Development Goals: access to energy, air pollution and climate change. • Incorporates ambitious goals of the countries and considers their full implementation. It is aligned with the Paris Agreement. • The energy demand is reduced (compared to STEPS) due to higher efficiency. This efficiency is also associated with greater electrification (24% of energy demand will be electricity in 2030) • There is a rapid transition to low-carbon electricity, implying a larger drop in emissions than would correspond to the drop in demand • This scenario closely linked to sustainable financing.
Transition scenarios IEA STEPS (previously IEA NPS)	Company-wide		• Includes recovery measures from the COVID 19 crisis assuming a sustained recovery from the crisis. • It is based on currently established policies (although it is not assumed that all of them will be met). • Consider the NDCs that have been committed to in the different countries, but do not include

			updates to the Net Zero commitments if these are not accompanied by approved policies and legislation. (In April 2021, 80 countries have presented new NDCs and some of them have already incorporated carbon neutrality commitments, however, most of these commitments aren´t considered in this scenario) • Consider that there are notable advances in corporate sustainability • Energy consumption grows in all sectors, led by electricity (global demand increase of 80% between 2030 and 2050) and natural gas • A significant investment in electricity networks is required to meet the increase in demand, the integration of renewables, the flexibility of the electricity system and the development of smart networks.
Transition scenarios Customized publicly available transition scenario	Country/area	1.5ºC	Energy transition scenarios proposed by the International Energy Agency (IEA) in its World Energy Outlook 2020 report have been completed with additional information on the relevant variables depending on the business and geographical area. In the case of the electricity business in Spain, (main society of RE Group) the scenarios proposed in Spain's National Energy and Climate Plan (NECP) have been considered because, as a regulated company, these scenarios are decisive when defining RE's strategy. Target scenario of NECP: this scenario is aligned to European NDCs and NZE 2050. Main inputs affecting RE business: - 42% renewable energy (end use) in 2030 -74% renewable energy in electricity production in 2030 to achieve a 100% renewable electricity system in 2050 - 15% of electricity interconnections (EU) - 23 % emission reduction in 2030, compared to 1990. -39.5% improvement in energy efficiency - Carbon neutrality in 2050
Physical climate scenarios RCP 8.5	Company-wide		We consider IPCC scenarios as the best reference to assess physical risks and opportunities. RCP 8.5 is one of the scenarios that have been chosen for the analysis, because it reflects the worst situation regarding emissions (a high emission scenario, No climate policies are implemented) and changes in the climatic variables (extreme scenario).

			• Very significant increase in the temperature (2.6-4.8 at the end of the century) • Changes in precipitation patterns • Rising sea levels (0.45-0.82 at the end of the century) • Increase of extreme events As expected changes are very different depending on the country/region, we have used specific predictions for climatic variables. For activities in Spain: projections indicated by the Spanish State Meteorological Agency for the RCP 8.5. For activities in Latin América: projections of the climate variables for each of the countries have been taken from the country profiles published by the World Bank. The parameters (inputs) considered for the assessment have been: - Temperature (minimum and maximum in summer; length of heat waves; number of days with temperature below 0º) - Rainfall and maximum rainfall in 5 days; - Radiation - Extreme winds.
Physical climate scenarios RCP 4.5	Company-wide		We consider IPCC scenarios as the best reference to assess physical risks and opportunities. RCP 4.5 is one of the scenarios that have been chosen for the analysis, because it reflects an intermediate situation. It considers some development of climate policies but emissions growth in excess of the Paris Agreement. • Increase in the temperature (2.6 at the end of the century) • Changes in precipitation patterns • Rising sea levels (0.32-0.63 at the end of the century) • Increase of extreme events As expected changes are very different depending on the country/region, we have used specific predictions for climatic variables. For activities in Spain, projections indicated by the Spanish State Meteorological Agency for the RCP 4.5. For activities in Latin América: projections of the climate variables for each of the countries have been taken from the country profiles published by the World Bank. The parameters (inputs) considered for the assessment have been:

			- Temperature (minimum and maximum in summer; length of heat waves; number of days with temperature below 0º) - Rainfall and maximum rainfall in 5 days; - Radiation - Extreme winds.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

a. How climate/energy policies will affect Redeia´s business (specially electricity transmission)? What will be expected from Redeia to contribute to energy transition?

b. Are there any regulation /requirement linked to climate action that will involve a strong change in Redeia´s operations or a change in technology?

c. What are the main changes in the physical parameters that can affect Redeia´s business? What kind of adaptation measures are needed and when should they be implemented?

Results of the climate-related scenario analysis with respect to the focal questions

a. Energy policies are strongly related to climate action as the fight to curb climate change implies a deep transformation of the energy model. Some of the main levers of decarbonization are the electrification of the economy and the integration of renewable energy in the electricity system. So, transition policies directly affect Redeia's business because they involve:

* The development of the electricity network, necessary to connect renewable energy, interconnect transmission system and support electrification (by, for example, supplying electricity to new infrastructures for high-speed train)

* The development of new functions and services to balance and integrate the increasing amount of renewable energy and the new elements of the electricity system: technical solutions, including the construction and operation of electricity storage infrastructures in extra-peninsular systems (isolated systems).

Redeia takes into account the scenario analysis to define this business strategy, considering the opportunities in the short-, medium- and long-term strategy. In particular, the scenarios proposed in Spain's National Energy and Climate Plan (NECP), aligned with NZE 2050, have been taken as a reference to design Redeia´s Strategic Plan 2021-2025, which includes a budget of 3,349 million€ for energy transition in Spain. (Main inputs considered: 42% renewable energy (end use) in 2030; 74% renewable energy in electricity production in 2030 to achieve a 100% renewable electricity system in 2050, 15% of electricity interconnections and carbon neutrality in 2050).
b. Low emission scenarios are associated with strong emission reduction efforts. Therefore, more restrictive regulation is expected, and it may impact Redeia's activities. For example, the regulation related to fluorinated gases emissions, can strongly affect the company and the risk of "increased legal requirements associated with the use of fluorinated gases (SF_6) " have been identified as a relevant risk for RE. Hence, the company has defined an adaptation plan (strategic decision), focused on emission reduction measures and on the research & development of alternative technologies for this gas.
c. Changes in climate parameters can affect RE assets and operations, especially temperature increase (that can impact on electrical/telecommunications equipment, reduce transmission capacity of overhead lines and increase the risk of forest fires) and strong winds. To forecast the evolution of these parameters, different scenarios must be considered for the short-medium and long term. As a result of the analysis, some risks have been identified and assessed and adaptation measures have been defined for relevant risks.
For example, in the case of risks linked to forest fires, adaptation measures are already in force. In the case of strong winds, besides the short-term adaptation measures (in force), further work is being done to improve wind projection and define long term adaptation measures.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	As described in Opp 1 "Development of the existing network to make the energy transition possible", Red Eléctrica, main society of Redeia, is a regulated company, whose remuneration is set in accordance with its regulated asset base. This remuneration is directly and mainly related to the investment in infrastructures development. Therefore, Redeia has identified the opportunity to increase its investments through the construction of new lines and substations, aimed to integrate new renewable power, to develop the high-speed train, to interconnect the different transmission systems (international

		and submarine cables to connect different islands in the isolated systems) and to support the greater electrification of the society in the short, medium and long term. Red Eléctrica is the only company that is authorized to build and operate these infrastructures in Spain. Therefore, the transition to a low carbon economy and the increase in renewable presence in the Spanish energy mix has influenced and will continue to influence significantly Redeia's investment and strategic plans. The investment in these infrastructures is materialised in the strategic plans of the company (every 4 years) and in the energy planning. For example, for the period 2015-2020 (short term), Red Eléctrica developed internal interconnection lines with the main objective of increasing the percentage of renewable electricity in the national mix, hence supporting the energy transition. One of these infrastructures was the interconnection with France by Catalonia. This particular line increases the international connectivity from 4.2% to 6.2% and the annual revenues of these infrastructures surpassed the 5% of 2020´s annual expected revenues. A substantial strategic decision made by Redeia, is the increase in investments in new lines and substations in order to help the government meet their national energy and climate targets. The opportunity, for the short -medium (2025) and medium-long term (2030) is expected to increase Redeia´s revenue 1,500 million € over a 10-year period. Part of this opportunity has been already materialised in the 2021-2025 Strategic Plan, which included 3,349 million € for energy transition in Spain.
Supply chain and/or value chain	Yes	As identified in Risk 2 "Impacts of extreme events (winds) on outdoor power lines", through the scenario analysis carried out, Redeia has identified a potential risk of damage to its infrastructure caused by extreme whether events. This risk has already materialized on several occasions (short term) and their effects have affected energy supply (customers). Therefore, mitigation of exposure to this risk is a central focus of Redeia´s strategy in the short, medium and long term and has influenced business decisions. A substantial strategic business decision has been the implementation of new contingency plans and special measures specifically designed for the small islands, since they are the most affected by this potential risk. Redeia invested in the improvement and strengthening of transmission grid assets, developing wind maps and revision of design parameters vs new wing hypothesis (0.1 million €/year), in new projects to reinforce vulnerable lines (13.7 million € /year); in contingency plans to be able to respond adequately to a disaster, crisis or emergency, such us extreme winds, etc. (0.9 million € /year).

		Total cost of the actions taken amounts to 14.7 million € per year. For example, one of the most recent relevant events have been the partial outage in the electricity supply occurred in the western part of the island of Menorca in October 2018. The incident was caused by a waterspout that hit Menorca from north to south. The storm and heavy rains caused severe damage to the two high voltage lines in the island. The demand lost due to the outage amounted to 32 MW out of a total of 55 MW at the time of the incident occurred. The electricity supply was restored two days after. Therefore, Redeia took the substantial strategic decision of investing in the improvement of decision-making processes and response procedures and the creation of emergency pylons to face critical situation and emergency plans for Balearic and Canary Islands. This costs approx. 0.9 million €/year.
Investment in R&D	Yes	As described in Risk 1, Redeia has also identified as one of the most important risks the "increased legal requirements associated with the use of fluorinated gases (SF_6) " in the long term. This has influenced Redeia´s business decisions and investment strategy and hence Redeia took the substantial strategic decision to invest in two mobile GIS substations, SF6-free. This was considered a R&D project, as the technology used is completely new and experience is needed. Other reevant projects to use SF6 alternatives in GIL (gas insulated lines) has been launched recently.The total investment amounts to 2,680,400 €. Besides other relevant projects aimed to reduce and control F6 leakages has been launched. On the other hand, Redeia has also identified some risks that can affect the operation of the electricity system posing severe difficulties associated with the monitoring and control of a system that has a higher penetration of renewable energy with high volatility in its production. This has influenced Redeia strategy as the sole Spanish transmission system operator. Hence, Redeia has taken the strategic decision to invest in R&D projects aimed to manage and reduce possible impacts on the energy supply. Some examples are the INERTIA + & OSMOSE (energy storage to improve renewable energy integration), Thirties (project aimed to improve renewable integration), Self -consumption platform (to improve monitoring of small scale renewable integration) & the launch of the Grid2030 Innovation Collaboration Programme to promote long-term research through the call for technological initiatives applied to the transmission grid that have a direct impact on the efficiency and sustainability of electricity systems. The company's investment effort in these projects have represented more than 10% of the

		total R&D budged in the last 4 years (3 million € over 30 million €). The most relevant substantive strategic decisions taken was the implementation of procedures to improve forecasting tools for non-manageable renewable energy production, to improve demand-management and to develop energy storage systems and other tools for maximizing the suitable management of RES(Renewable Energy Sources).
Operations	Yes	Redeia has also identified as one of the most important risks the "increased legal requirements associated with the use of fluorinated gases (SF_6)" in the long term (risk 1). This has influenced Redeia business decisions and financial strategy in this area. For instance, Redeia has taken a substantial strategic decision by setting a specific target regarding SF6 emissions which is part of an overarching initiative of establishing Science Based Targets, impacting the financial planning and the business strategy. Particularly, Redeia has set up a 25% reduction of SF6 emissions compared to 2015 in 2030. The fact of having absolute targets uncouples growth of the business with growth in emissions impacting directly Redeia's business strategy. In terms of SF6, this would equal an emission rate of around 0.134% on gas installed for 2030 (which is much more ambitious than the targets set by Redeia's peer companies). In order to fulfil such ambitious target, the company has worked to improve SF6 management: updating management procedures and dedicating an important budget, hence impacting financial planning, to reduce emissions: equipment renewal (2 million €/year); repairing leakages (225.000€/year) and leak prevention measures (gas management devices, stock of spare parts for early acting, preventive maintenance, coverage of outdoor substations): 3,184,500 €/year.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs	One of the core purposes of the Redeia is to take on a leading role in the energy transition. We are currently at a crucial moment in tackling the climate emergency and clearly the energy transition is key to achieving this goal, representing both

	Indirect costs Capital expenditures Access to capital Assets	a risk and an opportunity to the Company. This transition implies changing the way we generate, distribute and consume electricity, as well as making decarbonization possible through electrification, energy efficiency and digitalization. The energy transition in Spain is not possible without Redeia's activities and for this reason, the Company strategy is to tackle head-on the challenges derived from the same through the development of more robust, smarter and increasingly better interconnected grids for a better integration of renewables, as well as through new functions and technological solutions, such as energy storage, and through a greater level of digitalization in the operation of the system. Therefore, climate-related risks and opportunities have influenced Redeia's financial planning throughout the strategy development. a- Capital expenditures: Red Electrica's (main company in Redeia) contribution will be key in the energy transition as it is the only company that is authorised to build and operate electricity transmission infrastructures in Spain. The development of electricity transmission facilities is the most important opportunity for Redeia. Therefore, capital expenditures are factored into Redeia financial planning. The Strategic Plan 2021-2025 includes 3,340 million € investment for energy transition in Spain, a significant investment to develop a robust, smart and increasingly interconnected transition grid to respond to the energy transition challenges. b- Revenues: Red Eléctrica (Redeia's main company) is a regulated company, whose remuneration is fixed according to its regulated asset base and is directly and mainly related to the assets in operation. The construction and operation of new lines and substations, aimed at integrating new renewable power, developing the high-speed train, interconnecting the different transmission systems (international and submarine cables to connect different islands of isolated systems) and supporting the further electrification of society, has a direct influence on the company's revenues. As explained in Opp1, an investment of 3,34 million € has a potential financial impact of 1,500 million €. c- Direct & indirect costs: regarding costs, two main impacts are considered. Firstly, Redeia has developed measures to reduce the effects of climate change, both in terms of adaptation and mitigation. The most important measures are those to reduce the impact of physical risks on our assets through adaptation measures. The Company have identified two high-priority physical risks, including impacts of extreme events, particularly wind, on power lines, and fires beneath the lines and near substations. Therefore, direct &indirect operating costs have been increased through infrastructure improvement plans and emergency plans, including emergency pylons. The cost of these measures is estimated between 5 and 10% of the total operational expenditure for the year and are therefore included within our financial planning on an annual basis (i.e. short term). d- Assets: According to the explanations given so far, climate change risks and opportunities fully influence the assets, both from the point of view of investment for the energy transition (Capex), since this is destined to the development of

		new assets, and from the point of view of costs (CAPEx), since many of the costs will be linked to measures to adapt the assets to climate change risks d- Access to capital: Finally, access to capital and financing are crucial for the Company to allow for investment planning in the medium and long term. The conditions to access capital haven't changed substantially over the last few years. Nevertheless, it is important to mention that some of the very important projects developed by Redeia for the transition to a decarbonized energy system have been partially granted by the European Union to facilitate the integration of renewable energy into the grid (e.g. interconnection between Spain and France). Redeia has also observed an increase in interest from investors regarding climate-related issues. Therefore, we factor access to capital and financing into our strategic plan through our alignment to the TCFD recommendations and presence on several sustainability indices to help improve transparency on performance around climate-related risks and opportunities relating to the Company in the short, medium and long term. For example, the company is included in the DJSI World Index; it has been selected in various Euronext Vigeo-Eiris Indices (Eurozone 120, Europe 120, World 120) and received a rating of AAA in the MSCI ESG assessment. Also, it has again achieved ISS ESG Prime status. These indexes are among the most reputable providers of socially responsible investment services and stand out for advising investors on how to incorporate ESG factors into their financial decisions. Besides, in 2019, the group approved its Green Finance Framework (updated in 2021 to be aligned as much as possible with the current version of the proposed EU Green Bond Standard and to be fully aligned with the EU Taxonomy Delegated Act for sustainable economic activities), with the first issue of green bonds in January 2020 (700 million €), the second one in May 2021 (600 million €) and an issue of green hybrid bonds worth 500 million € in 2022.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	Yes, we identify alignment with both our climate transition plan and a sustainable finance taxonomy	At both the company and activity level

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric

Revenue/Turnover

Type of alignment being reported for this financial metric

Alignment with a sustainable finance taxonomy

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Objective under which alignment is being reported

Climate change mitigation

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

1,595,973,000

Percentage share of selected financial metric aligned in the reporting year (%)

79.2

Percentage share of selected financial metric planned to align in 2025 (%)

80

Percentage share of selected financial metric planned to align in 2030 (%)

100

Describe the methodology used to identify spending/revenue that is aligned

The Taxonomy Regulation (2020/852 of 18 June 2020) establishes that economic activities must be aligned with the following technical screening criteria to be considered sustainable:

1. Make a significant contribution to, at least, one of the 6 environmental objectives defined
2. Not cause any significant harm to any of the other environmental objectives.
3. Comply with minimum social safeguards (Human Rights).

The Delegated Act of the EU Commission for the development of the Taxonomy Regulation includes “construction and operation of transmission systems that transport the electricity on the extra-high-voltage and high-voltage interconnected system” as an activity that contributes to the mitigation of climate change. In the case of Redeia, these activities are completely aligned with national & international targets aimed to limit the increase of temperature to 1.5 ºC.

To analyse eligibility and alignment of Redeia's activities, the following steps have been taken:

- Classification and grouping of the economic activities of Redeia companies.
- Eligibility analysis of the identified activities.
- Assessment of compliance with the technical criteria established by Commission Delegated Regulation (EU) 2021/2139 for the contribution to the environmental objectives of climate change mitigation and adaptation.
- Analysis of the DNSH principle.
- Verification of compliance with minimum social safeguards.

Classification of eligibility and alignment of Redeia's activities:

• Activity 1. Management and operation of domestic electricity infrastructure: electricity transmission & system operation and management of the transmission network for the Spanish electricity system, including storage through the Salto de Chira pumped-storage hydroelectric power plant (100% eligible; 100% aligned)
• Act. 2 Management and operation of international electricity infrastructure (100% eligible; 0% aligned)
• Act. 3 Telecommunications Satellite Business: not covered by Commission Delegated Regulation 2021/2139
• Act. 4 Telecommunication Fibre Optics: not covered by Commission Delegated Regulation 2021/2139
• Act. 5 Other Business, Corp and adjustments: not covered by Commission Delegated Regulation 2021/2139

To calculate the ratio Revenue, aligned with the Taxonomy, in relation with Redeia (Group total), the following steps have been taken:

1. The Taxonomy-aligned activities have been identified: management and operation of domestic electricity infrastructure (Spain)
2. The companies that carry out these activities have been identified within the consolidated Group: Red Eléctrica
3. Within Red Eléctrica, which activities or businesses meet the criteria to be identified as Taxonomy-aligned activities have been analysed: a) Electricity transmission, b) System operation, mainland and non-mainland c) Other activities. Supplementary activities carried out by Red Eléctrica related to its main activities of electricity transmission and system operation.

In view of the foregoing, all activities carried out by Red Eléctrica are considered Taxonomy-eligible and Taxonomy-aligned activities.

Double counting have been avoided in the allocation of the numerator for revenue, using Red Eléctrica specific ratios. In relation to Revenue,

since the description provided by the Regulation meets the accounting criteria for the classification of "Revenue" in the financial statements, this figure was considered directly, net of consolidation adjustments.
As a result, 79,2% of the revenue at year-end 2022 corresponds to eligible activities. This % is expected to increase, as renewable energy integration will grow in LATAM (Act 2). The achievement of the 100% depends on the development of the regulation to consider Telecommunication activity as enabling technology to reduce emissions or the development of a "social taxonomy" including this activity.
The information about Redeia's taxonomy alignment have been verified by a third party (limited assurance).

Financial Metric

CAPEX

Type of alignment being reported for this financial metric

Alignment with a sustainable finance taxonomy

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Objective under which alignment is being reported

Climate change mitigation

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

470,370,000

Percentage share of selected financial metric aligned in the reporting year (%)

76.7

Percentage share of selected financial metric planned to align in 2025 (%)

80

Percentage share of selected financial metric planned to align in 2030 (%)

100

Describe the methodology used to identify spending/revenue that is aligned

The Taxonomy Regulation (2020/852 of 18 June 2020) establishes that economic activities must be aligned with the following technical screening criteria to be considered sustainable:

1. Make a significant contribution to, at least, one of the 6 environmental objectives defined
2. Not cause any significant harm to any of the other environmental objectives.
3. Comply with minimum social safeguards (Human Rights).

The Delegated Act of the EU Commission for the development of the Taxonomy Regulation includes “construction and operation of transmission systems that transport the electricity on the extra-high-voltage and high-voltage interconnected system” as an activity that contributes to the mitigation of climate change. In the case of Redeia, these activities are completely aligned with national & international targets aimed to limit the increase of temperature to 1.5 ºC.

To analyse eligibility and alignment of Redeia's activities, the following steps have been taken:

- Classification and grouping of the economic activities of Redeia companies.
- Eligibility analysis of the identified activities.
- Assessment of compliance with the technical criteria established by Commission Delegated Regulation (EU) 2021/2139 for the contribution to the environmental objectives of climate change mitigation and adaptation.
- Analysis of the DNSH principle.
- Verification of compliance with minimum social safeguards.

Classification of eligibility and alignment of Redeia's activities:

• Activity 1. Management and operation of domestic electricity infrastructure: electricity transmission & system operation and management of the transmission network for the Spanish electricity system, including storage through the Salto de Chira pumped-storage hydroelectric power plant (100% eligible; 100% aligned)
• Act. 2 Management and operation of international electricity infrastructure (100% eligible; 0% aligned)
• Act. 3 Telecommunications Satellite Business: not covered by Commission Delegated Regulation 2021/2139
• Act. 4 Telecommunication Fibre Optics: not covered by Commission Delegated Regulation 2021/2139
• Act. 5 Other Business, Corp and adjustments: not covered by Commission Delegated Regulation 2021/2139

To calculate the ratio CAPEX, aligned with the Taxonomy, in relation with Redeia (Group total), the following steps have been taken:

1. The Taxonomy-aligned activities have been identified: management and operation of domestic electricity infrastructure (Spain)
2. The companies that carry out these activities have been identified within the consolidated Group: Red Eléctrica
3. Within Red Eléctrica, which activities or businesses meet the criteria to be identified as Taxonomy-aligned activities have been analysed: a)

Electricity transmission, b) System operation, mainland and non-mainland c) Other activities. Supplementary activities carried out by Red Eléctrica related to its main activities of electricity transmission and system operation.
In view of the foregoing, all activities carried out by Red Eléctrica are considered Taxonomy-eligible and Taxonomy-aligned activities.
Double counting have been avoided in the allocation of the numerator for CAPEX, using Red Eléctrica specific ratios. Regarding CAPEX, the description included in the Regulation matches that relating to the accounting of additions to fixed assets. Therefore, this figure from Red Eléctrica's annual accounts was considered directly.
As a result, 76,7% of the CAPEX at year-end 2022 corresponds to eligible activities. This % is expected to increase, as renewable energy integration will grow in LATAM (Act 2). The achievement of the 100% depends on the development of the regulation to consider Telecommunication activity as enabling technology to reduce emissions or the development of a "social taxonomy" including this activity.
The information about Redeia's taxonomy alignment have been verified by a third party (limited assurance).

Financial Metric

OPEX

Type of alignment being reported for this financial metric

Alignment with a sustainable finance taxonomy

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Objective under which alignment is being reported

Climate change mitigation

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

422,084,000

Percentage share of selected financial metric aligned in the reporting year (%)

90

Percentage share of selected financial metric planned to align in 2025 (%)

95

Percentage share of selected financial metric planned to align in 2030 (%)

100

Describe the methodology used to identify spending/revenue that is aligned

The Taxonomy Regulation (2020/852 of 18 June 2020) establishes that economic activities must be aligned with the following technical screening criteria to be considered sustainable:

1. Make a significant contribution to, at least, one of the 6 environmental objectives defined
2. Not cause any significant harm to any of the other environmental objectives.
3. Comply with minimum social safeguards (Human Rights).

The Delegated Act of the EU Commission for the development of the Taxonomy Regulation includes “construction and operation of transmission systems that transport the electricity on the extra-high-voltage and high-voltage interconnected system” as an activity that contributes to the mitigation of climate change. In the case of Redeia, these activities are completely aligned with national & international targets aimed to limit the increase of temperature to 1.5 ºC.

To analyse eligibility and alignment of Redeia's activities, the following steps have been taken:

- Classification and grouping of the economic activities of Redeia companies.
- Eligibility analysis of the identified activities.
- Assessment of compliance with the technical criteria established by Commission Delegated Regulation (EU) 2021/2139 for the contribution to the environmental objectives of climate change mitigation and adaptation.
- Analysis of the DNSH principle.
- Verification of compliance with minimum social safeguards.

Classification of eligibility and alignment of Redeia's activities:

• Activity 1. Management and operation of domestic electricity infrastructure: electricity transmission & system operation and management of the transmission network for the Spanish electricity system, including storage through the Salto de Chira pumped-storage hydroelectric power plant (100% eligible; 100% aligned)
• Act. 2 Management and operation of international electricity infrastructure (100% eligible; 0% aligned)
• Act. 3 Telecommunications Satellite Business: not covered by Commission Delegated Regulation 2021/2139
• Act. 4 Telecommunication Fibre Optics: not covered by Commission Delegated Regulation 2021/2139
• Act. 5 Other Business, Corp and adjustments: not covered by Commission Delegated Regulation 2021/2139

To calculate the ratio OPEX, aligned with the Taxonomy, in relation with Redeia (Group total), the following steps have been taken:
1. The Taxonomy-aligned activities have been identified: management and operation of domestic electricity infrastructure (Spain)
2. The companies that carry out these activities have been identified within the consolidated Group: Red Eléctrica
3. Within Red Eléctrica, which activities or businesses meet the criteria to be identified as Taxonomy-aligned activities have been analysed: a) Electricity transmission, b) System operation, mainland and non-mainland c) Other activities. Supplementary activities carried out by Red Eléctrica related to its main activities of electricity transmission and system operation.
In view of the foregoing, all activities carried out by Red Eléctrica are considered Taxonomy-eligible and Taxonomy-aligned activities.
To calculate OPEX indicators, some adjustments have been made to comply with the Regulation. It was ensured that taxonomically aligned activities are considered only once, as they are specific activities carried out by Red Eléctrica, and not by other Group companies (Double counting avoidance).
As a result, 90% of the OPEX at year-end 2022 corresponds to eligible activities. This % is expected to increase, as renewable energy integration will grow in LATAM (Act 2). The achievement of the 100% depends on the development the regulation to consider Telecommunication activity as enabling technology to reduce emissions or the development of a "social taxonomy" including this activity.
The information about Redeia's taxonomy alignment have been verified by a third party (limited assurance).

C3.5b

(C3.5b) Quantify the percentage share of your spending/revenue that was associated with eligible and aligned activities under the sustainable finance taxonomy in the reporting year.

Economic activity

Transmission and distribution of electricity

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

Turnover
CAPEX
OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

1,595,973

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

79.2

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

79.2

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

0

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

470,370

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

76.7

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

76.7

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

422,084

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

90

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

90

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Activity enabling mitigation
Activity enabling adaptation

Calculation methodology and supporting information

As set forth in point 1.2. on Specifications of the disclosures accompanying the KPIs of non-financial undertakings, of Commission Delegated Regulation 2021/2178 of the European Commission implementing Article 8 of the Taxonomy Regulation, the following steps have been followed to calculate the ratio of Revenue (turnover), CAPEX &OPEX
1. Identification of taxonomy-aligned activities: management and operation of domestic electricity infrastructure.
2. Identification of the companies that carry out these activities: Red Eléctrica.
3. Within Red Eléctrica, identification of activities or businesses meet the criteria to be identified as Taxonomy-aligned.
a) Electricity transmission (Taxonomy-aligned activity).
b) System operation, mainland and non-mainland (Taxonomy-aligned activity)
c) Other activities. Supplementary activities carried out by Red Eléctrica related to its main activities of electricity transmission and system operation (Taxonomy-aligned activities).
All activities carried out by Red Eléctrica are considered eligible activities and aligned with the Taxonomy.
In relation to Revenues and CAPEX, given that the description provided by the Regulation is in line with the accounting criteria for the classification of Revenues & CAPEX in the financial statements, the figures in the annual accounts of Red Eléctrica have been considered directly. As for OPEX, some adjustments have been made to comply with the Regulation. It was ensured that taxonomically aligned activities are considered only once, as they are specific activities carried out by Red Eléctrica, and not by other Group companies.
4. After identifying the Taxonomy-aligned activities, the Revenues, ratio was calculated by including in the numerator the figures provided for Revenues of Red Eléctrica, and in the denominator, the total Revenues, of Redeia.
Please note that, although the percentages assigned to the contribution to the objectives are 100% to climate change mitigation and 0% to climate change adaptation, the items assigned to the mitigation objective could also include items related to the adaptation objective. In line with the European Commission's FAQs, one of the two objectives has been selected to avoid any risk of double counting.
Detailed information has been reported in the Sustainability Report pg 394-409: EU Taxonomy information
https://www.redeia.com/sites/webgrupo/files/publication/2023/04/downloadable/Redeia_Sustainability_Report_2022.pdf

Technical screening criteria met

Yes

Details of technical screening criteria analysis

Compliance with the technical criteria of substantial contribution to climate change mitigation:
- The electricity transmission activity, at national level, meets criteria(6) a) and b) defined in point 4.9 of Annex I of Commission Delegated Regulation 2021/2139, as it belongs to the interconnected European system, and the new electricity capacity connected to the transmission network, from 2017 to the present, is exclusively renewable.
- The operation of the national electricity system, in turn, meets criteria d) and e)(7). This activity is playing a leading role in the energy transition by taking on the challenge of integrating renewable energy, new energy uses and flexible assets into the system. As system operator, RE works to safely integrate as much renewable energy as possible. The control and monitoring of this type of energy is carried out by CECRE (the Control Centre of Renewable Energies). This enables reduction of CO2 emissions thanks to the fact that demand can be covered by this type of energy without affecting the security or quality of supply.
Furthermore, to facilitate the incorporation of non-dispatchable energy and avoid wasting the energy generated when demand is low, Red Eléctrica works on the development of energy storage instruments based on both hydroelectric power generation systems and other technologies (R&D+i). To this end, it carries out prospective evaluations on the impact of new storage facilities on the integration of renewable energy, identifies the technical or
management characteristics necessary for greater integration, and as a consequence of both actions, makes legislative and regulatory proposals to the competent authority. These systems will also help significantly improve the efficiency of the electricity system as a whole and optimise electricity infrastructure.
Compliance with the technical criteria of substantial contribution to climate change adaptation:
The activity of management and operation of national electricity infrastructure as a whole is a key element in the adaptation of the energy system to the risks arising from climate change and meets the criteria defined in point 4.9 of Annex II of Commission Delegated Regulation 2021/2139. A robust and meshed grid contributes to reduce the risks and impact of climate change in society. (However, the Taxonomy disclosures show a 100% contribution to the climate change mitigation and a 0% contribution to the adaptation, to keep the rules for KPI calculation)

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

Redeia's activities which contribute substantially to the objectives of climate change mitigation and adaptation do not cause significant harm to the rest of the environmental objectives defined in the Taxonomy Regulation.

- Sustainable use and protection of water and marine resources: no risks of degradation of water quality have been identified, nor significant impacts on the good ecological status or potential of bodies of water (surface water and groundwater) or on marine waters. During the design of the facilities, a detailed study is carried out and preventive measures implemented to avoid any impact on surface watercourses or groundwater contamination.

- Transition to a circular economy. Redeia works with the stakeholders in its value chain to improve the use of recycled materials in the equipment and materials used for its activities and, at the end of their useful life, they are also recycled, reused or recovered.

- Pollution prevention and control:

* The principles described in the CFI's Environmental, Health, and Safety Guidelines for Electricity Transmission and Distribution are followed in all construction activities. RE has implemented an Environmental Management System certified under ISO 14001 and the EMAS. Preventive and corrective measures are implemented to minimise the potential effects of the projects. To guarantee it effectiveness, environmental monitoring programmes are defined and developed.

*The power equipment owned by RE does not contain PCBs.

*EMF: the activities comply with the applicable standards and regulations to limit the effects of electromagnetic radiation on human health.

- Protection and restoration of biodiversity and ecosystems: all projects are assessed from an environmental perspective, and approval from environmental authorities is requested, even in the case of projects that are not legally required to be subjected to the environmental impact assessment procedure. Required mitigation and compensation measures are implemented to protect the environment and, therefore, biodiversity.

- Climate change adaptation: the activity of management and operation of national electricity infrastructure as a whole is a key element in the adaptation of the energy system to the risks arising from climate change. Besides, RE has identify the physical climate risks that could cause damage the electricity transmission network infrastructure and/or affect their operation. Adaptation measures have been implemented.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

Redeia maintains an explicit and public commitment to the promotion and respect for human rights in the development of all its activities and in all the territories and countries where it operates.

The company pays particular attention to vulnerable groups, and as such inculcates this in the corporate culture through the 10 Principles of Respect for Human Rights, set out in its Commitment to the Promotion and Respect of Human Rights, the Code of Ethics and Conduct and the Sustainability Policy.
The obligation to respect human rights has been extended to suppliers through the Supplier Code of Conduct.
In the development of these Principles and Codes, Redeia has taken into account the national and international legislation and benchmark standards:
o OECD Guidelines for Multinational Enterprises.
o OECD Guidelines on Responsible Business Conduct.
o United Nations Guiding Principles on Business and Human Rights.
o International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work.
o The eight ILO core conventions.
o International Bill of Human Rights.
In addition, the Company develops the necessary tools in terms of due diligence in integrity and human rights, both for its own activities and in its relations with third parties, in order to mitigate the risk of Redeia being linked to third parties associated with conduct which is not in line with its ethical values. To such end, since 2013 it has carried out periodic due diligence analyses that involve all Group companies in order to identity possible risks
stemming from its direct and indirect activity.

C3.5c

(C3.5c) Provide any additional contextual and/or verification/assurance information relevant to your organization’s taxonomy alignment.

The information about Redeia's taxonomy alignment is included in the Consolidated Director's Report, attached to the Consolidated Annual Accounts and available to the public. The non-financial an information sustainability included in this report has been verified by a third party. The INDEPENDENT ASSURANCE REPORT ON THE CONSOLIDATED NON -FINANCIAL STATEMENT AND INFORMATION ON SUSTAINABILITY is in pg, 250-251
https://www.redeia.com//sites/webgrupo/files/publication/2023/06/downloadable/Redeia_Consolidated_Annual_Accounts_2022.pdf

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Base year

2019

Base year Scope 1 emissions covered by target (metric tons CO2e)

25,316

Base year Scope 2 emissions covered by target (metric tons CO2e)

792,782

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

818,097

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

55

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

368,143.65

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

20,542

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

727,214

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

747,756

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

15.6329539496

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

Target 2030: Reduction of 55% of total Scope 1 and 2 emissions (compared to base year 2019). This is an absolute reduction target.
The previous target for Scope 1& 2 (approved in 2018) was updated in order to increase ambition and to include the new subsidiary companies in the Redeia, so:
The target is company-wide and includes 100% of Scope 1 and 2 emissions.
The target is science based target, and has been approved by SBTi in June 2022.
The target is part of the long term target: achieving net-zero emissions by 2050 (carbon neutrality in 2050);approved by SBTi.

Plan for achieving target, and progress made to the end of the reporting year

PLAN : to incorporate the actions and projects necessary to achieve this target, a new Climate Change Action Plan was approved in 2021:
a. Scope 1, main efforts will be focused on SF6 emissions reduction:
- Improvement of methods for detecting and control SF6 leaks and repair methodologies
- Renewal of old switchgear
- R&D projects to find alternatives and reduce installed gas

Besides, some measures to reduce other direct emissions (fossil energy consumption) have been set.
b. Scope 2 includes measures to increase energy efficiency and % of renewable energy consumed.
However, the main source of scope 2 is transmission losses (97% of Scope 1+2 in base year). Emissions=transmission losses (MWh) x emission factor for the energy system (t CO2e/MWh).
It's important to explain that Red Eléctrica (main society of Redeia), as the operator of the electricity system cannot make decisions regarding the main factors that affects energy losses, that mainly depend on the geographical location of generation units with respect to consumption areas, the generation mix, the size of the grid, the international power exchanges, the voltage level and the demand curve. The assessment of generation is based on market rules and performed by an independent body. RE must comply with operational procedures defined by the

regulator (mandatory) and it's not possible to operate the system with an energy losses reduction criteria. In fact, the evolution of the electricity system towards a more decarbonized and flexible one to enable energy transition, which involves an increase in electrification levels (exchange of flows and further built out of the grid) and a high penetration of renewable energy, will entail an increase in transmission losses. Nevertheless, RE's activity is needed to increase the % of renewable energy in the energy mix. The more renewable energy is integrated, the emission factor for electricity (tCO2e/MWh) will be lower and, finally, emissions will decrease.
PROGRESS:
8.6% reduction in 2022 (Progress 15.6%)
Up to now, initiatives which have contributed most to emission reduction have been those related to SF6 leaks control (new methodology for repair) and renewable energy integration into the electricity system.
Although the trend in emissions will be reduction, progress is expected to be variable (there could even be a one-off increase between two consecutive years), mainly for the reasons explained above regarding transmission losses emissions.

List the emissions reduction initiatives which contributed most to achieving this target

Target reference number

Abs 2

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

Well-below 2°C aligned

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 3

Scope 2 accounting method

Scope 3 category(ies)

Category 1: Purchased goods and services
Category 2: Capital goods
Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
Category 4: Upstream transportation and distribution
Category 5: Waste generated in operations
Category 6: Business travel
Category 7: Employee commuting
Category 8: Upstream leased assets
Category 13: Downstream leased assets
Category 15: Investments

Base year

2019

Base year Scope 1 emissions covered by target (metric tons CO2e)

Base year Scope 2 emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

268,836

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

319,458

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

675

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

2,093

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

193

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

3,477

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

5,317

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

0

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

39

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

17,341

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

617,456

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

617,456

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

100

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

100

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

100

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

100

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

100

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

100

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

100

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

100

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

100

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

100

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

28

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

444,568.32

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

301,214

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

125,308

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

955

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

1,000

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

49

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

1,227

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

3,790

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

90

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

0

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

32,188

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

465,821

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

465,821

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

87.7072328115

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

Target 2030: Reduction of 28% of total Scope 3 emissions (compared to base year 2019). This is an absolute reduction target.
The target is company-wide and includes 100% of Scope 3 emissions.
The target is science based target, and has been approved by SBTi in June 2022.
The target is part of the long term target: achieving net-zero emissions by 2050 (carbon neutrality in 2050), approved by SBTi.

Plan for achieving target, and progress made to the end of the reporting year

Plan: to incorporate the actions and projects necessary to achieve this target, a new Climate Change Action Plan was approved in 2021.
Regarding scope 3, the main areas of work are the following:
a- Collaboration programme with the main suppliers to involve them in the Group’s commitment to fight climate change, providing appropriate guidelines to promote changes in their management. The different actions are focused on two main goals:

- increase the number of suppliers with SBTi targets (the aim is to achieve 67% of suppliers by emissions covering purchased goods and services and capital goods with science-based targets by 2026)
- increase direct information (from suppliers) in the calculation of Scope 3 emissions

b- Definition and incorporation of sustainability criteria (climate change & circularity) in purchasing decision by developing LCA methodologies and considering carbon price for relevant supplies.

Up to now, initiatives developed (first collaboration program), although they've been considered a success.

Progress:

A relevant increase of the activities is expected for the next 10 years since a great development of the transmission grid is required in order to make energy transition possible. The construction of new infrastructure involves an increase in goods and services purchased and in capital goods, thus, an increase in scope 3 emissions in the next years can be expected. Although there will be improvements in the performance of suppliers, these may not be perceptible compared to the huge increase of goods and services purchased. For this reason, for the first years (2021-2026) Redeia has set the intermediate goal of achieving that the main suppliers commit themselves with SBTi objectives. This goal is a first step to achieve a subsequent reduction in emissions.

Besides, emissions evolution is expected to be highly variable when comparing consecutive years due to the high variability of the goods and services acquired each year (some supplies are more carbon intensive than others).

List the emissions reduction initiatives which contributed most to achieving this target

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production

Net-zero target(s)

Other climate-related target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2015

Target coverage

Company-wide

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Base year

2015

Consumption or production of selected energy carrier in base year (MWh)

16,169.7

% share of low-carbon or renewable energy in base year

0

Target year

2024

% share of low-carbon or renewable energy in target year

98

% share of low-carbon or renewable energy in reporting year

94

% of target achieved relative to base year [auto-calculated]

95.9183673469

Target status in reporting year

Underway

Is this target part of an emissions target?

This is an initiative part of the climate action plan for reducing our impact and is part of the efforts made to achieve our global emission reduction targets Abs 1.

Is this target part of an overarching initiative?

Science Based Targets initiative

Please explain target coverage and identify any exclusions

Target 2024: 100% of contracted energy must be renewable in 2024. (This means 98% of total electricity consumption. It must be taken into account that a small part of Red Electrica's electricity consumption is supplied directly from the transmission network, in these cases RE has not the option to choose the origin of the electricity. However, part of this default given electricity supply may include renewables as well, although we are not accounting them for our own internal target but something additional to it. So, the 2% should be considered as an exclusion. For that reason, the target is 98%)

Plan for achieving target, and progress made to the end of the reporting year

Plan: Redeia is committed to the use of renewables to cover the electricity consumption of its facilities.
The Group's goal is to have 100% of its contracted electricity from renewable sources by 2024 (98% of the total electricity consumed).The remaining consumption (2% in 2022) corresponds to work centres that do not have a local electricity distribution network connection, whereby the transmission grid directly supplies the electricity.
The main way to achieve this target is by signing electricity supply contracts for green energy or guarantees of renewable origin.
By now, the majority of the electricity supply contracts signed by the Company for its operations and activities are for green energy or with a guarantee of renewable origin, representing in 2022, 94% of the electricity consumed. Only some work centers under a lease contract are not

been supplied by renewable energy.
Pending actions defined to achieve this target:
- New electricity supply contracts for leased assets (agreements with owners)
Besides, Redeia is working to increase the use of renewable energy for self-consumption in work centres: implementation of self-consumption facilities in 21 work centres (i.e. Solar photovoltaic installation at the Tres Cantos Training Campus covers 16% of the building's total consumption; solar photovoltaic installation at the Arganda control centre (HISPASAT) with an expected coverage of 26.5% of the annual electricity consumption needs of this satellite control centre)
Progress in 2022:
-In 2022 there has been a great progress in this target thanks to the acquisition of IRECs (International Renewable Energy Certificates) for the facilities in LATAM.
-14 self-consumption facilities has been already installed in 14 work centers.

List the actions which contributed most to achieving this target

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number

Oth 1

Year target was set

2017

Target coverage

Site/facility

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Energy consumption or efficiency

MWh

Target denominator (intensity targets only)

Base year

2015

Figure or percentage in base year

16,169.7

Target year

2030

Figure or percentage in target year

11,318.8

Figure or percentage in reporting year

14,763.4

% of target achieved relative to base year [auto-calculated]

28.9904966089

Target status in reporting year

Underway

Is this target part of an emissions target?

This is an initiative part of the climate action plan for reducing our impact and is part of the efforts made to achieve our global emission reduction targets Abs 1.

Is this target part of an overarching initiative?

Science Based targets initiative - other

Please explain target coverage and identify any exclusions

Target 2030: Reduction of 30% of electricity consumption in work centers.
Includes every working centre in Spain (71% of total electricity consumption) It doesn´t include Hispasat Control Center and offices in Latin América, because they have been incorporated in the GHG inventory in 2020.
A company-wide new target has been defined in 2022: 10% reduction of total electricity consumption in 2025 (compared to 2029).

Plan for achieving target, and progress made to the end of the reporting year

Plan: The Climate Change Action Plan includes several measures to reduce electricity consumption in work centres:
- Efficiency measures in buildings, including certified Energy Management Systems
- Efficiency in IT systems
- Renewable energy for self -consumption in 21 work centers

Progress:
The progress made to the end of reporting year is linked to efficiency measures in buildings. In 2021, the implementation of a set of energy efficiency measures was approved, the associated estimated savings of which is expected to exceed 1,700,000 kWh in the period 2021-2030. In 2021, improvement measures were carried out on the air conditioning (replacement of cooling equipment with efficient heat pumps), lighting (installation of LED lamps) and the incorporation of consumption monitoring systems, which will lead to an estimated annual energy saving of 578.846 kWh.

List the actions which contributed most to achieving this target

Target reference number

Oth 2

Year target was set

2021

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Engagement with suppliers

Percentage of suppliers (by emissions) with a science-based target

Target denominator (intensity targets only)

Base year

2019

Figure or percentage in base year

0

Target year

2026

Figure or percentage in target year

67

Figure or percentage in reporting year

5.5

% of target achieved relative to base year [auto-calculated]

8.2089552239

Target status in reporting year

Underway

Is this target part of an emissions target?

The target is science based target, and has been approved by SBTi in June 2022: Redeia commits that 67% of its suppliers by emissions covering purchased goods and services and capital goods will have science-based targets by 2026.
The target is part of the long term target: achieving net-zero emissions by 2050 (carbon neutrality in 2050), approved by SBTi.
This is an initiative part of the climate action plan for reducing Redeia's impact and is part of the efforts made to achieve Scope 3 emission reduction target Abs 2.

Is this target part of an overarching initiative?

Science Based Targets initiative – approved supplier engagement target

Please explain target coverage and identify any exclusions

The target is company wide.
Coverage: suppliers covering purchased goods and services and capital goods.
No exclusions.

Plan for achieving target, and progress made to the end of the reporting year

Plan:
The main project to increase the number of suppliers with SBTi targets is the Engagement Programme, launched in 2019 and included in the updated Climate Change Action Plan, approved in 2021. (The first stage of the program was carried out between 2019 and 2021, the second stage corresponds to 2022-2026 period).
Actions planned for the second stage:
According to the maturity of the suppliers a different “development program” will be developed. The main areas of work are:
1) improvement of suppliers GHG inventory (including scope 3 emissions &increase suppliers with the inventory verify by a third), both needed to stablish SBTi targets.
2) encourage & help suppliers to define ambitious reduction targets, commit and validate them by SBTi (including training on Net -Zero).
Training & consultant support regarding calculation, verification process and targets definition will be provided to suppliers involved in the Program.
Progress:
- Initiatives developed during the first stage of the program were considered a success: increase of suppliers with Scope 1+2 emissions verified: from 56% (2019) to 78% (2021); increase of suppliers with scope 3 emissions verified: from 43.5% (2019) to 48% (2021): increase of suppliers

with SBT verified: from 8.7% (2019) to 30% +additional 13% committed (2021).
- Relevant suppliers in terms of emissions have been selected and invited to join the program. All of them have accepted. The new engagement period (second stage) has started with 29 suppliers representing 47% of the emissions in the supply chain. – Please note that emissions evolution is expected to be highly variable when comparing consecutive years due to the high variability of the goods and services acquired each year (some supplies are more carbon intensive than others), so the number of participant suppliers may vary along the period.
- Specific actions for each supplier have been proposed. Some of the actions have been launched. (The work in 2022-2023 is being specific with each supplier: one to one meeting to define next steps adapted to different maturity levels and circumstances).
At the end of 2022 the 5% of the emissions of the supply chain correspond to suppliers with SBTi.

List the actions which contributed most to achieving this target

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs1
Abs2

Target year for achieving net zero

2050

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Please explain target coverage and identify any exclusions

The company is a company-wide target. The scope 1, 2 &3 are considered. No exclusions have been made.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Yes

Planned milestones and/or near-term investments for neutralization at target year

Emissions expected to be neutralized in net-zero target year (2050): 143,555t CO2 e.
Redeia is already developing actions to mitigate emissions beyond the value chain and NEUTRALIZATION activities.
Every year the company purchase carbon credits. Up to now credits are REDD+ projects, and many times, they are forest restoration projects (Removal projects). In 2022, the company purchased 18,428 VCUs.
Regarding permanent carbon removal, the company has developed the “Redeia Forest”, an ongoing project initiated in 2009 that aims to offset part of the Company's emissions through the planting of trees and the recovery of degraded natural areas on publicly owned land, thus contributing to the conservation of biodiversity. Since the inception of the Red Eléctrica Forest, the Company has contributed to the recovery of 18 forests in Spain (260,976 tCO2eq offset). In 2022, 77,239 trees were planted for the recovery of 47 ha. Thanks to this project 2.132 emission offsets have been registered in the Spanish Climate Office.
In addition, Redeia is working to enlarge its mitigation beyond the value chain & NEUTRALIZATION strategy thorough the:
• Compensation strategy for complete offsetting scope 1 emissions in the short-term (before 2025) has been approved in 2022: the company has committed to offset 100% of scope1 emissions since 2023, through a combination of projects, including neutralization ones. In 2022, Redeia has already offset 100% of scope 1 emissions and emissions related to the holding of corporate events (18,428 VCUS+2,132 t CO2e Redeia forest-removal project-).
• Definition of compensation strategy for the long-term (mitigation of emissions beyond the value chain and neutralization). Expected to be defined in 2025-2026.

Planned actions to mitigate emissions beyond your value chain (optional)

Redeia is already developing actions to mitigate emissions beyond the value chain.
Every year the company purchase carbon credits. Up to now credits are REDD+ projects, and on some occasions, they are forest restoration projects (Removal projects).
Regarding permanent carbon removal, the company has developed the “Redeia Forest”, an ongoing project initiated in 2009 that aims to offset

part of the Company's emissions through the planting of trees and the recovery of degraded natural areas on publicly owned land, thus contributing to the conservation of biodiversity. Since the inception of the Redeia Forest, the Company has contributed to the recovery of 18 forests in Spain (260,976 tCO2eq offset). In 2022, 77,239 trees were planted for the recovery of 47 ha.
In addition, Redeia is working to enlarge its mitigation beyond the value chain & neutralization strategy thorough the:
• Compensation strategy for complete offsetting scope 1 emissions in the short-term (before 2025) has been approved in 2022: the company has committed to offset 100% of scope1 emissions since 2023, through a combination of projects, including neutralization ones. In 2022, Redeia has already offset 100% of scope 1 emissions and emissions related to the holding of corporate events (18,428 VCUS+2,132 t CO2e Redeia forest-removal project-).
• Definition of compensation strategy for the long-term (mitigation of emissions beyond the value chain and neutralization).

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	20	
To be implemented*	2	6,041
Implementation commenced*	4	2,093
Implemented*	20	6,842
Not to be implemented	0	

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Fugitive emissions reductions

Other, please specify

SF6 emission reduction

Estimated annual CO2e savings (metric tonnes CO2e)

2,357

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

10,030

Investment required (unit currency – as specified in C0.4)

36,000

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Initiative: leaks repair on SF6 equipment

Initiative category & Initiative type

Fugitive emissions reductions

Other, please specify

SF6 emission reduction

Estimated annual CO2e savings (metric tonnes CO2e)

26.3

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

112

Investment required (unit currency – as specified in C0.4)

1,816,182

Payback period

>25 years

Estimated lifetime of the initiative

>30 years

Comment

Initiative: replacement of old equipment, with high emission rate (2%) by new equipment with reduced emission rate (0.5%). Annual monetary savings are completely irrelevant comparing to the investment

Initiative category & Initiative type

Energy efficiency in buildings

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

1.5

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

10,746

Investment required (unit currency – as specified in C0.4)

5,265

Payback period

<1 year

Estimated lifetime of the initiative

11-15 years

Comment

Energy efficiency in buildings, lighting and reduction of standby consumption of equipment.
(The energy efficiency measures implemented in the work centres result in minor emission savings as most of the energy consumed (saved) comes from renewable sources)

Initiative category & Initiative type

Energy efficiency in buildings

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

1,437

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

1,809,118

Investment required (unit currency – as specified in C0.4)

158,874

Payback period

<1 year

Estimated lifetime of the initiative

11-15 years

Comment

Efficiency measures in electricity substations: activities that allow the switching off night-time lighting.

Initiative category & Initiative type

Low-carbon energy consumption

Other, please specify

Renewable energy supply

Estimated annual CO2e savings (metric tonnes CO2e)

3,006

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

4,004

Payback period

No payback

Estimated lifetime of the initiative

1-2 years

Comment

Renewable Energy supply (Guarantees of origin) & IRECs (International Renewable Energy Certificates)

Initiative category & Initiative type

Low-carbon energy consumption

Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

13.2

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

96,153

Investment required (unit currency – as specified in C0.4)

333,708

Payback period

4-10 years

Estimated lifetime of the initiative

16-20 years

Comment

Implementation of self-consumption solar installations in work centers (14 centers).
(The energy efficiency measures or self-consumption implemented in the work centres result in minor emission savings as most of the energy consumed (saved) comes from renewable sources)

Initiative category & Initiative type

Energy efficiency in production processes

Other, please specify

Improvement of IT systems (including replacement of old equipment)

Estimated annual CO2e savings (metric tonnes CO2e)

1.2

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

10,342

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

3-5 years

Comment

Efficiency measures in IT equipment: renewal of desktops and laptops, data storage systems and improvement in IT systems.
There is no specific monetary cost linked to this activity.
(The energy efficiency measures implemented in the work centres result in minor emission savings as most of the energy consumed (saved) comes from renewable sources)

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment

Compliance with regulatory requirements/standards	Redeia has defined some technical specifications applying to buildings and substation´s equipment (which are mandatory such as every internal procedure in the company) regarding energy efficiency. (For example, energy efficiency standards for buildings)
Dedicated budget for energy efficiency	A special budget is defined for energy efficiency activities: efficiency measures (improve in lighting, insulation, HVAC etc.), efficiency policies and promotion of energy efficiency among the company.
Dedicated budget for low-carbon product R&D	Redeia works to improve as much as possible the integration of renewable energy into the grid. A lot of research is developed in this way. There are also other R&D projects related to energy efficiency.
Dedicated budget for other emissions reduction activities	Special budgets are designated to activities regarding emissions reduction. (E.g. renovation of equipment, Redeia forest, SF6 management- including research to look for alternative to the use of SF6 gas- etcetera).
Employee engagement	Every year there is a piece of the budget dedicated to employee engagement (training- voluntary and mandatory- and awareness-voluntary-): news and information in the internal web, contests, awareness campaigns, general training for all employees (on –line) specific training for special tasks (e.g. SF6 management), etcetera.
Internal incentives/recognition programs	The fulfilment of some of the objectives related to climate change is provided with monetary incentives (for members of the board and also managers).

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon

The EU Taxonomy for environmentally sustainable economic activities

Type of product(s) or service(s)

Other

Other, please specify

High-voltage electricity transmission and grid operation

Description of product(s) or service(s)

Service considered: Red Eléctrica (the main company in Redeia) is the sole transmission agent and operator of the Spanish electricity system (TSO). Its mission is to guarantee the security and continuity of the electricity supply at all times and to manage high-voltage electricity transmission infrastructure.

Red Eléctrica´s activities enable Scope 2 emissions reduction for all electricity consumers in Spain because they make possible the integration of renewable energy into the electricity system: the use of renewable energy is necessary to reduce the emission factor associated to the use of electricity. If renewable energy proportion in the energy mix increases, emission factor for electricity in Spain decreases. Therefore, the increase of renewable energy in the electricity system avoids CO2 emissions for all the electricity users in Spain and this reduction is reflected in their Scope 2 emissions.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

Own methodology

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Not applicable

Functional unit used

Energy transmitted (GWh) in the Spanish electricity system.

Reference product/service or baseline scenario used

Baseline scenario considers:
- For mainland (Peninsula) and Canary Islands: no renewable energy (wind & solar) is integrated into the Spanish electricity system and this energy has to be generated by combined cycle power plants (by gas).
-For the Balearic Islands: the electric interconnection with the mainland doesn't exist and all the energy consumed in the islands is generated locally instead of importing cleaner energy generated in the mainland.

Life cycle stage(s) covered for the reference product/service or baseline scenario

Not applicable

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

139.8

Explain your calculation of avoided emissions, including any assumptions

Estimation of emissions avoided:
Red Eléctrica (main subsidiary of Redeia) activities are necessary to integrate renewable. To estimate the emissions avoided, emissions produced if wind or solar energy couldn´t have been integrated into the system have been calculated, assuming that gas (combined cycle power plants) would have substituted them.
Emissions without wind &solar would have been: 76,490,544 t CO2e. (This is calculated by applying the emission factor for gas generation to the total energy generated by solar or wind). As the real emissions from electricity generation in 2022 have been: 41,719,154 t CO2e, the emission avoided have been 34,771,390 tCO2e. (This calculation refers to the mainland (Peninsula) and Canary Islands).
For the Balearic Islands, saving estimation is based in the comparison between emissions associated to energy supplied through the interconnection built and managed by Red Eléctrica (602,734 MWh). The emissions of this energy are calculated using the emission factor that corresponds to the peninsular system: 0.143 t CO2e/MWh (86,292 tCO2e). If the interconnection didn´t exist, this energy would be produced in the Balearic Islands: emission factor in 2022: 0.452 t CO2e (272,435.8 tCO2e). So, emissions saved are: 272,435.8-86,191=186,244.8 t CO2e.
Total savings (avoided emissions): 34,771,390+ 186,244.8=34,957,635 tCO2e
It is important to point out that the figure is very big because the calculation is applicable to all the electricity consumed in Spain. (250,029.768 GWh).
Avoided emissions/energy transmitted in Spain=34,957,635/ 250,029.768=139.8 (t CO2e/GWh)

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

79.2

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	Yes, a change in methodology	There has been a relevant change in the methodology for calculating SF6 emissions, as the 100-year GWP (23,500) of the 5th IPCC report, (Intergovernmental Panel on Climate Change), has been used instead of the GWP (22,800) of the 4th IPCC report. For this reason, these emissions have been recalculated for the entire historical series and, as a

		consequence, the total data for Scope 1 emissions has also been updated. This recalculation has been verified by a third party (according to ISAE 3000).

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Scope(s) recalculated	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	Yes	Scope 1	It is considered there is a significant variation if there is a value higher than 2% in the total amount of emissions of an scope and/or an increase of 10% in the affected category. Nevertheless, even there are not changes which may affect significantly, it is possible to recalculate the emissions in the historical series if it is necessary to its evolution analysis to check its accomplishment or the redefinition of the reduction objectives.	Yes

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

25,315.6

Comment

Base year emissions have been recalculated to consider the change in the methodology for SF6 emissions calculation.

Scope 2 (location-based)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

Comment

In 2021, Redeia updated the emission reduction goals to increase ambition and 2019 was defined as a new base year.
Scope 2 (location- based emissions) weren't recalculated for 2019, because the reference for the new emission goals is market-based.

Scope 2 (market-based)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

792,782

Comment

This emissions haven´t been recalculated in 2022 (the change in the methodology doesn´t affect to scope 2)

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

268,836

Comment

This emissions haven´t been recalculated in 2022 (the change in the methodology doesn´t affect to scope 3)

Scope 3 category 2: Capital goods

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

319,485

Comment

This emissions haven´t been recalculated in 2022 (the change in the methodology doesn´t affect to scope 3)

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

675

Comment

This emissions haven´t been recalculated in 2022 (the change in the methodology doesn´t affect to scope 3)

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

2,093

Comment

This emissions haven´t been recalculated in 2022 (the change in the methodology doesn´t affect to scope 3)

Scope 3 category 5: Waste generated in operations

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

193

Comment

This emissions haven´t been recalculated in 2022 (the change in the methodology doesn´t affect to scope 3)

Scope 3 category 6: Business travel

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

3,477

Comment

This emissions haven´t been recalculated in 2022 (the change in the methodology doesn´t affect to scope 3)

Scope 3 category 7: Employee commuting

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

5,317

Comment

This emissions haven´t been recalculated in 2022 (the change in the methodology doesn´t affect to scope 3)

Scope 3 category 8: Upstream leased assets

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

39

Comment

This emissions haven´t been recalculated in 2022 (the change in the methodology doesn´t affect to scope 3)

Scope 3 category 9: Downstream transportation and distribution

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

0

Comment

NA

Scope 3 category 10: Processing of sold products

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

0

Comment

NA

Scope 3 category 11: Use of sold products

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

0

Comment

NA

Scope 3 category 12: End of life treatment of sold products

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

0

Comment

NA

Scope 3 category 13: Downstream leased assets

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

0

Comment

NA

Scope 3 category 14: Franchises

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

0

Comment

NA

Scope 3 category 15: Investments

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

17,341

Comment

This emissions haven´t been recalculated in 2022 (the change in the methodology doesn´t affect to scope 3)

Scope 3: Other (upstream)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

0

Comment

NA

Scope 3: Other (downstream)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

0

Comment

NA

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

Other, please specify

Spanish Climate Change Office; own methodology

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

20,542

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

Although we are reporting both location and market-based figures, the break downs and calculations included in this report are all specifically calculated using the market-based method.

C6.3

(C6.3) What were your organization’s gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

730,220

Scope 2, market-based (if applicable)

727,214

Comment

Please note that Scope 2 includes emissions due to electricity consumption and emissions associated to transmission grid losses. Emissions due to grid losses are not "purchased and consumed electricity" , so their value is the same in both cases (location or market based).

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization’s gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

301,214

Emissions calculation methodology

Supplier-specific method

Hybrid method

Spend-based method

Methodology for direct use phase emissions, please specify

Redeia collects specific emissions data for the most relevant suppliers (Quality information regarding the life cycle of the products purchased or emissions information verified by a third party)

Percentage of emissions calculated using data obtained from suppliers or value chain partners

15.64

Please explain

The annual expenditure is broken down for each group of items purchased by Redeia - groups already included in scopes 1 and 2 or in other categories of scope 3, are excluded from this calculation to avoid double counting- The emissions are obtained by multiplying the expenditure of each group of items by the emission factor that best fits their denomination. Emission factors: those from the Comprehensive Environmental Data Archive (CEDA) 6.0 database that provides emissions per dollar of production for more than 400 sectors of the US economy are used. The CEDA database is used by the US Environmental Protection Agency (U.S. EPA), the Department of Commerce (DOC) and the European Commission for policy support.

For the most relevant suppliers, Redeia carries out specific data collection work to improve the calculation described above. In case that suppliers provide quality information regarding the life cycle of the products purchased or emissions information verified by a third party (direct information), it is used instead of applying the CEDA emission factors on the annual expenditure.

Since 2019, Redeia is working on a project whose objective is the definition of a medium and long-term action plan for the reduction of emissions in the Redeia supply chain. The action plan includes engagement with the main suppliers (30) and the definition of the collection

processes and the incorporation to the calculation of the data provided by the suppliers (instead of using emission factors). According to Redeia experience, in many cases, there are some inconsistencies in the data provided by suppliers. For this reason, only the information that complies with the quality criteria (information regarding the life cycle of the products purchased or emissions verified by a third party), is incorporated to the calculation.
The objective is that this information is incorporated in a consistent & accurate way and that the data is comparable among different providers.

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

125,308

Emissions calculation methodology

Supplier-specific method
Hybrid method
Spend-based method
Methodology for direct use phase emissions, please specify

Redeia collects specific emissions data for the most relevant suppliers (Quality information regarding the life cycle of the products purchased or emissions information verified by a third party)

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Capital goods are final products that have a prolonged useful life and are treated as fixed assets, or as property, plant, and equipment. The emissions of the assets acquired in the year are estimated by multiplying the area of the facilities acquired by the base values, or relevant benchmarks. The emissions of the goods acquired are only considered in the year of acquisition, without apportioning over time. Some groups of items purchased by Redeia and that correspond to the concept of capital good are included in this category. In this case, the emissions are obtained by multiplying the expenditure of each group of items by the emission factor that best fits their denomination. Emission factors: those

from the Comprehensive Environmental Data Archive (CEDA) 6.0 database that provides emissions per dollar of production for more than 400 sectors of the US economy are used.
For the most relevant suppliers, Redeia carries out specific data collection work to improve the calculation described above. In case that suppliers provide quality information regarding the life cycle of the products purchased or emissions information verified by a third party (direct information), it is used instead of applying the CEDA emission factors on the annual expenditure.
Since 2019, Redeia is working on a project whose objective is the definition of a medium and long-term action plan for the reduction of emissions in the Redeia supply chain. The action plan includes engagement with the main suppliers (30) and the definition of the collection processes and the incorporation to the calculation of the data provided by the suppliers (instead of using emission factors). According to Redeia experience, in many cases, there are some inconsistencies in the data provided by suppliers. For this reason, only the information that complies with the quality criteria (information regarding the life cycle of the products purchased or emissions verified by a third party), is incorporated to the calculation.
The objective is that this information is incorporated in a consistent & accurate way and that the data is comparable among different providers.
The % of emissions calculated using primary data in 2021 is 0 % because there haven´t been relevant acquisitions of capital goods to the suppliers participating in the engagement program.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

955

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

These emissions represent 0.2% of total Scope 3 emissions (in 2022), so they are considered as NOT RELEVANT.
These include emissions due to energy and fuel production, consumed by Redeia and that have not been included in Scope1 and Scope2:
- Emissions associated with the extraction, production and transport of fuels consumed by Redeia. To obtain associated emissions, fuel consumption is multiplied by an emission factor that results from combining the emission factors of DEFRA and the factors of Emission used by Redeia (Climate Change Spanish Office).
- Emissions associated with the extraction, production and transport of fuel consumed in the generation of electricity used by Redeia. Only emissions associated with non-renewable energy consumption are considered. Emission factor: Well-to-tank (WTT) for Spain, DEFRA (upstream).

Upstream transportation and distribution

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

1,000

Emissions calculation methodology

Hybrid method
Fuel-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

63.4

Please explain

These emissions represent only 0.21% of total Scope 3 emissions, so they are considered as NOT RELEVANT
This category includes emissions associated with the transport and distribution of products acquired by Redeia in vehicles not owned by Redeia. Two types of transport are considered:
- External transport of products and materials between the supplier and Redeia facilities. The annual expenditure is broken down for the groups of items that refer to this type of service. The emission factor CEDA GLOBAL 6.0 for this type of articles is applied. (Kg CO2e/Euro)

- Internal transport of materials between Redeia facilities. Emissions are calculated from the litres of diesel consumed by the company that carried out the logistic service for Redeia. The logistic company monitors the kilometres travelled and litres of fuel used by each individual vehicle. Redeia obtains the data directly from the supplier. Emissions are then calculated using the same methodology used for Scope 1 emissions (Redeia vehicles, emission factors from Climate Change Spanish Office).

Waste generated in operations

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

49

Emissions calculation methodology

Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

These emissions represent 0.01% of total Scope 3 emissions, so they are considered as NOT RELEVANT
This category includes emissions associated with the treatment of waste generated by Redeia's operations taking into account their final treatment: landfill disposal, recycling, incineration, composting, etc. Detailed information on the amount of waste (kg) is collected by type of waste and treatment method. For the calculation, DEFRA emission factors (for each type of waste and final treatment method) are used. Information about the amount of waste (kg) and treatment method is obtained from the suppliers.

Business travel

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

1,227

Emissions calculation methodology

Fuel-based method

Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

99

Please explain

These emissions represented 0.26% of total Scope 3 emissions (in 2022), so they are considered as NOT RELEVANT.
These include emissions associated with business travel by plane, train (high-speed and long-distance) and car (private vehicles, rented vehicles, and taxis).
- Trips by plane: The travel agency provides the trip data, ticket type and number of routes. The emissions of each route are calculated by multiplying the total distance (distance of the route x number of routes) x emission factor of the ICAO (International Civil Aviation Organization).
- Trips by train (only Spain): The travel agency provides the trip data: type of train (high speed or long distance), distance of the route and number of routes ticket type and number of routes. The emissions of each route are calculated by multiplying the total distance (distance of the route x number of routes) x emission factor. Emission factor: Published by Renfe (railway company in Spain). AVE: Renfe Sustainability (2011); Long distance: Renfe, Environmental Report (2007);
- Trips by car:
a) Private vehicle: calculations are based on the number of kilometres travelled. Source: Redeia travel database. Emission factor: DEFRA 2022.
b) Rental vehicle: calculations are based on the number of kilometres travelled, provided by car rental suppliers. Emission factor: DEFRA 2022
c) Taxis: calculation based on the number of Kilometers travelled by taxi. Emission factor: DEFRA 2022. In Spain the company hired to carry out this service calculates the emissions with its own methodology (emission factors based on real data).

Employee commuting

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

3,790

Emissions calculation methodology

Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

65

Please explain

These emissions represented 0.8% of total Scope 3 emissions (in 2022), so they are considered as NOT RELEVANT.
These emissions refer to those associated with the employees commuting from their homes to the workplace. Necessary data (kilometres travelled by employees according to each transport method employed) are obtained from a survey to all employees. Once the calculation is made for the employees responding to the survey, the results are extrapolated for the entire workforce. Employees responding the survey: 65% of total workforce. Emission factors: Train: SACE tool (from Andalusian Autonomous Community) and Renfe Motorbike: SACE; Bus: SACE; Car: DEFRA.

Upstream leased assets

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

90

Emissions calculation methodology

Other, please specify

Electricity consumption estimation using benchmark information

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Redeia only leases offices. In general, emissions from leased assets (emissions from their electricity consumption) are already included in Scope 2, but for some offices, emissions have been estimated.
These emissions represent 0.02% of total Scope 3 emissions, so they are considered as NOT RELEVANT
Electricity consumption is estimated using benchmark information: CIBSE benchmarks on energy consumption per sq. meter (2000). Emissions are then calculated by applying the relevant emission factor from the Spanish Climate Change Office (OECC, 2022)

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

Not applicable. Redeia does not sell physical products. Emissions associated to energy transmission (service) are already included in Scope 2.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Not applicable. Redeia does not sell physical products.

Use of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Not applicable. Redeia does not sell physical products.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Not applicable. Redeia does not sell physical products.

Downstream leased assets

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

0

Emissions calculation methodology

Other, please specify

Direct electricity consumption data

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

This category includes the emissions associated with the operation of assets owned by Redeia and leased to third parties, whose impact has not already been considered in the Scope 1 and 2 inventories. Electricity consumption primary data is taken into account if it is available.
In 2022, all primary data has been used, i.e. Electricity consumption and market based information.
Emission factor: same as in Scope 2. Please note that if thermal energy is consumed, the emission factor proposed by the Spanish Climate Change Office is used. All the energy used has been renewable in 2022.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Not applicable. Redeia does not have any franchises

Investments

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

32,188

Emissions calculation methodology

Investment-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

These emissions only represent 6.9% of total Scope 3 emissions.
Emissions associated with participated companies for which Redeia does not have operational control are considered in this category.
The calculation is carried out considering the result of the annual participation for each of the companies (in economic terms), which are included in the Group's annual accounts by the equity method. The corresponding emission factors are applied to these economic data. The CEDA factors are taken as a reference. In the case of investees whose activity is the transmission of electrical energy, the average emission factor of Red Eléctrica is applied (which is considered to be more adjusted than the factors published in CEDA). This average factor is calculated considering Scope 1 and 2 emissions, which are divided by EBITDA.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

No other upstream emissions have been identified.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

No other upstream emissions have been identified.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.000371

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

747,756

Metric denominator

unit total revenue

Metric denominator: Unit total

2,015,040,000

Scope 2 figure used

Market-based

% change from previous year

8

Direction of change

Increased

Reason(s) for change

Change in physical operating conditions

Other, please specify

Geopolitical reasons

Please explain

The main reason for change has been the increase of Scope 1+2 emissions (11.6%), due to the increase of Scope 2 emissions (12.5%). Although revenues have slightly increased (3.18%), the increase of emissions have been more relevant.

The scope 2 emissions increase is linked to an increase of emissions due to transmission losses (12.53%), which has been motivated by two main factors:

- Change in physical conditions, affecting the generation mix. The generation mix affects the main factors regarding emissions associated to transmission grid losses: amount of transmission losses (%) and emission factor. In 2022 there has been a huge decrease in water availability and therefore, a decrease in hydro power generation (11,763 GWh less than in 2021). It has influenced the emission factor, that has increased in 2022.
- Increase in the share of coal power in the energy mix (55.8% increase compared to 2021) due to the lack of water and linked to the war situation in Ukraine and the increase of natural gas prices. It has had an impact in the emission factor.

The emission factor in 2022: 0.16 tCO2e/MWh compared to emission factor in 2021:0,14 tCO2e/MWh. (An increase of 14.2% of the emission factor)

Intensity figure

0.0029

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

747,756

Metric denominator

megawatt hour transmitted (MWh)

Metric denominator: Unit total

257,225,110

Scope 2 figure used

Market-based

% change from previous year

13.98

Direction of change

Increased

Reason(s) for change

Change in physical operating conditions

Other, please specify

Geopolitical reasons, change in energy transmitted

Please explain

The main reason for change has been the increase of Scope 1+2 emissions (11.6%), due to the increase of Scope 2 emissions (12.5%). Besides, the energy transmitted (denominator) has decreased 2.1%.

The scope 2 emissions increase is linked to an increase of emissions due to transmission losses (12.53%), which has been motivated by two main factors:

- Change in physical conditions, affecting the generation mix. The generation mix affects the main factors regarding emissions associated to

transmission grid losses: amount of transmission losses (%) and emission factor. In 2022 there has been a huge decrease in water availability and therefore, a decrease in hydro power generation (11,763 GWh less than in 2021). It has influenced the emission factor, that has increased in 2022.
- Increase in the share of coal power in the energy mix (55.8% increase compared to 2021) due to the lack of water and linked to the war situation in Ukraine and the increase of natural gas prices. It has had an impact in the emission factor.
The emission factor in 2022: 0.16 tCO2e/MWh compared to emission factor in 2021:0.14 tCO2e/MWh. (An increase of 14.2% of the emission factor)

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	2,308	IPCC Fifth Assessment Report (AR5 – 100 year)
SF6	17,718	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	516	IPCC Fifth Assessment Report (AR5 – 100 year)

C-EU7.1b

(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives	0	0	753.95	18,234	Fugitive emissions: - SF6 emissions: 17,718 tCO2e -Air conditioning emissions (HFCs): 516 t CO2e (Total gross Scope 1 emissions data in metric tons CO2e includes both sources)
Combustion (Electric utilities)	0	0	0	0	Redeia does not perform any energy production activities. Red Electrica's activities are limited to the transmission of electricity and operation of the power system.
Combustion (Gas utilities)	0	0	0	0	Not applicable. Redeia does not perform any activity related to gas.
Combustion (Other)	2,308	0	0	2,308	Emissions included: -Mobile Combustion: emissions derived from fuel consumption of the fleet. -Stationary combustion: derived from the combustion of fuels used in diesel generating sets. Most of RE substations and some of the buildings have Diesel Generating sets in order to ensure the supply in the event of electricity failure. In general, the number of operating hours registered correspond to the time where they have been on in order to perform maintenance checks to ensure that they are in suitable working conditions. -Combustion for heating (only in one building)

Emissions not elsewhere classified	0	0	0	0	

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
Spain	20,138
Peru	148
Chile	56
Brazil	200

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division
By activity

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Red Eléctrica de España (Red Eléctrica): TSO: transmission & operation of electricity system in Spain) (Includes emission from corporate activities in Spain an emissions and Elewit, as the building is shared and they are not material compared to Red Eléctrica's)	19,935.3

Reintel: telecommunications in Spain	24.4
Redinter: Transmission activities in Latin América	204.3
Hispasat: satellite infrastructure operator	378

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Fugitive emissions from electrical equipment	17,718
Fugitive emissions from air conditioning equipment	516
Mobile combustion	1,662
Stationary combustion (generating sets for emergency situations + heating)	646

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Comment
Electric utility activities	0	Not applicable. Redeia does not perform any energy generation activities. Red Electrica's activities are limited to the transmission of electricity and operation of the power system. Activities in Latin America (Redinter) are limited to transmission of electricity.

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Yes

C7.7a

(C7.7a) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

Subsidiary name

Red Eléctrica de España (Red Eléctrica)

Primary activity

Electricity networks

Select the unique identifier(s) you are able to provide for this subsidiary

Another unique identifier, please specify

NIF (Fiscal Identification Number)

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

A85309219

Scope 1 emissions (metric tons CO2e)

19,935.3

Scope 2, location-based emissions (metric tons CO2e)

720,294.8

Scope 2, market-based emissions (metric tons CO2e)

718,015

Comment

Emissions from the subsidiary Elewit are included in Red Electrica´s emissions as thy are not material. Elewit emissions are the ones resulting for the use of the buildings and they are already included in Rede Electrica´s inventory.
Please note that location-based emissions are remarkably similar to market-based emissions. This is due to the fact that the most relevant emissions in scope 2 are those associated to transmission losses. They are calculated using the emission factor for the electricity mix in both (market and location) cases, according to the Spanish regulation the TSO is not allowed to buy green energy for the transmission losses.

Subsidiary name

Red Eléctrica Internacional (Redinter)

Primary activity

Electricity networks

Select the unique identifier(s) you are able to provide for this subsidiary

Another unique identifier, please specify

NIF (Fiscal Identification Number)

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

A82852906

Scope 1 emissions (metric tons CO2e)

204.3

Scope 2, location-based emissions (metric tons CO2e)

9,294.5

Scope 2, market-based emissions (metric tons CO2e)

9,142

Comment

No comments

Subsidiary name

Reintel

Primary activity

Telecommunications services

Select the unique identifier(s) you are able to provide for this subsidiary

Another unique identifier, please specify

NIF (Fiscal Identification Number)

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

A87323127

Scope 1 emissions (metric tons CO2e)

24.45

Scope 2, location-based emissions (metric tons CO2e)

62.7

Scope 2, market-based emissions (metric tons CO2e)

19

Comment

Subsidiary name

Hispasat

Primary activity

Telecommunications services

Select the unique identifier(s) you are able to provide for this subsidiary

Another unique identifier, please specify

NIF (Fiscal Identification Number)

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

A79201075

Scope 1 emissions (metric tons CO2e)

378

Scope 2, location-based emissions (metric tons CO2e)

568

Scope 2, market-based emissions (metric tons CO2e)

38

Comment

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	260	Decreased	0.039	In 2022 emissions related to electricity consumption have decreased 260 t CO2e (365 t CO2e in 2021 vs 625 tCO2e in 2021), although electricity consumption has slightly increased. The emission reduction is due to the increase of renewable energy consumption. Total emission value percentage= 260/670,163*100=0.039%. Please note that 670,163 tCO2e figure corresponds to 2021 Scope1+2 emissions.
Other emissions reduction activities	32,333.62	Decreased	4.825	Decrease due to emission reduction activities: (a) Efforts to reduce SF6 emissions: leak repair on equipment (2,357 t CO2e)+ other reduction activities (815.62 t CO2e) = 3,172.62 t CO2e. (b) Efforts to reduce emissions from fleet vehicles (increase of electric/hybrid vehicles and efficiency measures). The use of vehicles for maintenance activities have increased but emissions have been reduced: 1,926 t CO2e (emissions 2021)-1,662 tCo2eq (emissions 2022)= 264 t CO2e. (c) Renewable energy (wind and solar) integration into the electricity system: RE has a crucial role in renewable energy integration: building the infrastructures to connect renewable power to the grid and operating the electricity network to integrate energy generated by renewables. The amount of renewable energy affects emissions due to transmission grid losses (because affects transmission losses rate and emission factor for the electricity system.)

				In 2022, there has been a relevant increase in the share of wind and solar energy in the energy mix , especially in photovoltaic generation (32.8 % increase), that has had an impact in the emission factor. To estimate emissions decrease, we have compared the emissions of transmission losses, calculated with the real emission factor in the peninsular system for 2022 (4,460,000 MWh* average factor 0.160921 tCO2e/MWh= 717,707 tCO2e) with emissions using a factor that has been calculated considering the same generation with gas (which is the most probable generation source to substitute renewable energy) ; (4,460,000 MWh* average factor 0.1674 tCO2e/MWh= 746,604 tCO2e) Decrease of emissions due to renewable integration: 717,707-746,604= -28.897 tCO2e Renewable wind and solar energy depend on RE activities but also on physical conditions. In 2022, changes in physical conditions regarding wind and solar haven´t been relevant. On the contrary, RE has been able to connect a higher amount of new renewable infrastructure to the grid (without this connections, renewable integration hadn't been possible). For these reasons we have allocated 100% of the emissions reduction to RE activities Total decrease: (a)+(b)+(c)=3,172.62+264+28,897=32,333.62 tCO2e. Total emission value percentage= 32,333.62 *100/670,163=4.82473%. Please note that 670,163 tCO2eq figure corresponds to 2021 Scope1+2 emissions.
Divestment	0	No change	0	Not applicable
Acquisitions	0	No change	0	Not applicable
Mergers	0	No change	0	Not applicable
Change in output	0	No change	0	Although there have been variations in electricity demand in 2022 compared to 2021, they haven´t been considered material for this analysis.
Change in methodology	527,765	Increased	0.079	There has been a relevant change in the methodology for calculating SF6 emissions, as the 100-year GWP (23,500) of the 5th IPCC report, (Intergovernmental Panel on Climate Change), has been used instead of the GWP (22,800) of the 4th IPCC report.

				SF6 emissions 2022=753.95 kg SF6. Total increase: (753.95*23,500/1000-753.95*22,800/1000) =527.765 tCO2 eq. Total emission value percentage= 527.765 *100/670,163=0.079%. Please note that 670,163 tCO2eq figure corresponds to 2021 Scope1+2 emissions.
Change in boundary	0	No change	0	Not applicable
Change in physical operating conditions	86,659	Increased	12.931	a. Changes in physical and operating conditions influence some aspects. The main one that affects emissions is the change in the generation mix, which depends on the physical operation conditions of each year (mainly water and wind availability). The generation mix affects the main factors regarding emissions associated to transmission grid losses: amount of transmission losses (%) and emission factor. In 2022 there has been a huge decrease in water availability and therefore, a decrease in hydro power generation (11,763 GWh less than in 2021). To estimate emissions increase, we have compared the emissions of transmission losses calculated with the real emission factor for 2022 (4,460,000 MWh* average factor 0.160921 tCO2e/MWh= 717,707 tCO2e), with emissions using a factor (average factor) that has been calculated considering the same hydro power production as in 2021- and assuming an equivalent reduction of energy generated with gas (which is the most probable generation source to substitute renewable energy)- (0.1415 t CO2eq/MWh) 4,460,000 *0.1415= 6301,090.38 tCO2e. Increase of emissions due to availability of water (physical conditions): 717,707-631,090 tCO2e=86,617 tCO2e b. Additionally, there has been a small increase in the use of heating in 2022 compared to 2021, linked to changes in physical conditions. 142 tCO2eq (2022)-100 t CO2eq (2021)=42 t CO2 e. Total change on emissions: 86,617+42=86,659 tCO2e Total emission value percentage= 86,659 /670,163*100=12.93 %. Please note that 670,163 tCO2e figure corresponds to 2021 Scope1+2 emissions.

Unidentified	21,247	Decreased	3.17	a. Regarding scope 1, there has been some changes in emissions: a1. Decrease of diffuse emissions from air conditioning: 742 (2021)-516 (2022)= 225.5 tCO2e. a.2 Increase of emissions in generating sets: 504 (2021)- 502 (2020)= 2tCO2e. There are different reasons associated to these variations (operational conditions or increase of maintenance works) but we are not able to identify them exactly. b. Regarding scope 2 emissions: The main factors affecting emissions related to transmission losses have been analysed and reported in this question: relevant changes in generation mix. But there are other factors that can influence final total emissions (i.e. minor changes in generation mix, demand variations, % of transmission losses, increase of international exchanges-energy exported to France-). As they can only be analysed as a whole and calculating /reporting single data is very confusing, they haven´t been included in this question. Total variation in emissions from transmission losses: 80,943 tCO2e (increase) Increase due to hydro power generation reduction: 86,617 tCO2e Increase due to coal power generation growth: 44,247 tCO2e Decrease due to wind&solar generation increase: 28,897 tCO2e Decrease due to "unidentified" (scope 2): 80,943- (86,617+44,247-28,897) = -21,024 tCO2 e Total variation (decrease scope 1+2) = 2-225.5-21,024=-21,247 t CO2 e Total emission value percentage= 21,247 /670,163*100=3.17 %. Please note that 670,163 tCO2e figure corresponds to 2021 Scope1+2 emissions.
Other	44,247	Increased	6.602	a. In 2022, there has been an increase in the share of coal power in the energy mix (55.8% increase compared to 2021) due to the lack of water (see change in physical operating conditions) and linked to the war situation in Ukraine and the increase of natural gas prices. It has had an impact in the emission factor. To estimate emissions increase, we have compared the emissions of transmission losses, calculated with the real emission factor for 2022 (4,460,000 MWh* average

				factor 0.160921 tCO2e/MWh= 717,707 tCO2eq) with emissions using a factor that has been calculated considering the same generation with coal as in 2021 and assuming that the difference would have been produced with gas (which is the most probable generation source to substitute coal energy)- (0.151 t CO2eq/MWh) 4,460,000 *0.151= 673,460 tCO2e. Increase of emissions due to the increase of coal fired power stations generation: 717,707 -673,460 =44,247 tCO2e Total emission value percentage= 44,247 /670,163*100=6.602%. Please note that 670,163 tCO2e figure corresponds to 2021 Scope1+2 emissions.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year

Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	No

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	10,472.7	10,472.7
Consumption of purchased or acquired electricity		18,999.8	1,604	20,603.8
Total energy consumption		18,999.8	120,767	310,765

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No

Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

Comment

No consumption of any biomass

Other biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

Comment

No consumption of any biomass

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

Comment

No consumption of other renewable fuels.

Coal

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

Comment

No consumption of coal

Oil

Heating value

LHV

Total fuel MWh consumed by the organization

10,472.7

Comment

Fuel types included in the answer:
Motor gasoline used in fleet vehicles
Diesel/gas oil used in fleet vehicles
Diesel/gas oil used in auxiliary generating units (to ensure the supply in case of electric failure)
Diesel/gas oil used only for heating (Gas oil C)

Gas

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

Comment

No gas consumption

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

Comment

No consumption of other non-renewable fuels

Total fuel

Heating value

LHV

Total fuel MWh consumed by the organization

10,472.7

Comment

Fuel types included in the answer:
Motor gasoline used in fleet vehicles

Diesel/gas oil used in fleet vehicles
Diesel/gas oil used in auxiliary generating units (to ensure the supply in case of electric failure)
Diesel/gas oil used only for heating (Gas oil C)

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area

Spain

Consumption of purchased electricity (MWh)

18,342.09

Consumption of self-generated electricity (MWh)

72.5

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

18,414.59

Country/area

Consumption of purchased electricity (MWh)

797.16

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

797.16

Country/area

Chile

Consumption of purchased electricity (MWh)

34.37

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

34.37

Country/area

Brazil

Consumption of purchased electricity (MWh)

1,430.26

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,430.26

C-EU8.4

(C-EU8.4) Does your electric utility organization have a transmission and distribution business?

Yes

C-EU8.4a

(C-EU8.4a) Disclose the following information about your transmission and distribution business.

Country/area/region

Spain

Voltage level

Transmission (high voltage)

Annual load (GWh)

250,029.77

Annual energy losses (% of annual load)

1.78

Scope where emissions from energy losses are accounted for

Scope 2 (market-based)

Emissions from energy losses (metric tons CO2e)

717,707

Length of network (km)

45,019

Number of connections

2,406

Area covered (km2)

506,000

Comment

Annual energy losses. The data for the historical series is available in the SR report 2022.
Area covered: REE is the Spanish Transmission System Operator (TSO). It is the sole company in Spain that carries out electricity transmission. The area includes all Spanish territory (including Balearic and Canary Islands).
Please note that the emissions from energy losses are equivalent for market-based & location -based.

Country/area/region

Peru

Voltage level

Transmission (high voltage)

Annual load (GWh)

5,348.58

Annual energy losses (% of annual load)

0.65

Scope where emissions from energy losses are accounted for

Scope 2 (market-based)

Emissions from energy losses (metric tons CO2e)

6,181.5

Length of network (km)

1,689.8

Number of connections

68

Area covered (km2)

362,961

Comment

Area covered: total area of the regions where the network is located

---

Country/area/region

Chile

Voltage level

Transmission (high voltage)

Annual load (GWh)

1,846.75

Annual energy losses (% of annual load)

0.52

Scope where emissions from energy losses are accounted for

Scope 2 (market-based)

Emissions from energy losses (metric tons CO2e)

2,960.69

Length of network (km)

562

Number of connections

10

Area covered (km2)

185,148

Comment

Area covered: total area of the regions where the network is located

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description

Energy usage

Metric value

14,763.4

Metric numerator

Electricity consumption in work centers (MWh)

Metric denominator (intensity metric only)

N.A

% change from previous year

5

Direction of change

Increased

Please explain

The company set efficiency targets regarding electricity consumption in work centres: 30% reduction by 2030 compared to 2015.
Although the consumption has increased from previous year, the electricity consumption has reduced the 8.7% compared to 2015, which means a good evolution towards the target, considering that the most relevant efforts are expected to be developed between 2022 and 2030.
This target has been updated in 2022 to incorporate work centers in LATAM & Hispasat (not included yet). The new target (approved in 2022) is a 10% reduction of the total electricity consumption in 2025 compared to 2019.

C-EU9.5b

(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan
Other, please specify Development of the national transmission grid: renewable integration & other (regarding energy transition)	Red Eléctrica, main society of Redeia, builds and maintains transmission infrastructures (lines and substations) being the owner and manager of the transmission grid in Spain. Besides, Red Eléctrica is responsible for the technical operation of the Spanish electricity system. As the manager of the transmission grid, Red Eléctrica must guarantee that facilities are adequately developed and enlarged as needed. The main investment of the company is therefore to develop new infrastructures that are needed to achieve a more decarbonized electricity system at a national level. The CAPEX planned corresponds to 2021-2025 period, covered by the current Strategic Plan. The new infrastructures are necessary to achieve the national renewable energy & emission reduction targets (EU targets 2030).	2,846,000,000	66	2025
Large-scale storage	The main project that Red Eléctrica is developing in this category is Chira pumped-storage hydroelectric power station. This infrastructure	411,000,000	9.5	2025

	will enable a greater development and use of renewable energy on the island of Gran Canaria (storage of renewable energy). The CAPEX planned corresponds to the period 2021-2025, covered by the current Strategic PlanThis project will contribute to achieve 2030 national & EU targets (renewable integration and emission reduction).			
Smart grid	Redeia Strategic plan includes investments in Technology and digitalization aiming to improve the entire Spanish national grid. Projects included in this category are referred to: Intelligent network, big data, active consumes, integration of distributed generation and development of electric mobility. The CAPEX planned corresponds to the period 2021-2025, covered by the current Strategic Plan. These projects will contribute to achieve 2030 national targets &EU targets (emission reduction, renewable integration & energy efficiency).	92,000,000	2.1	2025

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	

C-CO9.6a/C-EU9.6a/C-OG9.6a

(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)	Average % of total R&D investment planned over the next 5 years	Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan
Other, please specify Renewable distributed energy sources	Pilot demonstration	0.7	55,000	0	Self -consumption Platform: Development of an IT platform to monitor the actual level of small scale self -supply (P <1MW) as there is no real time measures or metering of the amount generated. The information, however, is available on the IoT and in the cloud. The platform makes real-time monitoring possible, allowing Red Eléctrica to estimate production in the system and make forecasts facilitating the smooth integration of small-scale distributed generation into the system. This technology CONTRIBUTES to achieve the commitments included in the Climate Change Action Plan: "Achieve the maximum level of integration of renewable energy into the electricity system" (Course of action: contribution to a sustainable energy model).
Other, please specify Renewable energy integration/Energy storage	Applied research and development	0.5	43,000	1	INERTIA+: By 2050, most EU economies are expected to be decarbonized. To achieve that goal, two of the main pillars are the electrification of energy consumption and the massive integration of renewable energy sources (RES) into the

					electricity system. These renewable energies are mainly Inverter Based Resources (IBR). The current power system relies mainly on conventional generation based on synchronous technology to ensure the provision of certain services and capacities that are critical to ensure stable and robust system operation, and most IBR facilities, alone or in combination with battery energy storage systems (BESS), hardly contribute to provide them due to their technical limitations. The grid formation (GF) capabilities are essential to ensure stable and robust operation of an electricity system with high RES penetration. So, RE is working closely with industry and academia to define future GF controllers that will ensure stable and robust system operation almost or in the total absence of synchronous generation. This technology CONTRIBUTES to achieve the commitments included in the Climate Change Action Plan: "Achieve the maximum level of integration of renewable energy into the electricity system" (Course of action: contribution to a sustainable energy model).
Other, please specify Renewable energy integration	Applied research and development	1.1	90,000	3	THIRTIES The project is aimed at studying and developing different strategies to perform voltage regulation in a context of high presence of Inverter Based Resources, typically all renewable generation.

					This project will help to maintain system stability in scenarios with low synchronous generation (typically thermal generation) and maximize renewable energy into the system. In addition, the project has developed full scale test in close collaboration with renewable energy operators in order to test and benchmark the different control strategies. This technology CONTRIBUTES to achieve the commitments included in the Climate Change Action Plan: "Achieve the maximum level of integration of renewable energy into the electricity system" (Course of action: contribution to a sustainable energy model).
Battery storage	Full/commercial-scale demonstration	8.8	730,000	0	OSMOSE: Development of tests and the evaluation of energy storage systems for their technical-economic assessment in field tests. Hybrid energy storage system consisting of a STATCOM, ultracapacitor and an electrochemical battery. Development of the hybrid system's own controls and that of a superior control hierarchy at an electricity system level for the coordination of storage devices (flywheel). This technology CONTRIBUTES to achieve the commitments included in the Climate Change Action Plan: "Achieve the maximum level of integration of renewable energy into the electricity

					system" (Course of action: contribution to a sustainable energy model).
Other, please specify SF6 leakages reduction (emissions reduction)	Full/commercial-scale demonstration	0.4	30,000	1	CIEGA: SF6 gas leakages reduction: Development of a new methodology for repairing leaks in GIS installations/facilities. This technology CONTRIBUTES to achieve the commitments included in the Climate Change Action Plan- Scope1+2 emission reduction target (55% in 2030 compared to 2029). The reduction of SF6 leakages is essential to reduce scope 1 emissions.
Other, please specify Sf6 leakages reduction (emissions reduction)	Pilot demonstration	1.8	150,000	1	SF6/SO2 sensors in Substations: Together with two relevant telecommunication companies, Redeia has developed a pilot project for the remote inspection of facilities using artificial vision in different spectrums and the detection of SO2/SF6 gas (indicator of faults in the sub-station and greenhouse gas leakages) both in electricity sub-stations and the channels within them. This technology CONTRIBUTES to achieve the commitments included in the Climate Change Action Plan- Scope1+2 emission reduction target (55% in 2030 compared to 2029). The reduction of SF6 leakages is essential to reduce scope 1 emissions.

Other, please specify SF6 leakages reduction (emission s reduction)	Basic academic/theoretical research	0.4	30,000	1	SF6 recovery system: This solution will enable to recover the SF6 leaked from GIS installations using absorbent materials (modified or synthesized commercial compounds). The system developed will make an effective contribution to reducing greenhouse gas emissions into the atmosphere caused by equipment leakages in the transmission grid that use SF6. This technology CONTRIBUTES to achieve the commitments included in the Climate Change Action Plan- Scope1+2 emission reduction target (55% in 2030 compared to 2029). The reduction of SF6 leakages is essential to reduce scope 1 emissions.
Other, please specify Hybrid generation (solar+batteries) to replace high carbon emission equipment	Full/commercial-scale demonstration	3.4	280,000	1	The PLATEA RENEWABLE project aims to provide a renewable power supply system for auxiliary services in a substation as an alternative to the use of a generator set. Its main objective is to reduce environmental pollution by means of a hybrid generation system (photovoltaic+batteries) and to make the system portable for use in other locations. This technology CONTRIBUTES to achieve the commitments included in the Climate Change Action Plan- Scope1+2 emission reduction target (55% in 2030 compared to 2029). The reduction of emissions fron fossil fuel (in

					diesel generator sets) contributes to reduce scope 1 emissions.
Battery storage	Full/commercial-scale demonstration	0.2	20,000	10	ViSynC: The project objective is to develop and commission a +10 MW hybrid energy storage solution in Lanzarote-Fuerteventura electrical system (Canary Islands). The system consists of a battery storage system and ultracapacitor that will work together in a coordinated manner to help renewable energy integration. In addition, the system will be provided with grid forming control system which allows for minimizing the need for coupling conventional (thermal) synchronous generation in the island. This technology CONTRIBUTES to achieve the commitments included in the Climate Change Action Plan: "Achieve the maximum level of integration of renewable energy into the electricity system" (Course of action: contribution to a sustainable energy model).
Other, please specify Reduction of indirect emissions from water supply /water consumption reduction	Pilot demonstration	1.2	100,000	1	Sustainable Water The objective of the project is to move to a more sustainable approach for water supply at electrical substations, typically far from water networks of municipalities and thus relying on tanker trucks for water supply. The project evaluated the feasibility of water supply based on the technique of “atmospheric water collection” at RE substations and is developing a state-of-the-art equipment

					(patent in progress) for this purpose and test it in real operation conditions. This will allow to achieve self-supply of water of water in some substations, will reduce indirect emissions linked to water supply and will decrease the stress over hydric reservoirs which might be scarce at local level. Although the projects CONTRIBUTION is mainly to Redeia's Circular Economy Roadmap, contribution to the Climate Change Action Plan is also considered.
Battery storage	Full/commercial-scale demonstration	0	0	10	Battery Storage: Future projects R&D investment in this technology area is expected to increase noteworthy. Some new projects are expected/planned to be launched in the next 5 years as storage is essential to renewable energy integration. This technology CONTRIBUTES to achieve the commitments included in the Climate Change Action Plan: "Achieve the maximum level of integration of renewable energy into the electricity system" (Course of action: contribution to a sustainable energy model).
Other, please specify Renewable integration, renewable distributed energy	Full/commercial-scale demonstration	0	0	2	Renewable /distributed renewable integration: future projects Some new projects are expected/planned to be launched in the next 5 years. This technology CONTRIBUTES to achieve the commitments included in the Climate Change Action Plan: "Achieve the maximum level of

					integration of renewable energy into the electricity system" (Course of action: contribution to a sustainable energy model).
Other, please specify SF6 Alternatives	Full/commercial-scale demonstration	0.6	40,000	8	Development of alternatives to SF6. (Different projects) R&D investment in this Technology area is expected to increase noteworthy. To find alternatives to the use of SF6 is essential to reduce Redeia's Scope1 emissions but also to reduce the regulatory risk linked to changes in regulation regarding the use of F-gases. Some projects are planned for the next 5 years. It CONTRIBUTES to achieve the commitments included in the Climate Change Action Plan-Scope1+2 emission reduction target (55% in 2030 compared to 2029), but mainly to achieve Net-zero 2050 goal.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Informe verificación GEI22_REDEIA_EN V7.pdf

Redeia_Sustainability_Report_2022.pdf

Page/ section reference

"Independent Auditor´s Limited Assurance Report on Redeia “Greenhouse Gas Inventory 2022 of Redeia” page 1-2; and Annex. Greenhouse Gas (GHG) 2022 Inventory of Redeia page 3-4)
The statement is also published in Sustainability Report (431-432)

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Informe verificación GEI22_REDEIA_EN V7.pdf

Redeia_Sustainability_Report_2022.pdf

Page/ section reference

"Independent Auditor´s Limited Assurance Report on Redeia “Greenhouse Gas Inventory 2022 of Redeia” page 1-2; and Annex. Greenhouse Gas (GHG) 2022 Inventory of Redeia page 3-4)
The statement is also published in Sustainability Report (431-432)

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Purchased goods and services
Scope 3: Capital goods
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
Scope 3: Upstream transportation and distribution
Scope 3: Waste generated in operations
Scope 3: Business travel
Scope 3: Employee commuting
Scope 3: Upstream leased assets
Scope 3: Investments
Scope 3: Downstream leased assets

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Informe verificación GEI22_REDEIA_EN V7.pdf

Redeia_Sustainability_Report_2022.pdf

Page/section reference

"Independent Auditor´S Limited Assurance Report on Redeia “Greenhouse Gas Inventory 2022 of Redeia” page 1-2; and Annex. Greenhouse Gas (GHG) 2022 Inventory of Redeia page 3-4)
The statement is also published in Sustainability Report (431-432)

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain

C2. Risks and opportunities	Other, please specify Governance, assessment process, risk &opp due to climate change, mitigation measures	ISAE 300	All the information included in the annual Sustainability report has been verified by third party according to ISAE 3000 (limited assurance). – Information regarding risks associated with climate change are reported in pg. 117-121 and information regarding opportunities arising from climate change pg. 99-101. Independent review of the Sustainability report, according to ISAE 3000 is included in pg.430. The information about risks associated with climate change is also included in the Consolidated Annual Accounts. The non-financial statement and information on sustainability is also verified according to ISAE 3000. (Repot is included in pg 250 - 251) 1, 2, 3
C6. Emissions data	Year on year change in emissions (Scope 1)	ISAE 3000	All the information included in the annual Sustainability report has been verified by third party according to ISAE 3000 (limited assurance). – Scope 1 emission data (2015, 2019-2022) GHG emissions data are reported in pg 194. Independent review of the Sustainability report, according to ISAE 3000 is included in pg.430 1, 3
C6. Emissions data	Year on year change in emissions (Scope 2)	ISAE 3000	All the information included in the annual Sustainability report has been verified by third party according to ISAE 3000 (limited assurance). – Scope 1 emission data (2015, 2019-2022) GHG emissions data are reported in pg 195. Independent review of the Sustainability report, according to ISAE 3000 is included in pg.430 1, 3
C6. Emissions data	Year on year change in emissions (Scope 3)	ISAE 3000	All the information included in the annual Sustainability report has been verified by third party according to ISAE 3000 (limited assurance). – Scope 1 emission data (2015, 2019-2022) GHG emissions data are reported in pg 195.

			Independent review of the Sustainability report, according to ISAE 3000 is included in pg.430 1, 3
C6. Emissions data	Year on year emissions intensity figure	ISAE 3000	All the information included in the annual Sustainability report has been verified by third party according to ISAE 3000 (limited assurance). – Scope 1 emission data (2015, 2019-2022) GHG emissions data are reported in pg 196. Independent review of the Sustainability report, according to ISAE 3000 is included in pg.430 1, 3
C4. Targets and performance	Emissions reduction activities	ISAE 3000	All the information included in the annual Sustainability report has been verified by third party according to ISAE 3000 (limited assurance). – Description of reduction activities, progress against emission reduction targets and energy/emissions reduction data are reported in pg. 177-191. Independent review of the Sustainability report, according to ISAE 3000 is included in pg.430 1, 3
C8. Energy	Energy consumption	ISAE 3000	All the information included in the annual Sustainability report has been verified by third party according to ISAE 3000 (limited assurance). – Energy consumption data are reported in pg. 192-194. Independent review of the Sustainability report, according to ISAE 3000 is included in pg.430 1, 3
C12. Engagement	Other, please specify Engagement program; organizations and associations	ISAE 300	All the information included in the annual Sustainability report has been verified by third party according to ISAE 3000 (limited assurance). – Information about engagement is reported in pg. 187-188;360. Independent review of the Sustainability report, according to ISAE 3000 is included in pg.430

			1, 3
C3. Business strategy	Alignment with a sustainable finance taxonomy	ISAE 3000	All the information included in the annual Sustainability report has been verified by third party according to ISAE 3000 (limited assurance). – EU Taxonomy information is reported in pg. 394-409. Independent review of the Sustainability report, according to ISAE 3000 is included in pg.430. The EU Taxonomy information is also part of the Consolidated Annual Accounts. The non-financial statement and information on sustainability is also verified according to ISAE 3000. (Repot is included in pg 250 -251 1, 2, 3

[1]Informe verificación_IS22_Redeia_EN V7.pdf

[2]Redeia_Consolidated_Annual_Accounts_2022.pdf

[3]Redeia_Sustainability_Report_2022.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits canceled by your organization in the reporting year.

Project type

Reforestation

Type of mitigation activity

Carbon removal

Project description

REDEIA FOREST 2022: Reforestation of burned areas in Salamanca (Spain), Cuevas del Valle and Mombeltrán
Reforestation of 2 burned areas (11.16 ha & 19.6 ha) with autochthonous vegetation: Pinus pinaster, Castanea sativa, Quercus pyrenaica, Prunus padus, Prunus avium, Fraxinus angustifolia, Salix alba, Populus nigra & Juglans regia.
The forests are registered in the absorption projects section of the Spanish Climate Change Office (MITERD) registry, with projected absorption of 3,403 tCO2eq. and 8,321 tCO2eq. respectively, and available absorption at the start of the project of 619 tCO2eq y 1.513 tCO2eq.
These forests are part of the going project Redeia Forest , initiated in 2009, which aims to offset part of the Company's emissions through the planting of trees and the recovery of degraded natural areas on publicly owned land, thus contributing to the conservation of biodiversity. In addition, this initiative aims to support the development of local economies by contracting the work to companies or associations in the area, as well as to raise awareness of the importance of forests by involving the local population, mainly students, and company employees.

Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

2,132

Purpose of cancellation

Voluntary offsetting

Are you able to report the vintage of the credits at cancellation?

Yes

Vintage of credits at cancellation

2022

Were these credits issued to or purchased by your organization?

Issued

Credits issued by which carbon-crediting program

Other regulatory carbon crediting program, please specify

Absorption projects section of the Spanish Climate Change Office (MITERD) registry. -Spanish Government

Method(s) the program uses to assess additionality for this project

Investment analysis

Approach(es) by which the selected program requires this project to address reversal risk

Monitoring and compensation

Temporary crediting

Other, please specify

Guarantee Fund

Potential sources of leakage the selected program requires this project to have assessed

Upstream/downstream emissions

Provide details of other issues the selected program requires projects to address

The OECC establishes the criteria that must be fulfilled by the project to be included in absorption projects section of the Spanish Climate Change Office (MITERD) registry and assess these criteria are met.

The OECC recognizes credits available to the developer (ex-ante) at the time of registration of the registration of the takeover project. These ex-ante credits comprise 20% of the total estimated tons of CO2 that will be captured in the future by the trees planted over the lifetime of the projects (50 years). From the total credits available, 10% of the total available credits are to be deducted and allocated to a Guarantee Fund.

The availability of the remaining 80% of the credits will be made available on the basis of the actual data on tree removals (ex-post). For these ex-post calculations OECC has established verification inventories every 5 years.

Comment

No additional comments

Project type

Agroforestry

Type of mitigation activity

Emissions reduction

Project description

CORDILLERA AZUL NATIONAL PARK REDD PROJECT.
Id:985 Verified Carbon Standard
Additional certifications: CCB Gold
REDD+ Project avoids deforestation through the conservation, sustainable management of forests and enhancement of forest carbon stocks in a large expanse of lowland and mountainous forests in four central Peruvian departments of lowland and mountainous forests in four departments of central Peru: San Martín, Ucayali, Huánuco and Loreto. The area covers 1,351,964 hectares within a national park, which is owned by the Peruvian government and is managed and financed by the Peruvian NGO "Centro de Conservación y Manejo de Areas Naturales (CIMA)" through a public-private partnership promoted by the Peruvian government. The project will reduce 1,575,268 tCO2e annually.
Benefits:
▪ Social: Approximately 180,000 people from more than 200 communities-immigrant and indigenous communities - are neighbours of the park. Inhabitants near the park practice mostly subsistence agriculture; those closer to the main roads also practice commercial activities. The project activities are highly participatory.
▪ Environmental: prevention of further land degradation, sustainable forest management system and creation of carbon sinks that absorb CO2 from the atmosphere. Intact forests extend from the lowlands (150 meters) to the mountain peaks (2,400 meters).
▪ Economic: Production of local employment for forest monitoring and preservation.

Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

18,428

Purpose of cancellation

Voluntary offsetting

Are you able to report the vintage of the credits at cancellation?

Yes

Vintage of credits at cancellation

2018

Were these credits issued to or purchased by your organization?

Purchased

Credits issued by which carbon-crediting program

VCS (Verified Carbon Standard)

Method(s) the program uses to assess additionality for this project

Investment analysis

Market penetration assessment

Approach(es) by which the selected program requires this project to address reversal risk

Monitoring and compensation

Temporary crediting

Potential sources of leakage the selected program requires this project to have assessed

Activity-shifting

Provide details of other issues the selected program requires projects to address

The project does not appear to have a negative environmental impact and is currently undergoing assessment against the CCB standard to demonstrate positive net effects on communities, biodiversity, and climate. The project has the approval of relevant environmental authorities in Peru.

Comment

No additional comments

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price

Internal fee

How the price is determined

Price/cost of voluntary carbon offset credits

Objective(s) for implementing this internal carbon price

Change internal behavior
Drive energy efficiency
Stakeholder expectations

Scope(s) covered

Scope 1

Pricing approach used – spatial variance

Uniform

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

The price is expected to increase.
In addition to an emissions reduction pathway, Redeia's Climate Change Action Plan includes the commitment to define the roadmap for carbon neutrality (including compensation strategy) and a target for 100% of Scope 1 emissions offset. Given that offsetting is carried out mainly through the purchase of carbon credits on the voluntary market & the development of domestic reforestation projects, the price is fixed according to these factors.
Both prices (voluntary market, VCUs and development of reforestation projects) varies annually depending on the market. In both cases, the increase of the demand for these services is rising the prices. For the reforestation projects, the costs to implement the projects are also increasing.
Please note that 6.5 €/tCO2 has been the price used by Redeia in 2022 in its emission offset projects (Redeia forest and VCUs).

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

6.5

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

6.5

Business decision-making processes this internal carbon price is applied to

Operations

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for all decision-making processes

Explain how this internal carbon price has contributed to the implementation of your organization’s climate commitments and/or climate transition plan

In addition to an emissions reduction pathway, Redeia's Climate Change Action Plan includes the commitment to define the roadmap for carbon neutrality (including compensation strategy) and a target for 100% of Scope 1 emissions offset.
The cost of voluntary emissions offsetting is shared between the different units in proportion to the emissions of each unit, and is therefore an "internal carbon fee".
Considering this fee withing business decision making processes, mainly in operation decisions, contributes to achieve de emission reduction targets for scope 1. (For example, one possible decision would be to give priority to a SF6 repair work, resulting in a reduction of leakages due to the early response).

It must be highlighted that the main role of the internal fee in contributing to the implementation of the climate transition plan goals (energy efficiency, emission reduction goals) is the effect that it has on internal behaviour. An internal carbon fee is a very useful tool to raise awareness and boost climate action within the organization.

Type of internal carbon price

Shadow price

How the price is determined

Alignment with the price of a carbon tax
Social cost of carbon

Objective(s) for implementing this internal carbon price

Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Identify and seize low-carbon opportunities

Scope(s) covered

Scope 1
Scope 3 (upstream)

Pricing approach used – spatial variance

Differentiated

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

The prices are expected to increase, as the reference prices are based on social cost of carbon (expected to increase) & alignment with carbon taxes, for example, taxes on the use of SF6 (also expected to rise).

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

0.23

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

35.95

Business decision-making processes this internal carbon price is applied to

Operations
Procurement
Product and R&D

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for some decision-making processes, please specify

Redeia has begun to incorporate the price of CO2 in some specific projects. (Pilot projects previous to the extension to other similar projects)

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

Redeia has started to incorporate the price of CO2 in some projects, as pilot projects. The aim is to extend this practise to most of the company projects. For example:
-to define the Circular Economy roadmap, Redeia used 35.95 €/tCO2. Reference: Social Cost of Carbon for Regulatory Impact Analysis - US Environmental Protection Agencies (EPA). All the actions included in the Circular Economy Roadmap have been monetized. using this price. Monetization helped to compare the impacts of different actions and facilitated decision making when carrying out certain actions versus others.
- the tax on the use of SF6 (100 €/kg ; 1kg =23.5 t CO2e; so, carbon price =0.23 €/tCO2) is considered for decision making regarding the use of the gas and it is starting to be considered in procurement decisions. (With respect to investment decisions, the price is used but it is still very low to have a relevant impact).
Considering emissions in these decisions contributes to the implementation of Redeia's Climate Change Action Plan.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change

Provide training, support, and best practices on how to set science-based targets

% of suppliers by number

3.37

% total procurement spend (direct and indirect)

45.3

% of supplier-related Scope 3 emissions as reported in C6.5

47.5

Rationale for the coverage of your engagement

RE is developing an “Engagement program” launched in 2019.
A. First stage
Criteria to choose suppliers: relevance in terms of spent and emissions. Between 2019 & 2021, RE worked with 20 suppliers, which represented 51% of the emissions in the supply chain (initial stage not applicable for 2022)
Objectives:
a. Involve suppliers in RE commitment, providing appropriate guidelines to promote changes in their management and promoting collaboration.
b. Get primary data to integrate direct information in the calculation of Scope 3
c. Be willing to establish ambitious Scope 3 emission reduction targets (a&b are needed for this)
Activities description:
- Suppliers completed a questionnaire that covered emission metrics, strategy aspects, reduction targets, offsetting, and engagement activities.
- Data collected was an input into RE’s emission calculation tool, but also to classify suppliers into different carbon maturity levels according to climate change performance, which made it possible to deploy specific collaboration activities depending on the characteristics of each supplier.
- Feedback & benchmark was sent to each supplier.
- A different “development program” have been carried out for different groups of suppliers (classified by maturity level). The main areas of work have been: 1) improvement of suppliers GHG inventory (including scope 3 emissions) &increase suppliers with the inventory verify by a third) 2) encourage & help suppliers to define ambitious reduction targets, commit and validate them by SBTi (including training on Net -Zero) 3) identification of specific collaboration projects (i.e. LCA projects).
Activities included training & consultant support regarding calculation, verification process and targets definition.
B. Second stage
In 2022 a new engagement period has started with some additional suppliers (29, representing 47.5% of supply chain emissions) -same criteria-
Objective: ensuring that suppliers representing 2/3 of the emissions associated with the supply chain have targets approved by SBTi.
Activities:
-Identify and promote common initiatives and projects to reduce emissions,
- Support to establish SBTi targets
- Improvement collection of quantitative information.
The work in 2022-2023 is being specific with each supplier: one to one meetings to define next steps adapted to different maturity levels and circumstances.

Impact of engagement, including measures of success

The engagement program is an interesting opportunity not only for Redeia, that gets relevant data and information from suppliers, but also for the participating suppliers, that are supported in their maturity path through training sessions, consultant support and benchmarking results.
The success of the initiative is measured through different indicators:
a. Acceptance of the initiative: we consider the program to be successful If more than 50% of the invited suppliers join. First stage (2019-2021): number of suppliers participating amounted to 76% (23 out of 30 suppliers participated). Second stage: 100% accepted the proposal (29 suppliers). This is significantly above our success threshold
b. Impact of the engagement:
- Scope 1+2 emissions, % of suppliers with emissions verified: increase from 56% (2019) to 78% (2021). This information is not available for the second stage yet.
- Scope 3 emissions, % of suppliers with emissions verified: increase from 43.5% (2019) to 48% (2021). This information is not available for the second stage yet.
- Reduction targets set:
Suppliers with SBT verified: increase from 8.7% (2019) to 30% (2021) +additional 13% committed. At the end of 2022 the 5% of the emissions of the supply chain correspond to suppliers with SBTi.
All the indicators show an improvement in the participants performance.
Finally, as one of the objectives of the first period of the engagement (2019-2021) was " Be willing to establish ambitious commitments for the reduction of Scope 3 emissions", other indicator of the success of the project is the fact that , in 2021, the Board of Directors of the Redeia approved specific reduction targets for Scope 3: to reduce absolute scope 3 GHG emissions 28% in 2030 compared to 2019 & 67% of Redeia 's suppliers by emissions covering purchased goods and services and capital goods will have science-based targets by 2026. These targets have been validated by SBTi. This commitment means that in the coming years, efforts will be increased to extend the Group's climate change commitment to the supply chain, developing new initiatives and intensifying collaboration with its suppliers, and this is the objective of the second period of the supplier’s engagement program (2022-2026)

Comment

For the moment, the engagement program is a voluntary program.
Nevertheless, data compilation and engagement activities allow comparison between peers and products/services so it could lead to better purchase decisions in terms of carbon information.
Redeia is working in other projects aimed to reinforce the consideration of climate criteria in the purchasing decision making.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Other relevant partners in the value chain for Redeia are: Society in general (as a company that provides a service of general interest for the society) and Redeia's employees (because the company understands that any stakeholder's engagement must start by its own employees).

Society in general: the engagement strategy with the society is focused in promoting energy transition and disseminating the knowledge regarding the electricity system and its demand-side management measures (efficiency). It is deployed through many different actions. To name a few:

· Development of communication tools that explain Redeia's positioning and best energy efficiency practices to society overall (web site, brochures, road shows, visits to the company facilities)

· Information and awareness of energy efficiency in events where Redeia is participating as a speaker or sponsor, in visits to its facilities (CECOEL and substations) or in ventures with various entities

· Participation in initiatives related to climatic change and energy efficiency, as well as applying for the rewarding and recognition of practices or projects in this field.

· Distribution of information related to the performance of the CO2 emissions ratio associated to Spain's electricity consumption (mainly website)

· Training of rural energy communities and providing municipalities with the necessary tools and knowledge to allow them to become involved in the energy transition challenge

· Educational program aimed at children, to show them how electricity arrives to their homes and instil in them the concept of responsible consumption.

· Support to training and disclosure of knowledge about the electricity system and energy efficiency through collaboration agreements with universities and administrations.

· Participation in projects to contribute to greater efficiency in the electricity system by improving awareness of electricity demand and developing new management measures.

· Participation in specific projects and development of communication contents for electrical vehicles issues (brochures, web site).

· Working with International Associations such as the Renewable Grid Initiative (RGI), through specific working groups aimed to improve renewable energy integration.

· Engagement activities linked to Redeia Forest Project: workshops held in different schools, awareness campaigns and voluntary work held by employees and their families.

Case study: Regarding the educational program, Redeia developed several educational activities revolve around 'entreREDes', a digital educational application for the dissemination of information among schoolchildren regarding the operation of the Spanish electricity system and involve young people in the challenge posed by a fair energy transition. Every year, an average of 80 educational centres from different Autonomous Communities

take part, which means 14,000 aprox. students. The contest, entreREDes Olympics have been held (the satisfaction generated by these activities is reflected in the results of the surveys: 85 % liked the game a lot). In 2022, Redeia has also launched Hémera, a digital school for the energy transition, a free training space to empower citizens as protagonists of the new energy model. Besides Redeia has presented the new interactive and digital exhibition 'Connected to the future' in 2022, a travelling exhibition that will tour the different science museums in Spain.

Employees:

Regarding our employees, the strategy is focused in making visible the Company's commitment to climate change and energy efficiency and in encouraging employees to identify and drive projects that promote the efficient use of natural resources.

Case study: The most important measures developed in recent years include: efficient management of fleet vehicles; measures to optimise work-related travel, rationalization of the use of private vehicles in the daily commute to work centres and teleworking 2 days per week for the main workforce. The main tools to engage employees in the Sustainable Mobility Plan are the mobility survey and the awareness campaigns in the internal website. We measure success of the initiatives through various KPIs, namely:

· Reductions in the work centers' resources consumption rates.

· Increase of participation of the employees regarding energy efficiency; Sustainable Mobility Plan: % employees using Company bus regularly and car sharing; comments gathered through the mobility survey and maintenance of Ecological Fleet Accreditation.

Besides, RE has launched REtaTE project, in order to achieve greater efficiency in the processes. It consists of the launching of initiatives aimed at re-engineering, intelligent automation, the sourcing model, disruptive innovation and the organisational model. These initiatives are proposed by employees and include energy consumption reduction measures.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement

Setting a science-based emissions reduction target

Description of this climate related requirement

Most important suppliers in terms of emissions are required to set Science-Based Targets. This is the final requirement for the suppliers participating in the "Engagement Program" and it´s expected to be extended to other relevant suppliers. This requirement is not included in contracts for the time being.

Including this requirement is intended to make progress regarding the Redeia's target for Scope 3: 67% of Redeia 's suppliers by emissions covering purchased goods and services and capital goods will have science-based targets by 2026.

% suppliers by procurement spend that have to comply with this climate-related requirement

60

% suppliers by procurement spend in compliance with this climate-related requirement

10.7

Mechanisms for monitoring compliance with this climate-related requirement

Certification

Supplier self-assessment

Other, please specify

Target published in SBTi website

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Waste reduction and material circularity

Description of this climate related requirement

General requirements regarding waste reduction and circularity (and other environmental requirements) are included in the "Code of conduct for suppliers". The Code, as stated in the General Conditions of Contract, is part of the contractual documentation.
It establishes the minimum ethical, social and environmental requirements (including compliance with regulatory environmental requirements, climate change and circular economy) that all suppliers must accept and comply with in order to work with Redeia, assuming the commitment to extend the Code to their own supply chain.
The acceptance of the code is mandatory to be qualified to work for Redeia and entails that the supplier accepts the possibility of being audited by the Company to verify its compliance. In the event that a supplier does not agree to be audited, such supplier will no longer be able to participate in new tenders.
Example of requirement: "To integrate circular economy criteria into the organisation's activities, such as life cycle analysis, sustainable use of resources, eco-design, extension of the life of assets and minimisation and management of waste. /To avoid or minimise contamination, with special consideration paid to emissions of greenhouse gases and degradation of the environment".
In addition specific requirements for climate change and circular economy are included in technical specifications (part of the contract) for some supplies.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

100

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
Other, please specify
Company audits

Response to supplier non-compliance with this climate-related requirement

Suspend and engage

Climate-related requirement

Complying with regulatory requirements

Description of this climate related requirement

General requirements regarding waste reduction and circularity (and other environmental requirements) are included in the "Code of conduct for suppliers". The Code, as stated in the General Conditions of Contract, is part of the contractual documentation.
It establishes the minimum ethical, social and environmental requirements (including compliance with regulatory environmental requirements, climate change and circular economy) that all suppliers must accept and comply with in order to work with Redeia, assuming the commitment to extend the Code to their own supply chain.
The acceptance of the code is mandatory to be qualified to work for Redeia and entails that the supplier accepts the possibility of being audited by the Company to verify its compliance. In the event that a supplier does not agree to be audited, such supplier will no longer be able to participate in new tenders.
Example of requirement: " To know and comply with the legal and voluntary requirements adopted by Redeia in environmental matters, in order to guarantee responsible behaviour towards the environment."

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

100

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
Other, please specify
Company audits

Response to supplier non-compliance with this climate-related requirement

Suspend and engage

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

The statement is available to the public on the website "Management of membership in organisations and associations"
https://www.redeia.com/en/sustainability/contribution-to-social-economic-and-environmental-development/commitment-to-society/participation-in-organisations-and-associations
There are other relevant commitments:
A: Climate change commitment (attached) : Commitment to combat climate change.
https://www.redeia.com/sites/webgrupo/files/downloadable/2.6_Climate_Change_Commitment.pdf
a. Development of the transmission grid. One of Redeias's main activities is the development and strengthening of the infrastructure of the Spanish electricity transmission grid, this process is regulated by law. Therefore, close collaboration with policy makers (Spanish Ministry) is mandatory to design the Energy planning.
c. Participation in initiatives related to climate change: Collaboration on initiatives to combat climate change promoted by the public administration and other stakeholders.
B: Sustainability commitment (attached). Information is available in pg 69-72.
https://www.redeia.com/sites/webgrupo/files/publication/2023/04/downloadable/Redeia_Sustainability_Report_2022.pdf
One of the sustainability priorities of Redeia is: Decarbonisation of the economy. "Be a proactive agent in the energy transition towards a zero-

emission model, advocating for the electrification of the economy and the efficient integration of renewable energy, through a robust and better-interconnected grid, as well as through the development and operation of energy storage systems."
Engagement activities must be aligned with this priority, mainly engagement with policy makers (Energy planning is regulated by low).

Climate Change Commitment REDEIA 2023_VF English_final.pdf

Sustainability Report 2022_.pdf

Net-Zero Strategy_fv.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

Redeia's Climate Change Commitment is approved by the Board. The commitment has been communicated to the management team, to all employees and is available to the public. The management team is responsible to ensure that the proposed actions and activities developed in their units are in accordance to the company's policies and standards. RE's commitment towards Climate Change is part of these policies, and therefore, all the company´s direct and indirect activities (including engagement activities) must be consistent with it.
Additionally, in order to ensure a common approach to multiple climate-related engagement activities, in 2017, the Board of Directors approved Redeia 2030 Sustainability Commitment This commitment is set out on four priorities: anticipating change and taking action; decarbonisation of the economy; responsible value chain, and the contribution to social, economic and environmental development. With this commitment, the Company addresses its long-term sustainability through a business model capable of responding to the challenges of the future that therefore must be taken into account in every decision that may affect Redeia's strategy. One of the cornerstones of the model is "decarbonisation of the economy", that means that climate change commitment will be considered in any strategic decision for the company and ensures its consistency regardless of the division or geography.
The Sustainability Steering Committee is then in charge of the integration of all the sustainability principles (sustainability model, including climate change) into the strategic decisions of the company again ensuring consistency of all activities with the strategy. Besides, the fulfilment of internal standards and regulation is reviewed through different auditing process (internal and third-party processes), in order to certify the compliance. The accordance to climate change commitment is also reviewed in those processes.
Redeia has developed a mechanism for selection and monitoring participation in organisations and associations. The suitability of relationship must be approved by the Chairwoman's Committee. The commitment of the organisation/association to renewable energy integration and the decarbonisation of the economy, their climate, social and sustainability positioning, & transparency are considered in the decision. The assessment is based on requested ad-hoc information, existing documentation (bylaws, Transparency Register).

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Spanish Transmission Grid Planning, which is a legal Mandate.

The process for the 2021-26 electricity transmission grid was launched in Feb. 2019. RE, in its capacity as System Operator, submitted the 'Initial Proposal' to the Ministry of Ecological Transition (MITERD). After the consultation phase (Spanish National Markets and Competition Commission and Regions in Spain), and after obtaining the Strategic Environmental Statement, the proposal was consolidated in the Transmission Grid Planning, submitted to the Congress of Deputies and approved on 22 March 2022.

The development/reinforcement of the electricity transmission grid is necessary to achieve the following objectives:

- Evacuation of the newly installed renewable generation, making possible to reduce the emission factor of the energy mix.
- Supply power to new high-speed train lines to reinforce a more sustainable mobility model.
- Increase grid efficiency by grid meshing and strengthen international interconnections and interconnections between islands.
- Contribution to the electrification of the Spanish power system that facilitates the usage of renewable energy sources in a greater number of applications.

The development of the plan will allow to achieve 67% of renewable integration into the Spanish system, that will lead to a 66% reduction of CO2 emissions compared to 2019.

The Transmission Grid Planning is updated periodically. The works (engagement) for the next period have already started.

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Climate-related targets

Climate transition plans

Emissions – CO2

Renewable energy generation

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

Spain

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

Red Eléctrica, main society of Redeia Group, closely works with the Spanish Ministry of Ecological Transition and regional authorities to design the Spanish Transmission Grid Planning. Red Eléctrica draws up an infrastructure proposal to the Ministry considering these main criteria: renewable integration, efficiency, and viability.
A wide public consultation process, that includes a deep engagement with regional authorities, is needed.
The definition of the final Planning involves a lot of modifications and adjustments, that are made working closely with the Ministry.
Once the process (long engagement) is finished, the Spanish Ministry of Ecological Transition approves the Planning.
The last Transmission Grid Planning was approved on March 2022 for the period 2021-2026.
The Transmission Grid Planning is updated periodically. The works (engagement) for the next period have already started.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Redeia, through its subsidiary, Red Eléctrica, is a key player and an essential agent in the transition towards a new energy model in Spain. Its main purpose is that of ensuring overall efficiency of the electricity system, the electrification of the economy, the maximum integration of

renewables into the energy mix, all while guaranteeing security of supply at all times.
One of the main pillars of Redeia Commitment to combat Climate Change and The Climate Change Action Plan (Climate Transition Plan), is the "Contribution to a sustainable energy model" and comprises all the actions related to the activity of Red Eléctrica as transmission agent and electricity system operator and which are necessary in order to achieve Spain's National Energy and Climate Plan (NECP) by 2030 (includes the development of infrastructure to facilitate the electrification of the economy, connect new renewable energy power capacity and provide the power to feed the railway network).
The Spanish transmission grid planning objective is to stablish the development needed to fulfil the commitments set out in the target scenario of Spain's National Energy and Climate Plan (NECP) for 2021-2030, and includes all the infrastructure needed to achieve it.
This infrastructure is, precisely, to be developed by Redeia.
The Strategic Plan of Redeia is mostly based on the Spanish transmission grid planning, so this regulation is central to achieve Redeia's transition plan. On the other hand, the Transmission grid planning is mandatory for Redeia.

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify

ENTSO-E

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, and they have changed their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

ENTSO-E (European Network of Transmission System Operators for Electricity), an association comprised of 42 members from 35 countries, is a key instrument for coordination between European TSOs in the design, development, and implementation of the Internal Energy Market and in the deployment of EU regulations. In addition, ENTSO-E acts as a technical advisor of reference for the institutions of the EU in the development of a sustainable, reliable, and competitive electricity system.
In 2022, Redeia dedicated 17,958 hours involving 59 employees of the Company and consolidated its representation in the Assembly, the main governing body, the Board, responsible for the orientation and direction of the association and the Resources Committee, which carries out the financial oversight of the association. In addition, it also actively participates in the five technical committees and in more than 40 working groups.
Regarding the initiatives related to climate change, these are the most relevant:
• Development of scenarios of the European electricity system within the framework of the ten-year grid development plan (TYNDP 2022).
• Implementation of the common grid model methodology (CGM) that will facilitate processes associated with the operation of the system.
• Developments relating to the Clean Energy Package approved in 2019, including in the Directive and Regulation on the Internal Electricity Market.
ENTSO-E position is aligned with the goal to decarbonise the energy system. Redeia position is consistent with it and has contributed with technical information and proposals that have been considered in the ENTSO-E contributions. For example, regarding the electricity system scenarios, RE promoted the consideration of external factors in the cost benefit analyses of Projects of Common interest through the monetised calculation of savings in emissions, security of supply and socio-economic contribution of investments.
During 2021-23, RE is also being involved in ENTSO-E new position regarding fluorinated greenhouse gases and comments to EU proposal for the new F-gas regulation that is currently in development. The aim of the work is to achieve the best pathway to end SF6 use without jeopardising energy transition. RE's position is aligned with ENTOSO-E's. In the case that there is a misalignment (no mayor misalignments), the proposals are discussed withing the group to set common positions.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

2,464,146

Describe the aim of your organization's funding

The organization is a key instrument for coordination between European TSOs in the design, development, and implementation of the Internal Energy Market and in the deployment of EU regulations. In addition, ENTSO-E acts as a technical advisor of reference for the institutions of the EU in the development of a sustainable, reliable, and competitive electricity system.

Red Eléctrica's participation aims to promote a national and international electricity grid comprised of efficient and sustainable infrastructure and which is fully accepted by society, placing special focus on the integration of renewable energy.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports, incorporating the TCFD recommendations

Status

Complete

Attach the document

Redeia_Consolidated_Annual_Accounts_2022.pdf

Page/Section reference

Governance (risk &opportunities) (pg. 162)
Risk& opportunities information (pg. 162-164)
Strategy (pg. 181-182)
Emission figures (pg. 83)
Emission targets (pg. 181)
Other metrics: energy consumption (pg183)

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Publication

In mainstream reports, in line with the CDSB framework (as amended to incorporate the TCFD recommendations)

Status

Complete

Attach the document

Redeia_Sustainability_Report_2022.pdf

Page/Section reference

Governance (pg. 104, 121,428)
Opportunities information (pg. 99-101)
Risk information (pg. 117-121,428)
Strategy (pg. 147-152)
Emission figures (pg. 194-196)
Emission targets (pg. 149)
Other metrics (pg. 192-194)

Other (pg. 147-191)

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics
Other, please specify
Decarbonization, main projects, emission reduction initiatives. General information.

Comment

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Business Ambition for 1.5C Other, please specify Renewable Grid Initiative (RGI); Spanish Green Growth Group	- Business Ambition for 1.5: Signatory - GRI: Renewables Grid Initiative is an organisation that brings together TSOs and NGOs in the EU to promote fair, transparent, and sustainable grid development. In 2022, on the initiative of Red Eléctrica, the launching of the Offshore Coalition for Energy and Nature in the Mediterranean (MED OCEAN) was presented. This initiative, which includes the Italian and French TSOs, Terna and RTE, other European and local NGOs, the wind industry employers organisations, Wind Europe and representatives of the tourism and fishing sectors, aims to promote the environmentally friendly development of offshore wind energy and the necessary grids for its connection in both the

		Mediterranean and the Atlantic areas. - Spanish Green Growth Group: an association for the promotion of public-private collaboration to jointly advance in the decarbonisation of the economy, working mainly on aspects related to the mitigation of and adaptation to climate change and the circular economy. Redeia participates actively in the Climate Change and Circular Economy working groups.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, both board-level oversight and executive management-level responsibility	Redeia's Biodiversity Commitment has been approved by the Board of Directors (updated version in 2023). The Board of directors and the Executive management Committee approve the strategic elements related to the management of biodiversity, such as Biodiversity Action Plan.(New name, biodiversity roadmap, currently being developed). Furthermore, the Sustainability Steering Committee and the Corporate Sustainability Area carry out a key role by reinforcing the implication of decision-makers at the highest level within the Company and involving all areas of the organisation in the implementation, supervision and monitoring of the Biodiversity Commitment and Biodiversity Action Plan.

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to Net Positive Gain Adoption of the mitigation hierarchy approach Commitment to not explore or develop in legally designated protected areas Commitment to respect legally designated protected areas Commitment to avoidance of negative impacts on threatened and protected species Commitment to no conversion of High Conservation Value areas	SDG Other, please specify "Biodiversity Pact" (Spanish Initiative for Business and Biodiversity (IEEB) promoted by the Spanish Ministry of Ecological Transition)." The Business for Nature initiative and the Principles for a sustainable ocean of the Global Compact".

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Tools and methods to assess impacts and/or dependencies on biodiversity

ENCORE tool
Other, please specify
Internal (own) methodologies for analysis/quantification of impacts and dependencies of Red Eléctrica´s ecosystem services + other (Calculation of biodiversity baseline; Landscape & visual impact methodology; Risks assessment tools etc)

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

An internal evaluation methodology is applied to identify and assess the most relevant environmental impacts and the natural assets that are most significantly affected by the electricity transmission activity (for the time being, the exercise is only carried out for Red Eléctrica).
As a result of this exercise, a materiality or relevance matrix of the environmental impacts on biodiversity is obtained. Natural assets have been identified: habitats, species (flora and fauna) and landscapes as those that suffer the greatest impacts due to the company's activities. To validate the work carried out, the results are cross-checked with other tools available on the market, such as ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure, developed by the Natural Capital Finance Alliance, in collaboration with UNEP-WCMC and Global Canopy).
The tool has been adapted to Red Eléctrica's business model (utilities, electricity services, transmission and distribution) as far as possible. Some differences have been found between the ENCORE analysis and the one carried out internally by experts. The main difference lies in the categorisation of the asset "species", which is considered to be of medium relevance, unlike the internal analysis (considered to be of high relevance).In addition, the asset "atmosphere", classified as of medium relevance according to the internal analysis, is rated by ENCORE as of high relevance.
As an explanation for this disparity, it is important to note that ENCORE's results are global in nature and cover the entire electricity sector, with a particular focus on transmission and distribution of electricity cover the entire electricity sector, with special attention to the transmission and distribution of electricity from hydroelectric, thermal and nuclear plants, which does not exactly fit the specific case of Red Eléctrica.

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Tools and methods to assess impacts and/or dependencies on biodiversity

ENCORE tool
SBTN materiality tool
TNFD – Taskforce on Nature-related Financial Disclosures
Other, please specify

Internal (own) methodologies for analysis/quantification of impacts and dependencies of Red Eléctrica´s ecosystem services + other (Calculation of biodiversity baseline; Landscape & visual impact methodology; Risks assessment toolsetc)

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

The assessment criteria indicated by the SBTN and the TNFD proposal, and the guidelines provided by the ENCORE tool are used. The results are reviewed internally with expert judgement and adjusted to the specific characteristics for each phase of activity.

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?

Yes

C15.4a

(C15.4a) Provide details of your organization’s activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area

Natura 2000 network of protected areas

Country/area

Spain

Name of the biodiversity-sensitive area

ZEC Macizo Central

Proximity

Overlap

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Dismantling of an existing line: temporary stockpiling of excess excavation 200m2 (with the authorisation of the environmental agents), which is extended over time due to the lack of availability of authorized manager for the removal.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Operational controls

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Potential impact caused by the temporary stockpiling of excess excavation 200m2 (with the authorisation of the environmental agents), which was extended over time due to the lack of availability of authorized manager for the removal.
Mitigation measure: removal was carried out, by authorized manager

Classification of biodiversity -sensitive area

Natura 2000 network of protected areas

Country/area

Spain

Name of the biodiversity-sensitive area

ZEC Montserrat-Roques Blanques- riu Llobregat

Proximity

Overlap

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Construction of a new tower

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Project design

Operational controls

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

In order to avoid impacts on biodiversity, the following measures were taken:

- The area was cleared without felling. Elimination of reed (Arundo Donax), which is an invasive species, about 2000m2.
- Collection and management of the inert material from the excavation, including the remain concrete from the cleaning of the tanks.
- Dismantling of the old tower.
- Biological stoppage from 15 June to 15 December to avoid damage to the fauna.

Classification of biodiversity -sensitive area

Natura 2000 network of protected areas

Country/area

Spain

Name of the biodiversity-sensitive area

ZEPA L'Alt Túria i la Serra del Negrete

Proximity

Overlap

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Construction of a new high-voltage line

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Project design
Operational controls
Restoration

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Potential impact: 1.7 ha are the area located in a natural sensitive area affected. three of the towers affect community habitats 5210 (Rhamno lycioidis-Quercetum cocciferae (kermes oak with +Juniperus)) and support 167 affects habitat 9240 (+Violo willkommii-Quercetum fagineae).
Mitigation measures:
- Felling and clearing of accesses: the impact has been reduced to the width necessary for the passage of the machinery to access to carry out the civil works for the pylons. Scarring has been applied to the pruned trees.
- Civil works, the conditioning of land has been carried out in such a way that the profiles of the terrain have been smoothed, so that there are

no major slopes or unevenness in the cuttings that have been generated.
- Works have taken place considering the limitations of biological stoppage periods

Classification of biodiversity -sensitive area

Other biodiversity sensitive area, please specify

Country/area

Spain

Name of the biodiversity-sensitive area

Turia Natural Park

Proximity

Overlap

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Construction of a new high-voltage line (one tower is located in the Turia National Park).

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Project design
Operational controls
Restoration

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Potential affection: 400m2 in a sensitive area
Mitigation measures:
- Reduction of the area of occupation
- Final restoration of the affected platform

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Species management Education & awareness Other, please specify Conservation or research projects with external partners: national & regional authorities; NGOs such as IUCN or SEO BirdLife and different Universities or scientific organizations.

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	State and benefit indicators Pressure indicators

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In mainstream financial reports	Content of biodiversity-related policies or commitments Impacts on biodiversity Details on biodiversity indicators Biodiversity strategy	Redeia Consolidated Accounts pg (189, 181, 183)(pdf) 1
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Impacts on biodiversity Details on biodiversity indicators Risks and opportunities Biodiversity strategy	- Sustainability Report: Biodiversity information is reported in Sustainability report in pg 284-297 and 362-368 (pdf) Biodiversity indicators: 285-286 (pdf) - Biodiversity Commitment: all document -EMAS Environmental Statement 2022: pg 41-75 2, 3, 4

[1]Redeia_Consolidated_Annual_Accounts_2022.pdf

[2]2.7_Biodiversity_Commitment.pdf

[3]declaracionambiental_emas_2022_EN.pdf

[4]Redeia_Sustainability_Report_2022.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chairwoman of Red Eléctrica Group (Board Chair)	Board chair

Submit your response

In which language are you submitting your response?

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options		Public

Please confirm below