Welcome to your CDP Climate Change Questionnaire 2022

C0. Introduction

C0.1

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

Red Eléctrica Group (RE) is a global operator of essential infrastructure, managing electricity transmission grids and telecommunication networks (dark fibre and satellites).-Please note that Red Eléctrica Group has recently change its identity (brand) to redeia, nevertheless we´ll keep referring to Red Eléctrica Group (RE) during the current report 2021, as the complete change to the new brand is taking place in this moment-

The main society of the group is Red Eléctrica de España (REE), the Spanish TSO (transmission -system operator). It is the sole company in Spain that carries out this kind of activities. REE 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. Red Eléctrica Group also conducts other business in order to maximum the company's experience: Electricity activities abroad, which are handled by Red Eléctrica International, Energy storage activity in the Canary Islands, still in the project stage (REINCAN), and Telecommunications activities (REINTEL). Since October 2019, Red Eléctrica Group also includes 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, but information about other companies in the group is also included. REE 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.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Reporting year	January 1, 2021	December 31, 2021	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(s)	Please explain
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 Sustainability Steering Committee, directly appointed by the Board of Directors. The Chief Sustainability Officer (Sustainability Corporate Director), who reports to the Board Chair (President), leads the Sustainability Steering Committee. An example of a decision taken by the Board Chair in 2021 is the approval in 2021 of the updated emission reduction targets (aligned with 1.5 global goal), Besides, the Board chair approved the update of RE Green Finance Framework and the second issue of green bonds in May 2021 (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 Sustainability Steering Committee, directly appointed by the Board of Directors. The Chief Sustainability Officer (Sustainability Corporate Director), who reports to the Board Chair (President), leads the Sustainability Steering Committee. 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-

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 major plans of action Reviewing and guiding business plans Monitoring implementation and performance of objectives	-Business plan: Due to the characteristics of the company, 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. - Major plans and actions included in RE's business plan related to climate change are: Electricity planning (2021-2026 , whose main objective is to integrate renewable energy into the electricity system and develop future interconnections with France; Large scale storage: Chira Project; Infrastructures improvement and renovation plans. - Monitoring implementation and performance of objectives: managerial targets performance is reviewed every meeting. 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 are also considered when calculating the annual salary revision for all employees covered by collective agreement. Managerial targets always comprise some projects about Climate Change issues (mainly emission reduction projects or risk management projects) and a specific emission reduction target.
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding risk management policies Reviewing and guiding annual budgets Setting performance objectives	Climate Change issues are taken into account when reviewing strategies and some policies (including risk policies). According to this, climate change is considered to set objectives and annual budgets. The revision of strategies and policies are not addressed at every meeting. Performance objectives are usually set once a year and revision of climate change annual budget is addressed twice 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
Row 1	Yes

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Sustainability committee	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Other, please specify Sustainability Steering Committee: The executive tasks are delegated to the Sustainability Steering Committee, directly appointed by the Board of Directors.	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Chief Sustainability Officer (CSO)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Other committee, please specify Audit Committee	Assessing climate-related risks and opportunities	Half-yearly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The ultimate responsibility for Climate Change Policy in RE is shared by the Board Chairwoman (president) & the CEO. The main responsibility of the Chairwoman & the CEO regarding CLIMATE CHANGE is to approve and promote the company's CLIMATE CHANGE Commitment. The chairwoman, as an external director, has the responsibilities of supervision and control. The CEO has the executive responsibilities for implementation of climate-

related policies. These responsibilities lie on the Chairwoman and the CEO because RE has decided that climate change responsibilities must remain at the highest level of the company. There are two sub-sets of the Board with climate related responsibility:
A. The Sustainability Committee is the sub-set of the Board who is responsible for supervising RE's Climate Change Policy (since it is responsible for the Sustainability Policy) in order to integrate this aspect in the decisions taken at group level. This committee was created in 2018 as a result of the strategic nature of the Sustainability Commitment of REE Group, with the aim to generate a proactive attitude for the integration of sustainability into the decision-making process of the organization. During monthly meetings, the Committee monitor the progress on the 2030 Sustainability Commitment and oversee the main actions and proposals in this field.
B. The Audit Committee is the sub-set of the Board who is responsible for supervising the Climate Change risk assessment and the efficiency of the risk control systems (because it is the committee responsible for risk assessment in RE).

The executive climate-related tasks are delegated to the Sustainability Steering Committee, directly appointed by the Board. The Sustainability Steering committee monitors and guarantees the fulfilment of the Climate Change Strategy, Commitment and Action Plan, which includes the fulfilment of the targets and the management of climate-related risks and opportunities. This committee also participates in climate-related risks assessment. This Committee monthly reports to the Board through the Sustainability Committee. Members of the Steering Committee: Chief Sustainability Officer (Sustainability Corporate Director), Sustainability Director, Human Resources Director, Procurement Director, Business Units Directors, Financial Director and Sustainability Manager. (The main units in the company are represented in this committee). The Chief Sustainability Officer (Sustainability Corporate Director), who reports to the Board Chair (president), leads the Sustainability Steering Committee. The Chief Sustainability Officer leads the necessary actions and best practices in order to implement the principles defined in the Climate Change Commitment. The CSO proposes the Climate Change Action Plan, which includes targets and actions to assess and manage climate change related risks and opportunities. The CSO is also involved in in climate change related risks assessment.

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	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction project Emissions reduction target	Since 2015, Environmental, Social and Governance (ESG) criteria has been applied by Red Eléctrica 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 2021 the managerial targets were: 1) "Reduce 9% of scope 1&2 from 2020 levels" and (2) "Progress of Sustainability Plan" (the plan includes different projects related to climate change, including risk management). Both targets accounted for the 7% of the total managerial targets. Besides, an additional 45% of the managerial targets were linked to projects for energy transition in Spain. In 2022 the managerial targets related to climate change are (1) "Reduce 21% of SF6 emissions compared to 2015 and reduce 15% 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). Both targets account for the 9% of the total managerial targets. Besides, the 35% of the managerial targets is linked to projects for energy transition in Spain.
Corporate executive team	Monetary reward	Emissions reduction project	Since 2015, Environmental, Social and Governance (ESG) criteria has been applied by Red Eléctrica 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 2021, the following projects were chosen: (a) Definition of the new emission reduction goals according to a 1.5 ambition (approval by SBTi); (b) Incorporation of the companies in Latin America and Hispasat into the climate risk and opportunity management system in accordance with TCFD; (c) Actions included in the environmental program of the company (reparation works to reduce SF6 leakages & "REE forest" for

			emissions offsetting.) For 2022, the following projects have been chosen:(a) Definition of Net-Zero targets and emission offsetting strategy, (b) Definition and approval of no deforestation commitment, (c) SF6 emission reduction projects
All employees	Monetary reward	Emissions reduction project Emissions reduction target	Managerial targets are also considered when calculating the annual salary revision for all employees covered by collective agreement. Incentive indicator: % of achievement of the managerial targets. Managerial targets always include some sustainability projects, in particular climate-related and emission reduction projects. In 2021 the managerial targets were: 1) “Reduce 9% of scope 1&2 from 2020 levels” and (2) “Progress of Sustainability Plan" (the plan includes different projects related to climate change, including risk management). Both targets accounted for the 7% of the total managerial targets. Besides, an additional 45% of the managerial targets were linked to projects for energy transition in Spain. In 2022 the managerial targets related to climate change are (1) “Reduce 21% of SF6 emissions compared to 2015 and reduce 15% 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). Both targets account for the 9% of the total managerial targets. Besides, the 35% of the managerial targets is linked to projects for energy transition in Spain.

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	2	This range has been chosen in order to be aligned with the interim short-term targets (2021-2022).
Medium-term	2	5	This range has been chosen in order to be aligned with the strategic plan of the company (it is defined for 5 years).
Long-term	5	100	This range has been chosen in order to be aligned with our Science Based Targets and the scenario analysis carried out (transition up to 2030 and physical 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, RE 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, a RE 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 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). RE's average annual profit of the last 3 years is 672 million euros. For 2021 we have considered that risks have a substantive financial impact on our business if their estimated annual impact is higher than 6.7 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 Electric System or the impact in terms of reputation is high. These two are generally interrelated for RE).

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 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 RE. 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 new 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 level risk. The risk has been included in the Company´s risk map. Besides, and according to the RE new 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 RE Group), 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 RE 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 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 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 2021, this risk was determined a medium level risk, in line with our risk categorisation, and it is integrated into the company's risk map.
Technology	Relevant, always included	At RE 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, RE 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. The development of this project is considered a priority for the Company. Since 2019, RE is also working on the study of alternatives to SF6 in AIS switchgear. This risk was determined a medium 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, Red Eléctrica 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 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 RE 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 RE (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. RE 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 impact negatively our 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 RE'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 RE 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 RE. 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. RE has currently 521.311 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 REE do not carry out generation activities), as SF6 GWP is very high: 22800.

This risk of increased regulation of existing products and services can impact RE 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
- 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 investments (new facilities will be more expensive)
- New requirements regarding management or reporting: increased operational costs and human resources needs.

Time horizon

Long-term

Likelihood

Likely

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)

38,000,000

Potential financial impact figure – maximum (currency)

42,000,000

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 70% 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 RE 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 (38,000,000 €) corresponds to a slight increase on SF6 taxes and progressive change of the equipment (without strong obligations to change old equipment or change in technology) and the maximum value (42,000,000 €) corresponds to a stronger change in regulation, with bigger taxes on new equipment installed and even progressive prohibition of F-gases use.

Cost of response to risk

5,819,500

Description of response and explanation of cost calculation

We respond & 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& European), 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 discuss & manage possible changes in national regulation. Besides, RE works with other European TSOs to share good practices and reach common positions regarding SF6 regulation. Currently, the work is focused on the contributions and 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. RE 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: RE 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. In addition, the effectiveness of the repair is proving to be more durable compared to other previously used techniques. Thanks to this R&D project (developed from 2016-2020 in cooperation with one RE supplier), 11.652 t CO2 has been saved between 2019&2021.
The main costs of managing the risks are mainly associated with:
o Equipment renewal estimated in 2 million €/year.
o Leak reparation:225,000 € /year, new leakage 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: 196,000 € /year
o Human resources costs have not been considered
Total annual management costs = 2,000,000+ 225,000 +36,000 +3,184,500+178,000+196,000= 5,819,500 €/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

Short-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 REE 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 REE'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. We have considered the sum of the insurances franchises for each related concept & the average value of potential fines, 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 2021-2031, 3.6 events/year have been forecasted.
According to RE 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

RE 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 RE) 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 REE's lines and in the vicinity of electricity substations, potentially severely affecting our 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

About as likely as 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)

7,000,000

Potential financial impact figure – maximum (currency)

21,000,000

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, 1.53 events per year have been forecasted
According to RE 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= 1.53*10*(100,000 +100,000+250,000+44,000) = 7,558,200€. This value is then recalculated considering the discount rate & inflation & the total value amounts to 7,000,000€.
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= 1.53*10*(100,000+100,000+750,000+450,000) = 21,420,000€. This value is then recalculated considering the discount rate & inflation & the total value amounts to 21,000,000€

Cost of response to risk

14,500,000

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 projects. 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 the Internet of Things (IoT) technology, 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, with a consequent reduction in costs and environmental and personal damage.
Total costs R&D: 240,000 € /yr
As a result of cutting & pruning program, optimised by the application of VEGETA, fire prevention and early detection procedures, the 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 (11 agreements in force), that include various 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+ 240,000+260,000= 14.5million € 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 Red Eléctrica Group, which must promote its activities and reinforce its unique role as a critical player in the electricity system.
The most important opportunity for RE is the possibility to invest in new transmission facilities in the short, medium and long term. REE (main society in RE Group) is the only company that is authorized to build and operate these infrastructures in Spain.
REE 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. REE 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 REE'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.
REE, main society of RE Group, 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. REE 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 REE, 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 REE, 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 REE), will only be possible through the development of new functions and services by REE, 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 RE is linked to the retribution that the company would obtain for the development of new services and functions, including the construction and operation of the storage infrastructures in the extra peninsular systems.

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

128,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

REE, main society of RE Group, 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 REE's retributive model, that is complex and depends on many factors. The main ones are annual investment and retribution fee.

We consider two main investments:

a. All investment necessary for the control and monitoring equipment for the provision of these new services, amounting to 550 million € for 2021-2030. We assume a uniform investment during this period, but investment is not expected to start until 2022. The retribution fee is considered the same as the other electricity transmission activities (5.58%). Thi is applied one year after the infrastructure is at service and it's maintained throughout its lifetime (40 yrs):

• If we consider that the investment starts in 2022, 550/9years= 61.1 million € are invested annually, in 2023 we would start being retributed at 61.1million € x retribution fee (5,58%) and so on until 2031 (we are considering a 10yrs period for the analysis)

• In 2023, another 61.1million € will be invested, from which we would start being retributed in 2023.

• Therefore, the calculation is as follows = 61.1*5,58%* (1+2+3+4+5+6+7+8+9)= 153.45 million € (that corresponds to the total investment of 550million € in 2022-2030, retributed from 2023-2031).

b. Investment related to the development of new storage facilities in the Canary Islands.

- Storage investment (400million €). We assume that all the investment will be in 2027. As we are studying a 10 yrs period, it will generate profit from 2028-2031.

For the construction and operation of electricity storage infrastructures, retribution fee has not been approved yet, so an estimated value has been used (average value, considering retribution fee for transmission activities:5.58% and retribution fee for renewable energy: 7.1%=6.34%). Therefore = 400*6.34%*4=101.44 million €.

Then OPERATION PROFIT= 153.45+101.44=254.89 million €

Impact of depreciation (approx. 7%) of operation profit AFTER DEPRECIATION & AMORTISATION = 254.89*(100%-7%) =237.05 million €
Impact of inflation and discount rate (approx. 28%) PRESENT VALUE of profit before taxes =237.05*(100%-28%) = 170.67 million €
Taxes on company profits (25%): present value of PROFIT AFTER TAXES = 170.67*(100%-75%)= 128.01 million €.
We have considered a rounded total for the provision of financial impact= TOTAL= 128 million €.

Cost to realize opportunity

950,000,000

Strategy to realize opportunity and explanation of cost calculation

REE, main society of RE Group, 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). REE 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 400 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). On one hand, the investments in control & monitoring equipment needed for the provision of new services (550 million €) and on the other hand the investments that correspond to the development of new storage infrastructures in the Canary Islands (400 million €)
Human resources cost haven´t been estimated as they are not material compared to the investment.
Overall cost of realizing the opportunity is 550 million € + 400 million €= 950 million €

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

Reputation is essential for Red Electrica. The Decarbonisation of the economy is a priority for the company, as mentioned in its Sustainability Commitment and included in the Strategic Plan (2018-2022 and updated version 2021-2025). 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 or improvement of funding opportunities
- Improvement of authorization processes for new infrastructures (better perception of REE's activities by stakeholders: society and government)

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)

572,000,000

Potential financial impact figure – maximum (currency)

852,200,000

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 RE 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 2021-2030. The profits reported have been calculated for a 10 years’ timeframe.

- Maximum value: The increased RE's market capitalization for the period 2021-2030 is calculated as follows = (0.84%) * Share price (reference 2021) x Number of shares traded *number of years = (0.84%) x 18.75 x 541,080,000 x 10= 852.2 million €. This value corresponds to the 50% percentile.
- Minimum value has been calculated as the percentile 1% = 572million€. This has considered a typical deviation of capitalization of 20%.

Cost to realize opportunity

7,000,000

Strategy to realize opportunity and explanation of cost calculation

RE works to improve reputation:
- RE is continuously working with stakeholders to identify their requirements. e. g. RE develops an annual survey to stakeholders.
- RE 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
-RE 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)
- RE works to improve its performance. e. g. RE has developed a Climate Change Action Plan, updated in 2021, where targets and actions to achieve them have been established.
-RE develops projects that improve relationship with stakeholders (e.g. RE Forest)
Different management costs must be considered amounting to approx. 700,000 Euros/year (some examples included):
i. Dedicated technical units 400,000 Euros /year
ii. Costs related to reporting. (i.e. Verification of the GHG inventory: 25,000 Euros/year); Climate Change projects to improve relations with stakeholders and reputation e.g. RE Forest 200,000 €/year
iii. Other Costs 75,000 € /year
The figure reported corresponds to the total estimated costs for a 10 years' time frame = 10years x (400,000+200,000+25,000+ 75,000) = 7,000,000 €

Comment

C3. Business Strategy

C3.1

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

Row 1

Transition plan

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

Publicly available transition plan

Yes

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

Our transition plan is voted on at Annual General Meetings (AGMs)

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

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 RE business (specially electricity transmission)? What will be expected from RE to contribute to energy transition?

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

c. What are the main changes in the physical parameters that can affect RE 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 RE'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).

RE takes into account the scenario analysis to define this business strategy, considering the opportunities in the short-, medium- and long-term strategy. For example, the 2021-2025 Strategic Plan includes a budget of 3,349 million€ for energy transition in Spain.

b. Low emission scenarios are associated with strong emission reduction efforts. Therefore, more restrictive regulation is expected, and it may impact RE'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", REE, main society of RE Group, 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, RE 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. REE 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 REE'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), REE 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 RE, 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 medium (2025) and long term (2030) is expected to increase our 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, RE 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 our exposure to this risk is a central focus of our strategy in the short, medium and long term and has influenced our 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. We 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), we invest 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 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. We have, therefore, we have taken 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, RE 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 our business decisions and investment strategy and hence RE 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. The total investment amounts to 1,960,000 €. Besides other relevant projects aimed to reduce and control F6 leakages has been launched. On the other hand, RE 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 our strategy as the sole Spanish transmission system operator. Hence, RE 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.
Operations	Yes	RE 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 our business decisions and financial strategy in this area. For instance, RE 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 our financial planning and our business strategy.

		Particularly, RE 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 our 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 our 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).

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 Indirect costs Capital expenditures Access to capital Assets	One of the core purposes of the Red Electrica Group 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 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 the RE Group and for this reason, our 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 our financial planning throughout our strategy development. Red Electrica's contribution will be key in the energy transition. Therefore, capital expenditures are factored into our 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.

		In terms of direct &indirect operating costs, two main impacts are considered. Firstly, RE 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). An increase in direct operating costs due to mitigation measures is also included within our financial planning, having a direct impact on our assets. 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 RE 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). RE 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 euro) and the second one in May 2021 (600 million euro).

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's transition to a 1.5°C world?

Yes

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's transition to a 1.5°C world.

Financial Metric

Revenue

Percentage share of selected financial metric aligned with a 1.5°C world in the reporting year (%)

81.8

Percentage share of selected financial metric planned to align with a 1.5°C world in 2025 (%)

Percentage share of selected financial metric planned to align with a 1.5°C world in 2030 (%)

100

Describe the methodology used to identify spending/revenue that is aligned with a 1.5°C world

The Taxonomy Regulation (Regulation 2020/852 of 18 June 2020 on the establishment of a framework to facilitate sustainable investment) has been taken as a reference to identify revenue aligned with a 1.5 º word.

The Taxonomy Regulation establishes that economic activities must be aligned with the following technical screening criteria in order 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).
In June 2021, the Delegated Act of the European Commission for the development of the Taxonomy Regulation was approved, which develops the sustainable activities for climate change mitigation and adaptation, and specifically establishes the list of activities that are considered environmentally sustainable. The approved list includes the activity of transmission of electricity, specifically the activity of “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 RE, these activities are completely aligned with national & international targets aimed to limit the increase of temperature to 1.5 ºC.

Calculation of the Revenue figures for the activity of transmission of electricity :as described in note 28 to the consolidated annual accounts on segment reporting, the Red Eléctrica Group segments its business activities based on their nature, reflecting the main branches of activity used by the Group in its management and decision-making processes.
As at 31 December 2021, the Group’s operating segments and their main products, services and operations are as follows:
- Management and operation of electricity infrastructure (Spain): this segment includes the Group's main activity, through the performance of the functions of sole transmission agent and operator of the Spanish electricity system (TSO). Since the activity included in the Taxonomy regulation is specifically the transmission activity (and does not include System Operation), only the balances related to the Transmission activities in Spain have been considered in the calculation.
- Management and operation of electricity infrastructure abroad (International): this segment includes the activities associated with the development of the business activity abroad as a natural avenue for growth, mainly focused on the construction and operation of electricity transmission grids outside Spain, as at 31 December 2021 in Peru, Chile and Brazil.
The international electricity infrastructure management and operation activity corresponds in its entirety to the transmission activity included in the Taxonomy Regulation.
- Telecommunications (satellites and fibre optics): activities not covered by the Taxonomy regulation.

As a result, 81.8% of the revenue at year-end 2021 corresponds to eligible activities.

Financial Metric

CAPEX

Percentage share of selected financial metric aligned with a 1.5°C world in the reporting year (%)

75.6

Percentage share of selected financial metric planned to align with a 1.5°C world in 2025 (%)

Percentage share of selected financial metric planned to align with a 1.5°C world in 2030 (%)

100

Describe the methodology used to identify spending/revenue that is aligned with a 1.5°C world

The Taxonomy Regulation (Regulation 2020/852 of 18 June 2020 on the establishment of a framework to facilitate sustainable investment) has been taken as a reference to identify revenue aligned with a 1.5 º word.

The Taxonomy Regulation establishes that economic activities must be aligned with the following technical screening criteria in order 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).

In June 2021, the Delegated Act of the European Commission for the development of the Taxonomy Regulation was approved, which develops the sustainable activities for climate change mitigation and adaptation, and specifically establishes the list of activities that are considered environmentally sustainable. The approved list includes the activity of transmission of electricity, specifically the activity of “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 RE, these activities are completely aligned with national & international targets aimed to limit the increase of temperature to 1.5 ºC.

Calculation of the CAPEX figures for the activity of transmission of electricity :as described in note 28 to the consolidated annual accounts on segment reporting, the Red Eléctrica Group segments its business activities based on their nature, reflecting the main branches of activity used by the Group in its management and decision-making processes.

As at 31 December 2021, the Group’s operating segments and their main products, services and operations are as follows:

- Management and operation of electricity infrastructure (Spain): this segment includes the Group's main activity, through the performance of the functions of sole transmission agent and operator of the Spanish electricity system (TSO). Since the activity included in the Taxonomy

regulation is specifically the transmission activity (and does not include System Operation), only the balances related to the Transmission activities in Spain have been considered in the calculation.
- Management and operation of electricity infrastructure abroad (International): this segment includes the activities associated with the development of the business activity abroad as a natural avenue for growth, mainly focused on the construction and operation of electricity transmission grids outside Spain, as at 31 December 2021 in Peru, Chile and Brazil.
The international electricity infrastructure management and operation activity corresponds in its entirety to the transmission activity included in the Taxonomy Regulation.
- Telecommunications (satellites and fibre optics): activities not covered by the Taxonomy regulation.

As a result, 75.6% of CAPEX at year-end 2021 corresponds to eligible activities.

Financial Metric

OPEX

Percentage share of selected financial metric aligned with a 1.5°C world in the reporting year (%)

75.1

Percentage share of selected financial metric planned to align with a 1.5°C world in 2025 (%)

Percentage share of selected financial metric planned to align with a 1.5°C world in 2030 (%)

100

Describe the methodology used to identify spending/revenue that is aligned with a 1.5°C world

The Taxonomy Regulation (Regulation 2020/852 of 18 June 2020 on the establishment of a framework to facilitate sustainable investment) has been taken as a reference to identify revenue aligned with a 1.5 º word.
The Taxonomy Regulation establishes that economic activities must be aligned with the following technical screening criteria in order 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).
In June 2021, the Delegated Act of the European Commission for the development of the Taxonomy Regulation was approved, which develops the sustainable activities for climate change mitigation and adaptation, and specifically establishes the list of activities that are considered environmentally sustainable. The approved list includes the activity of transmission of electricity, specifically the activity of “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 RE, these activities are completely aligned with national & international targets aimed to limit the increase of temperature to 1.5 ºC.

Calculation of the OPEX figures for the activity of transmission of electricity :as described in note 28 to the consolidated annual accounts on segment reporting, the Red Eléctrica Group segments its business activities based on their nature, reflecting the main branches of activity used by the Group in its management and decision-making processes.
As at 31 December 2021, the Group’s operating segments and their main products, services and operations are as follows:
- Management and operation of electricity infrastructure (Spain): this segment includes the Group's main activity, through the performance of the functions of sole transmission agent and operator of the Spanish electricity system (TSO). Since the activity included in the Taxonomy regulation is specifically the transmission activity (and does not include System Operation), only the balances related to the Transmission activities in Spain have been considered in the calculation.
- Management and operation of electricity infrastructure abroad (International): this segment includes the activities associated with the development of the business activity abroad as a natural avenue for growth, mainly focused on the construction and operation of electricity transmission grids outside Spain, as at 31 December 2021 in Peru, Chile and Brazil.
The international electricity infrastructure management and operation activity corresponds in its entirety to the transmission activity included in the Taxonomy Regulation.
- Telecommunications (satellites and fibre optics): activities not covered by the Taxonomy regulation.

As a result, 75.6% of OPEX at year-end 2021 corresponds to eligible activities.

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

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)

24,662

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

792,782

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

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

817,444

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 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]

367,849.8

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

23,632

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

646,531

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)

670,163

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

32.7586521356

Target status in reporting year

Underway

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

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 RE Group , 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: carbon neutrality in 2050 (in process to be 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. Regarding scope 1, the 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 have been established (reducing fossil energy consumption)
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 REE (main society of RE), 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. REE 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 made:
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

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

497,788

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

497,788

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

69.2171934981

Target status in reporting year

New

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

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: carbon neutrality in 2050 (in process to be 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, have not produced relevant emissions reductions. (The main reduction in scope 3 emissions has been linked to the COVID crisis and the slowdown of the new infrastructure development works).
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 is expected to generate an increase in scope 3 emissions in the next years. Although there will be improvements in the performance of suppliers, these will not be perceptible compared to the huge increase of goods and services purchased. For this reason, for the first years (2021-2016) RE 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

90

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

80.06

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

88.9555555556

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 90% of total electricity consumption. It must be taken into account that a small part of RE'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 10% should be considered as an exclusion. For that reason, the target is 90%)

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

Plan: the Red Eléctrica Group is committed to the use of renewables to cover the electricity consumption of its facilities.
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 2021, 80.6% of the electricity consumed in 2021.
The remaining consumption corresponds to work centres under a lease contract or that do not have a local electricity distribution network connection, whereby the transmission grid directly supplies the electricity. Besides, at the moment, the work centres in Latin America - LATAM do not have this type of contract. The Group's goal is to have 100% of its contracted electricity from renewable sources by 2024. (90% of the total electricity consumed)
Actions defined to achieve this target:
- New electricity supply contracts for leased assets (agreements with owners) and facilities in LATAM.
- 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 Arganda control centre (HISPASAT) with an expected coverage of 26.5% of the annual electricity consumption needs of this satellite control centre; Solar photovoltaic installation at the Tres Cantos Training Campus with an expected coverage of 16% of the building's total consumption).
Progress:
The progress made up to this year is linked to the increase of renewable energy supply contracts.

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

14,055.4

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

43.5857263601

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 is being defined and will be published at the end of 2022.

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 150,938 kWh.

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, we consider this a science-based target, and the target is currently being reviewed 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): 143,490 t CO2 e.

RE 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 2021, the company purchased 1,538 VCUs, to offset 6.5% of the Company's direct emissions.

Regarding permanent carbon removal, the company has developed the “Red Eléctrica 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

16 forests in Spain (210,883tCO2eq offset). In 2021, 30,855 trees were planted for the recovery of 51.42 ha.

In addition, RE is now working to enlarge its mitigation beyond the value chain & NEUTRALIZATION strategy thorough the:
• Definition of compensation strategy for complete offsetting scope 1 emissions in the short-term (before 2025). The strategy will include a combination of projects and the minimum % of neutralization projects will be defined. It will be approved& presented before the end of 2022.
• Definition of compensation strategy for the long-term (mitigation of emissions beyond the value chain and neutralization).

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

RE 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). In 2021, the company purchased 1,538 VCUs, t offset 6.5% of the Company's direct emissions.
Regarding permanent carbon removal, the company has developed the “Red Eléctrica 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 16 forests in Spain (210,883tCO2eq offset). In 2021, 30,855 trees were planted for the recovery of 51.42 ha.

In addition, RE is now working to enlarge its mitigation beyond the value chain & neutralization strategy thorough the:
• Definition of compensation strategy for complete offsetting scope 1 emissions in the short-term (before 2025). The strategy will include a combination of projects and the minimum % of neutralization projects will be defined. It will be approved & presented before the end of 2022.
• 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*	30	5,891
Implementation commenced*	18	2,082
Implemented*	5	3,244.7
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 leakage reduction

Estimated annual CO2e savings (metric tonnes CO2e)

93.5

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)

410

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

1,687,430

Payback period

>25 years

Estimated lifetime of the initiative

21-30 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

Fugitive emissions reductions

Other, please specify

SF6 leakage reduction

Estimated annual CO2e savings (metric tonnes CO2e)

868.7

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)

3,810

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

Energy efficiency in buildings

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

46.4

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)

2,236

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)

0

Payback period

No payback

Estimated lifetime of the initiative

1-2 years

Comment

There are no relevant monetary costs or savings associated to this activity.

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)

0.1

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

Scope 2 (location-based)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

727

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.

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	RE 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.
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	RE 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, RE 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). All employees are also incentivized through managerial targets, that are considered when calculating the annual salary revision. Managerial targets always include emission reduction targets.

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

Description of product(s) or service(s)

Service considered: REE (the main company in RE Group) 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.

RE´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

126.76

Explain your calculation of avoided emissions, including any assumptions

Estimation of emissions avoided:

REE activities are necessary to integrate renewable. To estimate the emissions avoided, we have calculated the emissions produced if wind or solar energy couldn´t have been integrated into the system, assuming that gas (combined cycle power plants) would have substituted them. Emissions without wind &solar would have been: 65,757,875 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 2021 have been: 33,594,608.33 t CO2e, the emission avoided have been 32,163,267.02 tCO2e. (This calculation refers to 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 REE (890,229 MWh). The emissions of this energy are calculated using the emission factor that corresponds to the peninsular system: 0.118 t CO2e/MWh. If the interconnection didn´t exist, this energy would be produced in the Balearic Islands: emission factor 0.439 t CO2e. So, emissions saved are: 285,763.51 t CO2e.
Total savings (avoided emissions): 32,163,267.02+ 285,763.51=32,449,030.53 t CO2e
It is important to point out that the figure is very big because the calculation is applicable to all the electricity consumed in Spain. (255,984.782 GWh).
Avoided emissions/energy transmitted in Spain=32,449,030.53/ 255,984.782=126.76 (t CO2e/GWh)

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

81.8

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?

Yes, other structural change, please specify

Since 2020, the GHG inventory includes subsidiary companies (this change was already considered in 2020 emission data, but not considered in base year emissions reported in CDP 2020 questionnaire).

Name of organization(s) acquired, divested from, or merged with

- Transmission companies in LATAM, (Red Eléctrica International, new name: Redinter): REA, Red Eléctrica del Sur (REDESUR), Red Eléctrica del Norte (REDELNOR) y Red Eléctrica de Chile
(RECHILE).
- HISPASAT, a satellite infrastructure operator (acquired in October 2019).

Details of structural change(s), including completion dates

- Companies in LATAM were not included in the inventory as they were considered not relevant. From 2020 they are included anyway
- HISPASAT was acquired in October 2019 and was included in the GHG inventory in 2020.

It must be noted that the emission inventory reported in last year's CDP questionnaire (2020) already included both these companies. Nevertheless, the base year hadn't been recalculated in 2020 (so base year emissions reported in 2020 CDP questionnaire didn´t include subsidiary companies). The base line year emissions have been recalculated in 2021.

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?
Row 1	No

C5.1c

(C5.1c) Have your organization’s base year emissions been recalculated as result of the changes or errors reported in C5.1a and C5.1b?

	Base year recalculation	Base year emissions recalculation policy, including significance threshold

Row 1	Yes	Recalculation policy: "In the case of significant variations that are important to consider in the historical series, the emissions will be calculated, mainly those of the base year. These variations may derive from expansions in the scope of the inventory, incorporation of assets or modification in the calculation methodology, among other causes. A significant variation is considered to be one that implies a change of more than 2% of the total emission data of the affected scope and/or a change of more than 10% in the affected category. However, even if significant variations do not occur, the emissions of the historical series can be recalculated if it is considered necessary for the analysis of their evolution, for review of compliance or for redefinition of reduction objectives." In 2021, RE Group (new name: redeia) has updated the emission reduction goals to increase ambition and 2019 has been defined as the new base year. As the new goals also consider the subsidiary companies (which were not included in the 2019 inventory), the 2019 inventory has been recalculate in order to include them.

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)

24,662

Comment

In 2021, RE Group has updated the emission reduction goals to increase ambition and 2019 was defined as a new base year.
2019 emissions have been recalculated, to consider the subsidiary companies.

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, RE Group has updated the emission reduction goals to increase ambition and 2019 was defined as a new base year.
Scope 2 (location- based emissions) hasn't been 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

In 2021, RE Group has updated the emission reduction goals to increase ambition and 2019 was defined as a new base year.
2019 emissions have been recalculated, to consider the subsidiary companies.

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

In 2021, RE Group has updated the emission reduction goals to increase ambition and 2019 was defined as a new base year. 2019 emissions have been recalculated, to consider the subsidiary companies.

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

In 2021, RE Group has updated the emission reduction goals to increase ambition and 2019 was defined as a new base year. 2019 emissions have been recalculated, to consider the subsidiary companies.

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

In 2021, RE Group has updated the emission reduction goals to increase ambition and 2019 was defined as a new base year. 2019 emissions have been recalculated, to consider the subsidiary companies.

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

In 2021, RE Group has updated the emission reduction goals to increase ambition and 2019 was defined as a new base year. 2019 emissions have been recalculated, to consider the subsidiary companies.

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

In 2021, RE Group has updated the emission reduction goals to increase ambition and 2019 was defined as a new base year. 2019 emissions have been recalculated, to consider the subsidiary companies.

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

In 2021, RE Group has updated the emission reduction goals to increase ambition and 2019 was defined as a new base year. 2019 emissions have been recalculated, to consider the subsidiary companies.

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

In 2021, RE Group has updated the emission reduction goals to increase ambition and 2019 was defined as a new base year. 2019 emissions have been recalculated, to consider the subsidiary companies.

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

In 2021, RE Group has updated the emission reduction goals to increase ambition and 2019 was defined as a new base year. 2019 emissions have been recalculated, to consider the subsidiary companies.

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

In 2021, RE Group has updated the emission reduction goals to increase ambition and 2019 was defined as a new base year. 2019 emissions have been recalculated, to consider the subsidiary companies.

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)

23,632

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

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 and Scope 2 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)

283,234

Emissions calculation methodology

Supplier-specific method

Hybrid method

Spend-based method

Methodology for direct use phase emissions, please specify

RE collect 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

26

Please explain

The annual expenditure is broken down for each group of items purchased by RE - 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) 5.0 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.

Besides, RE collects specific emissions data for the most relevant suppliers. In case they provide quality information (information regarding the

life cycle of the products purchased or emissions information verified by a third party), emissions are calculated using this primary data instead the CEDA emission factor.

Since 2019, RE 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 RE 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 RE 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)

193,394

Emissions calculation methodology

Supplier-specific method

Hybrid method

Spend-based method

Methodology for direct use phase emissions, please specify

RE collect 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. (i.e USEPA (1995) Heavy Construction Operations Benchmark).
Emissions of the goods acquired are only considered in the year of acquisition, without apportioning over time.
Some groups of items purchased by RE and that correspond to the concept of capital good are included in this category. In this case, the emissions are calculated using the corresponding CEDA factors, as explained in the previous section. (Comprehensive Environmental Data Archive (CEDA) 5.0.)
Besides, RE collects specific emissions data for the most relevant suppliers. In case they provide quality information (verified by a third party), emissions are calculated using primary data instead of the CEDA emission factor.
Since 2019, RE 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 RE 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 RE 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)

2,364

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 0.47% of total Scope 3 emissions (in 2021), so they are considered as NOT RELEVANT.
These include emissions due to energy and fuel production, consumed by REE and that have not been included in Scope1 and Scope2:
- Emissions associated with the extraction, production and transport of fuels consumed by REE. 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 REE (Climate Change Spanish Office).
- Emissions associated with the extraction, production and transport of fuel consumed in the generation of electricity used by REE. 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)

1,253

Emissions calculation methodology

Hybrid method
Fuel-based method
Distance-based method

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

41

Please explain

These emissions represent only 0.25% 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 RE in vehicles not owned by RE. Two types of transport are considered:
- External transport of products and materials between the supplier and RE facilities. The annual expenditure is broken down for the groups of

items that refer to this type of service. The emission factor CEDA 5.0 for this type of articles is applied. (Kg CO2e/Euro)
- Internal transport of materials between RE facilities. Emissions are calculated from the litres of diesel consumed by the company that carried out the logistic service for RE. The logistic company monitors the kilometres travelled and litres of fuel used by each individual vehicle. RE obtains the data directly from the supplier. Emissions are then calculated using the same methodology used for Scope 1 emissions (RE vehicles, emission factors from Climate Change Spanish Office).

Waste generated in operations

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

70

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 RE'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)

562

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 represent less than 0.11% of total Scope 3 emissions, so they are considered as NOT RELEVANT. In 2020 &2021, due to the COVID crisis, these emissions have been very low, Nevertheless, note that the previous years they were also 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: REE. Emission factor: DEFRA 2021.

b) Rental vehicle: calculations are based on the number of kilometres travelled, provided by car rental suppliers. Emission factor: DEFRA 2021

c) Taxis: calculation based on the number of Kilometers travelled by taxi. Emission factor: DEFRA 2021. In Spain the company hired to carry out this service calculates the emissions with its own methodology.

Employee commuting

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

1,716

Emissions calculation methodology

Distance-based method

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

65

Please explain

These emissions represent less than 0.34% of total Scope 3 emissions, so they are considered as NOT RELEVANT.
In 2020&2021, due to the COVID crisis, these emissions have been very low, Nevertheless, note that the previous years they were also 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)

162

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

RE 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 0.03% 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, 2021)

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

Not applicable. RE 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. RE does not sell physical products.

Use of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Not applicable. RE does not sell physical products.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Not applicable. RE 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 RE 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 2021, 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 2021.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Not applicable. RE does not have any franchises

Investments

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

15,033

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 3% of total Scope 3 emissions. So, they are considered as NOT RELEVANT.
Emissions associated with participated companies for which RE 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 RE 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 downstream 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

0.000343

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

670,163

Metric denominator

unit total revenue

Metric denominator: Unit total

1,952,960,000

Scope 2 figure used

Market-based

% change from previous year

8.8

Direction of change

Increased

Reason for change

The main reason for change has been the increase of Scope2 emissions (6.99%), while revenues have slightly decreased (2%)
The scope 2 emissions increase is linked to an increase of emissions due to transmission losses, which has been motivated by two main factors:
- Increase of energy demand (2.7% in Spain) linked to the recovery from COVID crisis
- Increase of transmission losses: the % of losses is mainly linked to the demand increase and to the increase of renewable energy integration (solar and wind) that are far from consumption areas. In the Spanish system, the % of losses has increased a 11.24%. -It's important to highlight, that an increase in the % of transmission losses doesn't involve a worst environmental performance of REE. In fact, the evolution of the electricity system towards a more decarbonized and flexible one, needed 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 (one of the main objectives in Spanish and European climate & energy policy) is entailing an increase in transmission losses. Actually, the contribution to a greener and more efficient overall energy system is expected to cause an increase in transmission losses.

Intensity figure

0.00255

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

670,163

Metric denominator

megawatt hour transmitted (MWh)

Metric denominator: Unit total

262,784,852.85

Scope 2 figure used

Market-based

% change from previous year

3.5

Direction of change

Increased

Reason for change

The main reason for change has been the increase of Scope 2 emissions (6.99%). - (There has been also a 3.3% increase on energy transmitted but the increase of emissions has been bigger).

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

- Increase of energy demand (2.7% in Spain) linked to the recovery from COVID crisis
- Increase of transmission losses: the % of losses is mainly linked to the demand increase and to the increase of renewable energy integration (solar and wind) that are far from consumption areas. In the Spanish system, the % of losses has increased a 11.24%. -It's important to highlight, that an increase in the % of transmission losses doesn't involve a worst environmental performance of REE. In fact, the evolution of the electricity system towards a more decarbonized and flexible one, needed 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 (one of the main objectives in Spanish and European climate & energy policy) is entailing an increase in transmission losses. Actually, the contribution to a greener and more efficient overall energy system is expected to cause an increase in transmission losses.

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	2,527.5	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	20,363	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	741.5	IPCC Fourth Assessment Report (AR4 - 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	893.1	21,104.5	Fugitive emissions: - SF6 emissions: 20,363 tCO2e

					-Air conditioning emissions (HFCs): 741.5 t CO2e (Total gross Scope 1 emissions data in metric tons CO2e includes both sources)
Combustion (Electric utilities)	0	0	0	0	RE does not perform any energy production activities. REE's activities are limited to the transmission of electricity and operation of the power system.
Combustion (Gas utilities)	0	0	0	0	Not applicable. RE does not perform any activity related to gas.
Combustion (Other)	2,527.5	0	0	2,527.5	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 REE 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/region.

Country/Region	Scope 1 emissions (metric tons CO2e)

Spain	22,981.5
Peru	207
Chile	111
Brazil	332.5

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)
REE:(TSO: transmission & operation of electricity system) in Spain) (Includes emission from corporate activities in Spain) New name: red eléctrica	22,759
REINTEL (Telecommunications in Spain)	26.5
Transmission activities in Latin América New name: redinter	318
HISPASAT (Satellite infrastructure operator)	528.5

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	20,363
Fugitive emissions from air conditioning equipment	741.5
Mobile combustion	1,926
Stationary combustion (generating sets for emergency situations + heating)	601.5

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. RE does not perform any energy generation activities. REE' 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.

C7.9

(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	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	24	Decreased	0.0038	In 2021 emissions related to electricity consumption have decreased 24 t CO2 eq (625 t CO2 eq in 2021 vs 649 tCO2eq in 2020), although electricity consumption has slightly increased. The emission reduction is due to the increase of renewable energy consumption. Total emission value percentage= 24/626,381*100=0.0038%. Please note that 626,381 tCO2e figure corresponds to 2020 Scope1+2 emissions.
Other emissions reduction activities	77,525.98	Decreased	12.38	Decrease due to emission reduction activities: (a) Efforts to reduce SF6 emissions: a1. Leak repair on equipment (869 t CO2 eq). a2. Replacement of old equipment (935 t CO2 eq). a.3 Other SF6 reduction activities (47 t CO2 eq) = 1,851 t CO 2 eq. (b) Renewable energy (wind and solar) integration into the electricity system: RE has a crucial role in renewable energy integration because RE activity makes possible to integrate the renewable energy generated (building the infrastructures to connect renewable power to the grid and also integrating the 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 2021, there has been a relevant increase in the share of wind and solar energy in the energy mix (15% increase compared to 2020), especially in photovoltaic generation (37% increase). It 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 2021 (4,531,436.22 MWh* average factor 0.118tCO2e/MWh= 534,709.47 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). (4,531,436.22 MWh* average factor 0.134tCO2e/MWh= 610,384.46 tCO2e) Decrease of emissions due to renewable integration:

				610,384.46-534,709.47 =75,674.98 tCO2e Renewable wind and solar energy depend on REE activities but also on physical conditions. In 2021, 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)=1,851+75,674.98=77.525,98 tCO2e. Total emission value percentage= 77.525,98/626,381*100=12.38%. Please note that 626,381 tCO2e figure corresponds to 2020 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	18,886.12	Increased	3.01	Change in output: (a)The variation of electricity demand is a change in RE´s output, that affects emissions related to transmission losses. Electricity demand (peninsular system+ Balearic Islands system +Canary Islands system) has increased 6,572,856 MWh in 2021, (5,875,537 peninsular system+585,119.4 Balearic Islands+112,199.58 Canary Islands). The increase is mostly related to COVID crisis recovery. To calculate emissions due to the increase of energy demand, we have considered 2021 operational conditions for each of the systems: loosing rates; 1.87(peninsular system); 2.1 (Bal. Islands);1.22 (Canary Islands)& emission factors 0.118 (peninsular system); 0.38 (Balearic Islands); 0.553 (Canary Islands)(tCO2e/MWh) Resulting emissions increase: (5,875,537*1.87/100*0.118) +(585,119.4*2.1/100*0.388)+(112,199.58*1.22/100*0.55)= 18,489.123tCO2e (b) Besides, the recovery of maintenance activities due to the improvement of COVID crisis has led to an increase of the use of fleet vehicles, an therefore to an increase of these emissions.

				Emissions from fleet vehicles in 2020: 1, 529 tCO2e Emissions from fleet vehicles in 2021: 1,926 t CO2e Total increase of emissions due to the recovery of activities (after COVID 19)=1,926-1,529= 397 tCO2e Total increase (a)+(b)= 18,489.123 +397=18,886.12 t CO2e Total emission value percentage= 18,886.12/626,381*100=3.01%. Please note that 626,381 tCO2e figure corresponds to 2020 Scope1+2 emissions.
Change in methodology	0	No change	0	Not applicable
Change in boundary	3,588.58	Increased	0.573	Besides, in 2021, emissions due to transmission losses has increased in LATAM, mainly due to the fact that some transmission lines that were being built have started operation this year. Increase of energy transmitted in Peru: 992,452.59 MWh (The % of transmission losses remains very similar:0,6 and emission factor is 0.2216). Total increase of emissions=713.66 tCO2eq) Increase of energy transmitted in Chile: 879,685.75 MWh (The % of transmission losses has slightly increased 0.74 vs 0.6) and emission factor has slightly decreased (0.39 vs 0.4 t CO2e/MWh). Total increase of emissions=2,874.92 t CO2eq Total increase of emissions: 3,588.58 t CO2eq Total emission value percentage= 3,588.58/626,381*100=0.573%. Please note that 626,381 tCO2e figure corresponds to 2020 Scope1+2 emissions.
Change in physical	6,753.15	Increased	1.078	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

operating conditions				affects the main factors regarding emissions associated to transmission grid losses: amount of transmission losses (%) and emission factor. In 2021 there has been a decrease in water availability and therefore, a decrease in hydro power generation (1,049.32 GWh less than in 2020). To estimate emissions increase, we have compared the emissions of transmission losses (peninsular system,) calculated with the real emission factor for 2021 (4,531,436.22 MWh* average factor 0.118 tCO2e/MWh= 534,709.47 tCO2e), with emissions using a factor (average factor) that has been calculated considering the same hydro power production as in 2020- and assuming an equivalent reduction of energy generated with gas (which is the most probable generation source to substitute renewable energy)-. (0.1165 t CO2eq/MWh) 4,531,436.22 *0.1165= 527,912.32 tCO2e Increase of emissions due to availability of water (physical conditions): 534,709.47- 527,912.32 tCO2e=6,797.15- tCO2e b. On the contrary, there has been a small reduction in the use of heating in 2021 compared to 2020, linked to changes in physical conditions. 144 tCO2eq (2020)-100 t CO2eq (2021)=44 t CO2 eq Total change on emissions: 6,797.15- 44= 6,753.15tCO2e Total emission value percentage= 6,753.15/626,381*100=1.078 %. Please note that 626,381 tCO2e figure corresponds to 2020 Scope1+2 emissions.
Unidentified	21,619.96	Increased	3.451	a. Regarding scope 1, there has been some changes in emissions: a1. Decrease of diffuse emissions from air conditioning: 1,185 (2020)-741.5 (2021)= 443.5 tCO2e. a.2 Increase of emissions in generating sets: 501.5 (2021)- 485 (2020)= 16.5tCO2e. 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

				(most relevant changes in generation mix , demand variations and % of transmission losses)y. But there are other factors that can influence final total emissions (i.e. minor changes in generation mix, not analysed) and haven´t been calculated. Total variation in emissions from transmission losses: 45,731.4 tCO2e (increase) Increase due to variation in energy demand: 18,489.12 tCO2e Increase due to hydro power generation reduction: 6,797.15 tCO2e Increase due to nuclear power generation reduction: 11,328.59 tCO2e Decrease due to wind&solar generation increase: 75,674.98 tCO2e Increase due to the increase of transmission losses %: 59,155 tCO2e Increase due to new operating transmission lines in LATAM: 3,588.58 tCO2e Increase due to "unidentified": 45,731.4-(18,489.12+6,797.15+11,328.59+ -75,674.98-59,155 +3,588.58)= 22,046.96 tCO2e Total variation: -443.5 +16.5+22,046.96= 21,619.96 t CO2e Total emission value percentage= 21,619.96/626,381*100=3.45 %. Please note that 626,381 tCO2e figure corresponds to 2020 Scope1+2 emissions.
Other	70,484.52	Increased	11.252	a. In 2021, there has been a reduction in the share of nuclear power in the energy mix (3% reduction compared to 2020) due to technical reasons. 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 factors (peninsular system) for 2021 (4,531,436.22 MWh* average factor 0.118 tCO2e/MWh= 534,709.47tCO2e) with emissions using a factor that has been calculated considering the same generation with nuclear generation as in 2020 (4,531,436.22 MW*0.1155 tCO2e/MWh=523,380.88 tCO2e). Increase of emissions due to reduction of coal fired power stations generation: 534,709.47-523,380.88=11,328.59 tCO2e

				b. Increase of transmission losses % (over total energy transmitted=energy demand). Transmission losses are qualified as technical losses resulting from the dispersion of energy determined by the passage of electricity through conductors and transformation phases inherent to the physics behind electricity transmission and cannot be completely avoided. Losses mainly depend on the geographical location of the generation units with respect to the consumption areas, the size of transmission grid, the voltage level, the power flows over the grid international power exchanges values and the amount of energy demanded and shape of the demand curve (REE as operator of the electricity system cannot make decisions regarding these factors). In 2021 the % of transmission losses has increased mainly because of the increase of demand and the higher share of renewables in the grid (particularly in Spain, renewable energy is linked to long transmission distances, as it is located far from consumption main points). To estimate the increase, we have compared the emissions of transmission losses, calculated with the real % (1.869% in the peninsular system) for 2021 (242,400,607.73 MWh-energy transmitted- * 1.869%* 0.118 tCO2e/MWh= 534,709.47tCO2e) with emissions considering the same % as in2020 (242,400,607.73 MWh* 1.662%* 0.118 tCO2e/MWh= 475,553.55 tCO2e) Increase of emissions due to the increase the % of losses: 534,709.47-475,553.55=59,155.93tCO2e Total variation: 11,328.59 +59,155.93= 70,484.52 t CO2e Total emission value percentage= 70,484.52/626,381*100=11.25 %. Please note that 626,381 tCO2e figure corresponds to 2020 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	11,015	11,015

Consumption of purchased or acquired electricity		15,938.64	3,831.4	19,770.1
Total energy consumption		15,938.64	14,846.4	30,785.1

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

C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

Country/area

Spain

Consumption of electricity (MWh)

17,552.1

Consumption of heat, steam, and cooling (MWh)

0

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

17,552.1

Country/area

Peru

Consumption of electricity (MWh)

818.01

Consumption of heat, steam, and cooling (MWh)

0

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

818.01

Country/area

Chile

Consumption of electricity (MWh)

35.28

Consumption of heat, steam, and cooling (MWh)

0

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

35.28

Country/area

Brazil

Consumption of electricity (MWh)

1,364.71

Consumption of heat, steam, and cooling (MWh)

0

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

1,364.71

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/Region

Spain

Voltage level

Transmission (high voltage)

Annual load (GWh)

255,984.78

Annual energy losses (% of annual load)

1.85

Scope where emissions from energy losses are accounted for

Scope 2 (market-based)

Emissions from energy losses (metric tons CO2e)

634,220.55

Length of network (km)

44,687

Number of connections

2,345

Area covered (km2)

506,000

Comment

Annual energy losses. The data for the historical series is available in the SR report 2021.
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).

Country/Region

Peru

Voltage level

Transmission (high voltage)

Annual load (GWh)

5,322.5

Annual energy losses (% of annual load)

0.62

Scope where emissions from energy losses are accounted for

Scope 2 (market-based)

Emissions from energy losses (metric tons CO2e)

7,336.17

Length of network (km)

1,561

Number of connections

64

Area covered (km2)

362,961

Comment

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

---

Country/Region

Chile

Voltage level

Transmission (high voltage)

Annual load (GWh)

1,477.56

Annual energy losses (% of annual load)

0.74

Scope where emissions from energy losses are accounted for

Scope 2 (market-based)

Emissions from energy losses (metric tons CO2e)

4,384.98

Length of network (km)

264

Number of connections

6

Area covered (km2)

168,275

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

14,055.4

Metric numerator

Electricity consumption in work centers (MWh)

Metric denominator (intensity metric only)

N.A

% change from previous year

12

Direction of change

Increased

Please explain

The company has set efficiency targets regarding electricity consumption in work centres: 30% reduction by 2030 compared to 2015 (there was an intermediate goal to reduce the 10% in 2020)
Although the consumption has increased from previous year (due to COVID crisis recovering), the electricity consumption has reduced the 13% compared to 2015, which means a good evolution towards the target, considering that there was an intermediate goal (reduce 10% in 2020 compared to 2015) and the most relevant efforts are expected to be developed between 2022 and 2030.
Besides, it must be noted that this target doesn't include yet work centers in LATAM, nor Hispasat, so it´s expected to be updated soon.

C-EU9.5a

(C-EU9.5a) Break down, by source, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.

Coal – hard

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Please note that this question is NOT APPLICABLE to RE, as the company doesn't perform any generation activities. REE activities are limited to the transmission of electricity and operation of the power system.

Lignite

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Please note that this question is NOT APPLICABLE to RE, as the company doesn't perform any generation activities. REE activities are limited to the transmission of electricity and operation of the power system.

Oil

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Please note that this question is NOT APPLICABLE to RE, as the company doesn't perform any generation activities. REE activities are limited to the transmission of electricity and operation of the power system.

Gas

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Please note that this question is NOT APPLICABLE to RE, as the company doesn't perform any generation activities. REE activities are limited to the transmission of electricity and operation of the power system.

Sustainable biomass

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Please note that this question is NOT APPLICABLE to RE, as the company doesn't perform any generation activities. REE activities are limited to the transmission of electricity and operation of the power system.

Other biomass

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Please note that this question is NOT APPLICABLE to RE, as the company doesn't perform any generation activities. REE activities are limited to the transmission of electricity and operation of the power system.

Waste (non-biomass)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Please note that this question is NOT APPLICABLE to RE, as the company doesn't perform any generation activities. REE activities are limited to the transmission of electricity and operation of the power system.

Nuclear

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Please note that this question is NOT APPLICABLE to RE, as the company doesn't perform any generation activities. REE activities are limited to the transmission of electricity and operation of the power system.

Geothermal

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Please note that this question is NOT APPLICABLE to RE, as the company doesn't perform any generation activities. REE activities are limited to the transmission of electricity and operation of the power system.

Hydropower

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Please note that this question is NOT APPLICABLE to RE, as the company doesn't perform any generation activities. REE activities are limited to the transmission of electricity and operation of the power system.

Wind

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Please note that this question is NOT APPLICABLE to RE, as the company doesn't perform any generation activities. REE activities are limited to the transmission of electricity and operation of the power system.

Solar

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Please note that this question is NOT APPLICABLE to RE, as the company doesn't perform any generation activities. REE activities are limited to the transmission of electricity and operation of the power system.

Marine

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Please note that this question is NOT APPLICABLE to RE, as the company doesn't perform any generation activities. REE activities are limited to the transmission of electricity and operation of the power system.

Fossil-fuel plants fitted with CCS

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Please note that this question is NOT APPLICABLE to RE, as the company doesn't perform any generation activities. REE activities are limited to the transmission of electricity and operation of the power system.

Other renewable (e.g. renewable hydrogen)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Please note that this question is NOT APPLICABLE to RE, as the company doesn't perform any generation activities. REE activities are limited to the transmission of electricity and operation of the power system.

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

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Please note that this question is NOT APPLICABLE to RE, as the company doesn't perform any generation activities. REE activities are limited to the transmission of electricity and operation of the power system.

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)	REE, main society of RE Group, builds and maintains transmission infrastructures (lines and substations) being the owner and manager of the transmission grid in Spain. REE is responsible for the technical operation of the Spanish electricity system, so, as the manager of the transmission grid, REE 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	2,846	66	2025

	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).			
Large-scale storage	The main project that RE is developing in this category is Chira pumped-storage hydroelectric power station. This infrastructure will enable a greater development and use of renewable energy on the island of Gran Canaria (storage of renewable energy). This project will contribute to achieve 2030 national & EU targets (renewable integration and emission reduction).	411	9.54	2025
Smart grid	The new 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	2.14	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 (optional)	Comment
Distributed energy resources 💬1	Pilot demonstration	≤20%	100,000	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 REs to estimate production in the system and make forecasts facilitating the smooth integration of small-scale distributed generation into the system.
Energy storage	Applied research and development	≤20%	100,000	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, Red Eléctrica (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.
Renewable energy	Applied research and development	≤20%	80,000	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.
Energy storage	Full/commercial-scale demonstration	≤20%		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).
Other, please specify SF6 leakages reduction	Full/commercial-scale demonstration	≤20%	36,000	SF6 gas leakages reduction: Development of a new methodology for repairing leaks in GIS installations/facilities

(emissions reduction)				
Other, please specify Sf6 leakages reduction (emissions reduction)	Pilot demonstration	≤20%	150,000	SF6/SO2 sensors in Substations (Infrastructures) Together with two relevant telecommunication companies, Red Eléctrica Group 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.
Other, please specify SF6 leakages reduction (emission s reduction)	Basic academic/theoretical research	≤20%	100,000	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.

[1]& Smartmeters

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 de verificación GEI_REE_EN.pdf

Page/ section reference

All document (pg1-2 +Apendix)

The statement is also published in Sustainability Report (423-424)

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 de verificación GEI_REE_EN.pdf

Page/ section reference

All document (pg1-2 +Apendix)

The statement is also published in Sustainability Report (423-424)

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 de verificación GEI_REE_EN.pdf

Page/section reference

All document (pg1-2 +Apendix)

The statement is also published in Sustainability Report (423-424)

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 Information about risks & opportunities due to climate change	ISAE 3000	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. 123-126 and information regarding opportunities arising from climate change pg. 106-108. Independent review of the Sustainability report, according to ISAE 3000 is included in pg.423

			1, 2
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). – GHG emissions intensity data are reported in pg 199 (energy) & 201 (GHG). Independent review of the Sustainability report, according to ISAE 3000 is included in pg.423 1, 2
C6. Emissions data	Year on year change in emissions (Scope 1)	ISAE 300	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, 2019-2021) GHG emissions data are reported in pg 200. . Independent review of the Sustainability report, according to ISAE 3000 is included in pg.42 1, 2
C6. Emissions data	Year on year change in emissions (Scope 2)	ISAE 300	All the information included in the annual Sustainability report has been verified by third party according to ISAE 3000 (limited assurance). – Scope 2 emission data (2015, 2019-2021) GHG emissions data are reported in pg 200. Independent review of the Sustainability report, according to ISAE 3000 is included in pg.42 1, 2
C6. Emissions data	Year on year change in emissions (Scope 3)	ISAE 300	All the information included in the annual Sustainability report has been verified by third party according to ISAE 3000 (limited assurance). – Scope 3 emission data (2015, 2019-2021) GHG emissions data are reported in pg 201. Independent review of the Sustainability report, according to ISAE 3000 is included in pg.42 1, 2

C4. Targets and performance	Emissions reduction activities	ISAE 300	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. 187-196. Independent review of the Sustainability report, according to ISAE 3000 is included in pg.42 1, 2
C8. Energy	Energy consumption	ISAE 300	All the information included in the annual Sustainability report has been verified by third party according to ISAE 3000 (limited assurance). – energy consumption information is in pg. 197-199. Independent review of the Sustainability report, according to ISAE 3000 is included in pg.42 1, 2

[1]REE Sustainability Report 2021_18jul.pdf

[2]Informe de verificación_IS_REE_EN.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 originated or purchased any project-based carbon credits within the reporting period?

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase

Credit purchase

Project type

Forests

Project identification

Reduction of in deforestation in Madre de Dios region Perú (Registry ID: 1067)

Verified to which standard

VCS (Verified Carbon Standard)

Number of credits (metric tonnes CO2e)

1,538

Number of credits (metric tonnes CO2e): Risk adjusted volume

1,538

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

Credit origination or credit purchase

Credit origination

Project type

Forests

Project identification

Bosque de Red Eléctrica en Agallas I (RE Forest in Agallas I)

Verified to which standard

Not yet verified

Number of credits (metric tonnes CO2e)

390

Number of credits (metric tonnes CO2e): Risk adjusted volume

355

Credits cancelled

No

Purpose, e.g. compliance

Voluntary Offsetting

Credit origination or credit purchase

Credit origination

Project type

Forests

Project identification

Bosque de Red Eléctrica en Agallas I (RE Forest in Agallas I)

Verified to which standard

Not yet verified

Number of credits (metric tonnes CO2e)

842

Number of credits (metric tonnes CO2e): Risk adjusted volume

765

Credits cancelled

No

Purpose, e.g. compliance

Voluntary Offsetting

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.

Objective for implementing an internal carbon price

Stakeholder expectations

Change internal behavior

GHG Scope

Scope 1
Scope 3

Application

RE has begun to include the price of CO2 in some specific projects, as a first step to gain experience and prepare the company for further applications.
The most relevant is the Circular Economy Roadmap to 2030: carbon price has been considered to monetize the impacts of the actions included in the roadmap. The monetization is a useful decision-making tool in order to prioritize or discard measures or activities. Decision-making mainly applies to operations an R&D.
For the project, the Technical Update Social Cost of Carbon for Regulatory Impact Analysis - US Environmental Protection Agencies (EPA) has been taken as a reference.
Besides, the use of carbon price is useful as a communication tool.

Actual price(s) used (Currency /metric ton)

35.95

Variance of price(s) used

For the moment, as the price is only applicable to specific projects or decisions, a uniform price is being considered.
The Technical Update Social Cost of Carbon for Regulatory Impact Analysis - US Environmental Protection Agencies (EPA) has been taken as a reference.
Nevertheless, the value is expected to be revised as the use of carbon pricing in the company evolves.

Type of internal carbon price

Shadow price

Impact & implication

RE uses internal price of carbon in specific projects as a first step to further applications.
Considering the carbon price in the Circular Economy Roadmap to 2030 has helped to prioritize or discard the measures or activities included in it (for example, operations or R&D), so it has been useful in the decision-making process.
Besides, the monetization of the impacts is a very valuable tool to understand and compare impacts from different actions, improving communication and leading to relevant results on changing internal behaviour. (For example, monetizing has been a very relevant instrument in

the presentation of the Circular Economy Roadmap and some projects included in it, to the Sustainability Committee).
The main challenge for the company is to extend the consideration of carbon pricing to other plans and projects.
It must be added that, for the moment, and according to the assessment of risks and opportunities associated with climate change that the company has carried out, the price of carbon has not been identified as a relevant variable to consider for this assessment. (Its impact on the quantification of the identified risks and opportunities is not material).

Objective for implementing an internal carbon price

Stakeholder expectations
Change internal behavior
Supplier engagement

GHG Scope

Scope 1
Scope 3

Application

The company has started to work in two main projects:
a. Considering carbon price in company decision-making processes that have the potential impact on scope 1 emissions (increase or reduce): projects, maintenance decisions, infrastructure design.
-The Group's emission reduction targets and the Climate Change Action Plan have been reviewed to increase their ambition. In addition to an emissions reduction pathway, the Plan includes the commitment to define the roadmap for carbon neutrality (including compensation strategy) and a target date in the short term (before 2025 and to be announced at the end of 2022) for the neutrality of Scope 1 emissions.-
b. Include an internal carbon pricing in tendering processes.

Actual price(s) used (Currency /metric ton)

13

Variance of price(s) used

The variation of scope 1 emissions due to a project will directly impact on the cost to fulfil the compensation strategy and goals. So, the medium offsetting price will be considered as the internal/shadow carbon price for decision making.
Given that offsetting is carried out mainly through the purchase of carbon credits on the voluntary market, now, the internal price we are taken as a reference is the highest (and latest) price that the company has paid for emissions offsetting.
Nevertheless, a new internal carbon price will be defined soon, considering the approved "offsetting" strategy, and taking into account the expected evolution of the prices (credit purchase and development of own projects).

Type of internal carbon price

Shadow price

Impact & implication

Including carbon price in the decision- making processes is a very valuable tool to understand and compare impacts from different actions, improving communication and leading to relevant results on changing internal behaviour. Integrating carbon price is a tool to consider the impact of projects and decisions (i.e., maintenance strategy) on scope 1 emissions from the beginning.
In the case of tendering processes, the use of carbon price can clearly rise supplier awareness and lead to changes in suppliers' behaviour.
This project is ongoing, the application is starting by single projects or decisions (very related to scope 1 emissions). As an example, the carbon price has been considered to identify and decide the SF6 emission reduction actions to be included in the updated Climate Change Action Plan.
The main challenge for the company is to extend the consideration of carbon pricing to every decision.
It must be added that, for the moment, and according to the assessment of risks and opportunities associated with climate change that the company has carried out, the price of carbon has not been identified as a relevant variable to consider for this assessment. (Its impact on the quantification of the identified risks and opportunities is not material).

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

Other, please specify

Help and provide guidelines to promote improvements in supplier's climate change disclosure & management. Identify collaboration projects.

% of suppliers by number

1

% total procurement spend (direct and indirect)

37

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

51.6

Rationale for the coverage of your engagement

RE is developing an "Engagement program" launched in 2019. The 30 most relevant suppliers were invited to join it. They were chosen considering these criteria:

- Main suppliers (top 20) regarding spent (considering 2016 - 2018 period), representing 55% of supplier- related emissions.
- Main suppliers (top 20) in terms of emissions (2016 -2018 period), that involved 66% of supplier related emissions. (% changes depending on the annual supplier portfolio: same suppliers involve 51.6% of supplier's emissions in 2021).

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:
- In the first stage, suppliers were asked to complete a questionnaire that covered emission metrics, strategy aspects, reduction targets, offsetting, and engagement activities.
- The questionnaire served as primary data collection to be 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.
- A feedback sheet with interesting benchmark comparisons and highlights of strengths has been 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 calculation of scope 3 emissions) &increase the number of 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 have included training & consultant support regarding calculation, verification process and targets definition and some workshops.
Between 2019 and 2021, RE have worked with 20 relevant supplier, which together represent more than 51% of the emissions in the supply chain. In 2022 a new engagement period has started with some additional suppliers.

Impact of engagement, including measures of success

The engagement program is an interesting opportunity not only for RE, 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. Number of suppliers participating amounted to 76% (23 out of 30 suppliers participated). 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)
- Scope 3 emissions, % of suppliers with emissions verified: increase from 43.5% (2019) to 48% (2021)
- Reduction targets set:
Suppliers with SBT verified: increase from 8.7% (2019) to 30% (2021) +additional 13% committed
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 Red Eléctrica Group approved specific reduction targets for Scope 3: to reduce absolute scope 3 GHG emissions 28% in 2030 compared to 2019 & 67% of RE '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.

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.

C12.1d

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

For RE, other relevant partners in the value chain are: Society in general (as a company that provides a service of general interest for the society) and RE'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 RE'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 RE 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 RE Forest Project: workshops held in different schools, awareness campaigns and voluntary work held by employees and their families.
Case study: Regarding the educational program, RE 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. In 2020-2021 academic year, 80 educational centres from seven Autonomous Communities took part, which means more than 14,000 students in the 2nd, 3rd and 4th years of Secondary Education. Besides, the contest, 2nd 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).

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 pilot for more than 120 people (flexibility plan)- . 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.
· Emissions reduction due to flexibility plan: 59.19 t CO2e in 2019 (not applicable in 2020-2021 due to COVID crisis). A new flexibility plan is being designed.
Please note that the answer refers to 2019 because during COVID crisis commuting has not been applicable for most of the workforce.
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, suppliers have to meet climate-related requirements, but they are not 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". This requirement is not included in contracts for the time being.
Including this requirement is intended to make progress regarding the RE target for Scope 3: 67% of RE '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

54

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

21

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
Other, please specify
SBTi public information

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

Retain and engage

Climate-related requirement

Climate-related disclosure through a non-public platform

Description of this climate related requirement

Most important suppliers in terms of emissions are required to disclosure climate related information to RE. This is one of the requirements for the suppliers participating in the "Engagement Program". This requirement is not included in contracts for the time being.
Including this requirement is intended to improve scope 3 emissions accounting and monitoring the progress regarding the RE target for Scope 3: 67% of RE '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

54

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

21

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
Supplier scorecard or rating

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, which is revised periodically, became effective as of 1 January 2013 and from that moment it became part of General Conditions of Contract. The acceptance of the Code 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".
Besides, the Company has identified and communicated to suppliers, the circular economy criteria related to the supply chain that it considers of greater relevance.
Finally, the company is working to include relevant circularity and specific climate change requirements in the technical specifications (part of the contract.

% 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

0

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment

Other, please specify

Audit can be conducted

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

Retain 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

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, we engage indirectly through trade associations

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)

A: Climate change commitment (attached) & available at
https://www.ree.es/sites/default/files/downloadable/climate_change_commitment_2017.pdf
a. Development of the transmission grid. One of Red Eléctrica'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 79-85 (https://www.ree.es/en/publications/sustainability-report-2021)
One of the sustainability priorities of RE Group 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).

REE Sustainability Report 2021_18jul.pdf

climate_change_commitment.pdf

Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

RE's Climate Change Commitment is approved by the chairman and the CEO. The commitment has been communicated to the management team, to all employees and has been published. 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.
In order to ensure a common approach to multiple climate-related engagement activities, in 2017, the Board of Directors approved the 2030 Sustainability Commitment of the Red Eléctrica Group. 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 RE 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.

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?

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

Electricity grid access for renewables

Other, please specify

Development of the electricity grid to increase electrification (i. e. electric interconnections /energy storage-also necessary to integrate renewable energy-, grid access for high -speed train)

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

Spanish Network development Plan (which is a legal mandate):
The development and structural reinforcement of the electricity transmission grid is necessary to achieve the following objectives:
- Evacuation of the newly installed renewable generation facilities: in this way, it is possible to reduce the emission factor of the energy mix.

- Supply power to new high-speed train lines: contributing to the reinforcement of 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 network development plan is a legal Mandate. After a long engagement process with the Spanish Ministry of Ecological Transition and other stakeholders, the last plan has been approved in March 2022 for the period 2021-2026.

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.

Policy, law, or regulation geographic coverage

National

Country/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

REE, main society of RE Group, closely works with the Spanish Ministry of Ecological Transition and regional authorities to design the transmission grid planning for Spain. REE 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 plan 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 plan.

The last plan has been approved on March 2022 for the period 2021-2026.

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 is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3b

(C12.3b) Provide details of the trade associations your organization 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 consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We have already influenced them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

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 2021, Red Eléctrica dedicated 15,804 hours involving 57 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. It should be noted that in 2021 Red Eléctrica contributed to the completion of ENTSO-E's strategic actions (Active 2020+) that establish the guidelines for the running of the association.

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. RE position is consistent with it. RE 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 2021-2022, 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.

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

Describe the aim of your organization's funding

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

REE_Consolidated_Annual_Accounts_2021_19abr.pdf

Page/Section reference

Governance (risk &opportunities) (pg. 154)
Risk& opportunities information (pg. 154-157)
Strategy (pg. 177-178)
Emission figures (pg. 179)
Emission targets (pg. 177-178)
Other metrics (pg. 179)
Other (pg. 177-179)

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics
Other, please specify
Emission reduction /energy efficiency initiatives

Comment

Publication

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

Status

Complete

Attach the document

REE Sustainability Report 2021_18jul.pdf

Page/Section reference

Governance (pg. 84,270,111)
Opportunities information (pg. 106-108)
Risk information (pg. 123-126)
Strategy (pg. 154-157)
Emission figures (pg. 200-201)
Emission targets (pg. 182-196)
Other metrics (pg. 197-202)
Other (pg. 182-196)

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics
Other, please specify
Emission reduction /energy efficiency initiatives

Comment

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	The Biodiversity Commitment, as part of the 2030 Sustainability Commitment has the full support of the Board of Directors and the management team of the RE Group. (Sustainability Committee was set in 2018 as part of the committees of the Board of Directors, mainly owing to the strategic nature that sustainability has within the Company). The Sustainability Committee met monthly to monitor progress on the 2030 Sustainability Commitment and oversee the main actions and proposals in this field. The Executive management Committee approves 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 an 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 Commitment to No Net Loss 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 no conversion of High Conservation Value areas	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 impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?
Row 1	Yes, we assess impacts on biodiversity in both our upstream and downstream value chain

C15.4

(C15.4) 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.

C15.5

(C15.5) 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

C15.6

(C15.6) 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	Information related to biodiversity is included in pg 176-177 Biodiversity indicators: 179 1
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Impacts on biodiversity Details on biodiversity indicators Biodiversity strategy Other, please specify Biodiversity Action Plan, performance., collaboration projects	Biodiversity information is reported in Sustainability Report: pg 282-292; 360-366 Indicators: pg 302-304 2

[1]REE_Consolidated_Annual_Accounts_2021_19abr.pdf

[2]REE Sustainability Report 2021_18jul.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?

English

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	Yes	Public

The European Climate Pact Submission

Please indicate your consent for CDP to showcase your disclosed environmental actions on the European Climate Pact website as pledges to the Pact.

Yes, we wish to pledge to the European Climate Pact through our CDP disclosure

Please confirm below

I have read and accept the applicable Terms