

Welcome to your CDP Climate Change Questionnaire 2021

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). 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, 2020	December 31, 2020	No

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

- 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

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 is the approval in 2020 of the updated identification, prioritisation and financial quantification of risks and opportunities aligned with the TCFD recommendations. Besides, the Board chair approved RE Green Finance Framework, with the first issue of green bonds in January 2020 (700 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 first issuance of green bonds in January 2020 (700 million euro).

C1.1b

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

Frequency with which climate-related issues	Governance mechanisms into which climate-related issues are integrated	Please explain
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are a scheduled agenda item		
Scheduled – all meetings	<p>Reviewing and guiding major plans of action</p> <p>Reviewing and guiding business plans</p> <p>Monitoring implementation and performance of objectives</p> <p>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</p>	<p>-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 has been the main reference for the business plan (Strategic Plan 2018-2022) & for the updated version (Strategic Plan 2021-2025). The Strategic Plan is mainly focused on the Spanish energy transition.</p> <p>- Major plans and actions included in RE's business plan related to climate change are: Electricity planning (2015-2020 in force and future 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 –Soria Project; Infrastructures improvement and renovation plans.</p> <p>- 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.</p>
Scheduled – some meetings	<p>Reviewing and guiding strategy</p> <p>Reviewing and guiding risk management policies</p> <p>Reviewing and guiding annual budgets</p> <p>Setting performance objectives</p>	<p>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.</p>

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 2020, the Committee met monthly to monitor 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 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	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 2020 the managerial targets were: 1) "Reduce 2% of scope 1&2 from 2019 levels" and (2) "Include Latin America and Hispasat activities in the GHG inventory of the group". Both targets accounted for the 8% of the total managerial targets. Besides, an additional 32% of the

			<p>managerial targets were linked to projects for energy transition in Spain.</p> <p>In 2021 the managerial targets related to climate change are (1) “Reduce 9% of scope 1&2 from 2020 levels” and (2) “Progress of sustainability Plan”. Both targets account for the 7% of the total managerial targets. Besides, the 45% of the managerial targets is linked to projects for energy transition in Spain.</p>
Corporate executive team	Monetary reward	Emissions reduction project	<p>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 2020, the following projects were chosen: (a) Implementation of the Task Force for Climate-related Financial Disclosure recommendation (continuation) (b)Reduction of SF6 leakages (emissions): reparation works in 4 substations (c) “REE forest” for emissions offsetting.</p> <p>For 2021: (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) Commissioning of a cell with gas as an alternative to SF6.</p>
All employees	Monetary reward	Emissions reduction project	<p>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.</p> <p>In 2020 the managerial targets were: 1) “Reduce 2% of scope 1&2 from 2019 levels” and (2) “Include Latin America and Hispasat activities in the GHG inventory of the group”. Both targets accounted for the 8% of the total managerial targets. Besides, an additional 32% of the managerial targets were linked to projects for energy transition in Spain.</p> <p>In 2021 the managerial targets related to climate change are (1) “Reduce 9% of scope 1&2 from 2020 levels” and (2) “Progress of sustainability Plan”. Both targets account for the 7% of the total managerial targets. Besides, the 45% of the managerial targets is linked to projects for energy transition in Spain.</p>

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 (2020-2021).
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 established 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 700 Million Euros. For 2020 we have

considered that risks have a substantive financial impact on our business if their estimated annual impact is higher than 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 strategic 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 being 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 REE 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 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. Some KPIs have been defined to monitor this risk, that 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

		<p>and national regulation framework for climate and energy has been deeply reviewed by RE in order to identify possible risks or opportunities.</p> <p>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:</p> <ul style="list-style-type: none"> -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 last revision of the assessment, it has been excluded).
Emerging regulation	Relevant, always included	<p>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. Changes in SF6 regulation could affect the company through various ways:</p> <ul style="list-style-type: none"> - 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. <p>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 2020, this risk was determined a medium level risk, in line with our risk categorisation, and it is integrated into the company's risk map.</p>
Technology	Relevant, always included	<p>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. From</p>

		<p>2017 to 2020, significant progress was 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 will be installed as mobile switchgear units in the Canary Islands. The development of this project is considered a priority for the Company (through a managerial objective in 2018 and a high level objective in 2020). Since 2019, in addition to continuing to develop this project, RE is 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.</p>
Legal	Relevant, always included	<p>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 has led 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.</p>
Market	Not relevant, explanation provided	<p>As REE, main society of the Group, is a regulated company (revenues are fixed by law and many activities of the company are ruled by mandatory procedures), it is not affected by factors such as market changes or consumers attitude in the same way as non-regulated companies. For this reason, market risks have been considered as not relevant.</p>
Reputation	Relevant, always included	<p>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</p>

		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 an 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 40°C 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 491.165 t of SF6 installed. 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

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)

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 EUR/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) or over already installed equipment (491 t SF6). These scenarios are combined with 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 years period (2021-2030)

The minimum value (38,000,000 EUR) 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 EUR) 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

3,635,000

Description of response and explanation of cost calculation

We respond and manage to this risk by carrying out the following activities:

- a) Establishing alliances with stakeholders (government, peers & suppliers) to identify risks & opportunities to be prepared for future requirements. RE participates in new regulation development processes (National & European), discussing and amending aspects that could have impacts on our business. E.g., in 2015 a "SF6 Voluntary Agreement 2015-2020" was signed by all actors involved in SF6 management (national level): REE, Ministry, manufacturers, electricity distribution & waste management companies. This is the main tool to discuss & manage possible changes in national regulation. Besides, RE is part of different Working Groups with other European TSOs, with the objective to share good practices and reach a common position regarding SF6. This common position will help to make contributions to new EU regulation proposals
- b) Working to reduce emissions. Achieving better performance to face any SF6-related

tax. Reduction targets & improvement actions are included in Climate Change Action Plan, which was updated in 2018 to introduce more ambitious emission reduction targets consistent with our global 2030 SBT (e.g. SF6: 20 % in 2020 and 25 % in 2030 compared to 2015). For example, we implemented a replacement plan for old SF6 equipment by lower leakage rate equipment. The cumulative results of the actions carried out since 2015 to 2020 have helped to avoid a total of 135,647 t CO₂ eq. per year.

c) Investing in R&D activities: working at national & international level, with companies in the sector and suppliers to improve management procedures and support any new technology.

The main costs of managing the risks are mainly associated with:

- o Equipment renewal estimated in 3 Million Euros /year.
- o Leak reparation: 225,000 Euros /year, development of leakage repair methodology 36,000 Euros/year
- o Training: 178,000 Euros/year
- o R&D: 196,000 Euros per year
- o Human resources costs (management, relationship with regulators etc.) have not been considered

Total annual management costs are approximately= 3,000,000+ 225,000 +36,000 +178,000+196,000= 3,635,000 Euros per 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

Increased severity and frequency of extreme weather events such as cyclones and floods

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 failure in a transmission line can affect grid availability (put a line out of operation) and sometimes energy supply. 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 (2021-2031). The minimum value of the threshold is = num. of events per year * num. of years considered*annual costs= $3.6 \cdot 10 \cdot (66,000 + 300,000 + 1750,000) = 76,176,000$ €. 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 Euros/year)
- ii) Projects to reinforce vulnerable lines (13.7 Million Euros /year) Contingency plans (to be able to respond adequately to a disaster, crisis or emergency, such as extreme winds):
- iii) Improvement of decision-making processes and response procedures. Emergency pylons to face critical situation- Emergency plans for Balearic and Canary Islands (0.9 Million Euros/year)

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 Euros 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
Increased likelihood and severity of wildfires

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 fire 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 (affection to energy supply).

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 Red Eléctrica'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.

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 10,0000€.

-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 (250000- 750000€)

-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 period 2021-2031, 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 (2021-2031)

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

15,500,000

Description of response and explanation of cost calculation

The main way to reduce this is by improving our work in vegetation management, which means an increase in the company's OPEX. In that regard, some key actions are undertaken:

- Cutting & pruning program (to maintain safety corridors of electricity lines) – 15 Million Euros /year

- Establishing forest management procedures (for fire prevention) – No relevant costs identified

- R & D projects. e.g. VEGETA project: the objective has been the definition of an algorithm, that based on the analysis of different variables of the vegetation, allows

falling works to be more efficient. The project includes making detail inventories of vegetation in the safety corridors and identifying precisely compatible and non-compatible species. PRODINT Project: Development of fire detection devices, that can be installed in the lines based in “internet of the things “concept.: 240,000 Euros/year
Other relevant actions are:

- Cooperation agreements with public administrations responsible for forestry management (10 agreements in force). They require the carrying out of various actions aimed at the prevention and fight against forest fires (implementing prevention measures, training programs for environmental agents and State Security Forces, and awareness campaigns). 260,000 Euros/year
- Emergency plans. (No relevant costs identified)
- 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)
- Insurance policies. covering damages to the facilities, damages the environment 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 annual management costs are approximately = 15,000,000+ 240,000+260,000= 15.5Million Euros per year.

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)

1,800,000,000

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: 9,700 M€ = 6,000 M€ for the 2021-2026 period and 3,700

M€ for the period 2027-2030. 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, 6,000 / 6= 1,000 M€ are invested, in 2022 we would start being retributed at 1,000M€ x retribution fee (5.58%) and so on until 2031
- In 2022, another 1,000 M€ will be invested, from which we would start being retributed in 2023.

• Therefore, the calculation is as follows = $1,000 * 5.58\% * (1+2+3+4+5+6+7+8+9+10) = 3,069$ M€ (that corresponds to the total investment of 6,000M€ in 2021-2026 and retributed from 2022-2031).

- From 2026 to 2030, there is an annual investment of $3,700\text{M€}/4=925\text{M€}$ that generates profit from 2027-2031. Therefore = $925*5.58\% *(1+2+3+4)=516\text{M€}$.

Then OPERATION PROFIT= $3,069+516= 3,586$ M€,

Impact of depreciation (approx. 7%) of operation profit AFTER DEPRECIATION & AMORTISATION = $3,586*(100\%-7\%) =3,334.98$ M€

Impact of inflation and discount rate (approx. 28%) PRESENT VALUE of profit before taxes = $3,334.98*(100\%-28\%) = 2,401.19\text{M€}$

Taxes on company profits (25%): present value of PROFIT AFTER TAXES = $1,602*(100\%-25\%)= 1,201.50$ M€.

We have considered a rounded total for the provision of financial impact= TOTAL= 1,800 M€. (Maximum value of the opportunity).

Cost to realize opportunity

9,700,000,000

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 infrastructure planning. Then the planning department works to define the different infrastructures (mainly lines and substations) that could solve each of the current or future requirements. REE makes a proposal to the Spanish Ministry of Energy (Electricity transmission is a regulated activity in Spain. This means that energy planning is defined by the Spanish government. REE has the mandate for drafting the proposal) & also works and negotiates with regional and national authorities with the aim to develop the best planning to fulfil all the requirements. Once the Ministry approves the Energy planning, the development of the infrastructures included in it is mandatory for REE. At the moment the definition of a new Energy Planning (2021-2026) is taking place. All the works related to the definition of the infrastructure planning are part of the regulated activities of REE as Spanish TSO and there is a specific unit for managing these issues. Estimated cost to realize the opportunity: the figure provided corresponds to the total investment estimated over the ten years (2021-2030), which amounts to 9,700 Million EUR.

Human resources cost haven't been estimated as they are not material compared to the investment.

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 M€ 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%). This 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, $550/9\text{years} = 61.1 \text{ M€}$ are invested annually, in 2023 we would start being retributed at $61.1\text{M€} \times \text{retribution fee } (5,58\%)$ and so on until 2031 (we are considering a 10yrs period for the analysis)
- In 2023, another 61.1M€ will be invested, from which we would start being retributed in 2023.
- Therefore, the calculation is as follows $= 61.1 * 5,58\% * (1+2+3+4+5+6+7+8+9) = 153.45 \text{ M€}$ (that corresponds to the total investment of 550M€ in 2022-2030, retributed from 2023-2031).

b. Investment related to the development of new storage facilities in the Canary Islands.
- Storage investment (400M€). 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 $= 400 * 6.34\% * 4 = 101.44 \text{ Million €}$.

Then OPERATION PROFIT $= 153.45 + 101.44 = 254.89 \text{ Million €}$

Impact of depreciation (approx. 7%) of operation profit AFTER DEPRECIATION & AMORTISATION $= 254.89 * (100\% - 7\%) = 237.05 \text{ Million €}$

Impact of inflation and discount rate (approx. 28%) PRESENT VALUE of profit before taxes $= 237.05 * (100\% - 28\%) = 170.67 \text{ Million €}$

Taxes on company profits (25%): present value of PROFIT AFTER TAXES $= 170.67 * (100\% - 25\%) = 128.01 \text{ Million €}$.

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 (storage).

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 Euros for 2021-2030) and on the other hand the investments that correspond to the development of new storage infrastructures in the Canary Islands (400 Million Euros 2021-2030)

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)

500,000,000

Potential financial impact figure – maximum (currency)

786,000,000

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' time-frame.

- Maximum value: The increased RE's market capitalization for the period 2021-2030 is calculated as follows = $(0.84\% * \text{Share price (reference 2019)} * \text{Number of shares traded (reference 2019)} * \text{number of years}) = (0.84\%) * 17.3 * 541,080,000 * 10 = 786 \text{ M€}$. This value corresponds to the 50% percentile.

- Minimum value has been calculated as the percentile 1% = 500 M€. 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 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 Euros/year
- iii. Other Costs 75,000 Eur /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 EUR

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Is your organization's low-carbon transition plan a scheduled resolution item at Annual General Meetings (AGMs)?

	Is your low-carbon transition plan a scheduled resolution item at AGMs?	Comment
Row 1	No, but we intend it to become a scheduled resolution item within the next two years	

C3.2

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

Yes, qualitative and quantitative

C3.2a

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

Climate-related scenarios and models applied	Details
<p>IEA B2DS Nationally determined contributions (NDCs) Other, please specify NZE2050</p>	<p>i) How the selected scenario was identified: Due to the activity carried out by REE, main society of RE Group, as transmission and electricity system operator and the fact that it’s a regulated company, climate scenarios are decisive when defining RE’s strategy. The primary climate related scenario on which Strategic Plan 2018-2022 (and updated plan 2021-2025, published in 2021) was drawn upon is the "target scenario" for the Spanish National Energy and Climate Plan (PNIEC), which is in line with the NDCs, aiming to achieve EU’s climate objectives.</p> <p>The scenario has been chosen because it includes specific information and projections of the main variables affecting RE business. Main inputs: electrification of the economy (% of electricity/total energy), electricity demand, integration of renewables (renewable energy goals), energy intensity goals (efficiency) & projections of energy generation mix. RE assumes all the projections & methods included in the PNIEC, mainly because RE has worked with the Spanish government in its definition.</p> <p>Please note that " PNIEC target Scenario" and European NDCs are aligned with B2DS Scenario, as it is justified in the 2020 NDC submission: "The IPCC Special Report on global warming of 1.5°C shows that pathways limiting warming to 1.5°C typically achieve net zero greenhouse gas emissions at global level in the second half of this century. This enhanced NDC is in line with the EU's agreed objective of achieving a climate-neutral EU by 2050. The EU therefore considers the enhanced NDC to be a fair contribution towards the global temperature goal of the Paris Agreement." Taking this into consideration, "PNIEC target scenario", aimed at achieving carbon neutrality in 2050, would also correspond to NZE2050 scenario (IEA).</p> <p>ii) Time horizons considered, 2030 and beyond (2050), are closely linked to compliance with EU and national targets and regulation. These timeframes are relevant for the company because RE business Plan must be directly linked to the EU and national climate and energy policies. They are also aligned with our SBTs.</p> <p>iii) Areas of organization considered: all value chain has been considered in the scenario analysis: upstream (electricity generation and suppliers), downstream (electricity demand) and own operations (planning, construction, maintenance,</p>

	<p>financial area, procurement, insurance)</p> <p>iv) Main results from the scenario analysis:</p> <p>a. Definition of the Strategic Plan based on the evolution of the variables forecasted in the PNIEC scenario (% electrification, demand, % of renewables etc): 53% of the foresaw investments in the 2018-2022 Plan is allocated to energy transition in Spain, including renewable integration. The new plan (2021-2025), foresees investments of 3,300M€ for energy transition.</p> <p>b. Identification and categorization of risks and opp associated with climate change: according to TCFD recommendations, the scenario analysis has been considered as a basis for risk&opp assessment. PNIEC scenario has been considered to identify & assess transition risks and opportunities. The results of the analysis have directly influenced RE strategy, since some decisions (implementation of different actions and adaptation measures) have been made as a consequence of the assessment.</p> <p>v) Case studies: (a) The main opportunity identified is the “Development of the existing network to make the energy transition possible”. Influence on the business: Part of this opportunity has been already materialized in the 2018-2022 Strategic Plan (3180 M€ are earmarked to infrastructures for energy transition, 590 M€ of them for renewable integration) & in the 2021-2025 Strategic Plan (3,300 M€ earmarked to infrastructures for energy transition) (b) The main risks under this scenario is: “Changes in SF6 regulation”. This has influenced our strategy in terms of R&D activities regarding SF6 replacement technologies and the investment of 3.6 M€ per year in SF6 management measures.</p>
RCP 4.5	<p>RE has worked on the implementation of the recommendations of the Task Force for Climate Disclosure (TCFD). In this framework, and according to the recommendations, the Company has conducted an scenario analysis, which have been considered as a basis to identify and categorize the risk and opportunities associated with climate change (physical and transition-related).</p> <p>i) We consider IPCC scenarios as the best reference to assess physical risks and opportunities. RCP 4.5 is one of the scenarios chosen for the analysis because it reflects an intermediate situation, with relevant changes in the climatic variables but not extreme ones. 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 0°; Rainfall and maximum rainfall in 5 days; Irradiation and Extreme winds. We have assumed that these climatic variables evolve according to the 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.</p> <p>ii) Time horizons of 2030 and beyond (2070-2100), in line with the IPCC timeframes and our SBTs have been considered. H2030 is important for the company to align physical risks & opportunities assessment with transition risk & opportunities assessment. H270-2100 is necessary in order to consider the lifetime of RE’s assets, as the infrastructures planned to fulfil 2030/2050 goals</p>

	<p>should be still operating by the end of the century (electric infrastructures have a lifetime of 30-40 years).</p> <p>iii) Areas of organization considered: all value chain has been considered in the scenario analysis: upstream (electricity generation and suppliers), downstream (electricity demand) and own operations (planning, construction, maintenance, financial area, procurement, insurance)</p> <p>v) The results of the scenario analysis have been considered as a basis to identify and categorize physical risks and opportunities associated with climate change. According to the analysis, changes that could affect RE facilities and activities are expected in some climatic variables (the most relevant are related to the increased frequency of extreme winds and increased temperatures). These changes have been considered in risks and opportunities assessment. Therefore, the scenario analysis directly influence RE's strategy since risk and opportunities assessment conclusions affects different business decisions (definition of measures, R&D projects, targets etc).</p> <p>v) Case study: The main physical risk identified by RE is the impact on outdoor facilities (electricity lines) due to extreme events (wind). The mitigation of our exposure to this risk is a central focus of our strategy 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 M Euros/year), we invested in new projects to reinforce vulnerable lines (13.7 M Euros /year) Contingency plans (to be able to respond adequately to a disaster, crisis or emergency, such us extreme winds), etc. All the actions taken amounts to 14.7 M€ per year.</p> <p>The same risk has been also identified for the RCP 8.5. According to the financial impact analysis performed by RE, the impact in both scenarios is the same in the 2021-2031 framework and significant differences are expected from 2070 onwards (when the impact of physical risks is expected to be higher).</p>
RCP 8.5	<p>RE has worked on the implementation of the recommendations of the Task Force for Climate Disclosure (TCFD). In this framework and according to the recommendations, the Company has conducted an scenario analysis which have been considered as a basis to identify and categorize the risk and opportunities associated with climate change (physical and transition-related).</p> <p>i) 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 increase and changes in the climatic variables (extreme scenario). 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 0°; Rainfall and maximum rainfall in 5 days; Irradiation and Extreme winds. We have assumed that these climatic variables evolve according to the projections indicated by the Spanish State Meteorological</p>

	<p>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. RE's value chain has been considered in the scenario analysis.</p> <p>ii) Time horizons of 2030 and beyond (2070-2100), in line with the IPCC timeframes and our SBTs have been considered. H2030 is important for the company to align physical risks & opportunities assessment with transition risk & opportunities assessment. H270-2100 is necessary in order to consider the lifetime of RE's assets, as the infrastructures planned to fulfil 2030/2050 goals should be still operating by the end of the century (electric infrastructures have a lifetime of 30-40 years).</p> <p>iii) Areas of organization considered: all value chain has been considered in the scenario analysis: upstream (electricity generation and suppliers), downstream (electricity demand) and own operations (planning, construction, maintenance, financial area, procurement, insurance)</p> <p>v) The results of the scenario analysis have been considered as a basis to identify and categorize physical risks and opportunities associated with climate change. According to the analysis, changes that could affect RE facilities and activities are expected in some climatic variables (the most relevant are related to the increased frequency of extreme winds and increased temperatures). These changes have been considered in risks and opportunities assessment. Therefore, the scenario analysis directly influence RE's strategy since risk and opportunities assessment conclusions affects different business decisions (definition of measures, R&D projects, targets etc).</p> <p>v) Case study: The main physical risk identified by RE is the impact on outdoor facilities (electricity lines) due to extreme events (wind). The mitigation of our exposure to this risk is a central focus of our strategy 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 M Euros/year), we invested in new projects to reinforce vulnerable lines (13.7 M Euros /year) Contingency plans (to be able to respond adequately to a disaster, crisis or emergency, such us extreme winds), etc. All the actions taken amounts to 14.7 M€ per year.</p> <p>The same risk has been also identified for the RCP 4.5. According to the financial impact analysis performed by RE, the impact in both scenarios is the same in the 2021-2031 framework and significant differences are expected from 2070 onwards (when the impact of physical risks is expected to be higher).</p>
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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	<p>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.</p> <p>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 (2031) is expected to increase our revenue 1,800 Million EUR over a 10-year period. Part of this opportunity has been already materialised in the 2018-2022 Strategic Plan, which included 3180 Million € for energy transition in</p>

		Spain. (The updated Strategic Plan 2021-2025, published in 2021, also includes 3,300 M€ for energy transition in Spain).
Supply chain and/or value chain	Yes	<p>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 weather events. This risk has already materialized in 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 M Euros/year), we invested in new projects to reinforce vulnerable lines (13.7 M Euros /year) Contingency plans (to be able to respond adequately to a disaster, crisis or emergency, such as extreme winds), etc. All the actions taken amounts to 14.7 M€ per year.</p> <p>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 Euros/year.</p>
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 has taken the substantial strategic decision to invest in two mobile GIS substations, SF6-free. This is considered a R&D project, as the

		<p>technology used is completely new and experience is needed. The total investment amounts to 1,960,000 Euros. 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 installation of a flywheel in Lanzarote, Installation of a large-scale energy storage battery (ALMACENA project), Implementation of the PRICE project for the deployment of demand-side management measures, 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 budgeted in the last 4 years (EUR 3 Million over EUR 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.</p>
Operations	Yes	<p>RE has also identified as one of the most important risks the "increased legal requirements associated with the use of fluorinated gases (SF₆)" 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 an 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 20% reduction of SF6 emissions compared to 2015 in 2020 (considering the emission budget: maximum emissions for 2016 to 2020) and a 25% reduction compared to 2015 in 2030.</p> <p>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 0.2% on gas installed for 2020</p>

		(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 (3 Million EUR/year) & repairing leakages (225.000 EUR/year).
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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	<p>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.</p> <p>Red Electrica's contribution will be key in the energy transition of Spain and therefore 53% of the investments of the 2018-2022 Strategic Plan (i.e. medium term) are aimed at making this transition possible. The updated Strategic Plan 2021-2025, published in 2021, also includes 3,300 M EUR investment for energy transition). Therefore, capital expenditures are factored into our financial planning. For example, our plan includes making a significant investment to develop a robust, smart and increasingly interconnected transition grid. It is necessary to respond to the new challenges that require new investments in the development of more robust, better interconnected and, above all, smarter and more modern grids/networks.</p> <p>In terms of direct & indirect operating costs, two main impacts are considered. Firstly, RE has developed measures to reduce the effects of</p>

	<p>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.</p> <p>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, RE is included in the DJSI World Index and in the DJSI Europe 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 ratings assessment. Also, it has again achieved ISS ESG Prime status and Sustainalytics, leading global provider of ESG gives it a 90 out of 100. 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.</p> <p>Besides, in 2019, the group approved its Green Finance Framework, with the first issue of green bonds in January 2020 (700 million euro).</p>
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C3.4a

(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

REE, main society of RE Group, as the transmission agent and operator of the Spanish electricity system, is a key player in the transition to a low carbon energy model .Decarbonisation of the economy is one of the five sustainability priorities for RE who is

engaged “to 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 energies, through a robust and better interconnected grid and the development and operation of energy storage systems”. • Aware of its important role, the Company has declared a voluntary commitment in the fight against climate change, approved by the CEO. The commitment is set out in a Climate Change Action Plan 2015-2020-2030, which was reviewed in 2018 with the purpose of introducing more ambitious targets, consistent with the global emissions reduction target for 2030 approved by the SBTi. The plan is divided into five main courses of action: A. Contribution to a more sustainable energy model: Contribution to achieving the European 2020 and 2030 targets: A.1 Develop the infrastructure that enables the reduction of the CO₂ emissions associated to the whole electricity system. A.2 Achieve the maximum integration of renewable energy into the system, maximising its use. A.3 Contribute to greater efficiency of the electricity system by improving knowledge regarding the electricity demand and the development of new measures for its management. A.4 Prepare the operation of the electricity system to undertake the efficient penetration of the electric vehicle. A.5 Develop studies and projects to reduce losses in the transmission grid and improve its efficiency. KPIs: Savings in emissions associated with the commissioning of facilities included in the electricity planning (t of CO₂ e) Renewable energy share in demand coverage (%) MW of Demand Response Resource Energy supplied for the electric vehicle connected to CECOVEL (MWh) B. Reduction of the Carbon Footprint. Overall targets reviewed in 2018: reduction of 10% of total scope1+2 emissions by 2020; reduction of 30% of total scope 1+2 emissions by 2030. B.1 Improve the carbon footprint calculation method. B.2 Reduce SF₆ emissions. B.3 Reduce electricity consumption and emissions. B.4 Reduce emissions associated with REE vehicles. B.5 Reduce business travel and employee commuting emissions. B.6 Reduce emissions associated with the supply chain and involve suppliers in REE's commitments. B.7 Work towards reducing other emissions. B.8 Offset part of the emissions. B.9 Move forward in the inclusion of criteria regarding efficiency and the saving of materials in the design of facilities and infrastructure. B.10 Continue to make progress in the emission management models. KPIs: Scope 1; Scope 2; Scope 3 (t of CO₂ e); Electricity consumption. C. Positioning, communication and raising awareness: participation in initiatives related to climate change. Involve stakeholders and engage them in REE's commitment on climate change. C.1 Raise awareness of and communicate REE's stance and commitment on climate change and promote energy efficiency among stakeholders. C.2 Collaborate with the public administration on climate change matters. C.3 Increase transparency and improve the information provided to investors regarding climate change matters. D. Adaptation to climate change: Define appropriate adaptation plans for the Company's activities to reduce the potential risks arising from the effects of climate change. Identify the opportunities that climate change and the present action plan offer the Company. D.1 Transmission grid facilities: "Study on the management of new climate risks over the life cycle of the transmission grid infrastructure". D.2 System operation: adaptation study to include activities related to system operation. D.3 Extend the risk analysis and climate change adaptation mechanisms to encompass the entirety of the Group. D.4 Opportunities: broaden the identification and consideration of opportunities associated with climate change. Red Eléctrica Group is currently working to update its climate-related targets and its action plan in order to increase its ambition in the fight against climate change.

•Strategic Plan: RE business plan and Climate Change Action Plan are completely aligned: due to the characteristics of the company, energy and climate change policies are the main drivers to define business strategy. In particular, European policy framework for climate and energy has been the main reference for the definition of the last business plans (2018-2022 & the new one 2021-2025). One of the cornerstones in the Strategic Plan (2018-2022 & the updated one 2021-2025) is “Making possible energy transition in Spain”, based in the following pillars: Integrating renewables; more interconnected grid; user in the centre (active consumer); electricity system platform, digitalization and smart grids; storage and promotion of electricity mobility. In the 2018-2022 Plan, the 53% of the total planned investment was dedicated to Spanish energy transition, 25.5% to integration of renewable energy (the rest to technology, digitalization and storage). In the updated Plan, 3,300 Million Euros have been allocated to achieve energy transition in Spain.

C4. Targets and performance

C4.1

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

Both absolute and intensity targets

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

2017

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based)

Base year

2015

Covered emissions in base year (metric tons CO₂e)

1,176,028

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2030

Targeted reduction from base year (%)

30

Covered emissions in target year (metric tons CO₂e) [auto-calculated]

823,219.6

Covered emissions in reporting year (metric tons CO₂e)

626,381

% of target achieved [auto-calculated]

155.7919255891

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

2°C aligned

Please explain (including target coverage)

In 2018, the SBTi approved RE's targets in accordance to the SBTi criteria, ambition level 2DS. In order to achieve our SBTs, RE defined a roadmap for 2020 and 2030. RE's validated targets are intensity based. This target is equivalent to Int 1 (and lead to absolute reductions proved by SBT). General target 2030: Reduction of 30% of total Scope 1 and 2 emissions (compared to base year 2015). This target includes transmission losses (95% of Scope 1+Scope2 in base year). It is important to explain that REE (main society of RE Group), as the operator of the electricity system cannot make decisions regarding the main factors that affects energy losses and emissions associated to them. Losses mainly depend on the geographical location 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 (not REE). REE must comply with operational procedures defined by the regulator (mandatory procedures) and according to them, it is not possible to operate the system with an energy losses reduction criteria. For this reason, it is very difficult for RE to establish targets to reduce emissions from energy losses. Nevertheless, RE has considered losses in the general targets, in order to be in accordance with SBTi criteria and to stress its commitment and ambition towards climate change and energy transition. RE has a crucial role in renewable energy integration and RE's activity is needed to increase the % of renewable energy in the energy mix. The more renewable energy is integrated, the emission factor (tCO₂e) is lower and emissions decrease. In 2020, the emission factor has decreased significantly due to the integration of renewable energy, but also due to the reduction of energy generated by coal, mainly associated with the acceleration of certain policies related to the energy transition in

Spain. RE has already committed to review reduction targets to increase their ambition and align them to the 1.5C scenario. The new targets will be published at the end of 2021.

Target reference number

Abs 2

Year target was set

2017

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based)

Base year

2015

Covered emissions in base year (metric tons CO₂e)

1,176,028

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2020

Targeted reduction from base year (%)

10

Covered emissions in target year (metric tons CO₂e) [auto-calculated]

1,058,425.2

Covered emissions in reporting year (metric tons CO₂e)

626,381

% of target achieved [auto-calculated]

467.3757767672

Target status in reporting year

Achieved

Is this a science-based target?

No, but we are reporting another target that is science-based

Target ambition

Please explain (including target coverage)

In 2018, the SBTi approved RE's targets in accordance to the SBTi criteria, ambition 2DS. In order to achieve our SBTs, RE defined a roadmap for 2020 and 2030. RE's validated targets are intensity based, although they are accompanied by absolute reductions: Int 1 (approved by SBT). Although our SBTs are long term objectives (2030), RE also established an interim milestone for 2020: Reduction of 10% of total Scope 1 and 2 emissions (compared to base year 2015). This target includes transmission losses (95% of Scope 1+Scope2 in base year). It is important to explain that REE (main society of RE Group), as the operator of the electricity system cannot make decisions regarding the main factors that affects energy losses. Losses mainly depend on the geographical location 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 (not REE). REE must comply with operational procedures defined by the regulator (mandatory procedures) and according to them, it is not possible to operate the system with an energy losses reduction criteria. For this reason, it is very difficult for RE to establish targets to reduce emissions from energy losses. Nevertheless, RE has considered losses in the general targets, in order to be in accordance with SBTi criteria and to stress its commitment and ambition towards climate change and energy transition. RE has a crucial role in renewable energy integration and RE's activity is needed to increase the % of renewable energy in the energy mix.

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Year target was set

2017

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based)

Intensity metric

Metric tons CO2e per megawatt hour (MWh)

Base year

2015

Intensity figure in base year (metric tons CO2e per unit of activity)

0.0045

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure

100

Target year

2030

Targeted reduction from base year (%)

40

Intensity figure in target year (metric tons CO₂e per unit of activity) [auto-calculated]

0.0027

% change anticipated in absolute Scope 1+2 emissions

30

% change anticipated in absolute Scope 3 emissions

0

Intensity figure in reporting year (metric tons CO₂e per unit of activity)

0.0025

% of target achieved [auto-calculated]

111.1111111111

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

2°C aligned

Please explain (including target coverage)

In 2018, the Company presented its overall emissions reduction target which was approved by the Science Based Targets initiative (SBTi). Red Eléctrica undertakes to reduce its Scope 1 and 2 emissions by 40 % per MWh transported by 2030 compared to 2015 figures. This relative target translates into a commitment to reduce absolute Scope 1 and 2 emissions by 30 % for the year 2030 with respect to 2015, having approved a previous emissions reduction target of 10 % for 2020 with respect to that same year. RE 2030 target includes transmission losses (95% of Scope 1+Scope2 in base year). It is important to explain that REE (main society of RE Group), as the operator of the electricity system cannot make decisions regarding the main factors that affects energy losses.

Losses mainly depend on the geographical location 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 (not REE). REE must comply with operational procedures defined by the regulator (mandatory procedures) and according to them, it is not possible to operate the system with an energy losses reduction criteria. For this reason, it is very difficult for RE to establish targets to reduce emissions from energy losses. Nevertheless, RE has considered losses in the general targets, in order to be in accordance with SBTi criteria and to stress its commitment and ambition towards climate change and energy transition. RE has a crucial role in renewable energy integration and REE's activity is needed to increase the % of renewable energy in the energy mix. The more renewable energy is integrated, the emission factor (tCO₂eq) is lower and emissions decrease.

In 2020, the emission factor has decreased significantly due to the integration of renewable energy, but also due to the reduction of energy generated by coal, mainly associated with the acceleration of certain policies related to the energy transition in Spain. RE has already committed to review reduction targets to increase their ambition and align them to the 1.5C scenario. The new targets will be published at the end of 2021.

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

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: absolute or intensity

Absolute

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)

Percentage

Target denominator (intensity targets only)

Base year

2015

Figure or percentage in base year

0

Target year

2020

Figure or percentage in target year

85

Figure or percentage in reporting year

88.72

% of target achieved [auto-calculated]

104.3764705882

Target status in reporting year

Achieved

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 and Abs 2.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

Target 2020: more than 85% of electricity consumption must be renewable. 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.

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

12,508.99

% of target achieved [auto-calculated]

75.4645529696

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 and Abs 2

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

Target 2030: Reduction of 30% of electricity consumption in work centers. Includes every working centre in Spain (except 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 soon.)

Target reference number

Oth 2

Year target was set

2017

Target coverage

Company-wide

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

2020

Figure or percentage in target year

14,552.7

Figure or percentage in reporting year

12,508.99

% of target achieved [auto-calculated]

226.3889919604

Target status in reporting year

Achieved

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 and Abs 2

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

Target 2020: Reduction of 10% of electricity consumption in work centres (includes every working centre).

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	15	
To be implemented*	3	480,728
Implementation commenced*	5	731,568
Implemented*	6	3,176.53
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)

26.3

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

115

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

494,575

Payback period

>25 years

Estimated lifetime of the initiative

21-30 years

Comment

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

Initiative category & Initiative type

Energy efficiency in buildings

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

1,236.23

Scope(s)

Scope 2 (location-based)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

794,002

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

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)

Scope 2 (location-based)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

376

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 are no specific monetary cost linked to this activity.

Initiative category & Initiative type

Low-carbon energy consumption

Other, please specify

Renewable energy supply

Estimated annual CO2e savings (metric tonnes CO2e)

1,880

Scope(s)

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 not relevant monetary costs or savings associated to this activity.

Initiative category & Initiative type

Energy efficiency in buildings
Heating, Ventilation and Air Conditioning (HVAC)

Estimated annual CO2e savings (metric tonnes CO2e)

1.3

Scope(s)

Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

3,894

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

80,000

Payback period

16-20 years

Estimated lifetime of the initiative

16-20 years

Comment

Initiative category & Initiative type

Transportation
 Other, please specify
 Route optimization of internal logistics

Estimated annual CO2e savings (metric tonnes CO2e)

32.6

Scope(s)

Scope 3

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

3-5 years

Comment

Reduction of emissions due to improvements in the delivery processes of equipment and materials (internal logistics)
 There are not relevant monetary costs or savings associated 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 or do they enable a third party to avoid GHG emissions?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Company-wide

Description of product/Group of products

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. RE makes possible to integrate renewable energy mainly by: -(a) Building and maintaining infrastructures (lines and substations), that are essential to incorporate renewable energy into the electricity system – (b) integrating the mayor quantity of renewable

energy as possible into the system. (RE has created a special control center for this purpose) –(c) carrying out many activities related to demand management, which are very important to increase the efficiency of the system, which means a reduction in CO2 emissions.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

The EU Taxonomy for environmentally sustainable economic activities

% revenue from low carbon product(s) in the reporting year

83.7

Comment

REE activities (REE is the mayor society of RE Group) are aligned with the EU Taxonomy: aligned with the applicable Technical Screening Criteria (“TSC”), with the Do No Significant Harm Criteria and with the minimum safeguards. This alignment has been validated in 2021 through a Second-party opinion.

According to this, 100% of REE’s revenues come from low-carbon products. REE is a regulated company, whose remuneration is set in accordance with its regulated asset base. REE is remunerated by all the infrastructures in service.

In the reporting year, REE revenues represented 83.7% of the total revenues of RE Group.

Estimation of emissions avoided:

REE activities are necessary to integrate renewable. In order 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: 62,048,604 t CO2e. As the real emissions from electricity generation in 2020 have been: 34,138,513 t CO2e, the emission avoided are 27,910,091 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 (1,426,538 MWh). The emissions of this energy are calculated using the emission factor that corresponds to the peninsular system: 0,123 t CO2e/MWh. If the interconnection didn’t exist, this energy would be produced by combined cycle power plants (gas): emission factor 0,37 t CO2e. So, emissions saved are: 155,493 t CO2e.

Total savings: 27,910,091+ 155,493=28,065,584 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. (249,412 GWh).

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1, 2015

Base year end

December 31, 2015

Base year emissions (metric tons CO₂e)

34,797

Comment

Scope 2 (location-based)

Base year start

January 1, 2015

Base year end

December 31, 2015

Base year emissions (metric tons CO₂e)

Comment

Scope 2 (market-based)

Base year start

January 1, 2015

Base year end

December 31, 2015

Base year emissions (metric tons CO₂e)

1,141,232

Comment

C5.2

(C5.2) 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

C5.2a

(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

For the emission sources listed below, RE has developed its own calculation methodology based on the GHG Protocol and the Spanish Climate Change Office methodology:

- **SF6 emissions:** RE has implemented a calculation process based on direct measurements of real SF6 leakage data that are obtained from direct measurements of the gas used to refill the equipment and the gas recovered from the equipment in maintenance works. Emissions resulting from accidents and emissions related to the end of life of equipment are also taken into account.

- **Emissions from electricity consumption** are calculated using the emission factor applicable to each case (market based): a) For electricity supplied by distribution companies: contract information or information supplied by Environmental Ministry (Spanish Climate Change Office) for each company. b) For electricity directly consumed from the transmission grid RE uses its own emission factor according to the Spanish generation mix. This factor is calculated every year by REE (REE is the operator of the Spanish electricity system). c) For electricity consumed in Latin America, IEA country factors are used when there is no direct information from suppliers or national authorities. - **Emissions from electricity losses:** For activities in Spain, RE uses its own emission factors. For activities in Latin America, factors provided by national authorities or IEA country factors are used. .A summary describing the complete methodology used is available in REE website:

<http://www.ree.es/en/sustainability/decarbonisation-of-the-economy/carbon-footprint>

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)

25,557

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 chapter are all specifically calculated using the market-based method.

C6.3

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

Reporting year

Scope 2, location-based

602,705

Scope 2, market-based (if applicable)

600,824

Comment

Please note that Scope 2 includes emissions due to electricity and emissions associated to transmission grid losses. Emissions due to grid losses are not associated to "purchased and consumed electricity".

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

Metric tonnes CO₂e

202,819

Emissions calculation methodology

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 collect 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.

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

7

Please explain

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 inconsistency 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

Metric tonnes CO₂e

162,834

Emissions calculation methodology

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 collect 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 it is used instead the CEDA emission factor.

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

12

Please explain

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 inconsistency 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 2020 is much lower that the % in 2019, 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

Metric tonnes CO₂e

709

Emissions calculation methodology

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).

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

100

Please explain

These emissions represent less than 0.2% of total Scope 3 emissions, so they are considered as NOT RELEVANT

Upstream transportation and distribution

Evaluation status

Not relevant, calculated

Metric tonnes CO₂e

1,178

Emissions calculation methodology

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 logistics service for RE.

The logistics 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).

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

34.7

Please explain

These emissions represent only 0.3% of total Scope 3 emissions, so they are considered as NOT RELEVANT

Waste generated in operations

Evaluation status

Not relevant, calculated

Metric tonnes CO₂e

709

Emissions calculation methodology

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.

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

100

Please explain

Information about the amount of waste (kg) and treatment method is obtained from the suppliers. These emissions represent 0.06% of total Scope 3 emissions, so they are considered as NOT RELEVANT.

Business travel

Evaluation status

Not relevant, calculated

Metric tonnes CO₂e

1,178

Emissions calculation methodology

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. 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 2020.

b) Rental vehicle: calculations are based on the number of kilometres travelled, provided by car rental suppliers. Emission factor: DEFRA 2020

c) Taxis: calculation based on the number of Kilometers travelled by taxi. Emission

factor: DEFRA 2020. In Spain the company hired to carry out this service calculates the emissions with its own methodology.

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

99.9

Please explain

All the data is obtained directly from the travel agency in charge of business travel in RE or directly from corporate tools (SAP): Trips by plane: The travel agency provides the trip data, ticket type and number of routes. Emission factor is provided by ICAO (International Civil Aviation Organization). Trips by train: 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. Emission factor: Published by Renfe. AVE: Renfe Sustainability (2011); Long distance: Renfe, Environmental Report (2007). Renfe is the railway company in Spain. Trips by car: number of kilometres is provided by car rental suppliers. Taxis: most emissions are provided by the supplier (only emissions in Latin America are calculated from internal registers) These emissions represent less than 0.2% of total Scope 3 emissions, so they are considered as NOT RELEVANT. In 2020, due to the COVID crisis, these emissions have been very low. Nevertheless, note that on previous years they were also considered as NOT RELEVANT.

Employee commuting

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

1,114

Emissions calculation methodology

Emissions 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.

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

65

Please explain

These emissions represent less than 0.3% of total Scope 3 emissions, so they are considered as NOT RELEVANT.

In 2020, due to the COVID crisis, these emissions have been very low, Nevertheless, note that the previous years they were also considered as NOT RELEVANT.

Upstream leased assets

Evaluation status

Not relevant, calculated

Metric tonnes CO₂e

184

Emissions calculation methodology

Electricity consumption is estimated from leased area data, using benchmark information: CIBSE benchmarks on energy consumption per sq. meter (2000) to estimate consumption. Emissions are then calculated by applying the relevant emission factor from the Spanish Climate Change Office (OECC, 2019)

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 six offices, emissions have been estimated.

These emissions represent 0.05% of total Scope 3 emissions, so they are considered as NOT RELEVANT.

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

Metric tonnes CO₂e

0

Emissions calculation methodology

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 2020, all primary data has been used, i.e. Electricity consumption and market based information. All the energy used has been renewable.

In case primary data is not available, electricity consumption is estimated from leased area data (using benchmark information: CIBSE (2000). 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.

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

100

Please explain

In 2020, primary data has been used. (Electricity consumption and market based information- the energy used has been renewable).

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Not applicable. RE does not have any franchises.

Investments

Evaluation status

Not relevant, calculated

Metric tonnes CO₂e

10,622

Emissions calculation methodology

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.

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

0

Please explain

These emissions only represent 2.8% of total Scope 3 emissions. So, they are considered as NOT RELEVANT.

Other (upstream)

Evaluation status

Please explain

Other (downstream)

Evaluation status

Please explain

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

0.000315

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

626,381

Metric denominator

unit total revenue

Metric denominator: Unit total

1,985,750,000

Scope 2 figure used

Market-based

% change from previous year

23.98

Direction of change

Decreased

Reason for change

The main reason for change has been the decrease of Scope1+2 emissions (-22%), while revenues have slightly increased (+2.35%)

Part of this emissions reduction has been motivated by emission reduction activities (around 5.3%): mainly, renewable energy integration into the electricity system, that has been possible thanks to REE activity. The integration of renewable energy involves a reduction in the average Spanish emission factor, which leads to a decrease in the emissions due to energy losses.

Other reason that has been relevant to reduce the average emission factor, has been the reduction in the share of coal-fired power stations in the energy mix.

The average Spanish emission factor reduction (0.165 in 2019 and 0.123 t CO₂e/MWh in 2020), reflects both facts.

Intensity figure

2.46

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

626,381

Metric denominator

megawatt hour transmitted (MWh)

Metric denominator: Unit total

254,339.85

Scope 2 figure used

Market-based

% change from previous year

19.2

Direction of change

Decreased

Reason for change

The main reason for change has been the decrease of Scope1+2 emissions (-22%).

Also, there has been a decrease in energy transmitted (-3.7%).

Part of this emissions reduction has been motivated by emission reduction activities (around 5.3%): mainly, renewable energy integration into the electricity system, that has been possible thanks to REE activity. The integration of renewable energy involves a reduction in the average Spanish emission factor, which leads to a decrease in the emissions due to energy losses.

Other reason that has been relevant to reduce the average emission factor, has been the reduction in the share of coal-fired power stations in the energy mix.

The average Spanish emission factor reduction (0.165 in 2019 and 0.123 t CO₂e/MWh in 2020), reflects both facts.

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	2,158	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	22,214	IPCC Fourth Assessment Report (AR4 - 100 year) D ₁
HFCs	1,185	IPCC Fourth Assessment Report (AR4 - 100 year)

D₁GWP 22800

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	9,074.3	23,399	Fugitive emissions: - SF6 emissions:22,214 tCO2e - Air conditioning emissions (HFCs): 1,185 tCO2e (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)	2,158	0	0	2,158	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	24,672
Peru	105
Chile	65
Brazil	715

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)	2,445
REINTEL (Telecommunications in Spain)	25
Transmission activities in Latin América	170
HISPASAT (Satellite infrastructure operator)	917

C7.3c

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

Activity	Scope 1 emissions (metric tons CO ₂ e)
Fugitive emissions from electrical equipment	22,214
Fugitive emissions from air conditioning equipment	1,185
Mobile combustion	1,529
Stationary combustion (generating sets for emergency situations + heating)	629

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 CO ₂ e	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 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?

Decreased

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	0		0	
Other emissions reduction activities	43,056.4	Decreased	5.35	<p>Decrease due to emission reduction activities:</p> <p>(a) Energy efficiency measures in work centres (isolation, climatization, lighting, energy management system, renewal of PCs, awareness campaigns): 279 t CO2e .</p> <p>(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.) To estimate the decrease in emissions we have calculated the decrease linked to energy demand reduction (see change in output: - 53,449.74 tCO2e); the decrease linked to the availability of water for hydropower generation (- 27,530.37 tCO2e) and the decrease due to the reduction in the share of coal-fired power stations in the energy mix (see other row: -65,029.54 tCO2e). Total decrease on transmission losses emissions has been: 188,787 tCO2eq (difference between 2020 and 2019 emissions in SPAIN, Latin America transmission losses have not been considered in this</p>

				<p>calculation).</p> <p>Emissions reduced due to renewable energy integration into the system : $188,787-53,449.74-27,530.37-65,029.54=42,777.4$ tCO₂e</p> <p>Renewable wind and solar energy depend on REE activities but also on physical conditions. In 2020, 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</p> <p>Total decrease: $(a)+(b)=279+42,777.4=43,056.4$tCO₂e.</p> <p>Total emission value percentage=$43,056.4/805,065*100=5.35\%$. Please note that 805,065 tCO₂e figure corresponds to 2019 Scope1+2 emissions.</p>
Divestments	0	No change	0	Not applicable
Acquisitions	1,068.02		0.13	<p>In October 2019, RE (Red Eléctrica Group) acquired HISPASAT, a satellite infrastructure operator. The emissions from Hispasat (activities in Spain and Brazil) have been calculated for 2020, following RE's methodology.</p> <p>Scope 1 emissions (air conditioning, fleet vehicles, generating sets and heating): 916.45 tCO₂ e</p> <p>Scope 2 emissions (electricity consumption): 151.57 tCO₂e.</p> <p>Scope 1+2 emissions: $916.45 +151.57=1,068.02$ tCO₂eq.</p> <p>Although Hispasat was acquired in October 2019, emissions were not included in 2019's inventory. So, the total increase due to acquisitions in 2020 is 1,068.02 t CO₂e.</p> <p>Total emission value percentage=$1068.02/805,065*100=0.13\%$. Please note that 805,065 tCO₂e figure corresponds to 2019 Scope1+2 emissions</p>
Mergers	0	No change	0	Not applicable

Change in output	53,731.2		6.67	<p>Change in output:</p> <p>(a) The variation of electricity demand is a change in RE's output. Electricity demand (peninsular system+ Balearic Islands system +Canary Islands system) has decreased 14,720,852 MWh in 2020, (12,618,929 peninsular system+1,172,651 Balearic Islands+929,271.58 Canary Islands). The decline is mostly related to COVID crisis. To calculate emissions due to the decrease of energy demand, we have considered 2019 operational conditions for each of the systems: losing rates; 1.66 (peninsular system); 2.17 (Bal. Islands); 1.47 (Canary Islands) & emission factors 0.123 (peninsular system); 0.377 (Balearic Islands); 0.579 (Canary Islands) (tCO₂e/MWh) Resulting emissions: decrease: $(12,618,929 * 1.66 / 100 * 0.123) + (1,172,651 * 2.17 / 100 * 0.377) + (929,271.58 * 1.47 / 100 * 0.579) = 53,449.74 \text{ tCO}_2\text{e}$</p> <p>(b) Besides, the reduction of activities due to COVID crisis has led to a reduction of the use of fleet vehicles, and therefore to a reduction of these emissions.</p> <p>Emissions from fleet vehicles in 2019: 1,645.66 tCO₂e</p> <p>Emissions from fleet vehicles in 2020: 1,528.74 tCO₂e</p> <p>Emissions from fleet vehicles from acquisitions (Hispasat) & change of scope (activities in Latin América) in 2020: 164.53 tCO₂e (increase)</p> <p>Total decrease of emissions due to the reduction of activities (COVID 19) = $1,646.66 - 1,529.74 + 164.53 = 281.45 \text{ tCO}_2\text{e}$</p> <p>Total decrease (a)+(b) = $53,449.74 + 281.45 = 53,731.2 \text{ tCO}_2\text{e}$</p> <p>Total emission value percentage = $53,731.2 / 805,065 * 100 = 6.67\%$. Please note that 805,065 tCO₂e figure corresponds to 2019 Scope 1+2 emissions</p>
Change in methodology	116.58		0.01	<p>Methodology to calculate emissions from the use of diesel generating sets has been changed in 2020. The information provided until 2019 considered only the refuelling in the year indicated. The new methodology considers the total fuel consumption during the year.</p>

				<p>Emissions from generating sets in 2019: 228.89 tCO₂e</p> <p>Emissions from generating sets in 2020: 484.57 tCO₂e</p> <p>Emissions from generating sets from acquisitions (Hispasat) & change of scope (activities in Latin América) in 2020: 139 t CO₂ e (increase)</p> <p>Total increase of emissions due to the reduction of activities (COVID 19)=484.57-228.89-139.1= 116.58 tCO₂e</p> <p>Total emission value percentage= 116.58/805,065*100=0.01%. Please note that 805,065 tCO₂e figure corresponds to 2019 Scope1+2 emissions</p>
Change in boundary	8,471.3		1.05	<p>2020 inventory includes facilities that were not included in previous years (they were not considered as relevant)</p> <p>(a) Facilities in Latin America: Peru & Chile</p> <p>Scope 1 emissions (air conditioning, fleet vehicles and generating sets): 170.21 tCO₂ e</p> <p>Scope 2 emissions (electricity consumption and transmission losses): 8,286.8 tCO₂e.</p> <p>Scope 1+2 emissions: 170.21 +8,286.8=8,457tCO₂eq.</p> <p>(b) Emissions from the use of air conditioning in REINTEL: 14.32 t CO₂e</p> <p>Total increase due to change in boundary: 8,457+14.32=8,471.3 t CO₂e</p> <p>Total emission value percentage= 8,471.3/805,065*100=1.05%. Please note that 805,065 tCO₂e figure corresponds to 2019 Scope1+2 emissions</p>
Change in physical operating conditions	27,530.39	Decreased	3.42	<p>Changes in physical and operating conditions influence some aspects. The main one that affects emissions is the change in the generation mix, which depends on the physical operation conditions of each year (mainly water and wind availability). The generation mix affects the main factors regarding emissions associated to transmission grid losses: amount of transmission losses (%) and emission factor.</p> <p>In 2020 there has been an increase in water availability and therefore, an increase in hydro power generation (5,895.24GWh more than in 2019). To estimate emissions decrease, we have compared</p>

				<p>the emissions of transmission losses (peninsular system, Balearic Islands system and Canary Islands system) calculated with the real emission factors for 2020 (4,157,239.28 MWh* average factor 0.14242096 tCO₂e/MWh= 592,078 tCO₂e), with emissions using a factor (average factor) that has been calculated considering the same hydro power production as in 2019</p> <p>Transmission losses= 4,157,239.28 MWh</p> <p>Emission factor considering the same production of *0,15 tCO₂e/MWh</p> <p>(4,157,239.28 *0,15=619,608.39 tCO₂e)</p> <p>Decrease of emissions due to availability of water (physical conditions): 619,608.39-592,078=27,530.39 tCO₂e</p> <p>Total emission value percentage= 27,530.39/805,065*100=3.42%. Please note that 805,065 tCO₂e figure corresponds to 2019 Scope1+2 emissions</p>
Unidentified	1,007.6		0.12	<p>There has been an increase of diffuse emissions in 2020: SF₆ emissions (924.9 tCO₂e) and in air conditioning in Spain (emissions from Hispasat not considered) (82.7 tCO₂e). There are different reasons associated to these variations (operational conditions or increase of maintenance works) but we are not able to identify them exactly. Total increase: 924.9+82.7=1007.6 tCO₂e Emissions value (percentage): 1007.6/805,065*100=0.12%. Please note that 805,065 tCO₂e figure corresponds to 2019 Scope1+2 emissions</p>
Other	65,029.5		8.08	<p>In 2020, there has been a drastic reduction in the share of coal fired power stations in the energy mix (55% reduction compared to 2019) due to national decarbonization plans leading to the dismantling of several conventional plants. It has had an impact in the emission factor .</p> <p>To estimate emissions decrease, we have compared the emissions of transmission losses, calculated with the real emission factors (peninsular, Balearic and Canary Islands systems) for 2020 (4,157,239.28 MWh* average factor 0.14242096tCO₂e/MWh= 592,078 tCO₂e) with emissions using a factor that has been calculated considering the same generation with coal as in 2019 (4,157,239.28 MWh*0,15806344 tCO₂e/MWh=657,107.54 tCO₂e).</p>

				Decrease of emissions due to reduction of coal fired power stations generation: $657,107.54 - 592,078 = 65,029.5$ tCO ₂ e Emissions value (percentage): $65,029.5 / 805,065 * 100 = 8.08\%$. Please note that 805,065 tCO ₂ e figure corresponds to 2019 Scope 1+2 emissions
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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	9,438.38	9,438.38
Consumption of purchased or acquired electricity		14,462.42	3,792.44	18,254.86
Total energy consumption		14,462.42	13,230.8	27,693.2

C8.2b

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

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

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

Fuels (excluding feedstocks)

Diesel

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

4,160.04

Emission factor

2.467

Unit

kg CO2e per liter

Emissions factor source

Spanish Climate Change Office (OECC) methodology

Comment

Diesel is used in fleet vehicles.

The Spanish Climate Office discloses that these emission factors are calculated through its own methodology based in the IPCC methodology and the Spanish Emissions Inventory. (Version published in June 2020)

Please note that the reported emission factor is used for activities in Spain (mayor activities). For activities in Latin America, DEFRA 2020 emission factors are used.

Fuels (excluding feedstocks)

Motor Gasoline

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

2,295.87

Emission factor

2.065

Unit

kg CO2 per liter

Emissions factor source

Spanish Climate Change Office (OECC) methodology

Comment

The Spanish Climate Office discloses that these emission factors are calculated through its own methodology based in the IPCC methodology and the Spanish Emissions Inventory. (Version published in June 2020)

Please note that the reported emission factor is used for activities in Spain (mayor activities). For activities in Latin America, DEFRA 2020 emission factors are used.

Fuels (excluding feedstocks)

Gas Oil

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

2,471.36

Emission factor

0.273

Unit

kg CO2e per KWh

Emissions factor source

DEFRA 2020

Comment

Gas oil is used in auxiliary generating units (to ensure the supply in case of electric failure)

Fuels (excluding feedstocks)

Gas Oil

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

511.11

Emission factor

2.87

Unit

kg CO2 per liter

Emissions factor source

Spanish Climate Change Office (OECC) methodology

Comment

Gas Oil used only for heating (Gasoil C)
The Spanish Climate Office discloses that these emission factors are calculated through its own methodology based in the IPCC methodology and the Spanish Emissions Inventory. (Version published in June 2020)

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)

249,411.92

Annual energy losses (% of annual load)

1.66

Scope where emissions from energy losses are accounted for

Scope 2 (market-based)

Emissions from energy losses (metric tons CO₂e)

592,078

Length of network (km)

44,471

Number of connections

2,084

Area covered (km²)

506,000

Comment

Annual energy losses. The data for the historical series is available in the CR report 2020. 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)

4,330.05

Annual energy losses (% of annual load)

0.69

Scope where emissions from energy losses are accounted for

Scope 2 (market-based)

Emissions from energy losses (metric tons CO₂e)

6,622.52

Length of network (km)

1,561

Number of connections

52

Area covered (km²)

362,961

Comment

Country/Region

Chile

Voltage level

Transmission (high voltage)

Annual load (GWh)

597.87

Annual energy losses (% of annual load)

0.6

Scope where emissions from energy losses are accounted for

Scope 2 (market-based)

Emissions from energy losses (metric tons CO₂e)

1,474.06

Length of network (km)

264

Number of connections

7

Area covered (km²)

42,226

Comment

C9. Additional metrics

C9.1

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

Description

Energy usage

Metric value

12,508.99

Metric numerator

Electricity consumption in work centers (MWh)

Metric denominator (intensity metric only)

N.A

% change from previous year

3.98

Direction of change

Decreased

Please explain

The company (besides setting emission reduction targets) has set efficiency targets regarding electricity consumption in work centres:
 -10% consumption reduction by 2020, compared to 2015. This target has been achieved: 22.6 % reduction in electricity consumption in work centres in 2020 compared to 2015.
 - 30% reduction by 2030, compared to 2015. (This target id going to be update in order to include work centres in Latin América and Hispasat, which are not included).

C-EU9.5a

(C-EU9.5a) Break down, by source, your total planned CAPEX in your current CAPEX plan for power generation.

Primary power generation source	CAPEX planned for power generation	Percentage of total CAPEX planned for power generation	End year of CAPEX plan	Comment

	from this source			
Other, please specify NA	0	0	2020	Please note that this question is NON-APPLICABLE to RE. RE does not perform any energy 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 to achieve a more decarbonized electricity system at a national level. The CAPEX planned corresponds to the complete planning period 2021-2025 (updated Strategic Plan). The new infrastructures are necessary to achieve the national renewable energy & emission reduction targets (EU targets 2030).	2,846	66	2025

Large-scale storage	The main project that RE is developing in this category is Soria-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 complete planning period 2021-2026 (updated 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
Renewable energy	Applied research and development	≤20%	497,000	Projects (4 projects) with the aim to improve the forecasting tools for non-manageable renewable energy production in order to reduce the impact of its variability on scheduling the reserve (2015-2020). A better knowledge of renewable energy production (forecast) involves a better integration of these energies. -Improvement of prediction models to reduce forecasts errors, for wind and for photovoltaic and solar thermal. - Development of models (Nowcasting model) for the prediction of direct and global solar radiation with the objective of this project is the improvement in the prediction of photovoltaic and termosolar energy in a very short-term horizon (first 4 hours).
Renewable energy	Small scale commercial deployment	≤20%	60,000	Development of HVAC systems for buildings and substations based on the use of geothermal energy. For Gas Insulated Substations, REE is working in the operation of a cooling system using geothermal ventilation.
Renewable energy	Pilot demonstration	≤20%	571,250	MIGRATE project: Massive Integration of power electronic devices (2017-2020). Analysis and search for alternatives to the impacts that the proliferation of devices based on power electronics has on the operation of the pan-European electricity system. The

				development of this kind of devices is needed to maximize the renewable energy integration into the electricity system.
Demand side response programs	Large scale commercial deployment	≤20%	666,000	Development of research projects that contribute to a greater efficiency of the electricity system by improving knowledge regarding electricity demand and the development of new measures for its management.
Distributed energy resources	Pilot demonstration	≤20%	150,000	Distributed Generation Limitations Management Platform: aimed to improve distributed generation integration into the electricity system.
Energy storage	Large scale commercial deployment	21-40%	3,500,000	* Batteries in Tenerife (ALISIOS project) The purpose of the initiative is to evaluate the impact the installation of a high capacity energy storage system may have on an isolated electricity system, such as the island of Tenerife, from the point of view of improving the quality of the system frequency, mitigating sudden variations in renewable generation and increasing the contribution of this form of energy to the generation mix under safe conditions and ensuring the security of supply. The results obtained will allow the possibilities that these systems offer to be gauged so as to resolve the present and future challenges arising from the massive introduction of non-manageable renewable generation in isolated electricity systems. * Development of tests and the evaluation of energy storage systems for their technical-economic assessment in field tests: OSMOSE projects/Stability plus project: 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	Applied research and development	≤20%	400,000	Projects (3 ongoing) related to the improvement in the handling of SF6 gas in order to reduce leakages (emissions). - Development of a new methodology for repairing leaks in GIS installations/facilities (Applied research development) - Systems for capturing gas leaks in indoor GIS substations (Basic research) - High-sensitivity SF6 detectors, proposed R&D project. (Basic research)
Other, please specify SF6: alternatives	Pilot demonstration	21-40%	2,000,000	Projects related to SF6 gas replacement: Study of alternatives to SF6 gas in gas-insulated or conventional switchgear. design and acquisition of two 66 kV cells with alternative insulating gases to be installed in mobile generating units in the Canary Islands.
Renewable energy	Pilot demonstration	≤20%	779,300	Design and validation of an energy storage system (green battery) powered by renewable generation sources (wind and photovoltaic) for auxiliary services in substations.

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
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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

 EY_REE_InformeVerificacion_GEI_i21-2244_Digital_Firmado_EN.pdf

Page/ section reference

All document (pg 1-2 +Appendix)

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

 EY_REE_InformeVerificacion_GEI_i21-2244_Digital_Firmado_EN.pdf

Page/ section reference

All document (pg 1-2 +Appendix)

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 (upstream & downstream)

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

 EY_REE_InformeVerificacion_GEI_i21-2244_Digital_Firmado_EN.pdf

Page/section reference

All document (pg 1-2 +Appendix)

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. 116-118 and information regarding opportunities arising from climate change pg. 99-100. Independent review of the Sustainability report, according to ISAE 3000 is included in pg. 384  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. 197. (305-4) - Independent review report of the sustainability indicators, according to ISAE 3000 is included in Sustainability report (pg. 384).  1, 2
C6. Emissions data	Year on year change in emissions (Scope 1)	ISAE 3000	All the information included in the annual Sustainability report has been verified by third party according to ISAE 3000 (limited assurance). - Scope 1 emissions data (2015-2020) are reported in pg. 195 (305-1) - Independent review report of the sustainability indicators, according to ISAE 3000 is included in Sustainability report (pg. 384).  1, 2

C6. Emissions data	Year on year change in emissions (Scope 2)	ISAE 3000	All the information included in the annual Sustainability report has been verified by third party according to ISAE 3000 (limited assurance). - Scope 2 emissions data (2015-2020) are reported in pg. 195 (305-2) - Independent review report of the sustainability indicators, according to ISAE 3000 is included in Sustainability report (pg. 384).  ²
C6. Emissions data	Year on year change in emissions (Scope 3)	ISAE 3000	All the information included in the annual Sustainability report has been verified by third party according to ISAE 3000 (limited assurance). - Scope 3 emissions data (2015-2020) are reported in pg. 196 (305-3) - Independent review report of the sustainability indicators, according to ISAE 3000 is included in Sustainability report (pg. 384).  ^{1, 2}
C4. Targets and performance	Emissions reduction activities	ISAE 3000	Information included in sustainability report has been verified by third party according to ISAE 3000 (limited assurance). - Description of the measures are reported in pg. 179-191. - Energy savings data: pg. 194 (302-4) - Emissions reduction data: pg. 1978. (305-5) - Independent review report of the sustainability indicators, according to ISAE 3000 is included in Sustainability report (pg. 384).  ^{1, 2}
C8. Energy	Energy consumption	ISAE 3000	Information included in the annual Sustainability report has been verified by third party according to ISAE 3000 (limited assurance). - Energy consumption information is included in pg. 192-194. (302-1; 302-2); energy efficiency measures information is included in pg.185&187 - Independent review report of the sustainability indicators, according to ISAE 3000 is included in Sustainability report (pg. 384).  ^{1, 2}

 ¹Sustainability_Report_2020_short.pdf

 ²EY_REE_InformeVerificacion_IS_i21-2245_Digital_Firmado_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

Madre de Dios Amazon REDD Project in Perú. ID 844

Verified to which standard

VCS (Verified Carbon Standard)

Additional Certifications CCB-Gold

Number of credits (metric tonnes CO₂e)

2,700

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

2,700

Credits cancelled

Yes

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 and R&D.
Besides, the use of carbon price is useful as a communication tool.
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.

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.

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 management. Identify collaboration projects.

% of suppliers by number

2

% total procurement spend (direct and indirect)

34

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

45

Rationale for the coverage of your engagement

RE is developing an "Engagement program" that was launched in 2019. The 30 most relevant suppliers were invited to join it. They were chosen considering the following

criteria:

- Main suppliers (top 20) regarding spent (considering 3 years period, 2016 - 2018), who represented 55% of supplier- related emissions.
- Main suppliers (top 20) in terms of emissions (considering 3 years periods, 2016 - 2018), that involved 66% of supplier related emissions

Objectives of the engagement:

- Involve suppliers in the commitment of RE Group, providing appropriate guidelines in order to promote changes in their management and promoting collaboration.
- Get primary data to integrate more direct information in the calculation of Scope 3
- Be willing to establish ambitious commitments for the reduction of Scope 3 emissions (a & b are needed for this)

Description of the activities:

- 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.
- A feedback sheet with interesting benchmark comparisons and highlights of strengths has been sent to each supplier
- Besides, a different "development program" with specific activities, have been defined for the different groups of suppliers (classified by maturity level).
- The main areas of work are: 1) improve of suppliers GHG inventory (including calculation of scope 3 emissions) & increase the number of suppliers with verified information (verification of the inventory by a third); 2) encourage suppliers to define ambitious reduction targets, commit and validate them by SBTi and 3) identify specific collaboration projects
- Activities include training & consultant support regarding calculation, verification process and targets definition. In 2020, different workshops have been developed (14 suppliers have joined them).

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:

- 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
- Impact of the engagement:
 - Scope 1+2 emissions, % of suppliers with emissions verified: it has increased from 56% (2019) to 65% (2020)
 - Scope 3 emissions, % of suppliers with emissions verified: It has increased from

43.5% (2019) to 52% (2020)

- Reduction targets set:

Suppliers committed: it has increased from 4% (2019) to 17% (2020)

Suppliers with SBT verified: it has increased from 8.7% (2019) to 13% (2020)

All the indicators show an improvement in the participants performance.

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 the dissemination of knowledge regarding the electricity system and its demand-side management measures (efficiency), as well as in the promotion of other energy efficiency measures and climate change issues. 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.
- Progress in the distribution of information related to the performance of the CO2 emissions ratio associated to Spain's electricity consumption (mainly website)
- 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: We have developed communication tools such as the travelling exhibition entitled “A highway behind the wall socket”, to spread knowledge about electricity system and energy efficiency among general public. We accumulated more than 1,000,000 visits (the number of visits is an indicator of the success of the initiative). Regarding the educational program, RE developed several educational activities revolve around ‘entreREDes’, a digital educational application, with more than 8250 school children from all over Spain participating in (the satisfaction generated by these activities is reflected in the results of the surveys: 85 % liked the game a lot). Moreover, the Company has 24 collaboration Agreements with universities and training institutions and collaborates with them in giving conferences at universities to disseminate information on different aspects of the electricity system.

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 due to COVID crisis)

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.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

- Direct engagement with policy makers
- Trade associations
- Other

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
<p>Other, please specify</p> <p>Energy transition in Spain: electrification of the Spanish power system & renewable energy integration.</p>	<p>Support</p>	<p>REE, main society of RE Group, closely works with the Spanish Ministry of Ecological Transition to design the transmission grid planning for Spain. REE draws up an infrastructure proposal to the Ministry which, after a wide public consultation process, defines and approves the final planning. 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. REE main criteria for the proposal are efficiency and viability.</p>	<p>The transmission grid planning is a legal Mandate. The last planning was approved on 16th October 2015 for the period 2015-2020. The legal process to define the new Electricity planning has already started (2021-2026) and REE is working on it with the Spanish Ministry of Ecological Transition.</p>
<p>Clean energy generation</p>	<p>Support</p>	<p>REE , main society of RE Group, as the Transmission System operator of the electric system in Spain, is engaged with the regulatory bodies in Spain and in Europe (both directly and through ENTSO-E, the European TSO association,)</p>	<p>National Grid Codes (operational procedures) and European Network Codes and Guidelines, have been approved by Member States, publish in the Official Journal of the European Union and enter into force. Intensive</p>

		<p>for the development of some Regulation that supports secure and affordable European energy transition (to low carbon scenario). REE is in charge of the proposal of Grid Codes (Operational Procedures) for the transmission system. Those Grid Codes are very important because they set the criteria for renewable connection and integration into the power system. REE also works within ENTSO-E in the development of the European Network codes and Guidelines, which are also necessary for renewable integration into the European power system.</p>	<p>national implemented tasks have been launched by REE.</p>
Clean energy generation	Support with minor exceptions	<p>REE, main society of RE Group, engages with the regulatory bodies in Spain and in Europe (through ENTSO-E or the European TSO association) for the development of a new set of regulations in the frame of the "Winter Package", clean Energy for Europeans.</p>	<p>11 European legislative proposals dealing with renewables, energy efficiency, governance, electricity market and energy consumers in order to prepare the European power system for the 2030.</p>
Other, please specify Climate Change: all aspects	Support	<p>RE is engaged in the development of the new Spanish Climate Change legislation framework: - In 2017 the Council of Ministers approved the establishment of a committee of Experts to prepare a report on different scenarios for energy transition, to achieve environmental sustainability commitments in the most efficient way possible. REE took part of this committee, whose results were presented to the Parliament. - REE also participated in the different</p>	<p>Spanish Energy and Climate Plan proposal was sent to the EU in 2019. Final version of PNIEC has been published in 2021.</p>

		workshops and public consultations organized by the Spanish Ministry in order to develop the future legislation. -In 2018 REE gave technical support to the Spanish Ministry of Ecological Transition in the development of the PNIEC (Spanish Energy and Climate Plan, according to EU legislation). REE has contributed in the elaboration of electric scenarios from different proposals.	
Other, please specify Development of interconnections 💬 ₁	Support with minor exceptions	RE participates in Med-TSO (18 TSOs in the Mediterranean area). This organization works to promote electrical interconnections between EU and MENA (Middle East and North Africa) countries. Electrical interconnections are very important to integrate renewable energy into the electricity system, so the aims of the association are to develop a coordinate methodology and planning process as well as promoting a regulatory framework in the MENA countries aligned with EU regulation.	Legislative solutions haven't come from this Project yet.
Other, please specify Regulation on fluorinated GHG	Support with minor exceptions	RE works with Spanish Ministry of Ecological Transition in the definition of better policies regarding SF6 emissions accounting and management. RE has participated in the consultation process and in some other activities (public consultations, forums, meetings with people involved in the process). In 2015 REE signed a Voluntary Agreement on this issue, led by the Ministry of	F-gas European regulation: RE supported proposed regulation with some exceptions regarding details about monitoring and reporting emissions. RE proposed some amendments to de different drafts, and the regulation was finally approved in 2014. Besides, although it is not a legislative solution, requirements included in the Voluntary

		<p>Ecological Transition and has been a very active member of the Technical Working group set up in order to share knowledge and to collaborate in possible coming legislation.</p>	<p>Agreement are mandatory for all the signers. The aim of the agreement is to create a framework of collaboration between all the stakeholders related to SF6 in Spain and develop some specific requirements about SF6 management (in addition to what it is stated by the legislation). As 1015-2020 agreement is reaching to its end, a new proposal for agreement is being developed.</p>
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¹Development of interconnections between Europe and MENA (middle East and Mediterranean area) countries.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

ENTSO-E

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

ENTSO-E was created by the Regulation (EC) 714/2009 (the third energy package) and is formed by the TSOs from European countries. RE as founder member of ENTSO-E, collaborates with this association in aspects regarding the European transmission grid development (Ten Year Network Development Plan), maintenance and operation at a European level.

(a) One of the main works as mentioned above is the elaboration of "Network codes". (Some of them refer to common requirements for generators also mandatory for renewable energy integration into the power system).

(b) Other relevant work has been published: TYNDP 2020 reports (including scenario

report).

(c) RE also works with ENTSO-E to achieve a common and strong position in some environmental aspects. e.g. During 2013 work was focused on "Regulation on fluorinated greenhouse gases COM/2011/643" consultation process. The work was based mainly in lobbying activities. ENTSO-E supports the legislation with minor exceptions regarding monitoring and reporting emissions and training of professionals. In 2019-2020 ENTOS-E has been working to update a common position about the use of SF6 and non-SF6 alternatives, in order to be prepared for the development process of the new fluorinated gases regulation.

How have you influenced, or are you attempting to influence their position?

(a) For Networks codes, the work is developed by working groups where EC, ACER (Agency for the Cooperation of Energy Regulators) and all stakeholders have participation.

(b) Regarding the electricity system scenarios, REE has 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.

(c) In the case of SF6 regulation, RE collaborates in the elaboration of the common position documents and has the opportunity to make comments on them. RE's position has clearly influenced the last position paper, promoting the increase in the ambition of the emission reduction targets that had been initially proposed.

Trade association

Spanish Green Growth Group

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Spanish Green Growth Group is formed by a Group of companies and the Spanish administration. The aim of the group is to join public and private forces to promote the creation of an efficient roadmap for a low-carbon economy. With this vocation to lead in the medium and long term, the companies which form the Group want to demonstrate their commitment to incorporating climate policies in their business strategies, because they are convinced that there is a huge opportunity for the Spanish economy to promote low-carbon green growth initiatives

How have you influenced, or are you attempting to influence their position?

RE belongs to the SGGG and shares the position with the other members. RE participates in the initiatives developed in the framework of this group. RE has the same position as SGGG (except minor exceptions that are discussed in working meetings to reach a consensus).

Trade association

FORETICA (Spanish representative of the World Business Council for Sustainable Development WBCSD)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Foretica is the Spanish partner for WBCSD, whose mission is to promote the integration of social, environmental and governance related aspects in the strategy and management of companies and organizations. The Climate Change Cluster, a working group formed by large companies, was launched in 2015. One of the objectives of this group is to bring the main trends in climate change to the Spanish context, through studies to generate practical solutions in collaboration with government and opinion leaders.

How have you influenced, or are you attempting to influence their position?

RE is a partner of Foretica and belongs to the Climate Change Cluster. RE shares the position with this group and participates in the meetings and initiatives developed by the cluster. REE has the same position as Foretica. Therefore, it is not necessary to influence Foreticas's position.

C12.3e

(C12.3e) Provide details of the other engagement activities that you undertake.

Actions addressed to the administration (policy makers) in climate change and energy efficiency issues through voluntary agreements. Some examples are:

- RE works with IRENA (International Renewable Energy Agency) through specific working groups aimed to improve renewable energy integration
- Participation (as technical experts) in working groups lead by policy makers, to contribute in the development of new regulation or national/local action plans related to climate change issues:
 - Consultation process for the new Spanish Climate Change Adaptation Plan
 - Members of Technical Committee for Climate Change in the region of Madrid. (*Comité científico técnico de cambio climático de la Comunidad de Madrid*)
 - Participation in initiatives to expand energy efficiency and sustainable mobility:
 - Agreement with Palma de Mallorca Council to optimize electricity consumption (energy efficiency measures will be developed)
 - Electricity mobility guide for local authorities
 - Participation in Mobility Observatory-CES, AEGFA-Association of Fleet managers- etc.
 - Collaboration agreement with the Spanish Federation of Municipalities and Provinces (FEMP) that enables the development of joint actions to improve energy efficiency, developing renewable energy and promoting sustainable mobility.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy 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 those that influence policy) 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.

C12.4

(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

Status

Complete

Attach the document

 CONSO_CCAA_2020_En.pdf

Page/Section reference

Governance (risk & opportunities) (pg. 127)
Risk & opportunities information (pg. 127-128)
Strategy (pg. 146)
Emission figures (pg. 146-147)
Emission targets (pg. 146)
Other metrics (pg. 147)
Other (pg. 146-147)

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics
Other, please specify
 Reduction measures

Comment

Publication

In voluntary sustainability report

Status

Complete

Attach the document

 Sustainability_Report_2020_short.pdf

Page/Section reference

Strategy (pg. 147-152)
Opportunities (pg. 99-100)
Risks (pg. 116-118)
Emissions figures (pg. 179-197)
Emission targets (pg. 179-187)
Other metrics (pg. 192-194)
Other (pg. 178-192)

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures

Emission targets

Other metrics

Other, please specify

Reduction of carbon footprint, emission reduction activities, targets achievement, stakeholder's engagement

Comment

C15. 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.

No additional comments

C15.1

(C15.1) 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 am submitting to	Public or Non-Public Submission
I am submitting my response		Public

Please confirm below