C0. Introduction

**C0.1**

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

IBERDROLA is a world leader in clean energy, focused on promoting CO2 free installed capacity in our mix.

Nearly two decades ago, Iberdrola decided to strongly back clean energy. Since then, Iberdrola has invested tens of billions of Euros in renewable energy – onshore and offshore wind energy and hydroelectric power – as well as in the grids needed to integrate this renewable energy, and in storage. This pioneering commitment to clean energy has made the company one of the world leaders, with a renewable capacity of almost 30,000 MW (and the number one wind power producer in the world).

IBERDROLA is well-positioned to become a benchmark as regards the contribution of the electricity subsector towards attaining a scenario that is compatible with the 2°C target, as a result of the characteristics of its energy mix, its investment profile and the commitments that it has already undertaken.

- IBERDROLA’s emissions per kWh in Europe were already 55% lower than the average of the European electricity sector in 2015; Source: European carbon factor Benchmarking of CO2 emissions by Europe's largest electricity utilities (January 2018, PwC).

- IBERDROLA is the world leader in renewable energies, smart grid and electric vehicle development and top of the main sustainability indices.

- IBERDROLA publicly announced its target for 2030: to reduce the intensity of its CO2 emissions to below 150 grams per kWh in 2030, a level 50% less than its emissions in 2007, and being carbon-neutral by the year 2050.

IBERDROLA operates in more than 40 countries and has over 30 million customers. At IBERDROLA, we have spent more than 150 years moving forward in a single direction. We have created an industrial growth project sustainable in the long term, by focusing on the core business, on stable activities and growth through a balanced business portfolio, on leadership in wind power, on operating efficiency and on financial soundness, becoming a number one worldwide energy group.

Thanks to the significant degree of alignment between our strategy and the objectives of the historic Paris Agreement and the documentation provided by the company as input to the Talanoa Dialogue Platform, Iberdrola was one of the six companies selected by the United Nations to participate in the Talanoa Dialogue session celebrated in May 2018 in Bonn.

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

<table>
<thead>
<tr>
<th>Row</th>
<th>Start date</th>
<th>End date</th>
<th>Indicate if you are providing emissions data for past reporting years</th>
<th>Select the number of past reporting years you will be providing emissions data for</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>January 1 2017</td>
<td>December 31 2017</td>
<td>No</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>2</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>3</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>4</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
</tbody>
</table>

C0.3

(C0.3) Select the countries/regions for which you will be supplying data.
- Brazil
- Mexico
- Spain
- United Kingdom of Great Britain and Northern Ireland
- United States of America

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 consolidation approach to your Scope 1 and Scope 2 greenhouse gas 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
  - Electricity generation
  - Transmission
  - Distribution
- Other divisions
  - Smart grids / demand response

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) of the individual(s) on the board with responsibility for climate-related issues.

<table>
<thead>
<tr>
<th>Position of individual(s)</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board/Executive board</td>
<td>Climate change's concern is present throughout the Company and the highest responsibility resides in the Board of Directors. According to its by-laws, they work through a committee structure representing the whole Board. The Corporate Social Responsibility Committee has overall oversight of climate related issues. This is a permanent internal informational and consultative body created by the Board of Directors, with powers in the areas of revision and update of the Corporate Governance System and supervision of the corporate social responsibility, climate change, sustainability, and reputation policy, upon the terms established in its regulations. The contribution to the achievement of SDG13 (emissions reductions) is a target included in the Bonus for the whole Board of Directors.</td>
</tr>
</tbody>
</table>

Please select

C1.1b

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

<table>
<thead>
<tr>
<th>Frequency with which climate related issues are a scheduled agenda item</th>
<th>Governance mechanisms into which climate related issues are integrated</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduled – all meetings</td>
<td>Reviewing and guiding strategy</td>
<td>IBERDROLA integrates climate change issues as a transversal element of risk and opportunity in its business plans. Therefore, climate change is dealt in all meetings. Example of issues treated in 2017 “Strategic positioning of Iberdrola in relation to climate change and integration of Sustainable Development Goals within its strategy”</td>
</tr>
<tr>
<td></td>
<td>Reviewing and guiding major plans of action</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reviewing and guiding risk management policies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monitoring implementation and performance of objectives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monitoring and overseeing progress against goals and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>targets for addressing climate-related issues</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Name of the position(s) and/or committee(s)</th>
<th>Responsibility</th>
<th>Frequency of reporting to the board on climate related issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Executive Officer (CEO)</td>
<td>Both assessing and managing climate-related risks and opportunities</td>
<td>More frequently than quarterly</td>
</tr>
<tr>
<td>Chief Sustainability Officer (CSO)</td>
<td>Managing climate-related risks and opportunities</td>
<td>Half-yearly</td>
</tr>
<tr>
<td>IBERDROLA supports its efforts on climate change issues on two areas that depend directly from the CEO: a) the Environmental Management Team, which is also responsible for: - the annual revision of the operational limits of the GHG emissions inventory, - the revision of emission factors, - the quantification of the GHG reductions, - the enactment of the environmental targets for the environmental management systems (ISO14001), - monitoring the key performance indicators trends, - the execution of the methodology for calculating direct and indirect emissions of IBERDROLA’s activities and the accomplishment of the inventory and the Carbon Footprint Report. This duties are lead by our Chief Sustainability Officer. He reports at least quarterly all Sustainability Management Team actions to the Board of directors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chief Risks Officer (CRO)</td>
<td>Assessing climate-related risks and opportunities</td>
<td>Annually</td>
</tr>
<tr>
<td>In 2015, before COP21, a new area was created depending from the CEO and President. Energy Policies and Climate change, in charge of Mitigation and Adaptation issues and external stakeholders relationship and Climate Change Policies. They lead a specific Working group multidisciplinary gathers monthly to review climate change key issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other C-Suite Officer, please specify (Energy Policy, Climate Change Director)</td>
<td>Other, please specify (Coordination climate actions initiatives) Coordination of all climate action initiatives, Iberdrola’s liaison unit in the UNFCCC process and Global Climate Agenda, development of climate policy positions and assessments at global level, development of climate action programs in different areas (e.g Climate change awareness campaign plan)…</td>
<td>Annually</td>
</tr>
</tbody>
</table>

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.

At operative level IBERDROLA supports its efforts on climate change issues on two areas that report directly to the CEO: a) the Environmental Management Team, which is also responsible for: - the annual revision of the operational limits of the GHG emissions inventory, - the revision of emission factors, - the quantification of the GHG reductions, - the enactment of the environmental targets for the environmental management systems (ISO14001), - monitoring the key performance indicators trends, - the execution of the methodology for calculating direct and indirect emissions of IBERDROLA’s activities and the accomplishment of the inventory and the Carbon Footprint Report. This duties are lead by our Chief Sustainability Officer. He reports at least quarterly all Sustainability Management Team actions to the Board of directors.

b) In 2015, before COP21, a new area was created depending from the CEO and President, Energy Policies and Climate change Directorate. Under its main responsibilities are: coordination of all climate action projects in the field of Mitigation, Adaptation and Awareness, develop policy positions and assessments in the field of climate policy, and tackle external stakeholders relationships within the context of the global climate action agenda (UNFCCC, Talanoa Dialogue, coalitions, multilateral bodies… They lead a specific Working group multidisciplinary gathers monthly representatives from the main corporative and business areas to assess and coordinate the state of affairs of the main climate action projects (policy positions, events, agenda…)

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

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues.

Who is entitled to benefit from these incentives?  
Board Chair

Types of incentives  
Monetary reward

Activity incentivized  
Emissions reduction target

Comment  
Variable compensation tied to the achievement of specific, pre-established, quantifiable objectives. At the proposal of the Nominating and Compensation Committee, PricewaterhouseCoopers Asesores de Negocios, S.L. was asked to provide a specific assessment of the performance of the chairman in the fields of corporate governance and sustainability. Variable fee depending on commitment to sustainable development. Specific targets are being set for the Board in the last years. Past year was established next target - Increase the emissions-free installed capacity ratio in order to comply with the commitment for emissions reduction in line with Sustainable Development Goals 7 and 13. The goals are: - A 50% reduction of the intensity of the 2007 level of CO2 emissions by 2030 and - Carbon neutrality by 2050. All information is public in our web page.

Who is entitled to benefit from these incentives?  
Executive officer

Types of incentives  
Monetary reward

Activity incentivized  
Emissions reduction target

Comment  
IBERDROLA considers, among others achievements, to combat the effects of climate change, minimizing the environmental impact of its activities and promoting the adoption of all actions within its power for such purpose, as main goals. Tied to this achievement an Strategic Bonus has been created, as a payment by means of the delivery of the Company’s shares. Our main goals to be achieved are: - Deploying clean energy development strategies, maintaining world leadership in renewable energy - Ensuring compliance with advanced corporate governance policies and recommendations - Maintaining downward trends in emissions (attainment of greenhouse gases (GHG) targets) and fuel consumption per unit of energy produced - Improving environmental quality and labour relations certification levels - Fostering corporate responsibility measures in the value chain - Advancing the development of measures fostering good labour relations. Managing the targets by 2030 and carbon neutrality by 2050 affect in a direct way to all employees in different percentage depending on their responsibility inside the Grroup.

Who is entitled to benefit from these incentives?  
Management group

Types of incentives  
Monetary reward

Activity incentivized  
Emissions reduction target

Comment  
Strategic Bonus applies for the Management group, whether Company’s main goals related to climate change are attained. A 50% reduction of the intensity of the 2007 level of CO2 emissions by 2030 and carbon neutrality by 2050, will lead to the Management group to receive a percentage, whether the Company’s target would be achieved year on year. Also it is important to say that the emissions reduction involve all employees in a direct way with its responsibly inside the company.

Who is entitled to benefit from these incentives?  
All employees
Types of incentives
Monetary reward

Activity incentivized
Emissions reduction target

Comment
The environmental objectives mentioned in the Strategic Bonus received by the Management group are in cascade and affect all employees from the top managers in different percentages depending on their responsibility. Every employee has a percentage of its variable fee directly linked to the performance of his/her boss, therefore the mentioned environmental objectives are for every employee. There are also campaigns among ALL employees related to the CO2 emissions produced on their commuting. They are given free grants to buy electric vehicle cars (6,000 €).

Who is entitled to benefit from these incentives?
All employees

Types of incentives
Recognition (non-monetary)

Activity incentivized
Other, please specify (Climate change teachers at kids schools)

Comment
Employees have been trained to offer climate change education at theirs kid’s schools and are participating in sessions so they have become climate change experts and have raised awareness among young children.

Who is entitled to benefit from these incentives?
All employees

Types of incentives
Other non-monetary reward

Activity incentivized
Behavior change related indicator

Comment
An online training course on climate change was launched in 2017 to all employees and to date has been completed by 16,150 employees. The purpose was to inform Iberdrola’s employees about the challenges and solutions of climate change and make them aware of the importance of taking action. The course also aims to make employees understand the relationship between climate change and the energy sector, so that they can value the importance of the commitment made by Iberdrola and further engage on this matter.

C2. Risks and opportunities

C2.1
(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

<table>
<thead>
<tr>
<th></th>
<th>From (years)</th>
<th>To (years)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term</td>
<td>1</td>
<td>5</td>
<td>In line with the strategic and capital planning of the Group and regular energy tariff reviews Strategic and capital planning the the Group: Perspectives 2018-2022. Tariff reviews of regulated distribution businesses of the Group (which are expected to contribute 50% of 2022E EBITDA): usually take place every 3-5 years. Investments decisions are a way to manage climate change risks, since investments in CO2 free technologies is key to minimize transition risks.</td>
</tr>
<tr>
<td>Medium-term</td>
<td>5</td>
<td>30</td>
<td>In line with useful life of assets: investments are amortized over their entire economic life (25-50 years). Furthermore, taken into account climate variables projections and extreme events occurrence, physical risk should be considered for different technologies (distribution, conventional generation and renewables) in the medium term. The Group has defined a Climate change adaptation plan to identify main risk exposure and climate change adaptation capacity of different technologies in the medium term.</td>
</tr>
<tr>
<td>Long-term</td>
<td>30</td>
<td>100</td>
<td>Climate risk in the long term will be highly dependent on the measures that would be taken in the short and medium term in terms of adaptation and mitigation measures. The timeframe selected match with the time horizons specified in many studies as the one included in the Fifth assessment Report for the long term scenario (2081-2100).</td>
</tr>
</tbody>
</table>

C2.2

(C2.2) Select the option that best describes how your organization’s processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

C2.2a

(C2.2a) Select the options that best describe your organization’s frequency and time horizon for identifying and assessing climate-related risks.

<table>
<thead>
<tr>
<th></th>
<th>Frequency of monitoring</th>
<th>How far into the future are risks considered?</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
<td>Six-monthly or more frequently</td>
<td>&gt;6 years</td>
<td>According to existing internal procedures, an annual review of structural risks must be performed and monitoring checks are made quarterly. In terms of how far into the future risks are considered, short term (1-5 years), medium term (5-30) and long term (30-50) risks could be considered. Every investment decision must be supported by an Investment Dossier. Among the risks factors considered in this kind of documents, the main risks related to climate change (future regulation, physical risks...) are included.</td>
</tr>
</tbody>
</table>

C2.2b
(C2.2b) Provide further details on your organization’s process(es) for identifying and assessing climate-related risks.

Regarding the identification process for climate change risk, Iberdrola’s Board of Directors and senior management are engaged in the identification and assessing of the Group’s risks:  a) Ex-ante: levels of risk tolerance are reviewed and approved on an annual basis through risk policies and limits that establish the qualitative and quantitative risk appetite at the Group level and at each of the main businesses and corporate functions;  b) Ex-post: at least quarterly monitoring of significant risks and threats and the various exposures of the Group, as well as of compliance with the approved risk policies, limits and indicators.

Identification of climate change risks are carried out in several committees and forums, with participation of the businesses units, corporate functions (ie: Risks, Regulation....) and Office of the Chairman.

Risk and opportunities identification could arise from every level of different business areas and from the complete lifecycle of the different assets of the company: from the investment decision analysis to the maintenance or even decommissioning. Also corporate areas have the aim to identify risk and opportunities within their functions.

Audit and Risk Supervision Committee and, at operating level, a Corporate Risk Committee and Corporate Risk Management organization and the Office of the Chairman are the latest steps for the corporate strategy, business and assets risk and opportunities identification.

These take place on a regular basis, and cover both strategic and business level issues. As stated before annual review of structural risks must be performed and monitoring checks are made every quarter, according to existing internal procedures. The risks and opportunities identified within those processes could be considered for the short term (1-5 years), medium term (5-30 years) and long term (30-100 years).

**Climate change has been a key element for defining the company’s strategy.** Iberdrola treats climate change not only as a risk factor, but also (and mostly) as a source of organic growth during the transition towards a low-carbon economy. Every investment decision must be supported by an Investment Dossier with several related to climate change (future regulation, physical risks...) are included. Iberdrola has adopted TCFD’s risk terminology as the main reference.

Existing internal risks procedures define a 4-level classification of risks in terms of economic impact (up to 12 months): Very High >100M€, High 50-100M€, Medium 10-50M€ and Low <10M€.

**Definition of substantive financial impact:** For the purposes of CDP, risks posed by climate change that have the potential to generate key changes in operations, revenue or expenditure, including levels Very High >100M€ and High 50-100M€ and/or a probability >= 50%.

Iberdrola has developed a specific climate change adaptation plan and as part of it, Iberdrola is developing an analysis of different climate scenarios and specific studies for Iberdrola Business in order to anticipate future climate risks as a result of climate change and to increase the resilience of the company.

C2.2c

(C2.2c) Which of the following risk types are considered in your organization’s climate-related risk assessments?

<table>
<thead>
<tr>
<th>Relevance &amp; inclusion</th>
<th>Please explain</th>
</tr>
</thead>
</table>
Current regulation
Relevant, always included
Existing regulation is always considered in all the risk assessments of Iberdrola Group. Policy actions that attempt to constrain actions that contribute to the adverse effects of climate change. National governments sometimes introduce policies that modify energy markets to achieve other social and political goals and this new regulations may affect our clean strategy. We present a case study of such a policy. The Royal Decree in Spain that mandated the use of the Spanish-Indigenous Coal (IC). The Royal Decree 134/2010, subsequently modified by the Royal Decree 1221/2010 (RD1221), introduced into the Spanish electricity market a new mechanism for security of supply. The justification for the mechanism, which incentivized the use of the IC to avoid the closure of the generation units that use this type of fuel, was to increase, or at least to keep, energy independence. The Decree regulates the IC bid price into the day-ahead market, and also requires a minimum level of generation from these sources and mandates, as needed, reductions in generation from non-IC sources, excluding nuclear. We apply a unit commitment model to quantify and analyze the impact of RD1221 on the Spanish electricity system, in particular the resulting productions and prices within the daily market and the effect on total CO 2 emissions.

Emerging regulation
Relevant, always included
The risks associated to future regulation are always considered. Example: an scenario where the price of CO2 is high in the electricity sector but emissions are not discouraged in other sectors could reduce the capacity of electricity to complete with other energy alternatives.

Technology
Relevant, always included
Investment in new technologies and/or substitution of existing products and services with lower emissions options are always considered. Example 1: a future scenario with more renewables and a higher electrification is likely to demand new capabilities from the transmission and distribution networks. If Iberdrola is unable to do this, it will lose competitiveness. Example 2: increased energy efficiency and distributed generation could reduce demand of electricity.

Legal
Not relevant, explanation provided
For this exercise, this identified risk is considered not relevant for Iberdrola Group. Due to Iberdrola excellent performance, legal actions against directors and companies for failing to adapt to, mitigate against and inform about climate change are not considered relevant, although it is monitored to check its future relevance.

Market
Relevant, always included
Climate change risks impact prices of commodities (ie: coal, gas, CO2 and electricity) Example 1: Possible risk of impact of climate change on GDP growth and/or electricity demand according to science estimations. Global warming by 2 °C could lead to a decrease in electricity demand in most European countries. The potential financial impact is estimated as “Higher than 100 KM”. It is a long-term estimated figure based on qualitative analysis, and could be a cumulative impact for the following 40 years. This risk could impact in the European Strategy for the following years planned by Iberdrola, taking into account the European EBITDA was 57% of total EBITDA Group in 2017. The continuous monitoring of tendencies and climate change scenario analysis are the management method for prevev the potential impact to likelihood increase. Also are remarkable Iberdrola activities related with collaboration with governments in the generation of policies and guidelines for the fight against climate change as well as its important informative activity that promotes social awareness of the importance of electrification through renewable resources. Example 2: Changes in energy commodity prices (ie: Market transition risk as per the TCFD terminology). Possible impact of a 5% change in the price of electricity and/or of energy commodities and CO2. 12M EBITDA of Iberdrola (mainly the Generation and Supply Business) could be affected by this risk. Spain: With carbon prices around 15 euro/tonne, a 5 per cent. change in the prices could give rise to an impact of ±8 million euro on operating results in Spain. UK: With clean spark spread levels around 4 GBP/MWh, a 5 per cent change in the spreads could give rise to an impact of ±7 million euro on operating results. Renewables US: With electricity prices around 30 U.S.$ per MWh, a 5 per cent change in prices could give rise to an impact of ±4 million euro on operating results. Actions taken to manage this risk are for example the mutual closing out of positions by the generation business and retailing business. The remaining risk is mitigated by: - Diversifying sale and purchase agreements - Stating specific clauses in those agreements - By arranging derivatives Furthermore the Group has developed a strategy of stabilizing margins by contracting for supplies of fuel and the delivery of electricity to end users in advance.

Reputation
Relevant, always included
The approach of the companies to climate risk impacts preference of the customers and other stakeholders. Shifts in consumer preferences, negative media coverage and stigmatization of sector

Acute physical
Relevant, always included
Physical risks resulting from climate change can be event driven such as storms, cyclones, hurricanes or floods. Example: direct damage to assets of the Group (power plants, substations, transmission and distribution lines...).

Chronic physical
Relevant, always included
Physical risks resulting from climate change can be longer-term shifts in climate patterns. Chronic physical risks resulting from climate change can result in longer term impacts such as changes of precipitation patterns, rise of mean temperatures, sea level variations. Example 1: Generation output of Iberdrola’s power plants could be affected by negative changes in weather conditions, due to higher or lower hydro and/or wind resource average figures (ie: long term chronic physical climate change risk) In terms of hydro resource risk, in Spain changes in output with respect to the average value can be up to -4,000 GWh in a dry year and +5,000 GWh in a wet year, and the variability would be around ± 190 million euro (figure for 12 months). In the long term, it is assumed that years with low resource tend to compensate years of high resource. In Spain hydro means the 38% of total installed capacity. Hydro resource risk in the UK is not material, because it means less than 12 % of its total installed capacity. Regarding wind resource risk, it is considered mitigated through the high number of wind farms available and their geographic diversification, and the trend to compensate periods with less wind energy with those with high wind energy in the medium term. Currently there are not conclusive reports assessing the financial impact (positive or negative) that the changes in wind resources in the long-term will have in Iberdrola. Generation and Retail Business has had increased in EBITDA of 28.9 % in 2017 (1,600 M€) The strategy for management this risk is having a well diversified mix of generation power plants in terms of geography and technologies. The generation mix is planned looking for the better expected natural resources during the lifetime of the assets and taking into account the possible compensation of punctual production reduction for one technology/area with another. For that purpose it is planned an increase of more than 20% of installed capacity (GW) by 2022 in a diversified mix by country and technologies, which the following inversion planning: 11,400 M€ as investment from 2018 to 2022, spread in the following per main geographical area: •USA: 16 % •United Kingdom: 9 % •Spain and Portugal: 45 % •Mexico: 21 % •Brazil: 7% 
Example 2: direct damage to assets of the Group (power plants, substations, transmission and distribut

Upstream
Relevant, sometimes included
Climate change risk could affect to providers of the Group. Depending on many factors, this risk could impact suppliers of materials and services, financial institutions, insurers, electricity providers of the regulated networks, etc.

Downstream
Relevant, sometimes included
Similar to the upstream, climate change risk could affect customers of the Group. Impacts on health and consequently life expectancy could also be observed.
C2.2d

(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

Managing climate-related risks and opportunities, Iberdrola has a well-developed system in place to monitor risks and opportunities of any nature, under an ERM approach. Management of risks and opportunities take into account the geographical presence of the Group, which is focused in Spain, UK, USA, Mexico and Brazil.

Management of climate change risks and opportunities are carried out in several committees and forums, with participation of the businesses units, corporate functions (ie: Risks, Regulation...) and Office of the Chairman.

The General Risk Control and Management Policy, approved by the Board of Directors, establishes the mechanisms and basic Group principles of risk and opportunities management, with the aim to:

- Attain strategic goals with controlled volatility
- Provide the maximum level of assurance
- Protect the results and the reputation of the Group
- Defend the interests of the stakeholders and guarantee the business stability and financial strength of the Group.

The Board of Directors has the support of the Audit and Risk Supervision Committee and, at operating level, a Corporate Risk Committee and Corporate Risk Management organization. The General Risk Control and Management Policy is further developed and supplemented by specific risk policies which are also subject to approval by the Board of Directors, to deal with corporate risks and opportunities and specific risk and opportunities of the business units.

Subsequently, the Subholding companies in each country adopt the Group’s risk policies and specify their application, approving the appropriate risk limits, given the characteristics and particularities of each country.

Basic elements of the system are:

- Integrate the risk/opportunity vision into the Company’s management
- Segregate functions, at the operating level, between risk-taking areas and areas responsible for the analysis, control, and monitoring of such risks, ensuring an appropriate level of independence
- The ongoing identification and analysis of significant risks and opportunities
- Homogenous risk measurements and risk control procedures within the entire Group
- The analysis of risks associated with new investments
- To inform with transparency

With regards to climate change risk and opportunities, the Group recognizes the seriousness of the threat that global warming entails, which must be faced in a collective and coordinated manner by governments, multilateral agencies, the private sector, and society as a whole.
Climate change risks and opportunities are, at a more moderate level, part of current businesses risks included, and managed by, Iberdrola’s risk policies. In terms of how far into the future risks are considered, short, medium and long term risks and opportunities are taken into account: for example from renewal of insurance premiums every year to the long term impact of physical risks.

Several management approaches are implemented in the Group when dealing with climate change risks:

a) Mitigation, as in the case of the proactive communication with regulators, investments in adaption to the new environment or the creation of a working group to analyse the future impact of physical risks of climate change into the generation, distribution and transmission businesses. An example of investments in adaption: Iberdrola has invested in grid resilience in USA, in orther to reinforce the capacity to tackle severe events as snow storms. Thank to that the Company provided exceptional storm response at Central Maine Power to three significant weather events in tight succession.

b) Transfer, through, for example, the signature of insurance policies to cover direct impacts of physical risk in the operating assets as for example the specific insurances for extreme weather conditions with coverages for material damages and civil responsibility for wind farms.

c) Accept, when for example day-to-day management of hydro power stations is performed even though the physical risk associated with the reduction of hydro resources could result in production reductions over the year.

The processes and associated decisions of investments and strategic and capital planning of the Group are affected by climate change risks and opportunities analysis.

Monitoring of risk and opportunities management is done at least quarterly. A Risk Policy Monitoring Report is prepared quaterly, where information is stored from previous reported quarters. This report is part of the comprehensive Group Risk Register and is presented on quarterly basis to the Group’s Corporate Risk Committee, including a Key Risk Report – KKR, with Structural or permanent risks and hot topic risks.

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
Physical risk
**Primary climate-related risk driver**
Chronic: Changes in precipitation patterns and extreme variability in weather patterns

**Type of financial impact driver**
Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

**Company- specific description**
Generation output of Iberdrola’s power plants could be affected by negative changes in weather conditions, due to higher or lower hydro and/or wind resource average figures (ie: long term chronic physical climate change risk)

**Time horizon**
Long-term

**Likelihood**
About as likely as not

**Magnitude of impact**
High

**Potential financial impact**
190000000

**Explanation of financial impact**
In terms of hydro resource risk, in Spain changes in output can be up to -4,000 GWh in a dry year and +5,000 GWh in a wet year, and the variability would be around ± 190 million euro (figure for 12 months). In the long term, it is assumed that years with low resource tend to compensate years of high resource. In Spain hydro means the 38% of total installed capacity. Hydro resource risk in the UK is not material, because it means less than 12 % of its total installed capacity. Regarding wind resource risk, it is considered mitigated through the high number of wind farms available and their geographic diversification, and the trend to compensate periods with less wind energy with those with high wind energy in the medium term. Currently there are not conclusive reports assessing the financial impact (positive or negative) that the changes in wind resources in the long-term will have in Iberdrola. Generation and Retail Business has had increased in EBITDA of 28,9 % in 2017 (1.600 M€)

**Management method**
The strategy for management this risk is having a well diversified mix of generation power plants in terms of geography and technologies. The generation mix is planned looking for the better expected natural resources during the lifetime of the assets and taking into account the possible compensation of punctual production reduction for one technology/area with another. For that purpose it is planned an increase of more than 20% of installed capacity (GW) by 2022 in a diversified mix by country and technologies, which the following inversion planning: 11.400 M€ as investment from 2018 to 2022, spread in the following per main geographical area: •USA: 16 % •United Kingdom: 9 % •Spain and Portugal: 45 % •Mexico: 21 % •Brazil: 7%

**Cost of management**
11400000000

**Comment**
The above figure is linked to long term investments in new generation capacity according to the Group Perspectives 2018-2022. Commissioning 11,900 MW by 2022 with 11.4 Bn € of net growth investments. These investments will even increase the diversified portfolio of the Group.

---

**Identifier**
Risk 2

**Where in the value chain does the risk driver occur?**
Customer

**Risk type**
Transition risk

**Primary climate-related risk driver**
Market: Changing customer behavior

**Type of financial impact driver**
Market: Change in revenue mix and sources resulting in decreased revenues

**Company- specific description**
Possible risk of impact of climate change on GDP growth and/or electricity demand. According to science estimations global warming by 2 °C could lead to a decrease in electricity demand in most European countries. Based on current temperature-consumption relationships, cooling electricity demand is estimated to remain relatively small compared to heating electricity demand. Unless Europe switches to a very cooling intensive lifestyle or significantly reduces the use of electric heating, +2 °C
global warming could mean that less electricity would be needed overall. However, temperature is just one of many factors influencing total electricity demand; other factors include income, electricity prices, demography and technology. This risk is considered to have potential substantial impact due to the potential economic impact associated with, although the estimated likelihood is “unlikely” due to the fact that decarbonisation of the energy model, especially in mobility and heating and cooling will bring about increased electrification, compensating the potential risk. This risk could impact in the European Strategy for the following years planned by Iberdrola, taking into account the European EBITDA was 57% of total EBITDA Group in 2017.

**Time horizon**
Long-term

**Likelihood**
Unlikely

**Magnitude of impact**
Medium-high

**Potential financial impact**
10000000

**Explanation of financial impact**
The above figure must be understood as “Higher than 100 €M”. It is a long-term estimated figure based on qualitative analysis, and could be a cumulative impact for the following 40 years. This risk is considered to have potential substantial impact due to the potential economic impact associated with, although the estimated likelihood is unlikely.

**Management method**
In the short-term it is assumed that reduction of electricity demand is not material for the Group: a) The profitability of the network business is not exposed to demand risk, except for the Brazilian subsidiaries b) In UK and Spain, given market structures and the profile of the Group, the sensitivities do not show material reductions of EBITDA as a result of changes in demand c) In Mexico, the structure of the agreements the Group has entered into isolates the business results from electricity demand fluctuations. Revenues come mainly from plant availability and only the sales indexed at the official Mexican tariff are subject to a certain extent to fluctuation in demand. Nonetheless, most of the plants have committed sales exceeding their production capacity and therefore a shift in demand would not have an impact on their operations or results as the electricity generated would be sold to another customer. For the long term, the continuous monitoring of tendencies and climate change scenario analysis are the management method for prewiev the potential impact to likelihood increase. Also it is very important for the long term the Iberdrola activities related with collaboration with governments in the generation of policies and guidelines for the fight against climate change as well as its important informative activity that promotes social awareness of the importance of electrification through renewable resources.

**Cost of management**
513233

**Comment**
The above figure is 2017 environmental expenditure across the Group

**Identifier**
Risk 3

**Where in the value chain does the risk driver occur?**
Direct operations

**Risk type**
Transition risk

**Primary climate-related risk driver**
Market: Increased cost of raw materials

**Type of financial impact driver**
Market: Increased production costs due to changing input prices (e.g., energy, water) and output requirements (e.g., waste treatment)

**Company-specific description**
Changes in energy commodity prices (i.e. Market transition risk as per the TCFD terminology). Possible impact of a 5% change in the price of electricity and/or of energy commodities and CO2. 12M EBITDA of Iberdrola (mainly the Generation and Supply Business) could be affected in the short/medium term as a result of adverse movements in prices of commodities. The numbers below are 12 months sensitivities: Spain: Given current market conditions, the production price of coal-fired power plants defines, to a large extent, the price of electricity since coal is the marginal technology necessary to cover electricity demand. Consequently, the price of coal conditions the revenues of the other less expensive technologies which are used to cover demand. The price of CO2 emission allowances influences the cost of production in coal-fired power plants. With carbon prices around 15 euro/tonne, a 5 %
change in prices could give rise to an impact of ±8 M€ on operating results. In 2017 coal-fired power plants represented less than 2% of the total installed capacity in Spain. UK: Clean spark spread has become the appropriate index to follow the uncertainty of the margins of gas-fired power plants. Despite the fact that commodities (coal, CO2 and electricity) are listed separately, the uncertainty of the unit margin is studied since it has been detected that it is a better indicator of the uncertainty of the results. With clean spark spread levels around 4 GBP/MWh, a 5% change in the spreads could give rise to an impact of ±7 million euro on operating results, but a greater or sudden fluctuation could have an adverse effect on the Group’s operations, annual results and the economic value of its businesses. Iberdrola Gas Combined Cycles represented the 43% of the installed capacity in UK in 2017. Renewables US: Approximately 65% of the energy produced by Avangrid Inc in 2017 was sold on fixed-price long-term contracts with third parties. And that percentage is expected to be increasing in the following years looking forward reducing the related electricity prices risks because the fixed-price are pre established and are not dependent upon the market. With electricity prices around 30 U.S.$ per MWh, a 5% change in prices could give rise to an impact of ±4 million euro on operating results. The renewable installed capacity is the 89% of the total installed capacity in USA.

**Time horizon**
Short-term

**Likelihood**
About as likely as not

**Magnitude of impact**
Medium-high

**Potential financial impact**
40000000

**Explanation of financial impact**
12M EBITDA of Iberdrola (mainly the Generation and Supply Business) could be affected in the short/medium term as a result of adverse movements in prices of commodities. The numbers below are 12 months sensitivities. Spain: With coal prices around 90 U.S.$ per tonne, a 5 per cent. change in the prices could give rise to an impact of ±20 million euro on operating results. With carbon prices around 15 euro/tonne, a 5 per cent. change in the prices could give rise to an impact of ±8 million euro on operating results in Spain. UK: With clean spark spread levels around 4 GBP/MWh, a 5 per cent. change in the spreads could give rise to an impact of ±7 million euro on operating results USA: With electricity prices around 30 U.S.$ per MWh, a 5 per cent. change in prices could give rise to an impact of ±4 million euro on operating results.

**Management method**
The positions exposed to market risk of the renewables businesses in Spain, UK, Brazil and Mexico (non-regulated generation not covered by long-term PPAs) are transferred to the Generation and Customers division in order to be managed and hedged in the most efficient manner possible, and included in the position of that business. In that division, the “Energy management” department aim is to deal with this related risks and opportunities. Actions taken to manage this risk are for example the mutual closing out of positions by the generation business and retailing business. Whit that measure the generation output is preselled with fixed prices before it is generated, as it is occurring in all geographical areas. The remaining risk is mitigated by: - Diversifying sale and purchase agreements. For example the risk of interruptions in fuel supplies is mitigated procuring them from diversified sources (in terms of counterparties and geographies). - Stating specific clauses in those agreements. For example indexation to variable generation costs. - By arranging derivatives as a hedging strategy using for example derivatives on regulated markets and over-the-counter (OTC) markets, or to cover fuel costs in euros, as physical purchases are made in U.S. dollars. Furthermore the Group has developed a strategy of stabilizing margins by contracting for supplies of fuel and the delivery of electricity to end users or wholesalers in advance.

**Cost of management**
15585000

**Comment**
The above figure is 2017 procurement cost of the Generation and Supply business

---

**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) 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

**Type of financial impact driver**  
Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

**Company-specific description**  
Iberdrola's commitment with the fight against climate change has lead the company to be leader in renewable energy generation, to provide consumer with greener energy and products during the last years and it is our aim to continue growing. IBERDROLA is taking advantage of the wide range of incentives available to promote new, renewable electricity generation, the reduction of technology costs and from its own previous experience. At the same time, IBERDROLA continue to increase the operational efficiency of the renewable assets by reducing costs and increasing production. Also it is at the forefront of providing green energy to consumers, both in households and for industry. Long term agreements are seen as a key element for the last years and also a focal point for the following 5 years.

**Time horizon**  
Short-term

**Likelihood**  
Very likely

**Magnitude of impact**  
Medium-high

**Potential financial impact**  
1200000000

**Explanation of financial impact**  
The Renewables EBITDA is expected to grow 1200 M€ by 2022.

**Strategy to realize opportunity**  
At Iberdrola we have been working for many years to spearhead the transformation of the electricity sector through a sustainable and profitable business model based on clean energies. To contribute towards the growth of this model, in the Renewables business is envisaged significant growth between 2018 and 2022 in strategic markets. The 11.500 M€ as investment in Renewables from 2018 to 2022 spread in the following geographical areas: •USA: 31 % •United Kingdom: 20% •Spain: 16% •Mexico: 9 % •Brazil: 4% Investment per technologies will be: •Onshore wind: 44 % •Offshore wind: 32% •PV: 14% •Hydro Storage: 10 % The accumulated power it is expected to reach 7.1 GW in 2022. Wind Offshore is planed to have selective growth in 3 hubs in quality areas: Baltic Sea, North Sea, US East Coast, as a core bussines, allocation 32% of the investment in renewables for 2018-2022. The customer at the centre strategy is focussing in reliability of services and creation of value added products to optimize the integration and promting storage and hybrid technologies. For example: ESS2GRID project in UK for analysing battery storage systems at renewable energy evacuation points, to provide frequency regulation services. Also long term agreements a focal point for the following 5 years. For example in USA Iberdrola has signed Long Term Purchase Agreements with Amazon US East, Amazon and El Cabo and Southern California Edison (SCE).

**Cost to realize opportunity**  
1150000000

**Comment**  
The 11.500 M€ as investment in Renewables from 2018 to 2022 are spread in the following per main geographical area: •USA: 31 % •United Kingdom: 20% •Spain: 16% •Mexico: 9 % •Brazil: 4% Investment per technologies will be: •Onshore wind: 44 % •Offshore wind: 32% •PV: 14% •Hydro Storage: 10 %

**Identifier**  
Opp2
Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Development of new products or services through R&D and innovation

Type of financial impact driver
Increased revenue through new solutions to adaptation needs (e.g., insurance risk transfer products and services)

Company-specific description
Distribution Networks have the central role in energy transition and need to adapt to new challenges arising worldwide. For IBERDROLA, investments on distribution networks are key for an efficient, safe and reliable electricity system. In the future, networks will not be anymore passive players, but rather active agents that must allow for the integration of renewables into the grids and the connectivity of more sophisticated customers (smart grids). Players with the financial and technical skills to do these investments (as Iberdrola) will be a very good position to benefit from it.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Medium-high

Potential financial impact
1000000000

Explanation of financial impact
The Networks business EBITDA is expected to have a growth of 1000 M€ by 2022.

Strategy to realize opportunity
Distribution Networks is evolving through the aim to support the Energy Transition focusing on: • Optimise planning and Network deployment in a context of electrification of transport and heat. • Ensure system operability and reliability with large penetration of intermittent generation. • Integrate Distributed Energy Resources (Renewables, EV, storage). (NECEC transmission project selected for interconnection between Canada and Massachusetts with commissioning in 2022). • Facilitate active demand response and supply balancing services. The IBERDROLA network digitalization has been in continuous improvement to set the blueprint for a Global Smart Grid model (3Bn € invested to date) supported by a fully functional in-house innovation model. Related to electric vehicle, IBERDROLA has started to deploy its early planning investing in distribution networks to accommodate full EV deployment in core markets. Long term regulatory frameworks and reasonable rates of return in all jurisdictions are the foundations of a balanced investment mix in Transport and Distribution. To continue with this evolution, the Networks business will absorb 50% of the group’s net investments until 2022. IBERDROLA has planned a net investment of 15,500 M€ (17% to transmission networks, 23% to the automation and digitisation of the networks, The rest to maintenance, reinforcement and development of the existing network) The country breakdown is: • USA: 37% • UK: 14 % • Spain: 12% • Brazil: 37%

Cost to realize opportunity
15500000000

Comment
The Networks business will absorb 50% of the group’s net investments from 2018 to 2022, placing it at the technological edge of the digitisation of the grid. That means that IBERDROLA has planned a net investment of 15,500 M€, with more than 17% of the amount allocated to growth in transmission networks and 23% to the automation and digitisation of the networks. The rest will be invested in the maintenance, reinforcement and development of the existing network. All of this has as its main objective the improvement of the quality of supply to the customer and a greater operational efficiency (18% reduction in the cost of customer service in the period). The country breakdown by country is: • United States: 37% • United Kingdom: 14 % • Spain: 12% • Brazil: 37% Also, 3.9 Bn € is expected to be invested for growing and expanding our global technology platform that includes data analytics, systems and applications, telecommunication network, automation and network assets.

Identifier
Opp3

Where in the value chain does the opportunity occur?
Customer

Opportunity type
Products and services

Primary climate-related opportunity driver
Shift in consumer preferences

Type of financial impact driver
Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

Company-specific description
IBERDROLA has been tackling the customer needs especially during the last years, previewing the shifting in the way people consume and interact with new technologies and in relation with the growing awareness of the climate change globally. Now our growth is based, among others, in having our focus in the customer to provide innovation, flexibility, digitalisation and connectivity in our new products.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Medium-high

Potential financial impact
600000000

Explanation of financial impact
The growth in retail will lead an incremental of 0,6 Bn€ EBITDA by 2022.

Strategy to realize opportunity
Current trends - decarbonisation and electrification of the economy, technological progress and increased customer connectivity - reinforce the focus of our three global businesses: networks, renewables and wholesale and retail, all focused on the customer. Our strategy to obtain profitable growth in the retail business is based on strong emphasis on smart solutions, expanding existing successful retail model. It is envisaged to have an increment from 6M to 14 M customer smart solutions for 2022, mainly in Spain, UK and Brazil, but also European expansion is planned. The smart solutions portfolio includes: • Smart Energy Services • Smart Home • Smart Mobility • Smart Solar. The services to customers growth is previewed in +9 M by 2022, based on our successful retail model and sustained growth in core geographies. The cost to serve and acquisition cost are previewed to have reductions of 9 and 6% due our digital channels and data analytics. Also digitalization of processes and sales will contribute with additional efficiencies during the following years, as: • promoting e-billing • launching new digital products to customer personalization • leveraging on smart meters and data analytics • giving customer advice about consumption based on data Estimated net growth investment in retail business is 1,1 bn € (2018-2022), and 800 M€ in smart meters, mainly for core countries (Spain, UK, USA and Brazil), but also for European deployment. (SPECIFIC EXAMPLES PROVIDED IN "COMMENT" SECTION)

Cost to realize opportunity
190000000

Comment
Estimated net growth investment in retail business is 1,1 bn € from 2018 to 2022, and 800 M€ in smart meters (Spain, UK, USA and Brazil also for European deployment) EXAMPLES: • Smart Home: Spain: 10,4 M smart meters in 2017. Smart products for home: Smart Irrigation, Smart Thermostats, Electric meters • Smart Mobility: smart charging+green tariff+maintenance+digital solutions • Smart Solar: personalized analysis+PV+storage+installation+maintenance+digital management • E-billing. Expected growth to 75% in 2022 (Spain, UK, Brazil and expansion in Europe) • New digital products. Spain and UK: Personalized Plans (used by 1M customers); Easy Quote, first machine learning algorithm to predict consumption for household; Power Up allows customers to purchase gas and electricity with their mobile according to their needs and forecast • Data analytics: Spain, USA, UK and Brazil: in 2017 70 Tb of data analyzed; big data tools developed to forecast demand. Reducion in 17 M/y costs of frauds in Spain

C2.5
(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

<table>
<thead>
<tr>
<th>Impact</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products and services</td>
<td>Impacted</td>
</tr>
<tr>
<td>Supply chain and/or value chain</td>
<td>Impacted for some suppliers, facilities, or product lines</td>
</tr>
<tr>
<td>Adaptation and mitigation activities</td>
<td>Impacted</td>
</tr>
<tr>
<td>Investment in R&amp;D</td>
<td>Impacted</td>
</tr>
<tr>
<td>Operations</td>
<td>Impacted for some suppliers, facilities, or product lines</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>Please select</td>
</tr>
</tbody>
</table>
(C2.6) Describe where and how the identified risks and opportunities have factored into your financial planning process.

<table>
<thead>
<tr>
<th>Relevance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>Impacted Increase of revenues thanks to our renewable strategy in line with the Opp 1. During 2017, Renewables Business had an EBITDA up to 6.1%, to 1,592.1 M€, with an installed capacity growing 7.5% to 16.6 GW world wide. Being a renewable energy producer leader and pushing for the fighting against climate change has placed the group in prominent positions on indexes such as the Dow Jones Sustainability Index and FTSE4Good. Iberdrola is considered as one of the world's most sustainable electricity companies among ESG investors. Magnitude of impact: high</td>
</tr>
<tr>
<td>Operating costs</td>
<td>Impacted An example related with Risk 1 and Chronic changes in precipitation patterns and extreme variability in weather patterns: Operation and Maintenance costs reflect the increased need of new measures to prevent the impact of physical climate change risks on assets. To improve assets adaptation Iberdrola is developing an analysis of different climate scenarios and specific studies for Iberdrola Business in order to anticipate future climate risks as a result of climate change and to increase the resilience of the company. An example of prevention measures taken related to this risk, in USA, Iberdrola has invested in grid resilience, in other to reinforce the capacity to tackle severe events as snow storms. Thank to that The Company provided exceptional storm response at Central Maine Power to three significant weather events in tight succession. More than 2,500 individuals from all Avangrid Networks Operating Companies, other utilities and contract workers ensured safe restoration. Magnitude of impact: medium</td>
</tr>
<tr>
<td>Capital expenditures / capital allocation</td>
<td>Impacted Example in relation to the strategies to realize the Opp 2 and Opp 3: Iberdrola investments decisions are clearly impacted by the global environment and the strategy of the Group. In this regards, it must be noted that 50% of the capex forecasted in the strategy for 2018-2022 will be allocated to networks, while 37% will be for Renewables Magnitude of Impact: high</td>
</tr>
<tr>
<td>Acquisitions and divestments</td>
<td>Impacted A recent example related with Opp 2 and Opp 3 is: Gas trading and storage in USA and Canada has been recently sold in line with the strategy of the Group to focus on renewables and netorks. Magnitude of Impact: low</td>
</tr>
<tr>
<td>Access to capital</td>
<td>Impacted In relation to Opp 1 it has to be mention the Iberdrola’s Green Bond emissions strategy. We are one of the largest private issuers of green bonds worldwide – in only three years it issued 6,700 million euros in green bonds – and has recently closed the largest sustainable loan transaction ever to date at the global level, in the amount of 5,300 million euros. Iberdrola has issued a total of 8 green bonds in 2017. The proceeds of all of these transactions have been used to fund the refinancing of investments in projects that met certain environmental and social responsibility criteria validated both by Iberdrola and subsequently by VigeoEiris (an independent entity). These projects are mainly within the area of renewable energy. Magnitude of Impact: medium</td>
</tr>
<tr>
<td>Assets</td>
<td>Impacted In relation to the Opp 1, Opp 2 and Opp 3 Iberdrola has increased its total assets 4M€ from 2016 to 2017. Also related with the Opportunity 1, and in line with the Group strong commitment to tackling the effects of climate change, Iberdrola has decided to complete the process of phasing out all its coal-fired power generation capacity worldwide. That technology represented less than 2% of the group's total installed capacity of 48,871 megawatts (MW) (2017). Magnitude of Impact: high</td>
</tr>
<tr>
<td>Liabilities</td>
<td>Impacted Related with the Opp 1, and as stated before, Iberdrola is in the process of phasing out all its coal-fired power generation capacity worldwide. Provisions for dismantling costs of coal power plants (less than 2 % of the total installed capacity in Spain in 2017) are reflected in the Liabilities side of our Balance Sheet. Magnitude of Impact: low</td>
</tr>
<tr>
<td>Other</td>
<td>Please select</td>
</tr>
</tbody>
</table>

C3. Business Strategy

C3.1

(C3.1) Are climate-related issues integrated into your business strategy?
Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?
Yes, qualitative and quantitative

C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b
Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy.

Yes
(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

i) Business strategy: Nearly two decades ago, Iberdrola understood that climate change was a real challenge that required urgent actions, being aware of the leading contribution of the electricity sector to the solution through electrification of the economy. Since then, Iberdrola leads the energy transition towards a sustainable model through investments in renewable energy, smart grids, large-scale energy storage and digital transformation, offering the most advanced products and services to its customers. ii) Evidence: Iberdrola has closed fifteen coal and fuel oil plants since 2001 all over the world, totaling approximately 7,500 MW, always working with local authorities to guarantee jobs and minimize impact on supply chain and local economy. Following this strategy of decarbonization Iberdrola has built more 17,000 MW of renewable capacity in the last 12 years, being the cornerstone of our strategy. This business strategy committed to climate action has enabled Iberdrola to make its specific emissions 39% lower than the average for the European electricity sector and have two thirds of its installed capacity emission free. iii) What aspects of climate change have influenced the strategy: IBERDROLA is aware of the new international energy scene, which is characterized by the need of guarantee a competitive, secure and sustainable supply. In this context clean technologies are decisive for fighting against climate change and minimize the dependence on carbon fossil fuel. Environmental management is one of the most important pillars in the Company's business development. The Group has become one of the largest utility of the world and world-leader in wind energy. iv) Short term strategy: During the financial year, digitalization is a priority, in the area of demand-side management, IBERDROLA’s main goal is to foster energy efficiency and the intelligent use of active electricity grids (more than 10 millions of smart meters installed). Several initiatives have been developed to reduce indirect emissions, such as the promotion of eco-efficiency in order to encourage the responsible consumption of energy and to foster the use of renewable sources if generation. Services related to the following are marketed in order to strengthen this strategy: energy savings and efficiency, renewable energy facilities and added services, comprehensive management of energy supplies and maintenance of facilities and electric mobility. v) Long term strategy: The purpose of the business model defined by the Iberdrola group is the “supply of reliable, high quality and environmentally-friendly energy”, through a sustainable, long-term industrial enterprise. Under this consideration, and taking into account the long-term consensus energy scenarios, Iberdrola is developing a strategy with the following main characteristics:

- The organic growth of the company is focused on major investments in the five countries where present.
- The investment will preferably focus on the networks and renewables businesses, which, apart from being regulated businesses with long-term contracts, contribute decisively to the fight against climate change.
- The strategic pillars defined by the company are profitable growth, operational excellence, customer-focused operations, the optimisation of capital, and innovation.
- The company has publicly announced its commitment to decarbonisation, setting high goals for 2030 and 2050

vi) Advantage over competitors: A deep change in the generation mix, derived from the increase in fossil fuel prices and policies to support security of supply and reduced CO2 emissions, is taking place. IBERDROLA, as a wind power-leader, can face up to this situation due to the development of low carbon technologies, digitalization, and the ecoefficiency strategy. In addition the Company’s diversified business assures IBERDROLA’s position as a Company that could continue developing its business in this new context. According to the above, several institutions have recognized IBERDROLA as a leader Company for their actions to fight against climate change (among others i.e: CDP, CDP Water, DJSI, FTSE4GOOD, MSCI World ESG Index, Global 100,Newsweeks Green Rankings 2017, Fortune Global 500...). vii) Influence on business decisions: The Company’s strategy is focused on gradually reducing its intensity of GHG emissions by continuing along the line of electricity generation based on renewable sources and progressively introducing more efficient and less-carbon intensive technologies at existing facilities. IBERDROLA integrates climate change issues as a transversal element of risk and opportunity in its business plans. viii) Iberdrola had already taken into account the Paris Agreement and the Sustainable Development Goals in its business strategy, Iberdrola took and transferred to Paris (COP21) its ambitious commitment to reduce its CO2 emissions intensity by 30% in 2020, 50% in 2030 and be carbon-neutral by 2050, continuing the development of electric energy from renewable sources, focusing innovation efforts within more efficient technologies having a lower intensity of carbon dioxide emissions, and progressively introducing them in their facilities. The achievement of SDG 7 and 13 are targets included in the Strategic Bonus for the Board of Directors. Example:

During 2017, Iberdrola requested the closure of the company's last two coal plants in the world, a decision consistent with the Group's commitment to clean energies as part of its fight against climate change. ix) Iberdrola signed in March 2017 with the Alliance of CEO Climate Leaders convened by the World Economic Forum, expressing our strong support for the recommendations of the industry-led Task Force on Climate-related Financial Disclosures (TCFD), convened by the Financial Stability Board
(C3.1d) Provide details of your organization’s use of climate-related scenario analysis.

<table>
<thead>
<tr>
<th>Climate related scenarios</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEA Sustainable development scenario</td>
<td>The SDS scenario: This is the baseline scenario for Iberdrola’s strategy, since Iberdrola integrated in its group strategy the fight against climate change, the development of clean energy and more sustainable electricity grids, together with the commitment to achieve the Sustainable Development Goals. The company’s plans are fully in line with the three main vectors of the transformation process that the energy sector is expected to perform under this climate scenario: decarbonisation, which entails a strong electrification process for the economy; technological advances, which are helping reduce costs and create new business opportunities; and greater consumer connectivity, which gives consumers more importance and capacity for interaction. These three trends strengthen Iberdrola’s focus on its three core businesses: more renewable, more and smarter networks and more smart-solutions for the consumer. We have made an internal (to be published shortly) analysis to check that our strategic and financial planning processes are very resilient to this climate-related scenario. The analysis of climate scenarios includes the following businesses of Iberdrola: • Renewables (includes hydraulic generation) • Generation • Networks • Commercial In the following geographical areas in which it is present: • Spain • United Kingdom • U.S • Mexico • Brazil The selection of the Scenario Sustainable Development Scenario as the basis of Iberdrola’s strategy is based on Iberdrola’s trajectory in relation to the commitment acquired over fifteen years ago, with the fight against climate change, the generation of increasingly clean energy and adherence to the UN initiative of the Sustainable Development Goals, integrating that commitment into the group’s own strategy, working towards its achievement in 2030 as well as its dissemination. The comparison of this scenario (more probability to happen than another plausible scenario such as the New Policies Scenario), has made it possible to extract, in an orderly manner by business and geographical area, conclusions about the degree of resilience. Regarding the Inputs / Assumptions of each scenario, the six most relevant key factors based on Iberdrola’s business have been taken as the basis of the internal analysis are: • Ð Growth of energy / electricity demand (%) • Ð Penetration of renewables and distribution among technologies (%) • Ð Installed gas power (GW) • Ð Penetration of the electric vehicle (Millions vehicles) • Ð Intensity of CO2 emissions (grCO2 / KWh) • Ð Access to electricity (Millions of people without access to electricity) This scenario generates more opportunities than risks for Iberdrola: expected EBITDA increase in the medium term: +12%</td>
</tr>
<tr>
<td>Other, please specify (IEA New Policies Scenario (NPS))</td>
<td>The NPS scenario: WEO’s central scenario, incorporates the current energy policies, as well as an evaluation of the results that can probably be obtained from the implementation of already announced commitments, in particular the NDC commitments of the Paris Agreement. This public climate scenario has been selected, with premises and baseline data that are available internationally in order to facilitate comparability and promote transparency. We have compared for this scenario the same six most relevant key factors based on Iberdrola’s business: • Ð Growth of energy / electricity demand (%) • Ð Penetration of renewables and distribution among technologies (%) • Ð Installed gas power (GW) • Ð Penetration of the electric vehicle (Millions vehicles) • Ð Intensity of CO2 emissions (grCO2 / KWh) • Ð Access to electricity (Millions of people without access to electricity) and our conclusion is that it implies more opportunities (less than the SDS Scenario) than risks for Iberdrola. In both scenarios the demand for electricity increases and, although in the NPS scenario the increase forecast for 2030 is somewhat higher, they are not significant differences, and in both cases it implies great opportunities for the development of electricity generation, distribution and transportation businesses. and commercial. In the SDS scenario, the growth of the renewable quota in the generation mix is more marked in all the geographical areas analyzed. This is directly related to the expected growth in this Iberdrola business. Within the framework of conventional generation, the NPS scenario foresees a greater growth of the installed gas capacity in all the geographical areas analyzed than the SDS. Iberdrola is more aligned with the SDS in terms of giving less weight in the global generation mix to conventional generation and gas, as evidenced by the fact that it is in the process of closing coal power generation plants.</td>
</tr>
<tr>
<td>Other, please specify (IPCC RCP 8.5)</td>
<td>In addition to the two transition scenarios, Iberdrola has included a physical scenario in its analysis of scenarios Iberdrola considers the analysis of an extreme climatic scenario, associated with RCP 8.5, which corresponds to an increase in the average global temperature in the period 2081-2100 of 3.7 °C, as a base scenario to diagnose in that case more unfavorable physical risks that could be faced by the company. To do this, work on Adaptation is being developed considering the RCP scenario 8.5 with a specific methodology to assess physical impacts. The first results on these works will be available by the end of 2018. The risks identified in this work will be included in this analysis of risks and opportunities arising from climate change. This is used as a worst-case scenario to plan and develop adaptation measures.</td>
</tr>
</tbody>
</table>

C-AC3.1e/C-CE3.1e/C-CH3.1e/C-CO3.1e/C-EU3.1e/C-FB3.1e/C-MM3.1e/C-OG3.1e/C-PF3.1e/C-ST3.1e/C-TO3.1e/C-TS3.1e
Iberdrola had already taken into account the Paris Agreement and the Sustainable Development Goals in its business strategy. Iberdrola took and transferred to Paris (COP21) its ambitious commitment to reduce its CO2 emissions intensity by 30% in 2020, 50% in 2030 and be carbon-neutral by 2050, continuing the development of electric energy from renewable sources, focusing innovation efforts with more efficient technologies having a lower intensity of carbon dioxide emissions, and progressively introducing them in their facilities. The achievement of SDG 7 and 13 are targets included in the Strategic Bonus for the Board of Directors.

Iberdrola signed in March 2017 with the Alliance of CEO Climate Leaders convened by the World Economic Forum, expressing our strong support for the recommendations of the industry-led Task Force on Climate-related Financial Disclosures (TCFD), convened by the Financial Stability Board.

Iberdrola will invest €32 billion over the period between 2018-2022, setting solid foundations for sustainable growth in the next decade. More than 90% of total amount will be allocated to regulated activities or long-term contracts, in line with the group’s strategy of investing in businesses with stable and predictable returns. A business strategy committed to climate action has enabled Iberdrola to make its specific emissions 38% lower than the average for the European electricity sector and have two thirds of its installed capacity emission free. To be consistent with this strategy, Iberdrola has closed fifteen coal and fuel oil plants since 2001 all over the world, totalling approximately 7,500 MW, always working with local authorities to guarantee jobs and minimize impact on supply chain and local economy. On top of that, the company is currently taking the necessary steps for the orderly closure of its two remaining coal plants in the world (both located in Spain, jointly 874 MW).

The company’s plans are fully in line with the three main vectors of the transformation process that the energy sector is currently experiencing: decarbonisation, which entails a strong electrification process for the economy; technological advances, which are helping reduce costs and create new business opportunities; and greater consumer connectivity, which gives consumers more importance and capacity for interaction.

These three trends strengthen Iberdrola’s focus on its three core businesses: more renewable, more and smarter networks and more smart-solutions for the consumer.

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.

<table>
<thead>
<tr>
<th>Target reference number</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abs 1</td>
<td>Scope 1</td>
</tr>
</tbody>
</table>
Iberdrola commits to reduce absolute Scope 1 GHG emissions 5% by 2023 from a 2017 base-year.

Is this a science-based target?
Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative.

% achieved (emissions)
0

Target status
New

Please explain
Iberdrola commits to reduce absolute Scope 1 GHG emissions 5% by 2023 from a 2017 base-year.

---

Iberdrola commits to reduce absolute Scope 1 GHG emissions 26% by 2030 from a 2017 base-year.

Is this a science-based target?
Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative.

% achieved (emissions)
0

Target status
New

Please explain
Iberdrola commits to reduce absolute Scope 1 GHG emissions 26% by 2030 from a 2017 base-year.

---

Iberdrola commits to reduce absolute Scope 1 GHG emissions 26% by 2030 from a 2017 base-year.

Is this a science-based target?
Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative.

% achieved (emissions)
0

Target status
New

Please explain
Iberdrola commits to reduce absolute Scope 1 GHG emissions 26% by 2030 from a 2017 base-year.

---

Iberdrola commits to reduce absolute Scope 1 GHG emissions 26% by 2030 from a 2017 base-year.

Is this a science-based target?
Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative.

% achieved (emissions)
0

Target status
New

Please explain
Iberdrola commits to reduce absolute Scope 1 GHG emissions 26% by 2030 from a 2017 base-year.
**Scope**
Scope 2 (location-based)

**% emissions in Scope**
100

**% reduction from base year**
7.75

**Base year**
2017

**Start year**
2018

**Base year emissions covered by target (metric tons CO2e)**
3415197

**Target year**
2023

**Is this a science-based target?**
Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

**% achieved (emissions)**
0

**Target status**
New

**Please explain**
Iberdrola commits to reduce absolute Scope 2 GHG emissions 7.75% by 2023 from a 2017 base-year.

---

**Target reference number**
Abs 4

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

**% emissions in Scope**
100

**% reduction from base year**
10

**Base year**
2017

**Start year**
2018

**Base year emissions covered by target (metric tons CO2e)**
20591696

**Target year**
2023

**Is this a science-based target?**
Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

**% achieved (emissions)**
0

**Target status**
New

**Please explain**
Iberdrola commits to reduce absolute Scope 3 GHG emissions 10% by 2023 from a 2017 base-year.
Iberdrola commits to reduce absolute Scope 1+2 GHG emissions 37% by 2030 from a 2007 base-year.
Please explain
Carbon neutral in 2050

C4.1b

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

**Target reference number**
Int 1

**Scope**
Scope 1

**% emissions in Scope**
100

**% reduction from baseline year**
50

**Metric**
Metric tons CO2e per megawatt hour (MWh)*

**Base year**
2007

**Start year**
2015

**Normalized baseline year emissions covered by target (metric tons CO2e)**
37769000

**Target year**
2030

**Is this a science-based target?**
Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science Based Targets initiative

**% achieved (emissions)**
54

**Target status**
Underway

**Please explain**
IBERDROLA has set an ambitious new environmental objective of reducing the intensity of its CO2 emissions to below 150 grams per kWh in 2030, a level 50% less than its emissions in 2007.

**% change anticipated in absolute Scope 1+2 emissions**
37

**% change anticipated in absolute Scope 3 emissions**
0

**Target reference number**
Int 2

**Scope**
Scope 1

**% emissions in Scope**
100

**% reduction from baseline year**
30

**Metric**
Metric tons CO2e per megawatt hour (MWh)*

**Base year**
2007

**Start year**
2015

**Normalized baseline year emissions covered by target (metric tons CO2e)**
37769000

**Target year**
2020

**Is this a science-based target?**
Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science Based Targets initiative

**% achieved (emissions)**
100

**Target status**
Underway

**Please explain**
IBERDROLA has set an ambitious new environmental objective of reducing the intensity of its CO2 emissions to below 150 grams per kWh in 2030, a level 30% less than its emissions in 2007.

**% change anticipated in absolute Scope 1+2 emissions**
24

**% change anticipated in absolute Scope 3 emissions**
0

**Target reference number**
Int 3

**Scope**
Scope 1

**% emissions in Scope**
100

**% reduction from baseline year**
49

**Metric**
Other, please specify (Metric tons CO2e per USD($) GDP)

**Base year**
2017

**Start year**
2018

**Normalized baseline year emissions covered by target (metric tons CO2e)**
26846490

**Target year**
2030

**Is this a science-based target?**
Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science Based Targets initiative

**% achieved (emissions)**
0

**Target status**
New
Please explain
Iberdrola commits to reduce Scope 1 GHG emissions 49% per kgCO2e/GDP $ by 2030 from a 2017 base-year.

% change anticipated in absolute Scope 1+2 emissions
26

% change anticipated in absolute Scope 3 emissions
0

C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

Target
Renewable energy production

KPI – Metric numerator
Renewable Production (MWh)

KPI – Metric denominator (intensity targets only)
Total Energy Production (MWh)

Base year
2015

Start year
2016

Target year
2020

KPI in baseline year
34.6

KPI in target year
37

% achieved in reporting year
100

Target Status
Underway

Please explain
37% of total electricity production in renewable energy in 2020.

Part of emissions target
To achieve emissions reduction objectives it is essential to increase production in renewable energy.

Is this target part of an overarching initiative?
No, it's not part of an overarching initiative

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 projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Number of projects</th>
<th>Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under investigation</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>To be implemented*</td>
<td>3</td>
<td>1000</td>
</tr>
<tr>
<td>Implementation commenced*</td>
<td>4</td>
<td>16000000</td>
</tr>
<tr>
<td>Implemented*</td>
<td>5</td>
<td>7403000</td>
</tr>
<tr>
<td>Not to be implemented</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Activity type</th>
<th>Description of activity</th>
<th>Estimated annual CO2e savings (metric tonnes CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-carbon energy installation</td>
<td>Other, please specify (Wind, Hydro and Solar PV)</td>
<td>16000000</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>Videoconferences</td>
<td></td>
</tr>
<tr>
<td>Transportation: use</td>
<td>Not Applicable</td>
<td></td>
</tr>
</tbody>
</table>

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
73000000

Investment required (unit currency – as specified in CC0.4)
11500000000

Payback period
4 - 10 years

Estimated lifetime of the initiative
6-10 years

Comment
World leader in renewable energies with 29.1 GW installed. We are among Europe’s most environmentally-friendly electricity utilities: 66.6% of our installed capacity is emissions free, which is 30% less than the average in the European electricity sector in terms of kWh. For the IBERDROLA Group innovation is the most important toll in order to ensure the sustainability, the efficiency and competitiveness. The R&D&I efforts are directed at optimising operating conditions, improving safety, reducing environmental impact and developing technologies which permit future energy challenges to be met. IBERDROLA also opens up new business opportunities in the energy sector through innovation. During 2017, projects related to smart grids, clean energy generation, offshore wind and new technologies and business models are the ones that highlight. For more information, please visit: https://www.iberdrola.com/wcorp/gc/prod/en_US/inversores/docs/Outlook2018_Renewables_5.pdf

Activity type
Other, please specify (Transportation: use - VIDEOCONFERENCES)

Description of activity
Not Applicable

Estimated annual CO2e savings (metric tonnes CO2e)
22500

Scope
Scope 3

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4) 1000000

Investment required (unit currency – as specified in CC0.4) 40000

Payback period 1-3 years

Estimated lifetime of the initiative 6-10 years

Comment
Videoconferences promotion is included in the Iberdrola’s Sustainable Mobility Plan to avoid business travels and emissions.

Activity type
Energy efficiency: Processes

Description of activity
Process optimization

Estimated annual CO2e savings (metric tonnes CO2e) 100000

Scope
Scope 2 (location-based)
Scope 3

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4) 650000000

Investment required (unit currency – as specified in CC0.4) 3900000000

Payback period 4 - 10 years

Estimated lifetime of the initiative 6-10 years

Comment
SMART GRIDS PROGRAM: During 2017, Iberdrola Distribution has continued to increase its efforts in R&D projects, related to smart grids in the Spanish and European field. The Group’s R&D activity in the Networks area focuses on optimizing the distribution grid, with an emphasis on worker safety, environmental issues, and the improvement in the quality of supply. +3.9 Bn Euros net investments for growing and expanding our global technology platform. 2018-2022: https://www.iberdrola.com/wcorp/gc/prod/en_US/inversores/docs/Outlook2018_Networks_4.pdf

Activity type
Process emissions reductions

Description of activity
Other, please specify (Electronic Billing)

Estimated annual CO2e savings (metric tonnes CO2e) 275

Scope
Scope 3

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4) 1700
Investment required (unit currency – as specified in CC0.4)
100000

Payback period
1-3 years

Estimated lifetime of the initiative
3-5 years

Comment
ELECTRONIC BILLING. Promotion of electronic billing as an ecological alternative to the use of paper, through awareness-raising campaigns, mailings, promotions, APP for customers, etc. Electronic billing promotion is included in the Iberdrola’s Sustainable Mobility Plan to avoid travel courier and emissions.

Activity type
Energy efficiency: Processes

Description of activity
Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
14500

Scope
Scope 2 (location-based)
Scope 3

Voluntary/Mandatory
Please select

Annual monetary savings (unit currency – as specified in CC0.4)
950000000

Investment required (unit currency – as specified in CC0.4)
15500000000

Payback period
4 - 10 years

Estimated lifetime of the initiative
6-10 years

Comment
Savings from ENERGY EFFICIENCY in Spain, Brazil and UK Loss reduction programmes have been implemented in all regions to improve the reliability and availability of the supply network, which has made it possible to reduce, or at least maintain, the level of losses. IBERDROLA, one of Europe’s most efficient major electricity companies, will continue to boost its operating efficiency on the strength of technical progress in terms of the automation and digitalisation of all its businesses and processes. The Company takes extensive measures to control or reduce such losses, including: – Updates and modifications to reduce the length of lines through construction of new substations and increases in the power of existing substations, increases in voltage and improvement of power factor, implementation of remote management, and maintenance work. – Improvements in contract management and supply point inspections: replacement of electromechanical meters with electronic meters, inspection of facilities and regulation of customers and clandestine connections. – Increase in first-level reviews and strengthening of field activities with supply point inspections to reduce administrative and non-technical losses.

Activity type
Process emissions reductions

Description of activity
New equipment

Estimated annual CO2e savings (metric tonnes CO2e)
75

Scope
Scope 3

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
2000000

Investment required (unit currency – as specified in CC0.4)
2500000

Payback period
1-3 years

Estimated lifetime of the initiative
3-5 years

Comment
Transportation: green fleet. Electric vehicles promotion is included in the Iberdrola’s Sustainable Mobility Plan to avoid local emissions. https://www.iberdrola.com/sustainability/environment/sustainable-mobility-plan

Activity type
Other, please specify (Colective Transport in commuting)

Description of activity
<Not Applicable>

Estimated annual CO2e savings (metric tonnes CO2e)
55

Scope
Scope 3

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
100000

Investment required (unit currency – as specified in CC0.4)
190000

Payback period
4 - 10 years

Estimated lifetime of the initiative
6-10 years

Comment
Lanzadera service. Colective Transport in commuting. Colective transport promotion is included in the Iberdrola’s Sustainable Mobility Plan to avoid the number of travels and emissions. Investment required/YEAR. Annual monetary savings for employees. https://www.iberdrola.com/sustainability/environment/sustainable-mobility-plan

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

| Dedicated budget for energy efficiency | SDG 7.3 is a sustainability development goal for the Group (2015-2030) From 4 points of view: 1) As an electric utility, by incorporating clean, advanced and efficient production and distribution technologies. 2) As a vendor, by informing and educating customers and providing them with solutions that help enhance their energy efficiency and reduce the environmental impact of their energy habits and consumption. 3) As an energy consumer, by ensuring continuous improvement in energy efficiency at its work centres, buildings and vehicles, developing mobility plans and raising awareness among employees. 4) As a purchaser, by including environmental and social commitment clauses in supplier contracts and by preparing awareness and carbon footprint measurement campaigns within the supply chain. |
| Dedicated budget for low-carbon product R&D | 1) Renewable Energy: Developing R&D projects to improve efficiency of existing technologies and to develop new generation technologies. Offshore wind projects: Sedar, Impacto Openfoam and FP7 Eera. Resource energy field: Low-Impact gravity foundations. Leanwind offshore technology, and various lines within OWA programme, promoted by the Carbon Trust in UK. In Scotland: study into fatigue in offshore piles for chalky soils (TLPWind project). The European Best Path project has been launched, with a view to demonstrating new technologies that enable the incorporation of renewable energy sources into networks. SmartWind project is working on storage and simulations related to wind farms. 2) Clean Generation Technologies: Focused operational flexibility and efficiency, respect for the environmental, and improved safety at facilities. IBERDROLA is firmly committed to reducing the environmental impact of its generating facilities. Underway projects: Fibraciones, Migres and Resonuc. 3) Smart Grids: Various projects that seek to implement a modern electric grid based on remote management. In Europe: Grids4EU and GreenGrid projects, Discern projects, Advanced and UpGrid project and Price. UK: ARC and Flexnet projects: strengthen smart grids in Scotland. In Brazil: Vants and Robô to inspect distribution grids. Also noteworthy is the Elektrobus project, prototype of a vehicle with an electrical propulsion system using ultra-condensers. In USA: Integrated Aerial Damage Assessment System project, to develop an aerial system to assess damages to the electrical grid after heavy storms. Iberdrola has an R&D technology centre in Qatar. 4) IBERDROLA has launched the Sustainable Mobility Plan with 23 measures to reduce CO2 emissions, focused on employees, business, customers and suppliers, promoting the use of electric vehicles. |
| Dedicated budget for other emissions reduction activities | In this context, investments are being made: 1) To strengthen transmission and distribution networks reducing losses. 2) To develop smart grids. 3) Promotion of green mobility with electric vehicles. 4) Promotion of e-billing for customers. 5) Committed to SDG (Sustainable Development Goals). 6) Collaboration with campaigns of the Energy Diversification and Savings Institute (Instituto para la diversificación y el ahorro energético) (IDAE). 7) Conducting information campaigns and commercial activities. 8) Providing information on the website and in invoices. 9) Sponsorship of fairs and participation in events such as World Environment Day and the European Mobility Week. 10) The IBERDROLA Bus. 11) Participation in forums, seminars and industry task forces. 12) Cooperation agreements and training sessions with the main consumer and business associations and public institutions. 13) Customer engagement: promoting electric vehicles. 14) Positioning as a global leader in the offshore area, where it develops more advanced and innovative projects. Note the Offshore Wind Accelerator (OWA) initiative, a special programme promoted by the Carbon Trust (United Kingdom), in which specialist companies and engineering firms join forces, pooling their knowledge to find solutions that enable a reduction in the costs and risks of offshore technology, thus facilitating and speeding up their development in UK waters. 15) REGALIZ Project: with the goal of recycling and eliminating SF6 gas located in zonal installations. |
| Partnering with governments on technology development | Among Others: 1) Green eMotion, a four-year cross-European initiative to promote electromobility. 2) IBERDROLA’s Sustainable Mobility Plan with 23 measures to reduce CO2 emissions, focused on employees, business, customers and suppliers, promoting the use of electric vehicles. 3) Other projects financed by national programs are being developed, such as Mugielec, in the Basque Country, Surtidor, with funds from the Ministry of Industry, and ICT4. 4) Agreements and alliances with companies such as Opel, Mitsubishi, and Peugeot to facilitate access to and the use of electric vehicles by citizens and businesses and develops projects with government authorities in the autonomous communities of Castille and Leon, Valencia, the Basque Country, Murcia, Andalusia, Catalonia and Estramadura. The Company also participates in electromobility projects in Scotland and the United States of America. 5) Agreement with Volvo to boost electrification of public transport in urban areas 6) Agreements to launch a corporate electric car-sharing service 7) Installation of recharge points in collaboration with government authorities in the autonomous communities. 8) First public services of e-carsharing. 9) Electric bus service, by the substitution of lines of conventional buses. 10) Electric fleet and electric recharge points for different governments. |
| Employee engagement | First Spanish company to launch a shared electric car service among its employees to handle commercial activities in Madrid, Bilbao, Seville, Valencia, Valladolid and Barcelona. IBERDROLA also plans to replace 40% of its fleet, some 300 cars, with these types of vehicles. Awareness campaign among all employees on emissions produced on commuting. IBERDROLA has launched the Electric Vehicle for Employees within the Sustainable Mobility Plan of IBERDROLA providing support to employees for the purchase of electric vehicles. |
| Compliance with regulatory requirements/standards | 1) In UK, work continues on the Carbon Emissions Reduction Target project, within the context of the UK government’s carbon emissions reduction programme, pursuant to which actions have been taken to improve insulation in homes and buildings and to distribute low-consumption lighting. 2) In Brazil, Elektro is developing various projects within the Energy Efficiency Programme (PEE), alongside the National Electrical Energy Agency: major energy efficiency programmes for public buildings, such as municipal governments, schools, assistance centres, etc. |
| Internal finance mechanisms | IBERDROLA’s Green Mobility plan: first comprehensive Spanish solution to facilitate real access by citizens to electromobility. The Company continues to develop and expand this solution, which allows customers to buy electric vehicles (cars, motorcycles and bicycles) from among a broad range of brands, financing, the supply of 100% renewable energy, and the systems and services needed for recharging, conforming to each situation, requirement and type of customer. As an example Smart Movility service, Iberdrola’s solution for electric vehicle. |

(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) 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**
Initiatives to reduce emissions are undertaken through a broad range of products and services promoting energy efficiency and savings.

**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**
Other, please specify (Emissions factor for each country)

**% revenue from low carbon product(s) in the reporting year**
15

**Comment**
Company-wide IBERDROLA generates and supplies low carbon electricity to its customers and offers energy efficiency services. Initiatives to reduce emissions are undertaken through a broad range of products and services promoting energy efficiency and savings. Avoided emissions Consumption equivalent to 199,085,887 GJ/year in non-renewable primary energy was avoided in 2017 through the generation of renewable energy, including hydroelectric energy, and the supply of steam to industrial customers. In total, the emission of 16,257,638 t CO2 was avoided for renewables and steam supplied. Other: Emission factor for each country is applied for the corresponding production IBERDROLA generates and supplies low carbon electricity to its customers and offers energy efficiency services. 1. Primary energy savings through the production of renewable energy: Energy (GJ/year): 183,309,359; CO2 Annually Avoided (t): 15,129,235. Savings through the provision of heat energy (steam) within the Group: Energy (GJ/year): 15,776,528; CO2 Annually Avoided (t): 1,128403. Improvement of efficiency in distribution networks and smart grids: in Spain, UK and Brazil: Energy (GJ/year) 4,273,557; CO2 Annually Avoided (t): 117,658 Commercial: Energy savings and efficiency: capacitor banks, luminosity regulators, energy managers, energy audits, climate control, efficient motors, frequency shifters for motor regulation, efficient gas boilers, microgeneration, and other efficient solutions: Energy (GJ/year): 44,744; CO2 Annually Avoided (t): 7,062,225. Savings through the use of videoconferences: CO2 Annually Avoided (t): 22,592. More information in Sustainability Report.

---

C-EU4.6
(C-EU4.6) Describe your organization’s efforts to reduce methane emissions from your electricity generation activities.

Iberdrola is a program partner of Natural Gas STAR Program (Methane Challenge Program Partner) through its subsidiary in USA (Avangrid). As a founding partner in the federal EPA’s “Natural Gas STAR Methane Challenge,” AVANGRID continues its voluntary efforts to identify sources of natural gas or greenhouse gas emissions and reduce those emissions beyond regulatory requirements. The challenge will result in a cleaner environment and a more efficient natural gas distribution system.

Iberdrola reduced methane emissions in USA by 4.3% through fixing leaks and cast iron main replacements.

Avangrid (Iberdrola in USA), represents 99.7% of methane emissions. The rest of emissions (0.3%) are located in United Kingdom, and its sale is planned for 2018.

The efforts in the generation area focused on flexibility and operating efficiency (including reduction of methane), respect for the environment and the improvement of facility safety.

In Grid Engineering area: TABÓN project: project to develop a technology for verifying, inspecting and predicting power lines by measuring the earthing resistance to increase the efficiency in managing these assets.

Flexibility and Efficiency Measures in cogeneration plants: A project was launched to improve the design of the degasser at the EW Aranda cogeneration plant, ultimately with the objective of optimising its performance at low flow levels of steam and, in doing so securing an estimated savings of 0.3t/h in terms of steam. The EW Cartagena cogeneration plant is hosting a project to replace the third stage of guide vanes in the Gas Turbine (GT), through the new model with an optimised profile to improve the GT Heat Ratio by 0.8%.

DESOx: Advanced desulphurisation process control system. Implemented at the Lada Coal-fired power plant in Asturias (Spain), the project focuses on developing an integrated and technologically advanced system for reducing SOx emissions and other effluents from desulphurisation to considerably reduce the environmental impact generated and the methane losses, while increasing the overall generation process and determining the optimal conditions for plant operation.

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 2016

**Base year end**
December 31 2016

**Base year emissions (metric tons CO2e)**
26691055

**Comment**
Iberdrola takes 2016 as the historical base year for it GHG inventory in accordance with the ISO 14064-1:2006 standard. Updating of the base year will be done in the case of any significant change (variation in total emissions > 5% over those reported for the previous year) in one of the following aspects: • Changes in the operating limits. • Significant structural changes involving transfer of ownership or operational control of GHG sources. Changes to the GHG quantification methodologies and/or improved accuracy of the emission factors that result in significant changes to the quantified emissions. The 2016 base year change is due to: • Change in the inventory estimate and the corporate structure of the company with the creation of Neoenergía Brazil. • Changes in the operating limits: - Inclusion under scope 2 of emissions through network losses. - Inclusion under scope 3 of emissions associated with energy purchased for sale to end users. • Change in the calculation methodology for emissions attributable to the supply chain.

Scope 2 (location-based)

**Base year start**
January 1 2016

**Base year end**
December 31 2016

**Base year emissions (metric tons CO2e)**
2727794

**Comment**
Iberdrola takes 2016 as the historical base year for it GHG inventory in accordance with the ISO 14064-1:2006 standard. Updating of the base year will be done in the case of any significant change (variation in total emissions > 5% over those reported for the previous year) in one of the following aspects: • Changes in the operating limits. • Significant structural changes involving transfer of ownership or operational control of GHG sources. Changes to the GHG quantification methodologies and/or improved accuracy of the emission factors that result in significant changes to the quantified emissions. The 2016 base year change is due to: • Change in the inventory estimate and the corporate structure of the company with the creation of Neoenergía Brazil. • Changes in the operating limits: - Inclusion under scope 2 of emissions through network losses. - Inclusion under scope 3 of emissions associated with energy purchased for sale to end users. • Change in the calculation methodology for emissions attributable to the supply chain.

Scope 2 (market-based)

**Base year start**
January 1 2016

**Base year end**
December 31 2016

**Base year emissions (metric tons CO2e)**
2593891

**Comment**
Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

Defra Voluntary 2017 Reporting Guidelines
ISO 14064-1
US EPA Climate Leaders: Direct Emissions from Stationary Combustion
Other, please specify (GHG Inventory Information Management)

C5.2a

Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

IBERDROLA’s Group has its own document explaining the procedure following the official methodologies: “Greenhouse Gas Inventory Information Management”. This protocol describes the management of information on the quantification and reporting of greenhouse gas emissions (hereinafter GHG) of the Group’s activities.

C6. Emissions data

C6.1

What were your organization’s gross global Scope 1 emissions in metric tons CO2e?

Row 1

Gross global Scope 1 emissions (metric tons CO2e)
26846490

End-year of reporting period
<Not Applicable>

Comment
Takes into account 100% of Neoenergia in 2017. Scope 1 – Direct GHG emissions Direct GHG emissions from GHG sources owned or controlled by the Company. The following are included: • Emissions from electricity generation facilities (fuel consumption). • Emissions from non-generation facilities (gas storage and sludge drying). • Escapes of methane (CH4) (natural gas storage and transmission). • Escapes of hexafluoride (SF6) in distribution networks. • Emissions from facilities that provide services to buildings (fuel consumption). • Emissions from mobile combustion sources associated with the road transportation of employees for work with fleet vehicles.
(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**
Takes into account 100% of Neoenergia in 2017. Scope 2 – Indirect GHG emissions Indirect GHG emissions are those that come from electricity, heat or steam generation of external origin consumed by the organisation. These emissions are: • Emissions associated with the consumption of auxiliary energy when stopping thermal, renewable and nuclear power plants, and pumping operations in hydroelectric power plants. • Emissions associated with the consumption of electricity in buildings. • Emissions associated with network losses (NEW - section added in 2017)

---

C6.3

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

Row 1

**Scope 2, location-based**
3415197

**Scope 2, market-based (if applicable)**
3300979

**End-year of reporting period**
<Not Applicable>

**Comment**
Takes into account 100% of Neoenergia in 2017. Scope 2 – Indirect GHG emissions Indirect GHG emissions are those that come from electricity, heat or steam generation of external origin consumed by the organisation. These emissions are: • Emissions associated with the consumption of auxiliary energy when stopping thermal, renewable and nuclear power plants, and pumping operations in hydroelectric power plants. • Emissions associated with the consumption of electricity in buildings. • Emissions associated with network losses (NEW - section added in 2017)

---

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 Scope 3 emissions, disclosing and explaining any exclusions.
Purchased goods and services

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
1636912

Emissions calculation methodology
In 2017 the eighth Supplier greenhouse gas awareness and measurement campaign was carried out, which involved sending questionnaires to the Group's suppliers in Spain, the UK, USA, Brazil and Mexico. A specific questionnaire and useful and supporting information on the topic was sent to 1,000 suppliers worldwide. Of the replies obtained from the questionnaires, emissions proportional to the supplier's invoicing volume to the Company with regard to the total were taken as corresponding to Iberdrola. From the sum obtained, a ratio of emissions per euro of turnover is worked out, which is extrapolated to the total Group turnover.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Explanation

Capital goods

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Emissions included in section Purchased goods and services.

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

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
18854048

Emissions calculation methodology
Emissions associated with energy purchased for sale to end users (18,761,881 tCO2e) and emissions associated with fuel transportation (92,167 tCO2e). - Emissions associated with fuel transportation: To calculate emissions associated with the transportation of fuel (coal and uranium) to power stations, the distance travelled in kilometres by road, rail or boat is determined and then multiplied by the emissions factors given in the UK Department for Environment Food & Rural Affairs (DEFRA) guide. - Emissions associated with energy purchased for sale to end users (NEW - section added in 2017): From energy supplied to the market, own energy produced is subtracted, the difference being energy purchased for sale to end users. Said energy emissions will be obtained from CO2 emissions obtained by applying the emission factor of the corresponding country's generation mix added to the upstream emissions for that energy, using the DEFRA WTT (Well To Tank) emissions factor.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Explanation

Upstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Emissions not relevant as they are below 5% of total emissions for the IBERDROLA Group. Meanwhile, IBERDROLA is analysing this category in order to incorporate it into its GHG Inventory in following years.
Waste generated in operations

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Emissions not relevant as they are below 5% of total emissions for the IBERDROLA Group. Meanwhile, IBERDROLA is analysing this category in order to incorporate it into its GHG inventory in following years.

Business travel

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
21033

Emissions calculation methodology
Emissions associated with staff business travel by various means (car, plane, train etc.) obtained from the distances travelled and using the specific emission factors for the means of transport obtained from: • DEFRA for Spain and UK • EPA for the US, Mexico and Brazil

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Explanation

Employee commuting

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
79703

Emissions calculation methodology
The company conducted its supplier greenhouse gas awareness and measurement campaign in 2017 on employee transit from their residence to their workplace. To do so, every Iberdrola Group employee was sent a questionnaire in order to calculate their transit emissions via an emissions calculator which works out emissions for travel. The compiled data is loaded into a database and extrapolated to all Iberdrola Group employees.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Explanation

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Emissions not relevant as they are below 5% of total emissions for the IBERDROLA Group. Meanwhile, IBERDROLA is analysing this category in order to incorporate it into its GHG inventory in following years.
Downstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Emissions not relevant as they are below 5% of total emissions for the IBERDROLA Group. Meanwhile, IBERDROLA is analysing this category in order to incorporate it into its GHG inventory in following years.

Processing of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Emissions not relevant as they are below 5% of total emissions for the IBERDROLA Group. Meanwhile, IBERDROLA is analysing this category in order to incorporate it into its GHG inventory in following years.

Use of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Emissions not relevant as they are below 5% of total emissions for the IBERDROLA Group. Meanwhile, IBERDROLA is analysing this category in order to incorporate it into its GHG inventory in following years.

End of life treatment of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Emissions not relevant as they are below 5% of total emissions for the IBERDROLA Group. Meanwhile, IBERDROLA is analysing this category in order to incorporate it into its GHG inventory in following years.
Downstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Emissions from the fuels consumed by Transferred and posted in Scope 1 in 2017. IBERDROLA's fleet of vehicles, which are leased assets: Each Region is responsible to introduce into the software SoFi the data of km made by IBERDROLA’s fleet vehicles. To calculate these emissions the following formula is used: km by fleet vehicles x emission factor. Emission factor come from DEFRA “Greenhouse Gas Conversion Factor Repository”, data for 2017.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Emissions not relevant as they are below 5% of total emissions for the IBERDROLA Group. Meanwhile, IBERDROLA is analysing this category in order to incorporate it into its GHG inventory in following years.

Investments

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Emissions not relevant as they are below 5% of total emissions for the IBERDROLA Group. Meanwhile, IBERDROLA is analysing this category in order to incorporate it into its GHG Inventory in following years.

Other (upstream)

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Imports of electricity from different countries where Iberdrola does not generate electricity. This category was reported under Scope 2.

Other (downstream)

Evaluation status
Please select

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No
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
0.000968

Metric numerator (Gross global combined Scope 1 and 2 emissions)
30261687

Metric denominator
unit total revenue

Metric denominator: Unit total
3126300000

Scope 2 figure used
Location-based

% change from previous year
3.87

Direction of change
Decreased

Reason for change
Revenues growth 7,01% in 2017 compared to 2016. Recalculated base year 2016 emissions for taking account 100% Neoenergía. (SC1+SC2 = 29,418,849 tCO2e in 2016).

Intensity figure
0.211

Metric numerator (Gross global combined Scope 1 and 2 emissions)
30261687

Metric denominator
megawatt hour generated (MWh)

Electricity + Steam

Metric denominator: Unit total
143706080

Scope 2 figure used
Location-based

% change from previous year
7.27

Direction of change
Increased

Reason for change
Production (electricity + steam) decrease 4,11% in 2017 compared to 2016. Recalculated base year 2016 emissions for taking account 100% Neoenergía. (SC1+SC2 = 29,418,849 tCO2e in 2016). Spain: The Energy Balance of the peninsular system in 2017 is characterised by a significant increase in thermal production compared to the previous year (26%), mainly due to the reduction of hydroelectric production (47%) as it was a year with very low rainfall. Coal and combined cycles production have increased in 21 and 32% respectively in comparison to 2016. In terms of demand, it increased by 1% with respect to the same period of 2016, while in terms adjusted for work and temperature, it grew by 1.6%. United Kingdom: With regard to production from traditional electricity generation, in 2017 it decreased by 25.5% to 7,792 GWh compared to the 10,456 GWh of the previous year, due to the aforementioned impact of the closure of the Longannet power plant.

C7. Emissions breakdowns
### C7.1

**C7.1**

(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?  
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).

<table>
<thead>
<tr>
<th>Greenhouse Gas</th>
<th>Emissions (metric tons CO2e)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2</td>
<td>26811871</td>
<td>IPCC Fourth Assessment Report (AR4 - 100 year)</td>
</tr>
<tr>
<td>CH4</td>
<td>8766</td>
<td>IPCC Fourth Assessment Report (AR4 - 100 year)</td>
</tr>
<tr>
<td>SF6</td>
<td>25652</td>
<td>IPCC Fourth Assessment Report (AR4 - 100 year)</td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>Category</th>
<th>Emissions (metric tons CO2e)</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fugitives</td>
<td>31288</td>
<td>350.64</td>
</tr>
<tr>
<td>Combustion (Electric utilities)</td>
<td>26721192</td>
<td>0</td>
</tr>
<tr>
<td>Combustion (Gas utilities)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Combustion (Other)</td>
<td>7998</td>
<td>0</td>
</tr>
<tr>
<td>Emissions not elsewhere classified</td>
<td>51393</td>
<td>0</td>
</tr>
</tbody>
</table>

### C7.2

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

<table>
<thead>
<tr>
<th>Country</th>
<th>Emissions (metric tons CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>5965789</td>
</tr>
<tr>
<td>United Kingdom of Great Britain and Northern Ireland</td>
<td>2951072</td>
</tr>
<tr>
<td>United States of America</td>
<td>1003915</td>
</tr>
<tr>
<td>Mexico</td>
<td>15334971</td>
</tr>
<tr>
<td>Brazil</td>
<td>1590743</td>
</tr>
</tbody>
</table>
C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.
By business division
By facility
By activity

C7.3a

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

<table>
<thead>
<tr>
<th>Business Division</th>
<th>Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation</td>
<td>26719303</td>
</tr>
<tr>
<td>Renewables</td>
<td>1890</td>
</tr>
<tr>
<td>Distribution</td>
<td>34618</td>
</tr>
<tr>
<td>No Generation</td>
<td>31288</td>
</tr>
<tr>
<td>Corporate</td>
<td>59391</td>
</tr>
</tbody>
</table>

C7.3b

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

<table>
<thead>
<tr>
<th>Facility</th>
<th>Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rye House</td>
<td>351574</td>
</tr>
<tr>
<td>Damhead Creek</td>
<td>1565875</td>
</tr>
<tr>
<td>Shoreham</td>
<td>940204</td>
</tr>
<tr>
<td>Daldowie</td>
<td>24770</td>
</tr>
<tr>
<td>Blackburn Mill</td>
<td>25340</td>
</tr>
<tr>
<td>Scottish Power Cogeneration</td>
<td>17995</td>
</tr>
<tr>
<td>Spain Cogeneration</td>
<td>1342072</td>
</tr>
<tr>
<td>Veilía (Thermal)</td>
<td>1114775</td>
</tr>
<tr>
<td>Lada (Thermal)</td>
<td>1526966</td>
</tr>
<tr>
<td>Aceca CCGT</td>
<td>199929</td>
</tr>
<tr>
<td>Arcos CCGT</td>
<td>353213</td>
</tr>
<tr>
<td>Castejon CCGT</td>
<td>72</td>
</tr>
<tr>
<td>Castillon CCGT</td>
<td>582469</td>
</tr>
<tr>
<td>Escombreras</td>
<td>142919</td>
</tr>
<tr>
<td>Santurce</td>
<td>54428</td>
</tr>
<tr>
<td>Tarragona Power</td>
<td>423209</td>
</tr>
<tr>
<td>Other Cogeneration Spain</td>
<td>203234</td>
</tr>
<tr>
<td>Dulces Nombres CCGT</td>
<td>3433586</td>
</tr>
<tr>
<td>Altamira III and IV CCGT</td>
<td>2998910</td>
</tr>
<tr>
<td>Altamira V CCGT</td>
<td>2657460</td>
</tr>
<tr>
<td>Laguna CCGT</td>
<td>1624288</td>
</tr>
<tr>
<td>Tazamunche CCGT</td>
<td>2941470</td>
</tr>
<tr>
<td>Enertek Cogeneration</td>
<td>712047</td>
</tr>
<tr>
<td>CCGT Baja California</td>
<td>611327</td>
</tr>
<tr>
<td>Monterey Cogeneration</td>
<td>179941</td>
</tr>
<tr>
<td>Ramos Cogeneration</td>
<td>175816</td>
</tr>
<tr>
<td>Brasil Cogeneration</td>
<td>97073</td>
</tr>
<tr>
<td>Termopernambuco</td>
<td>1471816</td>
</tr>
<tr>
<td>Klamath</td>
<td>965570</td>
</tr>
<tr>
<td></td>
<td>51.762381</td>
</tr>
<tr>
<td></td>
<td>51.425423</td>
</tr>
<tr>
<td></td>
<td>50.830147</td>
</tr>
<tr>
<td></td>
<td>55.718311</td>
</tr>
<tr>
<td></td>
<td>53.86333</td>
</tr>
<tr>
<td></td>
<td>55.86333</td>
</tr>
<tr>
<td></td>
<td>43.268282</td>
</tr>
<tr>
<td></td>
<td>42.817662</td>
</tr>
<tr>
<td></td>
<td>43.308794</td>
</tr>
<tr>
<td></td>
<td>43.944548</td>
</tr>
<tr>
<td></td>
<td>36.672363</td>
</tr>
<tr>
<td></td>
<td>42.177381</td>
</tr>
<tr>
<td></td>
<td>39.959553</td>
</tr>
<tr>
<td></td>
<td>37.57348</td>
</tr>
<tr>
<td></td>
<td>43.395516</td>
</tr>
<tr>
<td></td>
<td>41.110166</td>
</tr>
<tr>
<td></td>
<td>43.268282</td>
</tr>
<tr>
<td></td>
<td>34.33586</td>
</tr>
<tr>
<td></td>
<td>22.374401</td>
</tr>
<tr>
<td></td>
<td>22.373509</td>
</tr>
<tr>
<td></td>
<td>19.725081</td>
</tr>
<tr>
<td></td>
<td>21.311684</td>
</tr>
<tr>
<td></td>
<td>712047</td>
</tr>
<tr>
<td></td>
<td>611327</td>
</tr>
<tr>
<td></td>
<td>179941</td>
</tr>
<tr>
<td></td>
<td>175816</td>
</tr>
<tr>
<td></td>
<td>97073</td>
</tr>
<tr>
<td></td>
<td>1471816</td>
</tr>
<tr>
<td></td>
<td>965570</td>
</tr>
<tr>
<td>Facility</td>
<td>Scope 1 emissions (metric tons CO2e)</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>New York State Electric&amp;Gas - NYSEG (CH4)</td>
<td>3599</td>
</tr>
<tr>
<td>Rochester Gas&amp;Electric (CH4)</td>
<td>5141</td>
</tr>
<tr>
<td>New York State Electric&amp;Gas - NYSEG (SF6)</td>
<td>4626</td>
</tr>
<tr>
<td>Rochester Gas&amp;Electric (SF6)</td>
<td>1354</td>
</tr>
<tr>
<td>Central Maine Company - CMP (SF6)</td>
<td>2408</td>
</tr>
<tr>
<td>UIL</td>
<td>978</td>
</tr>
<tr>
<td>Networks Spain (SF6)</td>
<td>3778</td>
</tr>
<tr>
<td>SP Networks</td>
<td>10149</td>
</tr>
<tr>
<td>Hadfield (CH4)</td>
<td>26</td>
</tr>
<tr>
<td>Elektro (SF6)</td>
<td>93</td>
</tr>
<tr>
<td>Coelba (SF6)</td>
<td>1189</td>
</tr>
<tr>
<td>Cosem (SF6)</td>
<td>1277</td>
</tr>
<tr>
<td>Puertollano (Thermosolar)</td>
<td>1889</td>
</tr>
<tr>
<td>Spain Buildings</td>
<td>797</td>
</tr>
<tr>
<td>UK Buildings</td>
<td>454</td>
</tr>
<tr>
<td>USA Buildings</td>
<td>6729</td>
</tr>
<tr>
<td>Brazil Buildings</td>
<td>11</td>
</tr>
<tr>
<td>Mexico Buildings</td>
<td>7</td>
</tr>
<tr>
<td>ROW Buildings</td>
<td>25</td>
</tr>
<tr>
<td>Vehicles Fleet Worldwide</td>
<td>51393</td>
</tr>
<tr>
<td>Cofrentes Nuclear Plant</td>
<td>5726</td>
</tr>
<tr>
<td>Garoña Nuclear Plant</td>
<td>2100</td>
</tr>
<tr>
<td>Almaraz Nuclear Plant</td>
<td>1300</td>
</tr>
<tr>
<td>Trillo Nuclear Plant</td>
<td>1250</td>
</tr>
<tr>
<td>Ascó 2 Nuclear Plant</td>
<td>450</td>
</tr>
<tr>
<td>Vandellós II Nuclear Plant</td>
<td>1393</td>
</tr>
</tbody>
</table>

C7.3c

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

- Generating Facilities: 23025555
- Cogeneration: 3693748
- Gas Distribution: CH4 leakage: 8766
- Distribution networks: SF6 releases: 25852
- Non-generation facilities: 31288
- Renewables generation: 1890
- Corporate: 59391

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-T07.4/C-TS7.4) Break down your organization’s total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Global Scope 1 Emissions</th>
<th>Net Scope 1 Emissions</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement production activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Chemicals production activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Coal production activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Electric utility generation activities</td>
<td>2672192</td>
<td>&lt;Not Applicable&gt;</td>
<td>Emissions from Energy Generation (Fuel Consumption)</td>
</tr>
<tr>
<td>Metals and mining production activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Oil and gas production activities (upstream)</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Oil and gas production activities (downstream)</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Steel production activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Transport OEM activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Transport services activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
</tbody>
</table>

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

<table>
<thead>
<tr>
<th>Country</th>
<th>Global Scope 2 Emissions</th>
<th>Net Scope 2 Emissions</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>1505420</td>
<td>1495928</td>
<td>41620</td>
</tr>
<tr>
<td>United Kingdom of Great Britain and Northern Ireland</td>
<td>667349</td>
<td>617413</td>
<td>27865</td>
</tr>
<tr>
<td>United States of America</td>
<td>704657</td>
<td>649361</td>
<td>59626</td>
</tr>
<tr>
<td>Mexico</td>
<td>2275</td>
<td>1399</td>
<td>46139</td>
</tr>
<tr>
<td>Brazil</td>
<td>535496</td>
<td>536878</td>
<td>129</td>
</tr>
</tbody>
</table>

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division
By facility
By activity

C7.6a
### C7.6a Break down your total gross global Scope 2 emissions by business division.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Generation</th>
<th>Distribution</th>
<th>No generation</th>
<th>Corporate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>889217</td>
<td>2464981</td>
<td>8515</td>
<td>34115</td>
</tr>
<tr>
<td></td>
<td>801457</td>
<td>246981</td>
<td>8515</td>
<td>16917</td>
</tr>
</tbody>
</table>

### C7.6b Break down your total gross global Scope 2 emissions by business facility.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Generation</th>
<th>Distribution</th>
<th>No generation</th>
<th>Corporate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain facilities (stop in generation and pumping)</td>
<td>716270</td>
<td></td>
<td>707428</td>
<td>707428</td>
</tr>
<tr>
<td>UK facilities (stop in generation and pumping)</td>
<td>143448</td>
<td></td>
<td>96703</td>
<td>96703</td>
</tr>
<tr>
<td>USA facilities (stop in generation and pumping)</td>
<td>35559</td>
<td></td>
<td>4154</td>
<td>4154</td>
</tr>
<tr>
<td>Brazil facilities (stop in generation and pumping)</td>
<td>256</td>
<td></td>
<td>334</td>
<td>334</td>
</tr>
<tr>
<td>Mexico facilities (stop in generation and pumping)</td>
<td>2200</td>
<td></td>
<td>1353</td>
<td>1353</td>
</tr>
<tr>
<td>Spain’s Buildings (electricity)</td>
<td>11283</td>
<td></td>
<td>10663</td>
<td>10663</td>
</tr>
<tr>
<td>UK’s Buildings (electricity)</td>
<td>9796</td>
<td></td>
<td>6604</td>
<td>6604</td>
</tr>
<tr>
<td>USA’s Buildings (electricity)</td>
<td>27052</td>
<td></td>
<td>3160</td>
<td>3160</td>
</tr>
<tr>
<td>Brazil’s Buildings (electricity)</td>
<td>4279</td>
<td></td>
<td>5583</td>
<td>5583</td>
</tr>
<tr>
<td>Mexico’s Buildings (electricity)</td>
<td>75</td>
<td></td>
<td>46</td>
<td>46</td>
</tr>
<tr>
<td>Spain network</td>
<td>777865</td>
<td></td>
<td>777865</td>
<td>777865</td>
</tr>
<tr>
<td>UK Network</td>
<td>514106</td>
<td></td>
<td>514106</td>
<td>514106</td>
</tr>
<tr>
<td>USA Network</td>
<td>642046</td>
<td></td>
<td>642046</td>
<td>642046</td>
</tr>
<tr>
<td>Brazil Network</td>
<td>530962</td>
<td></td>
<td>530962</td>
<td>530962</td>
</tr>
</tbody>
</table>

### C7.6c Break down your total gross global Scope 2 emissions by business activity.

#### Emissions from consumption of auxiliary energy during stop in thermal, renewable and nuclear plants and pumping operations in hydro plants.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Emissions</th>
<th>Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissions from consumption of auxiliary energy during stop in thermal, renewable and nuclear plants and pumping operations in hydro plants.</td>
<td>897732</td>
<td>809972</td>
</tr>
<tr>
<td>Electricity consumption in buildings</td>
<td>52484</td>
<td>26026</td>
</tr>
<tr>
<td>Network losses</td>
<td>2464981</td>
<td>2464981</td>
</tr>
</tbody>
</table>

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

Increased
C7.9a

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

<table>
<thead>
<tr>
<th>Change in renewable energy consumption</th>
<th>&lt;Not Applicable&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other emissions reduction activities</td>
<td>1682416 Decreased 5.6</td>
</tr>
<tr>
<td>Divestment</td>
<td>1640190 Decreased 5.4</td>
</tr>
<tr>
<td>Acquisitions</td>
<td>1668135 Increased 5.7</td>
</tr>
<tr>
<td>Mergers</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Change in output</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Change in methodology</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Change in boundary</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Change in physical operating conditions</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Unidentified</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Other</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
</tbody>
</table>

1) Energy efficiency allows smart and innovative energy production and consumption and is one of the key factors in the fight against climate change and reducing greenhouse gases. It should be noted that the intensity of emissions at the Group's thermal plants has dropped over the past years, from 431 kg CO2/MWh in 2016, and to 422 kg CO2/MWh in 2017. Energy Generated for Thermal plants was 63638 GWh in 2017 and the CO2 emissions were 26846490 tCO2. We calculated the savings in CO2 emissions, due to the investment in efficiency, by multiplying the production of 2017 by the emission factor of 2016, subtracting the emissions of 2017 ((63638 · 431) - 26846490 = 554,013 tCO2 saved). 2) Savings through the supply of heat energy (steam) within the group in 2017 = 1,128,403 tCO2 (Public data in Sustainability Report 2017, pag 164: 305-5 Reduction of GHG emissions: https://www.iberdrola.com/wcorp/gc/prod/en_US/corporativos/docs/IB_Sustainability_Report.pdf): (554,013+1,128,403) / (SC1+SC2 in 2016) = 1,682,416 / 30,261,687 = 5.6% (Decrease)

In March, 2016, IBERDROLA closed Longannet coal plant in UK, the biggest coal plant of IBERDROLA Group, with an installed capacity of 2,304MW. There are no coal generation facilities in UK at the moment. No emissions in 2017. Until closure, Longannet emitted 1,640,190 tCO2 emissions in 2016. We consider that it was avoided the emission of 1,640,190 tCO2 compared to 2016; 1,640,190(SC1+SC2 in 2016) = 1,640,190 / 29,418,849 = 5.4 % (Decrease)

Increase in capacity of Combined Cycles 346 MW in México, wich has meant an increase in emissions per generation of this technology 2017 in México =1,668,135 tCO2. 1,668,135(SC1+SC2 in 2016) = 1,668,135/ 29,418,849 = 5.7 % (Increase)

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?

Location-based

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

More than 5% but less than or equal to 10%

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

<table>
<thead>
<tr>
<th>Activity</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption of fuel (excluding feedstocks)</td>
<td>Yes</td>
</tr>
<tr>
<td>Consumption of purchased or acquired electricity</td>
<td>Yes</td>
</tr>
<tr>
<td>Consumption of purchased or acquired heat</td>
<td>No</td>
</tr>
<tr>
<td>Consumption of purchased or acquired steam</td>
<td>No</td>
</tr>
<tr>
<td>Consumption of purchased or acquired cooling</td>
<td>No</td>
</tr>
<tr>
<td>Generation of electricity, heat, steam, or cooling</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Activity</th>
<th>LHV (lower heating value)</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption of fuel (excluding feedstock)</td>
<td></td>
<td>138181602</td>
<td>138181602</td>
</tr>
<tr>
<td>Consumption of purchased or acquired electricity</td>
<td>&lt;Not Applicable&gt;</td>
<td>44844</td>
<td>3195339</td>
</tr>
<tr>
<td>Consumption of purchased or acquired heat</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Consumption of purchased or acquired steam</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Consumption of purchased or acquired cooling</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Consumption of self-generated non-fuel renewable energy</td>
<td>&lt;Not Applicable&gt;</td>
<td>357661</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Total energy consumption</td>
<td>&lt;Not Applicable&gt;</td>
<td>402505</td>
<td>141376941</td>
</tr>
<tr>
<td></td>
<td></td>
<td>141779446</td>
<td>141779446</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Application</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption of fuel for the generation of electricity</td>
<td>Yes</td>
</tr>
<tr>
<td>Consumption of fuel for the generation of steam</td>
<td>No</td>
</tr>
<tr>
<td>Consumption of fuel for the generation of cooling</td>
<td>No</td>
</tr>
<tr>
<td>Consumption of fuel for co-generation or tri-generation</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Fuels (excluding feedstocks)</th>
<th>Heating value</th>
<th>LHV (lower heating value)</th>
<th>Total fuel MWh consumed by the organization</th>
<th>MWh fuel consumed for the self-generation of electricity</th>
<th>MWh fuel consumed for self-generation of heat</th>
<th>MWh fuel consumed for self-generation of steam</th>
<th>MWh fuel consumed for self-generation of cooling</th>
<th>MWh fuel consumed for self-cogeneration or self-trigeneration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas</td>
<td></td>
<td></td>
<td>128365202</td>
<td>0</td>
<td>0</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>0</td>
</tr>
<tr>
<td>Fuel Oil Number 1</td>
<td>Heating value</td>
<td>LHV (lower heating value)</td>
<td>570610</td>
<td>0</td>
<td>0</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>0</td>
</tr>
<tr>
<td>Coal</td>
<td>Heating value</td>
<td>LHV (lower heating value)</td>
<td>9172478</td>
<td>0</td>
<td>0</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>0</td>
</tr>
</tbody>
</table>
**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

---

**Fuels (excluding feedstocks)**

Gas, Oil

**Heating value**

LHV (lower heating value)

**Total fuel MWh consumed by the organization**

48805

**MWh fuel consumed for the self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

---

**Fuels (excluding feedstocks)**

Other, please specify (Waste Derived Fuel (WDF))

**Heating value**

LHV (lower heating value)

**Total fuel MWh consumed by the organization**

24506

**MWh fuel consumed for the self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

---

C8.2d
(C8.2d) List the average emission factors of the fuels reported in C8.2c.

**Coal**

**Emission factor**

1

**Unit**
metric tons CO2e per MWh

**Emission factor source**
ETS Measurement for Spain

**Comment**
Coal energy plants only in Spain.

**Fuel Oil Number 1**

**Emission factor**

3.16976

**Unit**
kg CO2e per liter

**Emission factor source**
DEFRA

**Comment**

**Gas Oil**

**Emission factor**

74.1

**Unit**
kg CO2e per GJ

**Emission factor source**
MAPAMA for Spain, EPA for USA and México and Ferramenta for Brazil.

**Comment**

**Natural Gas**

**Emission factor**

0.3763

**Unit**
metric tons CO2e per MWh

**Emission factor source**
ETS. Direct data for Combined Cicled in Spain, UK, USA, Brazil and México

**Comment**

**Other**

**Emission factor**

0.0807

**Unit**
metric tons CO2 per GJ

**Emission factor source**
Direct data for Cogeneration in Spain (ETS).

**Comment**
(C8.2e) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

<table>
<thead>
<tr>
<th>Source</th>
<th>Total Gross Generation (MWh)</th>
<th>Total Consumption (MWh)</th>
<th>Gross Generation from Renewable Sources (MWh)</th>
<th>Consumption of Renewable Sources (MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>140553195</td>
<td>2783606</td>
<td>51276961</td>
<td>357661</td>
</tr>
<tr>
<td>Heat</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Steam</td>
<td>6074141</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cooling</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

C-EU8.2e

(C-EU8.2e) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.

**Coal – hard**

Nameplate capacity (MW)
874

Gross electricity generation (GWh)
2839.34

Net electricity generation (GWh)
2641.87

Absolute scope 1 emissions (metric tons CO2e)
2641741

Scope 1 emissions intensity (metric tons CO2e per GWh)
1000

Comment
N/A

**Lignite**

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
N/A
<table>
<thead>
<tr>
<th></th>
<th>Oil</th>
<th>Gas</th>
<th>Biomass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nameplate capacity (MW)</td>
<td>0</td>
<td>15285</td>
<td>0</td>
</tr>
<tr>
<td>Gross electricity generation (GWh)</td>
<td>0</td>
<td>62516.9</td>
<td>0</td>
</tr>
<tr>
<td>Net electricity generation (GWh)</td>
<td>0</td>
<td>60996.07</td>
<td>0</td>
</tr>
<tr>
<td>Absolute scope 1 emissions (metric tons CO2e)</td>
<td>0</td>
<td>24071836</td>
<td>0</td>
</tr>
<tr>
<td>Scope 1 emissions intensity (metric tons CO2e per GWh)</td>
<td>0</td>
<td>395</td>
<td>0</td>
</tr>
<tr>
<td>Comment</td>
<td>N/A</td>
<td>Including Combined Cycle Power plants and Cogeneration Power Plants.</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Waste (non-biomass)</td>
<td>Nuclear</td>
<td>Geothermal</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------</td>
<td>------------------------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Nameplate capacity (MW)</td>
<td>0</td>
<td>3177</td>
<td>0</td>
</tr>
<tr>
<td>Gross electricity generation (GWh)</td>
<td>0</td>
<td>24277.72</td>
<td>0</td>
</tr>
<tr>
<td>Net electricity generation (GWh)</td>
<td>0</td>
<td>23248.54</td>
<td>0</td>
</tr>
<tr>
<td>Absolute scope 1 emissions (metric tons CO2e)</td>
<td>0</td>
<td>5726</td>
<td>0</td>
</tr>
<tr>
<td>Scope 1 emissions intensity (metric tons CO2e per GWh)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Comment</td>
<td>N/A</td>
<td>Emissions from generator set in nuclear power plant. Emissions considered in Scope 1</td>
<td>N/A</td>
</tr>
<tr>
<td>Absolute scope 1 emissions (metric tons CO2e)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Scope 1 emissions intensity (metric tons CO2e per GWh)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Comment</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Energy Source</td>
<td>Nameplate capacity (MW)</td>
<td>Gross electricity generation (GWh)</td>
<td>Net electricity generation (GWh)</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------</td>
<td>-----------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Hydroelectric</td>
<td>12513</td>
<td>15422.4</td>
<td>15319.86</td>
</tr>
<tr>
<td>Wind</td>
<td>16077</td>
<td>34769.77</td>
<td>34698.3</td>
</tr>
<tr>
<td>Solar</td>
<td>218.73</td>
<td>333.49</td>
<td>333.34</td>
</tr>
</tbody>
</table>
Other renewable

Nameplate capacity (MW)
303.27

Gross electricity generation (GWh)
393.59

Net electricity generation (GWh)
393.59

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Minihydro

Other non-renewable

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
N/A

Total

Nameplate capacity (MW)
48447

Gross electricity generation (GWh)
140553.21

Net electricity generation (GWh)
137631.94

Absolute scope 1 emissions (metric tons CO2e)
26721192

Scope 1 emissions intensity (metric tons CO2e per GWh)
194

Comment
Scope 1: Emissions from energy Generation (Fuel consumption) considered. Scope 1 emissions intensity considering steam production = 186 tCO2e/GWh: 6,074.141 GWh steam production cosidered (Net electricity generation = 137,631.94 + 6,074.141 = 143,706.081)

C8.2f
(C8.2f) Provide details on the electricity, heat, steam and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3.

Basis for applying a low-carbon emission factor
Energy attribute certificates, Guarantees of Origin

Low-carbon technology type
Solar PV
Wind
Hydropower

MWh consumed associated with low-carbon electricity, heat, steam or cooling
1822

Emission factor (in units of metric tons CO2e per MWh)
0

Comment
Consumption in Torre Iberdrola building in Spain.

C-EU8.4

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

C-EU8.4a

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

Country/Region
Spain

Voltage level
Distribution (low voltage)

Annual load (GWh)
93284

Scope 2 emissions (basis)
Location-based

Scope 2 emissions (metric tons CO2e)
777867

Annual energy losses (% of annual load)
6.63

Length of network (km)
268570

Number of connections
10300000

Area covered (km2)
190000

Comment

Country/Region
United Kingdom of Great Britain and Northern Ireland

Voltage level
Distribution (low voltage)
<table>
<thead>
<tr>
<th>Country/Region</th>
<th>United States of America</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage level</td>
<td>Distribution (low voltage)</td>
<td>Distribution (low voltage)</td>
</tr>
<tr>
<td>Annual load (GWh)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope 2 emissions (basis)</td>
<td>Location-based</td>
<td></td>
</tr>
<tr>
<td>Scope 2 emissions (metric tons CO2e)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual energy losses (% of annual load)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of network (km)</td>
<td>105220</td>
<td>137783</td>
</tr>
<tr>
<td>Number of connections</td>
<td>3100000</td>
<td>2200000</td>
</tr>
<tr>
<td>Area covered (km2)</td>
<td>80000</td>
<td>272000</td>
</tr>
<tr>
<td>Comment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
C9. Additional metrics

C9.1

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Metric value</th>
<th>Metric numerator</th>
<th>Metric denominator (intensity metric only)</th>
<th>% change from previous year</th>
<th>Direction of change</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other, please specify (Water use)</td>
<td>2.56</td>
<td>Water use (m3)</td>
<td>Overall sales (kEuro)</td>
<td>8.24</td>
<td>Decreased</td>
<td>Water is a basic and irreplaceable natural resource in many of Iberdrola’s activities. The company’s awareness of this dependency and of the risks arising from water shortages has led it to set itself the objective of ensuring an increasingly rational and sustainable use of this resource. The main actions taken by the group for a more sustainable use of water are: – Limiting the volume of withdrawal and consumption of inland water in all technologies. – Establishing and controlling limits on ecological flows at the hydroelectric generation reservoirs. – Continually improving processes at facilities to reduce consumption and impact. – Avoiding withdrawal of water in water-stressed areas. – Reusing and recycling water at facilities. – Conducting awareness-raising campaigns to achieve a more efficient and responsible use of sanitary water by employees at offices.</td>
</tr>
</tbody>
</table>

C-EU9.5a

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

<table>
<thead>
<tr>
<th>Source</th>
<th>Planned CAPEX</th>
<th>Percentage</th>
<th>Year</th>
<th>Link 1</th>
<th>Link 2</th>
</tr>
</thead>
</table>
(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

<table>
<thead>
<tr>
<th>Product</th>
<th>Description of product/service</th>
<th>CAPEX planned for product/service</th>
<th>Percentage of total CAPEX planned products and services</th>
<th>End of year CAPEX plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart grid</td>
<td></td>
<td>806000000</td>
<td>26</td>
<td>2022</td>
</tr>
</tbody>
</table>

C-CO9.6/C-EU9.6/C-OG9.6
(C-CO9.6/C-EU9.6/C-OG9.6) Disclose your investments in low-carbon research and development (R&D), equipment, products, and services.

Investment start date
January 1 2018

Investment end date
December 31 2022

Investment area
Equipment

Technology area
Renewable energy

Investment maturity
Large scale commercial deployment

Investment figure
11840000000

Low-carbon investment percentage
100

Please explain
The business will focus on sustainable development, mainly based on investments in onshore and offshore wind and in photovoltaic in the countries most important to the group, and in the safety of operations.


Investment start date
January 1 2018

Investment end date
December 31 2022

Investment area
R&D

Technology area
Digital technology

Investment maturity
Full/commercial-scale demonstration

Investment figure
4800000000

Low-carbon investment percentage
10

Please explain
• Iberdrola is a leading multinational group in the energy sector thanks to an innovative strategy based on a strong commitment to clean energy, smart grids, efficient energy storage, the development of custom-tailored solutions for customers, and digital transformation. • The wager on digital transformation will be key, with a planned investment of €4,800 million between 2018-2022.

C10. Verification

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

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

C10.1a

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

Scope  
Scope 1
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
CDP-verification-template_2017.pdf
Page/ section reference
Whole
Relevant standard
ISO14064-3
Proportion of reported emissions verified (%)  
100

Scope  
Scope 2 location-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
CDP-verification-template_2017.pdf
Page/ section reference
Whole
Relevant standard
ISO14064-3
Proportion of reported emissions verified (%)  
100

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

**Scope**
Scope 3 - all relevant categories

**Verification or assurance cycle in place**
Annual process

**Status in the current reporting year**
Complete

**Attach the statement**
CDP-verification-template_2017.pdf

**Page/section reference**
Whole

**Relevant standard**
ISO14064-3

---

**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**
## C3. Business strategy - Emissions reduction activities

This data was published in the Sustainability Report, verified by PwC, and also published in our Integrated Report and General Shareholders’s Meeting’s Proposed Resolutions.

### Emission-free installed capacity has increased being our emission free output our main initiative to comply with emission reduction target. Objective for Executive directors and management personnel linked to the Company’s performance’s variable fee.

## C6. Emissions data - Year on year emissions intensity figure

This data is published in the Sustainability Report, verified by PwC. Renewable energy products Iberdrola Green Energy comes exclusively from 100% renewable energy sources, as per European Directive 2009/28/EC, characterised by full environmental respect by avoiding the emission of CO2 and other pollutant gases. Iberdrola Green Energy is double certified: At source, by IRECS (International Renewable Energy Certificate Services) certificates issued and managed by an Issuing Body which guarantees that the energy generated comes exclusively from renewable sources. Renewable source of all the energy supplied, certified by Bureau Veritas Quality International.

### This is a key performance indicator for the Group. Available evolution in our webpage: https://www.iberdrola.com/sustainability/against-climate-change/direct-emissions

## C3. Business strategy - Renewable energy products

Iberdrola Green Energy comes exclusively from 100% renewable energy sources, as per European Directive 2009/28/EC, characterised by full environmental respect by avoiding the emission of CO2 and other pollutant gases. Iberdrola Green Energy is double certified: At source, by IRECS (International Renewable Energy Certificate Services) certificates issued and managed by an Issuing Body which guarantees that the energy generated comes exclusively from renewable sources. Renewable source of all the energy supplied, certified by Bureau Veritas Quality International.

### This certification implies the existence of an internal methodology for managing these IRECS certificates and the allocation of that energy to the customers who buy it, so that only energy from renewable sources and certified at source can be sold as green energy.

## C7. Emissions breakdown - Product footprint verification

The verification of the Corporate Environmental Footprint (CEF) is defined as: “A multi-criteria measure of the environmental performance of a goods/services providing organization from a life cycle perspective. The main objective of a CEF is to reduce the environmental impact derived from the organisation's activities.” The Iberdrola’s Environmental Footprint objectives are: Understand and compare objectively the effect of our activity in the different environmental impact categories, trace their cause, identifying the environmental aspects and the assets/technologies/regions responsible of them. This will be an extra element of information for the company's management system. Have a single homogeneous methodology for the whole group that allows: Measure to improve, developing activities to reduce the environmental impact, with the aim of: Improve efficiency. Improve our reputation. Improve our competitiveness. Benchmark. Communicate the company's impact. Ensure the group's commitment to transparency.


## C4. Targets and performance - Emissions reduction activities

This data was published in the Sustainability Report, verified by PwC. Also published in Iberdrola’s web page.

## C8. Energy - Renewable energy products

This data was published in the Sustainability Report, verified by PwC. Also published in Iberdrola’s web page.

### 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)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.
California CaT
EU ETS
UK carbon price floor

C11.1b

(C11.1b) Complete the following table for each of the emissions trading systems in which you participate.

California CaT

<table>
<thead>
<tr>
<th>% of Scope 1 emissions covered by the ETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period start date</td>
</tr>
<tr>
<td>Period end date</td>
</tr>
<tr>
<td>Allowances allocated</td>
</tr>
<tr>
<td>Allowances purchased</td>
</tr>
<tr>
<td>Verified emissions in metric tons CO2e</td>
</tr>
<tr>
<td>Details of ownership</td>
</tr>
<tr>
<td>Comment</td>
</tr>
</tbody>
</table>

EU ETS

| % of Scope 1 emissions covered by the ETS | 100  
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Period start date</td>
</tr>
<tr>
<td>January 1 2017</td>
</tr>
<tr>
<td>Period end date</td>
</tr>
<tr>
<td>December 31 2017</td>
</tr>
<tr>
<td>Allowances allocated</td>
</tr>
<tr>
<td>38032</td>
</tr>
<tr>
<td>Allowances purchased</td>
</tr>
<tr>
<td>8515120</td>
</tr>
<tr>
<td>Verified emissions in metric tons CO2e</td>
</tr>
<tr>
<td>8553758</td>
</tr>
<tr>
<td>Details of ownership</td>
</tr>
<tr>
<td>Facilities we own and operate</td>
</tr>
<tr>
<td>Comment</td>
</tr>
<tr>
<td>EU ETS in Spain and United Kingdom</td>
</tr>
</tbody>
</table>
**C11.1c**

(C11.1c) Complete the following table for each of the tax systems in which you participate.

**UK carbon price floor**

<table>
<thead>
<tr>
<th>Period start date</th>
<th>January 1 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period end date</td>
<td>December 31 2017</td>
</tr>
<tr>
<td>% of emissions covered by tax</td>
<td>98.54</td>
</tr>
<tr>
<td>Total cost of tax paid</td>
<td>£61,143,690</td>
</tr>
</tbody>
</table>

**Comment**

Total cost of tax paid in Euros. Exchange rate 0.85128 Pounds = 1 Euro (52,050,400.32 Pounds = 61,143,690 Euros).

---

**C11.1d**

(C11.1d) What is your strategy for complying with the systems in which you participate or anticipate participating?

Only the generation facilities located in Europe are subject to an emission rights trading system, for which reason this indicator does not affect the thermal generation facilities in Mexico, Brazil or the United States.

The European facilities (Spain and United Kingdom) have not received free trading rights since 2013, for which reason they have to acquire the necessary rights at auction to offset the emissions produced. The IBERDROLA Group is a major player in the European Emissions Trading Scheme, which began to operate in Europe on January 1st, 2005.

IBERDROLA has played an active role throughout 2017 in the EU-ETS trading through both bilaterally and in exchanges, mainly buying allowances for compliance. The main goal is to minimise the carbon market risk while optimising the value of the European thermal electricity generation assets.

A significant amount of the Avangrid Renewables western U.S. activity includes the import of energy into the State of California. The California Cap-and-Trade program commenced in 2013 and relies on the mandatory reporting of greenhouse gas emissions and purchase of equivalent allowances. To comply with the Cap-and-Trade regulation, we have registered with the California Air Resources Board, tracked and reported our annual GHG emissions on Avangrid Renewables resources imported into California, created the necessary allowance accounts, and designated authorized account representatives. We met the 2016 deadline by submitting the details of our emissions-related activities to an independent verifier. Upon approval from the verifier, Avangrid Renewables will surrender the required compliance instruments by the established deadlines.

---

**C11.2**

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

Yes
(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
Wind

Project identification
México: La Venta II

Verified to which standard
Other, please specify (MX 846)

Number of credits (metric tonnes CO2e)
6177

Number of credits (metric tonnes CO2e): Risk adjusted volume
6177

Credits cancelled
Yes

Purpose, e.g. compliance
Compliance

*During 2017, Iberdrola has cancelled 400 emission reduction credits to offset the Stakeholders Annual Meeting carbon footprint.

(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
- Navigate GHG regulations
- Drive low-carbon investment
- Stress test investments

GHG Scope
- Scope 1
- Scope 2
- Scope 3

Application
The use of an internal carbon price to alternatively assess comparative economic impact of different investment scenarios is one factor that helps inform capital and operational decision making and in our strategy for R and D investment (fuel transport, commuting, customer behaviour...) - We consider Scope 1, 2 and 3 emissions. By including a higher internal carbon price than the official market price, new renewable projects are being promoted (which may not be eligible for investment without this additional price) and the closure of facilities that could be profitable if they were not considering the cost of that externality has taken place. We have recently moved towards a lifecycle approach within our environmental strategy. With our foreseen renewables investments included in our Strategic Plan for 2022 and the switching from gas to Renewables we include the potential cost of projects CO2 emissions in all major investment decisions, using an average cost of €30 per ton of CO2

Actual price(s) used (Currency /metric ton)
- 30

Variance of price(s) used
This carbon price is forecasted quarterly and stress tests are launched in order to assess different long term impacts. We review this commodity quarterly and stress tests are being made to the estimations. IBERDROLA has a tool to calculate the cost of emitting CO2 in each country (this price is an average) where it operates taking into account their national decarbonization policies. Iberdrola participates in the Carbon Pricing Corridors project, with an outcome of a price range from 30-100 (USD/metric ton) for 2030-2035. The Carbon Pricing Corridors is part of the work conducted by CDP under the We Mean Business initiative comprising a panel of more than 20 chief executives and senior leaders from across the G20 who provide market insights into the future impact of carbon pricing and explore the carbon-related price signals that will decarbonize electricity generation and heavy industry through the short to medium-term (2020, 2025, 2030 and 2035) and help deliver a sub-2°C world as defined by the Paris Agreement. Iberdrola’s Chairman is one of the expert Panel Members that provides input to this initiative.

Type of internal carbon price
- Shadow price

Impact & implication
The internal carbon price is studied together with other commodities (such as gas, coal) and serves as a basis to foresee a switch from coal to CCGT in 2020 and a future switch from gas to renewables if prices are higher enough. We are active members of CO2 Carbon Pricing Leadership Coalition - CPLC (World Bank) and the Carbon Pricing Corridors project (We mean business) participating with our inputs and experts in order to reinforce the idea that carbon pricing is one of the tools to promote clean investments. Example: the closure of our biggest coal facility in March 2016 is an example of this change due to the carbon impact. The company is currently taking the necessary steps for the orderly closure of its two remaining coal plants in the world (both located in Spain, jointly 874 MW).

---

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
- Yes, our suppliers
- Yes, our customers
- Yes, other partners in the value chain

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

Type of engagement  
Information collection (understanding supplier behavior)

Details of engagement  
Collect climate change and carbon information at least annually from suppliers

% of suppliers by number  
5

% total procurement spend (direct and indirect)  
92

% Scope 3 emissions as reported in C6.5  
7.94

Rationale for the coverage of your engagement  
In its firm commitment to fight climate change, Iberdrola attempts to extend to its suppliers the effort to comply with the emission-reduction objectives. Emissions from suppliers are obtained through a yearly environmental awareness campaign to foster the reduction of CO2 emissions in the supply chain. In 2017, the 8th Campaign to Raise Awareness about and Measure Greenhouse Gases in Suppliers was carried out through specific questionnaires sent to over 1,000 suppliers of materials, equipment, works or services for the Group in Spain, the United Kingdom, Brazil, Mexico and the United States, the selection of these suppliers is based on our expenditure (we can not select them from their emissions perspective because we only know the amount of emissions after asking) With this initiative, we seek to have suppliers demonstrate their effectiveness in managing, controlling and reducing greenhouse gas (GHG) emissions, while understanding the impact of climate change on their businesses, managing the associated risks appropriately. Of the replies obtained from the questionnaires, emissions proportional to the supplier’s invoicing volume to the Company with regard to the total were taken as corresponding to Iberdrola. CSR Scoring: This includes environmental aspects Evaluate suppliers in terms of CSR, quantifying their relative position in terms of their management in this area.

Impact of engagement, including measures of success  
Based on responses to the surveys sent to the suppliers, emissions proportional to the volume of the supplier’s billing to the Company as a function of total billing are deemed to correspond to Iberdrola. In order to expand awareness of the Group’s Carbon footprint, the following levels of indirect emissions were included in the inventory: 2017 CO2 eq emissions associated with the supply chain (t) Spain 1,054,507 United Kingdom 795,891 United States 490,768 Brazil 211 Mexico 635,421 These campaigns also give suppliers the opportunity to inform us of the environmental projects they are developing or whether they have an environmental project that they would like to undertake in partnership with Iberdrola. Having established improvement objectives for all the Purchasing team on increasing purchases from analysed suppliers and increasing the percentage of purchases from A+ suppliers. A specific communication about their situation is sent to those suppliers with a B so that they try to improve to A+.

Comment

Type of engagement  
Compliance & onboarding

Details of engagement  
Included climate change in supplier selection / management mechanism  
Climate change is integrated into supplier evaluation processes

% of suppliers by number  
100

% total procurement spend (direct and indirect)  
79.5

% Scope 3 emissions as reported in C6.5  
7.94

Rationale for the coverage of your engagement  
Use in supplier scorecards The minimum requirements to be classified as an IBERDROLA supplier include: - Acceptance of the Supplier’s Code of Ethics - Compliance with applicable legislation in each of the countries in which IBERDROLA Group conducts its business - Proof of a stable financial situation - For certain contracts, an appropriate needs-based third-party liability policy - Once registered, the factors assessed for classifying the supplier will depend on the supplier's situation in the following areas: - Corporate social responsibility, labour practices and respect for human rights - Environmental respect - Safety and occupational risk prevention - Assessment of credit risk, financial health - Quality - Risk of corruption and bribery - References and history of previous work
**Impact of engagement, including measures of success**

The supplier's situation in the area of sustainability (quality, environment, occupational risk prevention, social responsibility and human rights) has a weight of 40% on the total score, and the other 60% corresponds to the assessment of credit risk, financial health and prior references. Seeking to improve the situation for suppliers with minor performance in these matters, year-long actions are carried out for traction, awareness-raising and motivation with a view to having these suppliers become certified in these areas (further information in the section on Dialogue with suppliers—Traction).

**Comment**

In the management of suppliers and during the procurement process, the measures adopted to promote proper environmental behaviour by suppliers are based on the Procurement Policy, the Suppliers’ Code of Ethics and the specific environmental clauses in the procurement terms of the group. Subsequently, during the supply stage, the business units monitor the environmental performance of the supplier during the term of the contract. At the end of 2017, procurement from suppliers with a certified environmental management system represented 79.5% of all procurement from suppliers of general supplies. 100% of suppliers (both new and existing) of general supplies are evaluated according to environmental and sustainability criteria. The principal environmental risks are considered to be managed through the current management systems and the periodic audits that are performed. No supplier with a significant negative environmental impact has been detected. Furthermore, Iberdrola does not have major suppliers located in areas with water stress. By acting as a tractor company and being an economic driving force, because of our high annual purchasing potential and: ☐ Creating an integral, ethical and transparent business model that favours the development of these values and commitments in the market in which it operates ☐ Encouraging internationalization ☐ Injecting liquidity into suppliers ☐ Providing highly qualified employment ☐ Driving investments in R&D ☐ Rewarding the supplier's contribution to the Company’s strategic objectives Among other results, Iberdrola has contributed to ensuring that supplier companies that were initially only local, had no management systems, or were focused on a single activity, etc., could gain access to new markets and clients, become involved in R&D projects, grow more competitive by developing an international presence that would allow them to become leading firms on their own in sectors such as renewable energies, industrial facility maintenance, power facility construction, global services, etc.

**Type of engagement**

Engagement & incentivization (changing supplier behavior)

**Details of engagement**

Climate change performance is featured in supplier awards scheme

*Supplier’s of the Year Award- Environmental category: promoting suppliers’ environmental responsibility and publicly recognising those who go the extra mile*

% of suppliers by number

100

% total procurement spend (direct and indirect)

100

% Scope 3 emissions as reported in C6.5

7.94

**Rationale for the coverage of your engagement**

Supplier’s of the Year Award- Environmental category: promoting suppliers’ environmental responsibility and publicly recognising those who go the extra mile The aim of Iberdrola's supplier awards is to incentivise and recognise excellence, sustainable development, quality, internationalisation, innovation, corporate social responsibility, job creation and the prevention of workplace risks. This action driver for suppliers have generated a progressive convergence of suppliers and supplies toward the sustainable parameters required by the company, resulting in a multiplying effect throughout the supply chain, since what is currently being requested from first-level suppliers will gradually be assumed by the entire supply chain.

**Impact of engagement, including measures of success**

Active engagement with the most active sustainable suppliers. Iberdrola works and shall continue to work with excellent and sustainable suppliers, and to do so, it establishes clear traction and measurement mechanisms with resources in the Purchasing Division allocated to these tasks. The Company likewise establishes personal objectives with its management team that are linked to continuously improving the sustainability ratios of its suppliers. Only in this way can Iberdrola continue to grow and serve the societies in which it is present and to which it is committed.

**Comment**

**Type of engagement**

Engagement & incentivization (changing supplier behavior)

**Details of engagement**

Other, please specify (Environmental clause in hiring condition)
% of suppliers by number
100

% total procurement spend (direct and indirect)
100

% Scope 3 emissions as reported in C6.5
7.94

Rationale for the coverage of your engagement
Environmental clauses that the supplier must comply with during the contract

Impact of engagement, including measures of success
The procurement terms of the group establish certain environmental requirements to meet this commitment, and the company also performs various tracking and reporting activities on an on-going basis.

Comment

<table>
<thead>
<tr>
<th>Type of engagement</th>
<th>Details of engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information collection (understanding supplier behavior)</td>
<td>Other, please specify (Supplier Mobility Plan)</td>
</tr>
</tbody>
</table>

% of suppliers by number
100

% total procurement spend (direct and indirect)
100

% Scope 3 emissions as reported in C6.5
7.94

Rationale for the coverage of your engagement
In the database management of suppliers is intended to have knowledge of initiatives and sustainable mobility plans that our suppliers have. That is why Iberdrola has incorporated an issue in the basic register of suppliers of the following type: “Does your organization have a sustainable urban mobility plan (SUMP *)?”

Impact of engagement, including measures of success
In this way, Iberdrola has information about its suppliers and knows the initiatives that are being carried out or are programmed in its supply chain and will be able to monitor new sustainability actions in order to promote sustainability mobility.

Comment

C12.1b
(C12.1b) Give details of your climate-related engagement strategy with your customers.

**Type of engagement**
Education/information sharing

**Details of engagement**
Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

**Size of engagement**
100

**% Scope 3 emissions as reported in C6.5**
91

**Please explain the rationale for selecting this group of customers and scope of engagement**
Materiality analysis pursued: As stated in our Sustainability Policy recently approved in December 2013, we pursue the safety in the supply of energy products, resorting whenever possible to locally-produced primary energy sources, using renewable energy resources, and ensuring the reliability and availability of generation, transmission, and distribution facilities. As part of its demand-side management programmes, Iberdrola’s main objective is to improve energy efficiency and the smart use of active electrical grids to thus contribute to the more efficient use of energy by consumers, and thereby reduce CO2 emissions and contribute to the fight against climate change. The types of actions taken include those relating to information, training and the supply of solutions and technologies that help them improve energy efficiency and reduce the environmental impact of their energy habits and consumption. Iberdrola engages in demand-side management in all of its geographic areas and for its various types of customers.

**Impact of engagement, including measures of success**
Iberdrola sells a wide range of products and services that promote efficiency, energy saving and environmental protection: – Energy efficiency: efficient air conditioning and lighting, capacitor banks, home automation systems and other solutions. – Renewable energy facilities: solar photovoltaic energy. – Comprehensive management of energy supplies. – Electromobility. In 2017 more than 800,000 customers benefited from products and services that improve energy efficiency. Noteworthy is the launch in 2017 of the Smart Irrigation product, which permits the programming and more efficient control of residential sprinklers. This product supplements others launched in prior years, like smart thermostats, electricity meters capable of distinguishing consumption by the main appliances, etc. In the industrial and commercial sectors, there are initiatives to diagnose and propose measures for energy savings and efficiency, like efficient lighting, efficient air conditioning, etc.

---

**Type of engagement**
Education/information sharing

**Details of engagement**
Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

**Size of engagement**
100

**% Scope 3 emissions as reported in C6.5**
91

**Please explain the rationale for selecting this group of customers and scope of engagement**
The company’s projects in the area of commercial and industrial customers are focused on energy savings, cost reductions and CO2 emissions. These include projects for managing connectivity at buildings and audits to identify low-cost and easily-applied energy saving measures. As stated in our Sustainability Policy recently approved in December 2013, we pursue the safety in the supply of energy products, resorting whenever possible to locally-produced primary energy sources, using renewable energy resources, and ensuring the reliability and availability of generation, transmission, and distribution facilities.

**Impact of engagement, including measures of success**
Strategy: we have many programmes like: Get about with zero emissions, enjoy Iberdrola Green Charge for €32/month, Sp CONNECTED HOME: accessible through all available mobile devices, fully integrated within the digital environment, providing the seamless customer experience, integrated through the full suite of energy, SmartSolar: a comprehensive solar solution that lets generate and use your own power, in which everything is designed for efficiency and convenience, and energy service products. Smart Mobility: Iberdrola’s solution for electric vehicle.

---

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

Iberdrola’s Sustainable Mobility Plan - Employee section:

The initiatives launched by Iberdrola include the Electric vehicles for employees program, launched in 2016 in Spain and UK, and due to the great acceptance of the initiative by employees, launched again in 2017 and 2018 in the same countries in addition to the United States, and is expected to be rolled out to other places where the company operates. This plan is organized into three types of aid:

- special advances of up to €4,000 to purchase a 100% electric vehicle,
- grants of €750 for installing a charging station
- and up to €6,000 for employees who buy 100% electric vehicles for three years. It is also included bicycles, motorcycles and electric mopeds.

Iberdrola has also made available to employees the following tools:

- Collective transport
- Labour flexibility
- Training
- Videoconferences
- Promoting cycling
- Parking management
- Carpooling, which allows employees to publish their journeys and offer their vehicle to share the trips

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
Funding research organizations
Other

C12.3a

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

<table>
<thead>
<tr>
<th>Mandatory carbon reporting</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 14064 external verification since 2010. Participation in European Commission pilot project.</td>
<td>Carbon reporting should be compulsory for big companies.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cap and trade</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBERDROLA participates in the EU ETS. As a stakeholder, IBERDROLA plays an active role in the EU regulatory dialogue regarding cap and trade structural design and rules, specifically in the review of the Directive of the EU-ETS and in the Effort Sharing Decision.</td>
<td>Recognition of the important role of cap &amp; trade to tackle the decarbonisation of EU energy model. In the context of EU ETS, long term goals are essential to provide a CO2 price which consolidates as a signal to the investment in low carbon technologies. A strong carbon price signal able to encourage investments in decarbonisation. However, this signals shoud be reinforced trough a carbon price floor to bring visibility and stability to investors.</td>
</tr>
<tr>
<td>Issue</td>
<td>Support</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Carbon tax</strong></td>
<td>Support IBERDROLA operates throughout markets where there are carbon price instruments equivalent to a carbon tax (EU ETS, carbon price floor in UK...).</td>
</tr>
<tr>
<td><strong>Energy efficiency</strong></td>
<td>Support IBERDROLA has created its own Energy Services Company (ESCO), to deploy specific actions in the field of efficiency, together with other suppliers in IBERDROLA Group who plays and active role in the regulatory dialogue at international and national level.</td>
</tr>
<tr>
<td><strong>Clean energy generation</strong></td>
<td>Support IBERDROLA was founded at the beginning of the past century based on hydroelectric power and 15 years ago pre-empted the rest of the sector with a focus on renewables that has made it world leader in wind power and pioneer in measures to combat climate change.</td>
</tr>
<tr>
<td><strong>Adaptation or resilience</strong></td>
<td>Support IBERDROLA plays and active role in the regulatory dialogue at international and national level. In particular Iberdrola has shared its experience in the development of adaptation tools with the Basque Government to support the development of further guidance to other industries. Additionally IBERDROLA USA has participated in the United States Department of Energy’s (DOE) Partnership for Energy Sector Climate Resilience program, where it has contributed to the development of resources that facilitate risk-based decision making and pursue cost-effective strategies for a more climate-resilient energy infrastructure. In the UK our networks and generation businesses are engaged with the Adaptation Reporting Power inviting companies to report on their preparedness to adapt to climate change.</td>
</tr>
<tr>
<td><strong>Climate finance</strong></td>
<td>Support IBERDROLA plays and active role in the regulatory dialogue at international and national level.</td>
</tr>
<tr>
<td><strong>Other, please specify</strong></td>
<td>Support Some of these principles have not been fully adopted in some of the countries in which it operates and are the subject of a social debate, in which IBERDROLA participates, for their possible inclusion in regulations.</td>
</tr>
<tr>
<td><strong>Other, please specify</strong></td>
<td>Support IBERDROLA is member of Carbon Price Leadership Coalition. We believe that is necessary to put in place the right incentives, in electricity and in all other sectors, to invest and consume in low carbon technologies. This will move from the current model that rewards polluters to a new system based on the principle “polluter pays”. The most efficient tool to achieve this goal is putting a price on carbon, as it provides technology-neutral incentives and promotes the cheapest clean production sources.</td>
</tr>
<tr>
<td><strong>Other, please specify</strong></td>
<td>Support IBERDROLA is one of the largest electricity companies in the world and a global leader in wind power. We have achieved this position by strengthening our commitment to sustainable development and care for the environment using cleaner technologies with the lowest CO2 emission levels. The Company proposes an efficient energy mix, based on efficient renewable energy, combined cycle gas turbines, and nuclear. IBERDROLA current energy mix is 66% free of carbon emissions and plans to reduce by 50% emissions in 2030 vs. 2007 and become carbon neutral in 2050.</td>
</tr>
</tbody>
</table>

**In general terms, finance is one of the main elements to tackle climate change. IBERDROLA signed in November 2012, the Carbon Price Communiqué, issued to governments by the leaders of more than 200 companies worldwide with a view to the Doha Summit, an initiative of The Prince of Wales’s Corporate Leaders Group on Climate Change (CLG), managed and developed by the Programme for Sustainability Leadership of the University of Cambridge (CPSL). Environmental goals and stable regulatory frameworks are essential for agents to obtain finance to invest in low carbon technologies. Currently, the economic crisis may delay investment and reduce R&D expenditure in the climate change field. In September 2014, IBERDROLA endorsed the goals set by CDP via its Road to Paris 2015 initiative.**

**Active participation in national and international forums (i.e., Davos, 2017 our CEO and our Environment Director attended promoting this issue).**

A strong carbon price signal based on the “polluter pays principle” and faced by the whole economy should be the main tool for driving cost-effective decarbonisation and low carbon investment. Carbon pricing will not be fully effective unless all agents are in a level playing field, removing subsidies to carbon-intensive producers because in the energy sector, subsidies to fossil fuels are five times more costly than subsidies to renewables.
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.

<table>
<thead>
<tr>
<th>Trade association</th>
<th>Is your position on climate change consistent with theirs?</th>
<th>Please explain the trade association’s position</th>
<th>How have you, or are you attempting to, influence the position?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eurelectric</td>
<td>Mixed</td>
<td>Eurelectric in Europe, decarbonisation in 2050.</td>
<td>We are participating focused on clean energy promotion instead of the general rule of coal generation in Europe. Members of Groups relating Climate Change are committed to design the energy roadmap in order to decarbonise European utilities.</td>
</tr>
<tr>
<td>Transparency Register</td>
<td>Consistent</td>
<td>Created by European institutions to give adequate transparency to the relations of such institutions with companies, NGOs, citizens’ associations, think tanks, among others.</td>
<td>In February 2012, IBERDROLA registered within the Transparency Register. Existence of government and regulatory support mechanisms to facilitate the implementation of these programmes and help achieve the global targets. The company is also engaged by the input from expert stakeholders to the sustainability report.</td>
</tr>
<tr>
<td>Club de Excelencia en Sostenibilidad</td>
<td>Consistent</td>
<td>Created by leading corporations in order to point out the public authorities best practices regarding sustainability issues: GHG emissions, mobility, biodiversity and energy efficiency projects...</td>
<td></td>
</tr>
</tbody>
</table>
How have you, or are you attempting to, influence the position?
We have participated in all the publications and we have coordinated within the institutions several Working Groups. The most recent is the Biodiversity Catalogue.

Trade association
Call of eight leading energy companies to EU leaders for a revitalized energy policy

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association’s position
The eight energy companies agreed on a joint statement to underline the seriousness of the current challenges facing European carbon market able to support climate-friendly technologies and in which a reliable perspective is provided, notably, by establishing ambitious but realistic and stable post-2020 greenhouse gas emissions targets.

How have you, or are you attempting to, influence the position?
IBERDROLA has supported the event. Information published in IBERDROLA’s webpage.

Trade association
Grupo español de Crecimiento Verde

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association’s position
The aim of this Group is increasing participation of companies, sharing information, identifying opportunities and supporting Spanish presence in international forums. Main spanish companies belong to this Group which was created by the Spanish Ministry for Agriculture, Alimentation and Environment.

How have you, or are you attempting to, influence the position?
IBERDROLA is present in this Group since its creation on September 2014. It is one of the few utilities present.

Trade association
CDP Roadmap to Paris

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association’s position
IBERDROLA reaffirmed its unwavering commitment to combating climate change at the Climate Change Summit organised by the United Nations in New York in September 2014. In this regard, the company endorsed the goals set by CDP via its Road to Paris 2015 initiative, which aims to ensure that more ambitious and binding measures will be taken by States at the Climate Summit scheduled for the French capital.

How have you, or are you attempting to, influence the position?
IBERDROLA, when attending the New York Climate week in September 2014, signed the basic purposes of this initiative and has joined the effort in order to go on bringing down greenhouse gas emissions, limit global warming to less than 2º Celsius and promoting transparency in the reporting.

Trade association
BetterCoal

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association’s position
BetterCoal is a global, not for profit initiative that has been established by a group of major European utilities to promote the continuous improvement of corporate responsibility in coal mining, with a specific focus on the mines themselves.

How have you, or are you attempting to, influence the position?
IBERDROLA is one of the 17 members of the international BetterCoal initiative, which includes the leading European coal-purchasing energy companies. Its aim is to set a standard for ethical, environmental, and social conduct, evaluate the conduct of producers through audits, create a database with the results of such evaluations, and improve producers’ actions.

Trade association
Global Compact Lead
Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association’s position
By bringing companies together with relevant experts and stakeholders, Global Compact LEAD provides a collaborative space to generate and implement advanced corporate sustainability practice. As an integral part of the United Nations and the UN Global Compact, LEAD is uniquely positioned to inspire widespread uptake of sustainability solutions among businesses around the world.

How have you, or are you attempting to, influence the position?
IBERDROLA takes an active part in this Group.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?
Yes

C12.3e

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

Iberdrola participated in the COP23, showing its leadership in the fight against climate change, goal no. 13 of the Sustainable Development Goals (SDGs). The company is actively engaged in these Goals of the Global Compact, which were already included in its business strategy and Sustainability Policy.

Once again, the company played a very important role in the Summit with the Moving for Climate NOW initiative and with its participation in the main events and meetings arranged during the Summit held in Bonn (UN Framework Convention for Climate Change, World Business Council for Sustainable Development, Carbon Pricing Leadership Coalition, UN Global Compact, etc.). This year, Moving for Climate NOW gathered over 40 representatives of international organisations, who travelled almost 800 km on bicycle to raise the awareness on the importance of how movement is required to combat climate change.

This initiative is one of the actions as part of Iberdrola's broader Plan to Raise Social Awareness on Climate Change, directed towards different public audiences, mostly through alliances with experts and third–parties. Other activities are:

I) online training course to all employees
II) on-site school workshops by Iberdrola volunteers
III) sponsorship of a children's theatre play tour
IV) advice in the documentary Guardians of the Planet

A partial summary of the organizations and initiatives:
- World Economic Forum (WEF) CEO Climate Leaders.
- World Climate Summit.
- SE4ALL.
- We Mean Business.
- United Nations Global Compact.
- Spanish Green Growth Group.
- The Climate Group. - Caring for Climate.
- CERES.
- The Paris Pledge.
- Club de la Excelencia en Sostenibilidad
- MAKE POWER CLEAN (Signed letter 550gCO2/kWh)
- Aire Limpio platform (Iberdrola with presence for 2 years)

We support research organisations who produce public work on climate change:

- Academic
  Various Universities and colleges to facilitate technology, training and research into climate mitigation techniques (Universities of Strathclyde, Edinburgh, Durham, Liverpool, MIT, etc)
  The Utility of the future- MIT Edinburgh Centre for Climate Change Innovation
  IBERDROLA chair in Energy and Innovation at the University of Comillas - ICAI
  IBERDROLA chair at the University of Salamanca
  IBERDROLA chair at Polytechnic University of Madrid for the Sustainable Development Goals
  IBERDROLA Hall and IBERDROLA-UPSA Innovation Club at the Pontifical University of Salamanca
  Partnership with the Conference by Nicholas Stern “Energy, a key factor in a more sustainable economy”
  Sponsorship of the “Rey Jaime I” Award for the Protection of the Environment,

Our Foundation continuous in 2017 the annual Scholarship and Research Aid Programme specialising in energy and environment, with the aim of contributing to excellence in training and research in the energy field, with special emphasis on renewable energy, the improvement of Biodiversity, as well as the efficiency of the energy system.

The University of Salamanca, the Polytechnic University of Madrid and Iberdrola organised the 1st Ibero-American Conference on the Sustainable Development Goals, which took place in Salamanca between 27 and 29 June 2018 and involved over 400 international representatives.

- Business
  CBI – through work in respect to the business response to climate change
  Green Alliance – work in research, behaviour change and lobbying
  Carbon Trust – to investigate technology improvement for climate mitigation, especially in relation to renewables
  PERSEO program, where IBERDROLA Venture Capital is dedicated to investing in innovative technologies that ensure the sustainability of the energy model
  Supporter of Foundation COTEC that promotes technological innovation in Spanish business fabric and Spanish society

- Trade Body
  Eurelectric: European electricity association, where IB participates in different groups (climate change, renewables, etc)
  WindEurope: IB is member of the European wind industry association
Unesa: IB is member of Spanish electricity association

AEE: IB is member of Spanish wind association

APPA: IB is member of Spanish renewable producers association

ScottishPower Renewables – undertakes research into increasing deployment of renewables and low carbon electricity generation in Scotland

Energy UK – research and influencing activity to help reduce the carbon intensity of the UK electricity generating portfolio and increase energy efficiency measures

Electricity Networks Association – to facilitate the development of a low carbon electricity system through research and development activity in relation to grids

NEOTEC Program - investment committee member

Innnvierte Program - in conjunction with the Centre for Industrial Technological Development (CDTI), for studying and development of new technologies for the energy sector

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?

We promote relationships geared to the enactment of efficient regulatory provisions allowing the development of a competitive market. To that end, there is a continuous and constructive dialogue where information, knowledge, and opinions are exchanged. IBERDROLA is thus acquainted with the concerns and proposals of regulatory entities and puts forward the Company’s own opinions in the legitimate defence of its interests and those of its shareholders, customers, and users. It also actively participates in “public hearings” held by regulatory entities in order to ascertain the opinions of the players involved in the processes prior to the revision of regulations or the determination of domestic energy policies, and in the official processes of enactment of the laws and regulations and the monitoring of the application thereof.

The Company maintains smooth and cordial relationships with European Union institutions through its office based in Brussels and with the entities of Spain, UK and Scottish governments. The existence of government and regulatory support mechanisms to facilitate the implementation of these programmes and help achieve the global targets. The company is also engaged by the input from expert stakeholders to the sustainability report.

For example, in the UK, we have been working with the UK and Scottish Governments to facilitate new low carbon sources of electricity generation through the Electricity Market Reform process. We have also been involved with Government and external stakeholders in the past in the achievements of CERT/CESP and we are nowadays involved in the development of the Green Deal/ECO framework that is designed to encourage energy efficiency for households and businesses.

In the fight against climate change, adaptation measures are essential. That is the reason why IBERDROLA has developed a specific climate change adaptation plan in order to anticipate future climate risks as a result of climate change and increase the resilience of the company. We have multidisciplinary environmental regulation meetings (6 per year minimum).

As a general rule, IBERDROLA works for the approval of and respect for the principles of good regulation: proportionality, effectiveness and efficiency, responsibility and independence, consistency and credibility, and, finally, transparency and clarity.

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 voluntary sustainability report

**Status**
Complete
Attach the document
IB_Sustainability_Report_2017.pdf

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Publication
In mainstream reports

Financial Report

Status
Complete

Attach the document
FinancialStatements_AuditorsReport_Consolidated17.pdf

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Publication
In mainstream reports in accordance with TCFD recommendations

Integrated Report

Status
Complete

Attach the document
IA_IntegratedReport18.pdf

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Publication
In voluntary communications

Iberdrola’s inventory of greenhouse gas emissions

Status
Complete

Attach the document
GEI_Report_2017.pdf

Content elements
Strategy
Emissions figures
Emission targets
In mainstream reports in accordance with TCFD recommendations, Iberdrola supports the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) to disclose financial information relating to climate change. The company believes that this initiative will facilitate Stakeholders’ evaluation of the risks and opportunities arising from climate change. For these reasons, Iberdrola supported the initiative in April, and in September 2017 joined a group of ten companies that were the first to assume the commitment to implement the recommendations of the TCFD within a period of three years.

**Status**
Complete

**Attach the document**
IA_IntegratedReport18.pdf

**Content elements**
- Governance
- Strategy
- Other, please specify (TCFD endorsement (page 34))

---

**C14. 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.

SBTi has approved our targets for SCOPE 1 and Scope 2 but they have changed the methodology for Scope 3 and we are in conversations with them in order to clarify that issue. Therefore, we still do not have the final approval but we are quite confident that we will achieve it!

Decision Letter - Iberdrola SA (4).pdf

---

**C14.1**

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

| Row 1 | VP, Innovation and; Sustainability Director, Director | Chief Sustainability Officer (CSO) |

---

**SC. Supply chain module**

---

**SC0.0**
* IBERDROLA is a world leader in clean energy, focused on promoting CO2 free installed capacity in our mix.

* IBERDROLA is well-positioned to become a benchmark as regards the contribution of the electricity subsector towards attaining a scenario that is compatible with the 2ºC target, as a result of the characteristics of its energy mix, its investment profile and the commitments that it has already undertaken.

* IBERDROLA's emissions per kWh were already 55% lower than the average of the European electricity sector in 2016; Source: European carbon factor Benchmarking of CO2 emissions by Europe's largest electricity utilities (January 2018, PwC).

* IBERDROLA is the world leader in renewable energies, smart grid and electric vehicle development and top of the main sustainability indices.

* IBERDROLA publicly announced its target for 2030: to reduce the intensity of its CO2 emissions to below 150 grams per kWh in 2030, a level 50% less than its emissions in 2007, and being carbon-neutral by the year 2050.

* IBERDROLA operates in more than 40 countries and has over 32 million customers. At IBERDROLA, we have spent more than 150 years moving forward in a single direction. We have created an industrial growth project sustainable in the long term, by focusing on the core business, on stable activities and growth through a balanced business portfolio, on leadership in wind power, on operating efficiency and on financial soundness, becoming a number one worldwide energy group.

**SC0.1**

*(SC0.1) What is your company's annual revenue for the stated reporting period?*

**Row 1**

31263300000

**SC0.2**

*(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?*

*Yes*

**SC0.2a**

*(SC0.2a) Please use the table below to share your ISIN.*

**Row 1**

ES 0144580Y14
(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

**Requesting member**
Cellnex Telecom SA

**Scope of emissions**
Scope 1

**Emissions in metric tonnes of CO2e**

**Uncertainty (±%)**

**Major sources of emissions**
Electricity generated by IBERDROLA, consumed by Cellnex Telecom SA

**Verified**
No

**Allocation method**
Other, please specify (we don't allocate emissions per customer)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

---

**Requesting member**
Pirelli

**Scope of emissions**
Scope 1

**Emissions in metric tonnes of CO2e**

**Uncertainty (±%)**

**Major sources of emissions**
Electricity generated by IBERDROLA, consumed by Pirelli

**Verified**
No

**Allocation method**
Other, please specify (we don't allocate emissions per customer)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

---

**Requesting member**
Vodafone Group

**Scope of emissions**
Scope 1

**Emissions in metric tonnes of CO2e**

**Uncertainty (±%)**

**Major sources of emissions**
Electricity generated by IBERDROLA, consumed by Vodafone

**Verified**
No

**Allocation method**
Other, please specify (we don't allocate emissions per customer)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

---
SC1.2

(Sc1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

IBERDROLA's GHG Inventory Report is publicly available, covering Scopes 1, 2, and 3.


SC1.3

(Sc1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

- Customer base is too large and diverse to accurately track emissions to the customer level.
- Managing the different emission factors of diverse and numerous geographies makes calculating total footprint difficult.
- Customer who know it is asking for this information in CDP could ask for detailed track emissions prior starting the reporting year.
- Customer could provide contract details ideally to be included in this scope as: contract numbers, kind of products, uses for that products, location where our products are consumed.

SC1.4

(Sc1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Yes

SC1.4a

(Sc1.4a) Describe how you plan to develop your capabilities.

Through smart meters and digitalisation of information, it would be easier to allocate consumed electricity to each customer, and with such information, we will be able to allocate CO2 emissions to them.

Also further analysis of our supply chain GHG emissions related to use of sold products would provide more information.

SC2.1

(Sc2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(Sc2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

No
SC3.1

(SC3.1) Do you want to enroll in the 2018-2019 CDP Action Exchange initiative?
No

SC3.2

(SC3.2) Is your company a participating supplier in CDP's 2017-2018 Action Exchange initiative?
No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services, if so, what functionality will you be using?
No, I am not providing data

SC4.2d

(SC4.2d) Have any of the initiatives described in SC4.2c been driven by requesting CDP Supply Chain members?
No

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 my response Public

I am submitting my response Customers

Yes, submit Supply Chain Questions now

Please confirm below

I have read and accept the applicable Terms