CDP 2016 Climate Change 2016 Information Request EDP - Energias de Portugal S.A.

#### **Module: Introduction**

#### **Page: Introduction**

CC0.1

#### Introduction

Please give a general description and introduction to your organization.

EDP – Energias de Portugal, S.A. is a listed company whose ordinary shares are publicly traded at NYSE Euronext Lisbon.

EDP is the largest Portuguese business group, a vertically integrated utility with operational activities in power generation, distribution and supply of electricity and gas.

EDP has a relevant presence in the world energy landscape, operating in 14 countries, with 9,7 million electricity customers, 1,4 million gas customers and more than 12 thousand employees around the world.

EDP is the largest generator, distributor and supplier of electricity in Portugal. It is the third largest electricity generation company and one of the largest gas distributors in the Iberian Peninsula. In Brazil, EDP is the fifth largest private electricity generation operator, has two electricity distribution concessions and is the third largest supplier in the liberalized market.

The company is one of the largest wind power operators worldwide, with windfarms in the Iberian Peninsula, United States, Canada, Brazil and several European countries, and currently installing new capacity in Mexico and UK. EDP also generates solar photovoltaic energy in Portugal, Romania and the United States. On 31 December 2015, EDP had an installed capacity of 24 GW, 71% of which in renewable power plants. In 2015, EDP generated 64 TWh, 58% of which from renewable sources.

Key figures 2015: Turnover 15517 M€ EBITDA 3924 M€ Net profit 1247 M€ Net investment 1735 M€ Net debt 17380 M€ Total assets 42537 M€ Employees 12084 # ISIN PTEDP0AM0009 SEDOL 4103596

EDP's vision is to be a global energy providing company, leader in creating value, innovation and sustainability. The company assumes the electricity sector's key

### CDP

role in the transition to a low-carbon economy and set a strategic agenda based on organic growth focused on renewables and low exposure to CO2 and sustainability risks.

EDP publishes detailed information on its financial and sustainability performance and governance practices in its Annual Report, available in www.edp.pt.

CC0.2

#### **Reporting Year**

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed

Thu 01 Jan 2015 - Thu 31 Dec 2015

#### CC0.3

#### **Country list configuration**

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country

Portugal

#### Select country

Spain	
Brazil	
United States of America	
Rest of world	

#### CC0.4

#### **Currency selection**

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

EUR(€)

CC0.6

#### Modules

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire. If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net. If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx.

**Further Information** 

**Module: Management** 

Page: CC1. Governance

#### CC1.1

Where is the highest level of direct responsibility for climate change within your organization?

Board or individual/sub-set of the Board or other committee appointed by the Board

### CC1.1a

Please identify the position of the individual or name of the committee with this responsibility

Rui Teixeira is the Corporate Executive Board member with formal responsibility over electricity generation and sustainability issues.

### CC1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

Yes

#### CC1.2a

Please provide further details on the incentives provided for the management of climate change issues

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Board/Executive board	Monetary reward	Emissions reduction target	EDP's has a four layer KPI system: group level; Business Unit (BU) level; team level; and individual level. ESG KPIs (including those related to climate change) are mandatory for the first three levels. At group level, members of EDP' Executive Board of Directors, in accordance with the Board's remuneration policy, have the company's sustainability performance factored into their multi-annual variable remuneration. The indicator is monitored through EDP performance in the Dow Jones Sustainability Index (DJSI), which includes the attainment of the explicit CO2 reduction targets set by the company.

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
			In 2016, EDP will implement a new Group wide sustainability KPIs system: at group level, all employees will have their variable compensation dependent on DJSI performance. At BU level, team level and individual level, EDP will apply KPIs based on the company's 2020 Business Plan and Sustainability Targets. These include specific CO2 emissions reduction and renewable installed capacity targets that will affect all employees' monetary reward, in a percentage dependent upon the department.
Environment/Sustainability managers	Monetary reward	Emissions reduction target	EDP's has a four layer KPI system: group level; Business Unit (BU) level; team level; and individual level. ESG KPIs (including those related to climate change) are mandatory for the first three levels. At BU level, team level and individual level, EDP employees who deal directly with climate change issues have their annual variable remuneration linked to climate change performance, including emissions reduction targets attainment. This applies to the Corporate Sustainability Department team and to all BU staff members working in sustainability. In 2016, EDP will implement a new Group wide sustainability KPIs system: at group level, all employees will have their variable compensation dependent on DJSI performance. At BU level, team level and individual level, EDP will apply KPIs based on the company's 2020 Business Plan and Sustainability Targets. These include specific CO2 emissions reduction and renewable installed capacity targets that will affect all employees' monetary reward, in a percentage dependent upon the department.
Other: All Employees of specific Business Units (EDP Renováveis and EDP Brazil)	Monetary reward	Emissions reduction target	EDP's has a four layer KPI system: group level; Business Unit (BU) level; team level; and individual level. ESG KPIs (including those related to climate change) are mandatory for the first three levels. At BU level, employees at some subsidiaries have the company's sustainability performance factored into their annual variable remuneration. This applies to all employees in EDP Renováveis and EDP Brasil. In EDP Renováveis, the indicator is monitored through the company's performance in the Dow Jones Sustainability Index (DJSI), which includes the attainment of the explicit CO2 reduction/avoidance targets set by the company. EDP Renováveis participates individually in DJSI's sustainability assessment. In EDP Brasil, the indicator is monitored through the CO2 reduction targets evaluation. EDP Brasil is listed in BM&F BOVESPA. In 2016, EDP will implement a new Group wide sustainability KPIs system: at group level, all employees will have their variable compensation dependent on DJSI performance. At BU level, team level and individual level, EDP will apply KPIs based on the company's 2020 Business Plan and Sustainability Targets. These include specific CO2 emissions reduction and renewable installed capacity targets that will affect all employees' monetary reward, in a percentage dependent upon the department.

#### **Further Information**

### Page: CC2. Strategy

### CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

### CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Annually	Board or individual/sub-set of the Board or committee appointed by the Board	All geographies where EDP operates: Portugal, Spain, North America (USA, Canada and Mexico) Brazil, Rest of Europe (Belgium, France, Italy, Poland and Romania)	> 6 years	Climate change is fully integrated into EDP's risk management (taxonomy, phases and responsibilities). EDP has identified climate change risks/opportunities within business, operational and strategic risk categories. They are assessed in a 1-50 year timeframe for impact on: i) Strategic development – In 2015, EDP performed a specific risk analysis of climate change impacts on structural hydro and wind electricity volumes and activity disruption. ii) Business Plan – EDP Business Plan undergoes scenario analysis featuring weather volatility and climate-related regulation effects in energy prices and volumes. iii) Project investment – Investment in renewables undergoes resource evaluation encompassing scenario analysis: price volatility and changes due to volume fluctuations are included in all wind, solar and hydro investments evaluation. iv) Operation – Business Units access exposure of generation and distribution

Frequency To whom are of reported monitoring	(=oodrappical areas co	How far into the future are risks considered?	Comment
		ä	assets to physical climate-related risks through ClimEDP Project.

#### CC2.1b

#### Please describe how your risk and opportunity identification processes are applied at both company and asset level

Company level:

Risk identification is supported by the proprietary EDP Risk Portal and consists of surveys and updates of main risks: first at Business Unit (BU) and then at corporate level. Corporate Risk Dep. also produces EDP's Global Risk Map, based on interviews and co-work with risk-owners. Climate-related risks are included in EDP's risk map within the Business (e.g. CO2 price, renewables regulation), Operational (e.g. extreme weather damage to physical assets) and Strategic (e.g. structural hydro availability change) risk categories, as well as within the cross-cutting Reputational risk category.

Specific risk identification and quantification is also conducted. In 2015, EDP developed a Water Risk Map, including a stakeholder consultation and research public information. EDP identified strategic risks driven by structural changes in precipitation patterns (reduction of hydro generated electricity volume) and operational risks driven by increase in global temperature (reduction of thermal power plant cooling systems efficiency) as well as extreme weather events (damage to physical generation and distribution assets).

Climate change opportunities are assessed by corporate depts. (Energy Planning, Sustainability, Marketing and New investments). Examples include energy efficiency services and deployment of energy monitoring devices.

Asset level:

Operational climate-related risks are identified and managed by BUs and monitored at corporate level. BUs use country specific meteorological data to assess risks/opp. across assets the life cycle. On design phase, examples include rising power plant ground-level to increase flood resilience or reinforcing power line foundations to withstand extreme wind speeds. On construction/maintenance phase, damage from extreme events is managed through risk transfer (insurance, if available). Risk mitigation includes planning of critical activities (e.g. overhauls) for periods with least probability of extreme weather.

#### CC2.1c

#### How do you prioritize the risks and opportunities identified?

The Executive Board decides upon the company's risk appetite and acceptable level of risk exposure. This is a key risk prioritization. The Group manages its meaningful risks in a portfolio approach, optimizing the risk/ return trade-off transversely across its business areas. Climate Change risk/opportunity prioritization is, like with all other risks, based on a materiality analysis, which evaluates its impact on both BUs and EDP Group. This is facilitated by EDP's Risk Portal which automatically generates the following two-dimensional risk maps: (1) risk manageability vs. expected risk; (2) risk control vs. expected risk; (3) manageability-control gap vs expected risk where "expected risk"= frequency x severity. This standardized approach helps make risks of a heterogeneous nature comparable, informs the various decision makers and guides the prioritisation of management and mitigation initiatives.

Risk quantification contemplates a perspective of average loss and maximum loss (95% confidence interval), taking into account estimated probabilities of materialisation and impacts according to multiple scenarios and prospects (short, medium and medium-long term), and performing an aggregation by category of risk that takes into account potential correlations between the various risk natures. In addition to this perspective, risk-return analyses are systematically conducted (based on EBITDA@Risk, CF@Risk or other methods) associated with the main strategic guidelines and decisions of the Group (e.g., regarding the Group's Strategic Plan, key investment decisions or other topics deemed to be relevant).

In what regards opportunities related with climate change, its prioritization is the result of (1) EDP's investment policy. This states a required ROI, and (2) EDP's Business Plan, that establishes the strategic guidelines for the company, including investment.

#### CC2.1d

Please explain why you do not have a process in place for assessing and managing risks and opportunities from climate change, and whether you plan to introduce such a process in future

Main reason for not having a process   Do you plan to introduce a process?   Comment	
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#### CC2.2

Is climate change integrated into your business strategy?

Yes

#### CC2.2a

Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

- 1 Continued growth Organic growth focused on CO2-free technologies, mainly wind and hydro generation
- 2 Financial deleveraging Positive free cash flow and improved credit ratios
- 3- Low business risk profile Low exposure to market volatility, market diversification and low exposure to CO2 and other environmental risks

i. EDP business strategy (Strategic Agenda 2014-2017, announced in May 2014), sets out four strategic guidelines:

4 - Attractive returns - Attractive dividend policy

EDP's Board defines the corporate strategy based on the inputs from corporate departments (Energy Planning, Business Analysis, Risk Management, Regulation and Competition, Sustainability) and Business Units (generation, distribution, supply and trading). These inputs cover commodities markets scenarios, technology and regulation analysis and climate change related data such as current and future emissions regulation, evolution of renewable generation support schemes, CO2 price history and forecast and climate trends, including frequency of extreme weather events. Fuel use and availability are also considered.

ii. EDP's business strategy has been influenced by the need to:

- Mitigate climate change - Reduce CO2 emissions from electricity generation by focusing on renewables;

- Adapt to climate change - Increase resilience of generation and distribution assets;

- Reduce the exposure to climate-related regulatory and market risks – Reduce specific CO2 emissions, manage CO2 allowances and credits portfolio and maintain a global leadership position in sustainability practices;

- Seize opportunities to develop new products and services – Deliver low carbon energy, market decentralized renewable energy solutions and tailored energy efficiency services.

iii. Integration of Climate Change issues is explicitly stated in two of the four macro-objectives of EDP Strategic Agenda 2014-2017:

 Continued growth – Organic growth focused on CO2-free technologies, mainly wind (international expansion, 60% of which in USA market) and hydro generation (conclusion of the Portuguese Hydro Programme). Business Plan target is to reach at least 75% of installed capacity based on renewable energy sources by 2017.
Low business risk profile – Low exposure to CO2 and other environmental risks, trough low-carbon electricity generation, management of CO2 portfolio and sustainability leadership. Business Plan targets are to reduce specific CO2 emissions (tCO2/MWh) by 75% between 2005 and 2030 and to keep RobecoSAM Gold Class status in 2017. The company will also make a strong investment in distribution networks, namely in smart-grids, and increase its distribution assets resilience to extreme weather events.

This strategic focus on renewable growth was further strengthened in the new Business Plan 2016-2020, presented to investors in May 2016; EDP announced investments of € 1.4 bn/year for the next five years, 70% of which in new renewable generation installed capacity. In 2020, EDP foresees its specific CO2 emissions will be 30% below 2015 levels, putting the company well on track to meet its 75% reduction commitment in 2030, compared to 2005.

iv. EDP's long term strategy (from 2020 onwards) is focused on renewable generation growth and the company is today one of the largest wind power operators worldwide.

The company's vision and business strategy is fully aligned with the long term objectives set in the Paris Climate Conference in December 2015: EDP will supply competitive, low-carbon energy that can assure sustainable economic growth and assumes the electric sector's key role in the transition to a low-carbon economy.

v. This strategy has allowed EDP to reach strategic advantages over the competitors through:

- Profitability and reduced risk exposure – Increasingly decarbonized generation portfolio (with high share of renewables) and more resilient generation assets;

- Commercial differentiation – Delivery of products (low carbon electricity and fuels) and services (energy efficiency services) that meet growing customers demand for solutions that reduced their own energy consumption and carbon footprint, such as "RE:DY".

- Increased internal efficiency – EDP wind turbine load capacity (30%) and availability (>97%) have been consistently increasing. EDP has also became differentially good in wind farm development.

vi. In 2015, EDP committed to a set of quantified objectives for each of its main operational areas, in line with this long-term business strategy – decarbonize electricity generation and provide client solution to further decarbonize the economy:

- To contribute to the increase of electricity generation from renewable energy sources, exceeding 75% of the overall installed capacity by 2020;

- To reduce CO2 specific emissions by 75% before 2030 (compared to 2005 levels);

- To expand the installation of smart meters to more than 90% of EDP's low-voltage power network delivery points in Iberia by 2030, utilizing new smart grid technology;

- To provide customers with ongoing access to energy efficiency products and services to reduce overall consumption by more than 1 TWh in accumulated energy savings by 2020 (compared with 2014);

- To foster partnerships in the research and development on clean energy technologies, energy efficiency and smart grids, by investing EUR 200 million in innovative projects by 2020.

In 2015, EDP added over 1240 MW of renewable generation to its portfolio. Furthermore, EDP developed solutions in decentralised renewable generation, network efficiency and energy efficiency services, totaling around EUR 258 million revenues, which represented an increase of 19% compared to 2014.

#### CC2.2b

Please explain why climate change is not integrated into your business strategy

#### CC2.2c

#### Does your company use an internal price of carbon?

Yes

#### CC2.2d

#### Please provide details and examples of how your company uses an internal price of carbon

EDP uses an internal price of carbon for emissions from electricity generation in power plants (scope 1).

Internal carbon prices are used by EDP to assess the impact of current and future carbon regulation - namely emissions trading schemes and carbon taxes - on energy prices and volumes, existing assets' value and to evaluate capital investments in new electricity generation assets (fossil fuel based and renewable energy based). In its investment evaluation processes for electricity generation projects, we take into account the specifics of the markets (geography and regulation).

Price ranges are defined by the Energy Planning Department (Corporate Centre) based on several reference sources, either public or restricted, and are updated yearly. Price forecasts currently range from 5 to 60 €/t CO2, depending on scenario, year and geography.

For example, in European markets, price projections take into account reasonable expectations for the evolution of the EU ETS, namely structural measures already adopted (e.g., the Market Stability Reserve, approved in July 2015) but also the likelihood of additional measures discussed (price floor recently proposed by France). For the timeframe 2016-2030, the average price for the base scenario is about EUR25/tCO2. For the timeframe of EDP's current Business Plan (2016-

2020), the average expected price is 10 €/t, as disclosed in EDP's Capital Markets Day held in London in May 2016.

### CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

Direct engagement with policy makers Trade associations Funding research organizations Other

### CC2.3a

#### On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Energy efficiency	Support	In 2015, EDP participated in the public consultation processes related to the review of EU Directive on the Energy Performance of Buildings and the review of EU Directive on Energy Efficiency. Both these legislation pieces impact the company's energy supply activities in Iberia. In Portugal, EDP is a member of the Tariff Council and Advisory Council of the Portuguese Energy Services Regulator, regularly participating in public discussions regarding consumer efficiency promotion plans and technical advices on the electrical grid operation and commercialization regulation. The company also meets with Government representatives and other public authorities conveying the corporate position on energy efficiency, clean power generation and other climate related issues.	EDP strongly supports policy measures aiming at the promotion of energy efficiency and was actively involved in the transposition of the current EU Energy Efficiency Directive into Portuguese legislation. In its engagement with policy makers, EDP conveys its support to energy efficiency and presents concrete actions to promote it (e.g. projects under energy efficiency programs promoted by the regulator; EDP's own energy services commercial offers). It also defends that public authorities should lead by example, applying energy efficiency measures to public buildings and transport systems.
Clean energy generation	Support	In 2015, EDP participated in the stakeholder consultation process related to the preparation of the new EU Renewable Energy Directive for the period 2020-2030. This legislation will impact the company's renewable generation activities in Europe (Iberia and	EDP strongly supports regulation promoting clean energy generation, in particular from renewable sources. It does so in all geographies where it operates and in all the fora in which it participates. In EU, EDP defends that support to

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
		other EU countries). In USA, EDP Renováveis (EDP Group's subsidiary for renewable power generation), directly engaged in the support to several legislative initiatives related to climate change, in particular renewable power generation, including: - Changes to Section 45 on Production Tax Credit for wind energy; - Legislation creating a national renewable energy standard; - Funding of the Department of Energy's Wind Energy Program in the Energy and Water Appropriations legislation; - Several federal legislation and regulatory actions addressing issues related to the constructing of large scale wind generation projects (electricity transmission infrastructure permits; siting and permitting legislation; Federal Aviation Administration requirements). EDP Renewables North America also engages directly with the US Congress to promote clean energy regulation. Activities include regular meetings with Members of the Congress and their staffs in which the company discusses the economic and environmental benefits of wind energy, provides information on the potential impact of legislation under discussion and discusses issues related to specific projects located in a Congress Member's state or district.	renewable generation should entail the revision of EU State Aid Guidelines in what concerns renewable energy and the security of supply Directive. In the USA, the company supports legislative and regulatory policy initiatives (both federal and state) promoting clean energy development and operations business, as well as the growth of healthy, robust and sustainable markets for clean energy. In 2015, EDP Renewable North America specifically supported extending the Production Tax Credit for wind energy and making it more usable for taxpayers.
Climate finance	Support	In 2015, EDP participated in the consultation process related to the preparation of the new EU Electricity Market Design Package. This is to be followed by legislative proposals in 2016, including new regulation on electricity security of supply and renewables support schemes. This legislation will impact the company's electricity generation, distribution and supply activities in Europe (Iberia and other EU countries).	EDP advocates that stability and predictability of legal and regulatory framework are key to providing confidence to prospective investors and thus boost the necessary invest in new renewable generation capacity.
Other: International climate agreements	Support	In 2015, in the run-up to the Paris Climate Conference and at the Conference itself, EDP Group publicly called for the adoption of a strong international climate agreement and advocated the vital role of renewable energy generation in the attainment of the 2°C objective. EDP presented its contribution to the Low Carbon Technology Partnership Initiative (LCTPi) – a collaborative initiative led by the World Business Council for Sustainable Development - in a wide range of events associated with the Climate Conference, among which the Energy Day, organized by the Lima Paris Action Agenda, where EDP's CEO participated in the discussion of financial mechanisms to accelerate the massification of renewables. Also in 2015, EDP Renewables	EDP embraces the objectives of the Paris Climate Agreement and assumes the electricity sector's key role in the transition to a low-carbon economy, particularly the vital role of renewable energy generation.

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
		North America published a number of climate pledges under its membership of the US Business for Climate Action, calling for a strong outcome of Paris Conference and supporting US Environmental Protection Agency's Clean Power Plan.	
Other: National climate change policy plans	Support	In Brazil, EDP Energias do Brasil (EDP Group's subsidiary) participates in fora created to discuss the Sectorial Plans proposed by the government in its National Policy on Climate Change. An example is the "Energy for sustainability development – The National Policy on Climate Change within Energy Sector". The company engages mainly through meetings and participation in working groups that discuss the role of Brazilian energy sector in tackling climate change and reducing GHG emissions.	EDP advocates the importance of the interaction between the companies of the Energy Sector and the Brazilian Federal government in order to strengthen efforts in mitigation an adaptation to climate change events. The company also participated in discussions and proposed solutions for CDM and other emissions reduction programs.

### CC2.3b

### Are you on the Board of any trade associations or provide funding beyond membership?

Yes

### CC2.3c

### Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
EURELECTRIC – Union of the Electricity Industry	Consistent	EURELECTRIC advocates the support of EU institutions and legislation to GHG reduction, carbon market mechanisms (EU Emissions Trading Scheme), renewable energy support	EDP is a member of the Board of Directors. From June 2015, EURELECTRIC's President is EDP's CEO (António Mexia). EDP participates in several of the association's

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
		schemes, intelligent electricity grids, transport electrification and R&D and incentives for early deployment of not-yet- mature renewable technologies. EDP supports EURELECTRIC's position on climate change legislation. In 2015, Eurelectric responded to the European Commission's public consultation on the review of the Energy Efficiency Directive, issued public statements welcoming the legislative proposals to revise EU ETS Directive and Energy Labelling Directive and reiterated its call for a robust climate change agreement promoting the role of market mechanisms, in the run-up to the Paris Climate Conference.	committees: Environmental and Sustainable Development Policy, Energy Policy and Generation, Markets, DSO and Retail Customers Committees. EDP regularly contributes with specific inputs to the association's common position papers and answers to consultation processes, namely: state of play on renewable energy policy and support schemes in each Member State, in the context of the European Commission's stakeholder consultation on the new EU Renewables Directive; revision of the Energy Efficiency Directive; Revision of the Energy Performance of Buildings Directive, among others.
European Wind Energy Association (EWEA)	Consistent	EWEA is the voice of the wind industry, actively promoting the use of wind power in Europe and worldwide, and representing the wind sector development before the European Commission. The association defends wind generation support. In 2015, EWEA participated in the European Commission stakeholder consultation on the new renewable energy directive (REDII) for the period 2020-2030. EDP supports EWEA's position on climate change legislation.	EDP Renewables (EDP Group's subsidiary for renewable energy generation) is a member of the Board of Directors.
Portuguese Energy Association (APE)	Consistent	APE is the Portuguese Association that represents the World Energy Council. APE strongly supports cap and trade schemes, EU-ETS reform, energy efficiency, clean energy generation and adaptation and resilience. EDP supports APE's position on climate change legislation.	EDP is a member of the Board of Directors.
APREAN Renewable Spain	Consistent	APREAN Renewable works as a negotiator/speaker with the Autonomic, Central and Local Administration in Spain and with any public or private organization. Its main objective is to participate in the development of policies, especially energetic and environmental. The association defends renewable generation support. EDP supports APREAN's position on climate change legislation.	EDP is a member of the Board of Directors.
American Wind Energy Association (AWEA)	Consistent	AWEA is a US association representing several players in wind power industry. AWEA represents wind energy advocates from around the world and defends wind	EDP Renewables (EDP Group's subsidiary for renewable energy generation) is a member of the Board of Directors.

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
		generation support. EDP supports AWEA's position on climate change legislation.	
Wind Energy Foundation (WEF)	Consistent	The Wind Energy Foundation is a Washington, D.C based organization founded in 2010 to educate the public about the benefits of wind power. WEF defends wind generation support EDP supports WEF's position on climate change legislation.	EDP Renewables (EDP Group's subsidiary for renewable energy generation) is represented in the Foundation's governance bodies.
Canadian Wind Energy Association	Consistent	CanWEA is a Canadian wind power industry association that promotes the realization of the country's abundant wind energy potential to build a cleaner, stronger future. It engages in this mission through advocacy, education, communication, partnerships and the promotion of industry best practices. CanWEA advocates wind generation support. EDP supports the Canadian Wind Association's position on climate change legislation.	EDP Renewables (EDP Group's subsidiary for renewable energy generation) is a member of the Board of Directors.

#### CC2.3d

Do you publicly disclose a list of all the research organizations that you fund?

Yes

### CC2.3e

### Please provide details of the other engagement activities that you undertake

EDP also engages in climate policy making through its membership of organizations other than trade associations, namely national and international business associations specifically focused on sustainability advocacy. Most relevant in 2015:

World Business Council for Sustainable Development (WBCSD)

EDP is a member of the WBCSD, actively participating in the association's activities and regularly taking part in some of its high level projects. In 2015, EDP joined WBCSD led Low Carbon Technology Partnership Initiative (LCTPi), a partnership bringing together over 140 companies that aims to demonstrate the potential of existing business solutions to achieving the 2°C climate objective. EDP, along with 15 worldwide relevant companies, signed an action plan, whose implementation enables the installation of 1.5 TW renewable energy capacity worldwide, over the next 10 years, in order to limit the increase in global warming. EDP is also a member of the Business Council for Sustainable Development Portugal, part of the WBCSD network. António Mexia, CEO of EDP is currently President of BCSD Portugal and the company is also represented at the association's Executive Secretariat.

#### The Global Compact

EDP Brasil is a member of the ONU's Global Compact Brazilian Network, the 4th largest local network. The company participates in the network's working group Energy and Climate, promoting a country level discussion on issues such as climate change mitigation and adaptation, carbon pricing, energy efficiency and renewable energy. EDP actively shares experiences that contribute for knowledge building on the energy sector's role on fighting climate change. In 2015, EDP prepared and published a case study on ClimaGrid, a company's project on electricity distribution grid climate resilience improvement.

#### CC2.3f

# 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?

EDP's approach to Climate Change has been publicly stated since 2006, when the company announced its strategic shift towards renewable energy. The visibility of EDP's climate strategy was further reinforced in late 2015, with the company's direct participation, at CEO level, in COP21 Climate Conference, and the announcement of its five ambitious climate protection targets addressing emissions reduction, renewable electricity generation, smart grids expansion, energy services for clients and clean technologies R&D. These targets are fully integrated in the company's current Business Plan 2016-2020, presented to investors in May 2016.

EDP's position has been stressed in all the fora in which the company participates, as well as with all regulatory bodies with whom EDP interacts with. Furthermore, EDP has dedicated structures in each geography that manage the relation with the supervisory bodies of the energy sector:

- Portugal: Corporate Regulation and Competition Department, Stakeholders Department
- Spain: Regulación y Relaciones Institucionales Department (Regulation and Institutional Relationship Department)
- EDPR (Europe and USA): Market Analysis & Regulation Department
- Brazil: "Área de Assuntos Regulatórios" (Regulatory Issues Department) and environmental department.

These structures ensure the overall alignment of EDP's climate policy engagement activities with the corporate climate strategy.

Please explain why you do not engage with policy makers

#### Further Information

### Page: CC3. Targets and Initiatives

### CC3.1

Did you have an emissions reduction or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?

Absolute target Intensity target Renewable energy consumption and/or production target

### CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science- based target?	Comment
Abs1	Scope 1	99.8%	20%	2005	28255000	2015	No, but we are reporting another target which is science-based	Group-wide reduction target for GHG emissions from stationary combustion in the company's electricity generation assets. This target applies to all geographies and generation activities and is embedded in the strategic options set out in our 2014-2017 Business Plan, and further reinforced in the 2016-2020 Business Plan.
Abs2	Scope 1+2 (location- based)	100%	41%	2015	24191396	2030	Yes	New Science Based Target, set using the Sectoral Decarbonization Approach and submitted by EDP to SBTI, expressed in absolute terms, assuming average hydro and

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science- based target?	Comment
								wind conditions. Group-wide reduction target for combined scope 1 and scope 2 emissions for all GHGs. The target applies to all geographies and is fully aligned with our public commitment, announced before COP21, to reduced specific CO2 emissions from electricity generation by 75% in 2030, compared with 2005 levels. This is part of EDP's strategic priorities as set out in the 2014-2017 Business Plan (active in 2015) and confirmed in its update for 2016- 2020 presented to investors in May 2016. Target achievement will be supported by the strategic focus on renewable generation growth (scope 1 emissions reduction) and continued investment in distribution grids, thus reducing electricity losses (scope 2 emissions reduction).

### CC3.1b

### Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science- based target?	Comment
Int1	Scope 1+2 (location- based)	100%	55%	Metric tonnes CO2e per megawatt hour (MWh)*	2015	0.382	2030	Yes	New Science Based Target set using the Sectoral Decarbonization Approach and submitted by EDP to SBTI. Replaces intensity target 2008-2020, in effect in 2014. Group-wide reduction target for combined scope 1 and scope 2 emissions for all GHGs. The target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science- based target?	Comment
									applies to all geographies and is fully aligned with our public commitment, announced before COP21, to reduced specific CO2 emissions from electricity generation by 75% in 2030, compared with 2005 levels. This is part of EDP's strategic priorities as set out in the 2014-2017 Business Plan (active in 2015) and confirmed in its update for 2016-2020 presented to investors in May 2016. Target achievement will be supported by the strategic focus on renewable generation growth (scope 1 emissions reduction) and continued investment in distribution grids, thus reducing electricity losses (scope 2 emissions reduction).

### CC3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Decrease	41	No change	0	Absolute emissions reduction in target year, assuming average hydro and wind conditions.

Please provide details of your renewable energy consumption and/or production target

ID	Energy types covered by target	Base year	Base year energy for energy type covered (MWh)	% renewable energy in base year	Target year	% renewable energy in target year	Comment
RE1	Electricity production	2005	44993385	20%	2020	72%	This target is equivalent, assuming average hydro and wind conditions, to EDP's public commitment, announced prior to COP21, of ensuring at least 75% of renewable installed capacity by 2020.

### CC3.1e

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Abs1	100%	100%	Target was exceeded (119%) despite adverse hydrological conditions, due to faster than anticipated growth in renewable installed capacity.
Abs2	0%	0%	Target was set in the reporting year, which is also the base year for this target, so no progress is visible yet.
Int1	0%	0%	Target was set in the reporting year, which is also the base year for this target, so no progress is visible yet.
RE1	67%	81%	Target achievement is ahead of schedule due to the faster than anticipated growth in renewable installed capacity.

Please explain (i) why you do not have a target; and (ii) forecast how your emissions will change over the next five years

### CC3.2

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

#### CC3.2a

Please 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	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Group of products	Renewable energy EDP's strategic focus on renewable generation growth led to a progressive decarbonization of the company' electricity generation portfolio. In 2015, EDP's installed capacity worldwide was 70% renewable and the company generated almost 60% of its electricity from renewable sources, thus delivering electricity with an average low carbon content. In addition, 100% certified	Low carbon product	Low Carbon Investment (LCI) Registry Taxonomy	48%	More than 40% but less than or equal to 60%	In its Business Plan 2016- 2020, presented to investors in May 2016, EDP announced investments of € 1.4 bn/year for the next five years, 70% of which on new renewable generation installed capacity.

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
	renewable electricity is also part of EDP's product portfolio. In 2020, EDP foresees its generation portfolio to be 75% renewable based and its specific CO2 emissions to be 30% below 2015 levels, putting the company well on track to meet its 75% reduction commitment in 2030, compared to 2005.					
Group of products	Energy efficiency services EDP has a diversified portfolio of energy efficiency services targeted at the specific needs of different customer segments, that increase efficiency and avoid emissions in final energy consumption. Current solutions include: . For residential clients: Installation of heat pumps, and compact smart energy management devices For SMEs: Integrated energy management solutions For large corporate clients: In Iberia, the Save To Compete offering, which identifies energy reduction measures and funds it implementation through the induced savings. In Brazil, through the newly acquired company APS - Soluções em Energia, EDP is also expanding its presence in energy efficiency and distributed generation services. By the end of 2015, Save To Compete alone had induced accumulated savings of around 77 GWh and avoided avoiding 39,000 tons of CO2.	Avoided emissions	Other: Low Carbon Investment (LCI) Registry Taxonomy	1%	More than 40% but less than or equal to 60%	In 2015, in the run-up to Paris Climate Conference, EDP committed to provide customers with energy solutions in order to reduce overall consumption by more than 1 TWh in accumulated energy savings by 2020 (compared with 2014).
Group of products	Renewable micro-generation EDP offers solar PV micro-generation solutions for residential	Low carbon product	Low Carbon Investment (LCI)	0.5%	Less than or equal to 10%	In 2015, in the run-up to Paris Climate Conference, EDP

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
	clients, delivering up to 25% reduction in electricity bill and allowing for 100% renewable electricity self-consumption.		Registry Taxonomy			committed to provide customers with energy solutions in order to reduce overall consumption by more than 1 TWh in accumulated energy savings by 2020 (compared with 2014).
Group of products	Electric mobility EDP is promoting electric mobility by offering commercially attractive packages combining special prices for electricity, home charging stations and partnerships with electric car manufacturers. For a small passenger car and average yearly mileage, electric mobility delivers annual savings of 1,2 t CO2 compared to conventional mobility.	Avoided emissions	Other: Low Carbon Investment (LCI) Registry Taxonomy	0.2%	Less than or equal to 10%	In 2015, in the run-up to Paris Climate Conference, EDP committed to provide customers with energy solutions in order to reduce overall consumption by more than 1 TWh in accumulated energy savings by 2020 (compared with 2014).

### CC3.3

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

Yes

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	10	
To be implemented*	10	5200000
Implementation commenced*	6	4933000
Implemented*	9	2486000
Not to be implemented	0	

### CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary∕ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Low carbon energy installation	New renewable electricity generation capacity - Hydro power plants in Portugal (112 MW)	229000	Scope 1	Voluntary	14600000	224000000	11-15 years	>30 years	CO2 savings based on avoided thermal generation and respective 2015 emission intensity by geography. Monetary savings based on avoided thermal generation costs (coal and gas), assuming average renewables

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary∕ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
									load factors, and on avoided CO2, assuming EU-ETS spot price as of 31.12.2015. Investment based on typical values of CAPEX for the different type of renewable power plants.
Low carbon energy installation	New renewable electricity generation capacity - Wind farms in USA (398 MW)	785000	Scope 1	Voluntary	46600000	597000000	11-15 years	21-30 years	CO2 savings based on avoided thermal generation and respective 2015 emission intensity by geography. Monetary savings based on avoided thermal generation costs (coal and gas), assuming average renewables load factors, and on avoided CO2, assuming EU-ETS spot price as of 31.12.2015. Investment based on typical values of CAPEX for the different type of renewable power plants.
Low carbon energy installation	New renewable electricity generation capacity - Wind farms in Portugal (623 MW)	1132000	Scope 1	Voluntary	72200000	934500000	11-15 years	21-30 years	CO2 savings based on avoided thermal generation and respective 2015 emission intensity by geography. Monetary savings based on avoided thermal generation costs (coal and gas), assuming average renewables load factors, and on avoided CO2, assuming EU-ETS spot price as of 31.12.2015. Investment based on typical values of CAPEX for the different type of renewable power

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary⁄ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
									plants.
Low carbon energy installation	New renewable electricity generation capacity - Wind farms in Poland (77 MW)	176000	Scope 1	Voluntary	9200000	115500000	11-15 years	21-30 years	CO2 savings based on avoided thermal generation and respective 2015 emission intensity by geography. Monetary savings based on avoided thermal generation costs (coal and gas), assuming average renewables load factors, and on avoided CO2, assuming EU-ETS spot price as of 31.12.2015. Investment based on typical values of CAPEX for the different type of renewable power plants.
Low carbon energy installation	New renewable electricity generation capacity - Wind farms in France (24 MW)	55000	Scope 1	Voluntary	2900000	36000000	11-15 years	21-30 years	CO2 savings based on avoided thermal generation and respective 2015 emission intensity by geography. Monetary savings based on avoided thermal generation costs (coal and gas), assuming average renewables load factors, and on avoided CO2, assuming EU-ETS spot price as of 31.12.2015. Investment based on typical values of CAPEX for the different type of renewable power plants.
Low carbon energy installation	New renewable electricity generation capacity - Wind	12000	Scope 1	Voluntary	1100000	15000000	11-15 years	21-30 years	CO2 savings based on avoided thermal generation and respective 2015 emission intensity by geography. Monetary savings

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary∕ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	farms in Italy (10 MW)								based on avoided thermal generation costs (coal and gas), assuming average renewables load factors, and on avoided CO2, assuming EU-ETS spot price as of 31.12.2015. Investment based on typical values of CAPEX for the different type of renewable power plants.
Low carbon energy installation	New renewable electricity generation capacity - Wind farms in Spain (3 MW)	6000	Scope 1	Voluntary	400000	4500000	11-15 years	21-30 years	CO2 savings based on avoided thermal generation and respective 2015 emission intensity by geography. Monetary savings based on avoided thermal generation costs (coal and gas), assuming average renewables load factors, and on avoided CO2, assuming EU-ETS spot price as of 31.12.2015. Investment based on typical values of CAPEX for the different type of renewable power plants.
Energy efficiency: Processes	Investment in electricity distribution networks to reduce energy losses - Portugal	74000	Scope 2 (location- based)	Voluntary	31700000	114400000	1-3 years	21-30 years	CO2 savings based on 2015 location-based grid emission factors by geography. Monetary savings based on consumption tariffs and on avoided CO2, assuming EU-ETS spot price as of 31.12.2015. Investment equals CAPEX on new distribution grid infrastructure in 2015.

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary⁄ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Processes	Investment in electricity distribution networks to reduce energy losses - Brazil	17000	Scope 2 (location- based)	Voluntary	20300000	3000000	1-3 years	21-30 years	CO2 savings based on 2015 location-based grid emission factors by geography. Monetary savings based on consumption tariffs and on avoided CO2, assuming EU-ETS spot price as of 31.12.2015. Investment equals CAPEX on new distribution grid infrastructure in 2015.

### CC3.3c

What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	Focus on renewable generation allows for the reduction of exposure to risk of further regulatory restrictions on CO2 emissions.
Dedicated budget for low carbon product R&D	EDP has a dedicated budget for R&D that is allocated to 4 main areas: (1) Cleaner Energy; (2) Smarter Grids; (3) Customer-Focused Solutions and (4) Data Leap.
Internal price of carbon	EDP uses internal price of carbon to assess the impact of current and future carbon regulation on energy prices and volumes, existing assets' value and to evaluate capital investments in new electricity generation assets (fossil fuel based and renewable energy based).

#### CC3.3d

If you do not have any emissions reduction initiatives, please explain why not

#### **Further Information**

### Page: CC4. Communication

### CC4.1

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	Status	Page/Section reference	Attach the document	Comment
In mainstream reports (including an integrated report) in accordance with the CDSB Framework	Complete	Section 5.1 – Climate Change, p. 90-93 (.pdf file all pages)	https://www.cdp.net/sites/2016/00/5300/Climate Change 2016/Shared Documents/Attachments/CC4.1/EDP_AnnualReport2015_EN_90-93.pdf	EDP Annual Report 2015 (only relevant extract attached. Complete document is over 5MB). Climate change related disclosure is in accordance with the Climate Change Reporting Framework (CCFR) requirements, including the corresponding statement of conformance.
In voluntary communications	Complete	EDP Corporate Website – Climate Change Section (all pages)	https://www.cdp.net/sites/2016/00/5300/Climate Change 2016/Shared Documents/Attachments/CC4.1/EDP_Climate Commitments_WEB_20160628.pdf	EDP Corporate website – Climate Change section. Includes EDP Group's climate commitments.
In voluntary communications	Complete	EDP Capital Markets Day 2016,	https://www.cdp.net/sites/2016/00/5300/Climate Change 2016/Shared Documents/Attachments/CC4.1/EDP_CapitalMarketsDay2016_p119-	EDP Capital Markets Day 2016 (only relevant extract

Publication	Status	Page/Section reference	Attach the document	Comment
		p. 119-p.124 (.pdf file all pages)	124.pdf	attached. Complete document is over 5MB). Investors Presentation of EDP Business Plan 2016- 2020. Growth focused on renewables and low carbon – low risk portfolio are major strategic focuses.
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	Section 2.1.1 – Transition Towards a Low Carbon Economy and Section 2.1.2 – Renewable Energy Advantages, p. 39- 43 (.pdf piles all pages)	https://www.cdp.net/sites/2016/00/5300/Climate Change 2016/Shared Documents/Attachments/CC4.1/EDPR_AnnualReport2015_EN_p39- 43.pdf	EDP Renováveis Annual Report 2015 (only relevant extract attached. Complete document is over 5MB). EDP Renováveis is EDP Group's subsidiary for renewable energy, focusing on the development and operation of wind and solar generation assets. Climate change is fully integrated into EDP Renováveis business strategy.

### Further Information

Complete documents available at www.edp.pt.

## Module: Risks and Opportunities

Page: CC5. Climate Change Risks

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Risks driven by changes in regulation Risks driven by changes in physical climate parameters Risks driven by changes in other climate-related developments

### CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Renewable energy regulation	Changes in incentives to wind and solar energy Several incentives schemes – in the form of feed-in tariffs, tax credits or capital incentives – are being revised in markets where EDP is present, namely EU countries, USA and Brazil. Portugal – The new Government (sworn in in November 2015) announced the intention of retaking the investment in renewables. Concrete measures and	Other: Reduced revenues	1 to 3 years	Direct	More likely than not	Medium- high	Potential financial impact of inherent risk is estimated to be less than 1% of EBITDA, across EDP Renováveis' markets.	Risk is mitigated through an active strategy of diversification across multiple technologies, geographies, asset maturity and markets regulatory design. EDP's Business Plan 2016- 2020 includes investment in 3.5 GW wind and solar capacity addition (10% solar, 90% wind on-shore and off-shore), 65% of which in North America, 15% in EU	Major risk mitigation process is EDP Renováveis' diversification strategy. EDP Renováveis will invest c. 650 M€/year (net investment) in wind and solar expansion in 2016-2020, distributing this investment across diversified markets and technologies.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	implementation details are yet to be defined. France - Following the provisions of the "Energy Transition Law", passed in July 2015, the French government disclosed a draft decree with the details of a new remuneration scheme for renewables. Implementation for wind energy will probably be delayed to 2018. Poland - a new Renewables' Act was approved in February 2015, introducing a different support system for new renewables plants. Italy - A new draft decree was made public envisaging new wind tenders for at least the two next years. UK - Energy secretary announced a "new direction for UK energy policy" on 18 November. With regards to offshore wind, the government							and 10% in Brazil. This risk is also mitigated through a close follow up of regulatory bodies and governments, including direct engagement in climate policy making, allowing for the anticipation and minimisation of unfavourable and/or inadequate outcomes that can materialise in the various market environments where the Group operates.	

Risk driver I	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
auctic end o with ti to be 2016. May 2 Europ Comr the R Rene scher 2015 Cons Appro 2016, the ex energ incen powe Redu incen renew gener from o regula a neg EDP (EDP renew reven to cap	nission cleared omanian wables support ne amendments. - the President d in December								

### CC5.1b

Please describe your inherent risks that are driven by changes in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in mean (average) precipitation	Structural decrease in hydro generation According to IPCC (Intergovernmental Panel on Climate Change), comparison between mean projected changes (%) in precipitation for 2016-2035 relatively to 1986- 2005 suggests a reduction between - 10% to 0% in Iberia. In Longer Term perspective, EEA (European Environment Agency) and IPCC forecast, respectively, an average decrease of annual precipitation in Portugal and Spain of approximately 20% to 10% and 30% to 20% Hydro generation is an important source of	Reduction/disruption in production capacity	>6 years	Direct	More likely than not	Medium	Structural decrease in hydro generation can impact EDP's NPV and Long term EBITDA. These indicators can also be negatively impacted by expected increase in hydro volatility (higher extreme values). In a long term perspective (up to 2035), decrease in EDP hydro generation in Iberia can represent a maximum yearly loss of 50 to 100 M€.	EDP manages the risk through a diversified generation portfolio in terms of technologies (currently 30% hydro, 40% wind, 30% thermal) and geographies (currently 70% Europe, 20% North America, 10% Brazil). EDP's Business Plan 2016-2020 investments in new generation capacity are also diversified: total 5 GW additions (30% hydro, 65% wind, 5% solar) in Europe (45%), North America (50%) and Brazil (5%). Geographic	Major risk mitigation process is EDP's diversification strategy for generation portfolio growth. According to the company's Business Plan 2016-2020, EDP will invest a total of € 1.4 bn/year in the 2016-2020 period, 70% of which on new renewable generation installed capacity. This investment will be distributed across diversified geographies and generation technologies.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	value for EDP, mainly in Portugal and Brazil. A structural decrease in precipitation, and thus in hydro generation, can negatively affect EDP's revenues.							diversification, in particular, significantly reduces the risk, as structural reduction in precipitation is not likely to occur in all geographies and with same magnitude. In addition, in 2015, EDP Brasil joined the hydro risk renegotiation deal proposed by the Brazilian regulator, which materially limits the level of risk associated to the volatility in hydro generation in this geography. New power plant project valuation considers sensitivities to lower inflows scenarios, thus enabling informed	Cost of risk mitigation through the hydro risk renegotiation deal in Brazil amounts to 2.3M€.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								decision making. In 2015, EDP set up an internal Task Force of Risk Management and Sustainability experts and conducted a detailed water risks analysis, including strategic and operational risks related with climate change.	
Change in precipitation extremes and droughts	Operational disruption of electricity distribution activities Precipitation extremes, floods and landslides – frequently associated also with extreme winds – can have a negative impact in several EDP business activities, in particular electricity	Reduction/disruption in production capacity	>6 years	Direct	More likely than not	Low- medium	Maximum financial impact of damage to distribution networks under operation in Portugal is, in the worst case scenario (before insurance) estimated at 15 M€/year. No detailed evaluation of	Risk is firstly mitigated by the operational areas of Business Units, who propose and implement best practice (e.g. regular inspections and preventive maintenance) and have specific plans for catastrophic events' crisis management	Risk transfer through insurance entails costs estimated to amount to 0.2% of EBITDA in 2020. Costs associated with the company's Business Continuity structures, including specialized

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	distribution, resulting in damage to assets in operation (overhead lines, poles and substations). To a lesser extent, damage can also occur during the company's hydro power plant construction phase, as cofferdams may be insufficient to hold large water inflows, causing flooding in some elements of the work. According to IPCC scenarios, the frequency and intensity of these extreme weather events is likely to increase due to climate change, thus increasing the risk of disruption in EDP's energy distribution and/or supply activities, as well as increasing the operational and capital cost from damage recovery.						financial implications is currently available for EDP's distribution activities in Spain and Brazil.	and business continuity. EDP has Business Continuity Departments in strategic company areas and, in 2015, revised its crisis management and business continuity policies, in line with international best practice. A significant part of the remaining risk is mitigated through a comprehensive range of insurance policies (property damage and civil and environmental responsibility) that mitigate the financial impact of large- scale events (e.g., associated with extreme and comprehensive	outsourced services, are not relevant and are fully integrated into Group's budget cycles.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								weather phenomena, non-availability of revenue generating assets or significant compensation to third parties) as well as much less frequent incidents with catastrophic impact (e.g., earthquakes). In Spain, EDP of the Compensation Insurance Consortium, a State-run initiative targeted at extreme events risk mitigation for the electricity sector. In Brazil, EDP developed ClimaGrid to manage the physical risks of the grid. This system automatically	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								storms, allowing real time intervention in the prevention of future grid shutdowns. In 2015, EDP set up an internal Task Force of Risk Management and Sustainability experts and conducted a detailed water risks analysis, including strategic and operational risks related with climate change.	

# CC5.1c

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk Description Potential Timeframe Indirect Likelihood Magnitude Estimated driver Description impact Timeframe Indirect Likelihood of impact financial method manage	
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Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Changing consumer behaviour	Reduced demand driven by energy efficiency improvement In developed markets, gains in energy intensity and energy efficiency – further strengthened by climate-related policy targets - are expected to dictate a slow recovery in electricity consumption. In Europe, in particular, in response to the competiveness challenges faced by industry and climate regulation, the economy is specializing in low- energy-intensive sectors. On the other hand, responding to the Energy Efficiency Directive, the implementation of energy saving measures, either voluntary or mandatory, has been reinforced. These shifts in consumption patterns - either regulation driven or	Reduced demand for goods/services	1 to 3 years	Direct	More likely than not	Low- medium	Potential financial impact of inherent risk (reduced revenues across EDP's electricity supply markets) is estimated to amount to 2.5% of EBITDA in 2020, in a worst case scenario.	Risk is managed through the development and marketing of specific energy services and customer efficiency solutions (e.g. fuel switching, load optimization, decentralized renewable generation). In December 2015, as part of its climate commitments, EDP has pledged to provide customers with ongoing access to energy efficiency products and services to reduce overall consumption by more than 1 TWh in accumulated energy savings by 2020 (compared with 2014). Also in 2015, EDP Brasil acquired APS - Soluções em Energia, an energy services company, assuming its commitment of expanding its	In 2015, EDP invested a total of 62 M€ in energy services.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	behavioral driven – can negatively impact revenues from EDP's energy supply activities in Iberia and Brazil.							presence in energy efficiency and distributed generation services also in Brazil.	

#### CC5.1d

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

#### CC5.1e

Please explain why you do not consider your company to be exposed to inherent risks driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

#### CC5.1f

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

#### **Further Information**

## Page: CC6. Climate Change Opportunities

### CC6.1

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Opportunities driven by changes in regulation Opportunities driven by changes in physical climate parameters Opportunities driven by changes in other climate-related developments

### CC6.1a

### Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Renewable energy regulation	Renewable generation growth opportunity in USA In December 2015, US President Obama signed the Consolidated Appropriations Act 2016, which	Investment opportunities	1 to 3 years	Direct	Very likely	Medium- high	EDP Renováveis (EDP subsidiary for renewable energies) EBITDA is expected to grow 8% CAGR in 2016-2020.	70% of total investment included in EDP's Business Plan 2016-2020 is dedicated to the expansion of renewable generation capacity worldwide. The	EDP will invest around 750 M€/year CAPEX in visible growth opportunities, installing c.700 MW/year, i.e., a total 3.5 GW capacity additions - 90%

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	includes the extension of energy-related tax incentives for wind power in the country. Higher regulatory visibility in the US (with Production Tax Credits extended and clarified until 2020) gives EDP a key competitive advantage in seizing renewables growth opportunities, given its large pipeline of projects in USA.						We expect an average annual financial positive implications (additional revenues) of about 145 M€ per year.	strategic focus on wind generation in North America (65% of total wind and solar 3.5 GW addition) allows the company to maximize the investment opportunity brought about by the new regulatory context in that geography.	wind, 10% solar. Approximately 75% of the total capacity addition will be in the United States.

## CC6.1b

# Please describe the inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in	Increased	Increased	>6 years	Direct	More likely	Low-	A recent study	In addition to the	According to

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
temperature extremes	electricity demand for operation of HVAC equipment Higher temperatures during summer and lower temperatures in winter may lead to an increase in electricity demand as the result of intensive use of HVAC equipment in these periods, thus increasing EDP revenues from its electricity supply business (Iberia and Brazil).	demand for existing products/services			than not	medium	by EDP estimated the increase in electricity demand driven by temperature extremes to be in the range of 2 GWh/day for each °C decrease in Winter and 1.5 GWh/day for each °C increase in Summer. Assuming average temperature extreme growths in the range +/- 2 to 3°C in the Iberian Peninsula, the positive impact is estimated in the range of 0.5-1% of EBITDA in 2020.	strong focus on generation capacity expansion, 30% of total investment included in EDP's Business Plan 2016-2020 will be channelled to distribution networks and supply business, thus strengthening the company's capacity to respond to peak electricity demand and capture this market opportunity.	the company's Business Plan 2016-2020, EDP will invest a total of € 1.4 bn/year in the 2016-2020 period, 30% of which in distribution networks and supply business.

## CC6.1c

Please describe the inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Changing consumer behaviour	Business opportunity in new client efficiency solutions Implementation of the Paris Climate Agreement objectives is expected to lead to profound changes in the electricity sector: 50% of the Intended National Determined Contributions (INDCs) include energy related targets, 40% include quantified objectives for renewable production and more than 30% include energy efficiency targets. Electricity will be essential to decarbonize the world economy and the sector is set to undergo a major transformation towards renewable and decentralized	New products/business services	Up to 1 year	Direct	Virtually certain	Medium	EDP's total revenues in energy efficiency services, currently centred in Iberia, amounted to 80 M€ in 2015. In Brazil, analysts estimate the global value of the energy services market amount to 930 M€ in 2018.	In line with its climate strategy, EDP intends to lead the development of infrastructure and applications of smart grids focused on customers and operations, preparing its presence in a future in which the production and consumption of electricity will be increasingly decentralized. Anticipating this new paradigm, EDP provides a range of energy solutions intended to respond to the specific needs of different customer segments, through a diversified offering of competitive and sustainable products and	In 2015, in Iberia, EDP invested a total of 258 M€ in the development of decentralised renewable generation solutions, energy efficiency services for clients and smart grids. This represents an increase of 19% compared to 2014. In Brasil, que acquisition of APS energy services company involved a total investment of 6 M€.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	generation and smart consumption. This structural change in energy production and consumption patterns brings about new growth opportunities for EDP, especially in energy services (smart buildings and industry), renewable distributed generation and electric mobility.							services that avoid emissions in final energy consumption. In order to foster the brazilian market potencial for energy services, in 2015 EDP Brasil acquired the company APS - Soluções em Energia, assuming its commitment of expanding its presence in energy efficiency and distributed generation services. In December 2015, as part of its climate commitments, EDP has pledged to: i) provide customers with ongoing access to energy efficiency products and services to reduce overall consumption by	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								more than 1 TWh in accumulated energy savings by 2020 (compared with 2014); ii) expand the installation of smart meters to more than 90% of EDP's low- voltage power network delivery points in Iberia by 2030; iii) foster partnerships in the research and development of clean energy technologies, energy efficiency and smart grids research, by investing EUR 200 million in innovative projects by 2020.	

CC6.1d

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

#### CC6.1e

Please explain why you do not consider your company to be exposed to inherent opportunities driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

#### CC6.1f

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

#### **Further Information**

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

## Page: CC7. Emissions Methodology

#### CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Tue 01 Jan 2008 - Wed 31 Dec 2008	19813643
Scope 2 (location-based)	Tue 01 Jan 2008 - Wed 31 Dec 2008	1571028
Scope 2 (market-based)	Tue 01 Jan 2008 - Wed 31 Dec 2008	1571028

## CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use

European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

## CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

## CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	IPCC Fourth Assessment Report (AR4 - 100 year)

## CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference
Other: Natural Gas (Self-consumption – Portugal)	0.184	metric tonnes CO2e per MWh	EDP Gás Energy Balance
Other: Natural Gas (Self-consumption – Spain)	0.204	metric tonnes CO2e per MWh	Naturgás Energy Balance
Other: Natural Gas (Distribution losses – Portugal)	5.15	metric tonnes CO2e per MWh	EDP Gás Energy Balance
Other: Natural Gas (Distribution losses - Spain	5.71	metric tonnes CO2e per MWh	Naturgás Energy Balance
Other: Diesel (Europe and USA)	2.68	kg CO2e per liter	Mobile combustion - GHG emissions calculation tool – version 2.3
Other: Diesel (Brazil)	2.67	kg CO2e per liter	Mobile combustion - National emission factor – GHG Protocol Brazilian Program

Fuel/Material/Energy	Emission Factor	Unit	Reference
Other: CNG (Brazil)	2	Other: kg CO2e per cubic meter	Mobile combustion - National emission factor – GHG Protocol Brazilian Program
Other: Alcohol (Brazil)	1.18	kg CO2e per liter	Mobile combustion - National emission factor – GHG Protocol Brazilian Program
Other: Gasoline (Europe and USA)	2.4	kg CO2e per liter	Mobile combustion - GHG emissions calculation tool – version 2.3
Other: Gasoline (Brazil)	2.27	kg CO2e per liter	Mobile combustion - National emission factor – GHG Protocol Brazilian Program
Other: Electricity Portugal (location based)	357	kg CO2 per MWh	Electricity national emission factor - Portuguese Regulator (ERSE) and TSO (REN)
Other: Electricity Spain (location based)	294	kg CO2 per MWh	Electricity national average emission factor - Spanish TSO (REE)
Other: Electricity Brazil (location and market based)	124	kg CO2 per MWh	Electricity national emission factor – Brazil Minister of Science and technology
Other: Electricity USA - offices (location and market based)	545	kg CO2 per MWh	Electricity emission factor of the states in which EDP is operating
Other: Electricity USA - wind farms (location and market based)	512	kg CO2 per MWh	Electricity emission factor of the states in which EDP is operating
Other: Electricity Portugal – EDP Comercial (market based)	494	kg CO2 per MWh	Supplier emission factor – EDP Comercial (electricity labelling scheme - ERSE)
Other: Electricity Portugal – EDP Serviço Universal (market based)	185	kg CO2 per MWh	Supplier emission factor – EDP Serviço Universal (electricity labelling scheme - ERSE)
Other: Electricity Spain (market based)	190	kg CO2 per MWh	Guarantees of Origin Spanish Authority (CNE)

### Further Information

2008 scope 2 (market-based) emissions value uses scope 2 (location-based) as proxy as no data is available for recalculation of scope 2 emissions with supplier specific emission factors for that year.

## Page: CC8. Emissions Data - (1 Jan 2015 - 31 Dec 2015)

## CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

#### Financial control

### CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

21550378

CC8.3

Does your company have any operations in markets providing product or supplier specific data in the form of contractual instruments?

Yes

### CC8.3a

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
2641018	2634843	Supplier specific emission factors where used to calculate market-based scope 2 emissions for activities in Portugal and Spain.

### CC8.4

Are there are 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

#### CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

	Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded	
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#### CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	Less than or equal to 2%	Metering/ Measurement Constraints	Source of uncertainty is fuel control and measurement equipment in thermal power plants. There is no significant difference in data accuracy between these installations. Values are fully audited. EDP considers as an acceptable figure an uncertainty of less than 2%.
Scope 2 (location-	Less than or equal to 2%	Metering/ Measurement	Source of uncertainty is electricity control and measurement equipment in company sites (generation assets and administrative buildings). There is no significant difference in data accuracy between these

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
based)		Constraints	installations. Values are fully audited. EDP considers as an acceptable figure an uncertainty of less than 2%.
Scope 2 (market- based)	Less than or equal to 2%	Metering/ Measurement Constraints	Source of uncertainty is electricity control and measurement equipment in company sites (generation assets and administrative buildings). There is no significant difference in data accuracy between these installations. Values are fully audited. EDP considers as an acceptable figure an uncertainty of less than 2%.

## CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance process in place

### CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Verificatio n or assurance cycle in place	Status in the current reportin g year	Type of verificatio n or assurance	Attach the statement Page/sectio n reference	Relevant standard	Proportio n of reported Scope 1 emission s verified (%)

Verificatio n or assurance cycle in place	Status in the current reportin g year	Type of verificatio n or assurance	Attach the statement	Page/sectio n reference	Relevant standard	Proportio n of reported Scope 1 emission s verified (%)
Annual process	Complet e	Reasonabl e assurance	https://www.cdp.net/sites/2016/00/5300/Climate Change 2016/Shared Documents/Attachments/CC8.6a/EDP_AnnualReport2015_S1GHGAssurance_KP MG.zip	EDP Annual Report 2015, p. 90-93 and p.422-425. Only relevant extract attached. Complete document is over 5MB. GHG from stationary combustion were revised after the Annual Report went to print, in order not to include emissions from the burning of ArcelorMittal' s steel gases in EDP's power plants in Spain, thus avoiding double counting.	ISAE300 0	100

Verificatio n or assurance cycle in place	Status in the current reportin g year	Type of verificatio n or assurance	Attach the statement Page/sectio n reference	Relevant standard	Proportio n of reported Scope 1 emission s verified (%)
			These emissions totalled 3265 ktCO2 and are allocated to the steel industry. KMPG assurance declaration on the subject is attached as supporting evidence.		

## CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emissions Monitoring Systems (CEMS)

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission
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## CC8.7

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

Third party verification or assurance process in place

## CC8.7a

Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements

Locatio n-based or market- based figure?	Verificati on or assuranc e cycle in place	Status in the current reportin g year	Type of verificati on or assuranc e	Attach the statement	Page/Secti on reference	Relevan t standar d	Proporti on of reported Scope 2 emission s verified (%)
Location -based	Annual process	Complet e	Reasonab le assurance	https://www.cdp.net/sites/2016/00/5300/Climate Change 2016/Shared Documents/Attachments/CC8.7a/EDP_AnnualReport2015_S2GHGAssuranc e_KPMG.zip	EDP Annual Report 2015, p. 90- 93 and p.422-425. Only relevant extract attached. Complete document is over 5MB.	ISAE30 00	100
Market- based	Annual process	Complet e	Reasonab le assurance	https://www.cdp.net/sites/2016/00/5300/Climate Change 2016/Shared Documents/Attachments/CC8.7a/EDP_AnnualReport2015_S2GHGAssuranc e_KPMG.zip	EDP Annual Report 2015, p. 90- 93 and p.422-425.	ISAE30 00	100

Locatio n-based or market- based figure?	Verificati on or assuranc e cycle in place	Status in the current reportin g year	Type of verificati on or assuranc e	Attach the statement	Page/Secti on reference	Relevan t standar d	Proporti on of reported Scope 2 emission s verified (%)
					Only relevant extract attached. Complete document is over 5MB.		

## CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
Year on year change in emissions (Scope 1)	Verification under third party independent assurance of EDP Annual Report 2015 – Performance chapter and Sustainability Reporting appendix.
Year on year change in emissions (Scope 2)	Verification under third party independent assurance of EDP Annual Report 2015 – Performance chapter and Sustainability Reporting appendix.
Year on year change in emissions (Scope 3)	Verification under third party independent assurance of EDP Annual Report 2015 – Performance chapter and Sustainability Reporting appendix.
Year on year emissions intensity figure	Verification under third party independent assurance of EDP Annual Report 2015 – Performance chapter and Sustainability Reporting appendix.
Financial or other base year data points used to set a science-based target	Verification under third party independent assurance of EDP Annual Report 2015 – Performance chapter and Sustainability Reporting appendix.
Renewable energy products	Verification under third party independent assurance of EDP Annual Report 2015 – Performance

Additional data points verified	Comment
	chapter and Sustainability Reporting appendix.

## CC8.9

#### Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

#### **Further Information**

Reported scope 1 GHG emissions from stationary combustion in 2015 differ from those published in EDP Annual Report, as they do not include emissions from the burning of ArcelorMittal's steel gases in EDP's power plants in Spain. These emissions totalled 3265 ktCO2 and are allocated to the steel industry. Values were corrected in order to avoid double counting, after the Annual Report went to print.

## Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2015 - 31 Dec 2015)

### CC9.1

Do you have Scope 1 emissions sources in more than one country?

Yes

### CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e
Portugal	9832635
Spain	8001722
Brazil	3714424
United States of America	1198
Rest of world	399

#### CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By business division By GHG type By activity

## CC9.2a

Please break down your total gross global Scope 1 emissions by business division

**Business division** 

Scope 1 emissions (metric tonnes CO2e)

Business division	Scope 1 emissions (metric tonnes CO2e)
Electricity generation, distribution and supply	21543800
Gas distribution and supply	6578

## CC9.2b

Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
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## CC9.2c

## Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	21542213
CH4	42
N2O	282
SF6	7841

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)	
Stationary fuel combustion in thermal power plants	21518097	
SF6 emissions	7841	
Mobile fuel combustion in company fleet	17969	
Natural gas self-consumption	460	
Natural gas leaks in distribution grids	6011	

### **Further Information**

Reported scope 1 GHG emissions from stationary combustion in 2015 differ from those published in EDP Annual Report, as they do not include emissions from the burning of ArcelorMittal's steel gases in EDP's power plants in Spain. These emissions totalled 3265 ktCO2 and are allocated to the steel industry. Values were corrected in order to avoid double counting, after the Annual Report went to print.

### Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2015 - 31 Dec 2015)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

Yes

## CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Portugal	2014331	2014288	5649861	0
Spain	133953	127822	456031	19364
Brazil	467471	467471	3756546	0
United States of America	17703	17703	34509	0
Rest of world	7560	7560	13178	0

## CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By business division By activity

## CC10.2a

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
Electricity generation, distribution and supply	2640575	2634438

Netwol readiet/ibution and supply 440	Business division	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
Natural gas distribution and supply 443 405	Natural gas distribution and supply	443	405

### CC10.2b

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)

## CC10.2c

## Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
Electricity consumption in office buildings	12698	12163
Electricity losses in distribution grid	2034958	2034958
Renewable power plants self-consumption	593362	587722

## Further Information

## Page: CC11. Energy

## CC11.1

What percentage of your total operational spend in the reporting year was on energy?

More than 85% but less than or equal to 90%

## CC11.2

Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	Energy purchased and consumed (MWh)
Heat	0
Steam	0
Cooling	0

## CC11.3

Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year

70095701

## CC11.3a

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Bituminous coal	58108592
Natural gas	8002774
Diesel/Gas oil	50739
Other: Fueloil	75455
Blast furnace gas	3151939
Coke oven gas	263731
Oxygen steel furnace gas	371474
Other: Fuel for mobile combustion (Gasoline, diesel oil, alcohol, LNG)	70996

## CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in CC8.3a

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Comment
Energy attribute certificates, Guarantees of Origin	19364	In Spain, EDP office buildings Zaragoça and Sevilla and all but one wind farm are supplied with renewable energy with attribute certificates (Guarantee of Origin).

## CC11.5

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
9910126	47688	62479059	36869560	5345310	Consumed electricity: office buildings, renewable power stations self-consumption and distribution grid losses. Consumed electricity purchased: only in geographies where EDP does not have electricity supply activities (North America and Europe except Iberia). In all the other, consumed electricity is purchased from group companies. Consumed renewable electricity produced by company: For geographies where EDP has electricity supply activities, the % of renewable electricity in EDP generation mix in 2015 was considered. In all other geographies, as no renewable origin certification instruments where purchased, it was assumed zero. (note: Guarantees of Origin in Spain, mentioned in CC11.4 where obtained and canceled from EDP Group company).

**Further Information** 

## Page: CC12. Emissions Performance

CC12.1

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

Increased

### CC12.1a

Please 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

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	13	Decrease	Emission reduction activities implemented in 2015 (entry into operation of 1 244 MW new renewable electricity generation capacity and reduction of energy losses in distribution networks, as reported in CC 3.3b) significantly limited the growth in EDP's S1 and S2 emissions, driven by other factors. Total emissions reduction from these activities amounted to 2486000 tCO2e, which represents a 13% decrease in EDP's combined S1 + S2 emissions from 2014: (2486000/18766000)*100 = 13%
Divestment	0	No change	No change in combined scope 1 and scope 2 emissions from previous year resulting from divestment.
Acquisitions	20	Increase	In 2015, EDP acquired 50% of Pecém coal power plant (720 MW) - opportunistic acquisition from our distressed partner. This plant is now 100% owned by EDP Brasil and included in the Group's consolidation perimeter. With this operation, EDP diversified its electricity generation portfolio in Brazil. Emissions from coal combustion in Pecém power plant in 2015 amounted to 3708000 tCO2e, which represents a 20% increase in EDP's combined S1 + S2 emissions from 2014: (3708000/18766000)*100 = 20%
Mergers	0	No change	No change in combined scope 1 and scope 2 emissions from previous year resulting from mergers.
Change in output	6	Increase	In 2015, EDP increased its total electricity generation by 3,4 TWh, compared to the previous year, as a result of new installed capacity. This increase in output induced (assuming the same emissions intensity as in previous year) resulted in the emission of additional 1063000 tCO2e, which represent a 6% increase in EDP's combined S1 + S2 emissions from 2014: $(1063000/18766000)*100 = 6\%$
Change in methodology	0	No change	No change in combined scope 1 and scope 2 emissions from previous year resulting from change in methodology.
Change in boundary	0	No change	No change in combined scope 1 and scope 2 emissions from previous year resulting from change in boundary.
Change in physical operating conditions	12	Increase	In 2015, adverse weather conditions (hydraulic factor IPH = 0.7 in Iberia) reduced electricity generation from EDP's renewable assets. Increased resort to the company's thermal generation fleet increased emissions by 2307000 tCO2e compared with an average hydrological year, representing a 12% increase in EDP's combined S1 + S2 emissions from 2014: $(2307000/18766000)*100 = 12\%$ Additional increase in emissions driven by lower than average wind availability has also occurred but no quantification is available.
Unidentified	0	No change	No change in combined scope 1 and scope 2 emissions from previous year resulting from unidentified changes.
Other	0	No change	No change in combined scope 1 and scope 2 emissions from previous year resulting from other changes.

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

#### Location-based

### CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.0015590	metric tonnes CO2e	15516799288.38	Location- based	35	Increase	Gross S1 + S2 emissions increased by 29%, due to the combined effect of increased electricity output (15% of the increase), adverse weather conditions that reduced renewable generation (35% of the increase) and acquisition of a coal power plant (50% of the increase). Gross emissions increase would have been higher if not for the emissions reduction activities implemented throughout the year (induced reduction of 13%). In 2015, EDP's consolidated revenue decreased by 5% compared to 2014, thus rendering a 35% increase in the emissions intensity figure.

### CC12.3

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.382	metric tonnes CO2e	megawatt hour (MWh)	63349681.58	Location- based	22	Increase	Gross S1 + S2 emissions increased by 29%, due to the combined effect of increased electricity output (15% of the increase), adverse weather conditions that reduced renewable generation (35% of the increase) and acquisition of a coal power plant (50% of the increase). Gross emissions increase would have been higher if not for the emissions reduction activities implemented throughout the year (induced reduction of 13%). In 2015, EDP's electricity generation output increased by 6% compared to 2014, thus rendering a 22% increase in the emissions intensity figure. Unfavorable trend in indicator is circumstantial and will not jeopardise the achievement of EDP's long-term objectives commitment of 75% decrease in specific CO2 emissions in 2030 from 2005 level, which assumes decomissioning of coal-fired plants in Iberia between 2020 and 2030 and the maintenance of renewables investment at an average 500 MW/year from 2017.

## Further Information

# Page: CC13. Emissions Trading

## CC13.1

Do you participate in any emissions trading schemes?

Yes

#### CC13.1a

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership
European Union ETS	Thu 01 Jan 2015 - Thu 31 Dec 2015	76576	11402253	17810164	Facilities we own and operate

#### CC13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

EDP's compliance strategy for the EU-ETS is based on emission reduction as well as in allowances purchase. The allocation of emissions allowances for the 2013-2020 period is made partially in auction, in accordance with Directive 2009/29/EC, which regulates the 3rd phase of the EU ETS - European Emission Trading Scheme.

EDP's carbon credit management follows a hedging strategy, as in previous years, aiming at minimizing its exposure to market risk. The purchase of allowances is made on the secondary market and through over-the-counter transactions. In 2015, only one CHP plant in Portugal got allowances allocated for free.

EDP's power plants covered by the EU ETS emitted about 18 Mton of CO2 in 2015, 9% more than in 2014, which was explained by the strong decrease in hydropower generation and the consequent increased use of coal and gas-fired power plants.

In 2015, to comply with EU-ETS, EDP has used allocated allowances, allowances purchased and banked allowances (allowances that EDP had not been used in the past years). Verified emissions exclude those resulting from the steel gases that are burnt in our facilities but are allocated to the steel industry sector.

### CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

#### CC13.2a

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance	
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## Further Information

## Page: CC14. Scope 3 Emissions

## CC14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Not relevant, calculated	53336	Life Cycle Assessment (LCA) study performed with Simapro software. Scope and emissions	50.00%	Purchase of chemicals products and use of municipality water. Categories that account

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			categorization defined to comply with the requirements of The GHG Protocol Value Chain (Scope 3) Accounting and Reporting Standard. Activity data sources: EDP; Ecoinvent database when primary data was not available. Emission factors source: calculated from publish data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 4 (2007).		for less than 1% of total scope 3 emissions or are not applicable to EDP, are considered not relevant.
Capital goods	Relevant, calculated	254741	Life Cycle Assessment (LCA) study performed with Simapro software. Scope and emissions categorization defined to comply with the requirements of The GHG Protocol Value Chain (Scope 3) Accounting and Reporting Standard. Activity data sources: EDP; Ecoinvent database when primary data was not available. Emission factors source: calculated from publish data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 4 (2007).	20.00%	Facilities construction (power plant and buildings) and equipment acquisition.
Fuel-and-energy- related activities (not included in Scope 1 or 2)	Relevant, calculated	11215624	Life Cycle Assessment (LCA) study performed with Simapro software. Scope and emissions categorization defined to comply with the requirements of The GHG Protocol Value Chain (Scope 3) Accounting and Reporting Standard. Scope 2 emissions calculated according to location-based method. Activity data sources: EDP; Ecoinvent database when primary data was not available. Emission factors source: calculated from publish data (national energy authorities and LCA studies). GWP source:	50.00%	Generation/processing of electricity and natural gas purchased for retail. Production (extraction and processing) of fuels (coal, natural gas, forest biomass, fuel oil and diesel) used by EDP for electricity generation (excluding transport/transmission).

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			IPCC Assessment Report 4 (2007).		
Upstream transportation and distribution	Relevant, calculated	2477508	Life Cycle Assessment (LCA) study performed with Simapro software. Scope and emissions categorization defined to comply with the requirements of The GHG Protocol Value Chain (Scope 3) Accounting and Reporting Standard. Activity data sources: EDP; Ecoinvent database when primary data was not available. Emission factors source: calculated from publish data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 4 (2007).	50.00%	Transportation of coal and transmission/distribution of electricity purchased by EDP from other suppliers for retail.
Waste generated in operations	Not relevant, calculated	22300	Life Cycle Assessment (LCA) study performed with Simapro software. Scope and emissions categorization defined to comply with the requirements of The GHG Protocol Value Chain (Scope 3) Accounting and Reporting Standard. Activity data sources: EDP; Ecoinvent database when primary data was not available. Emission factors source: calculated from publish data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 4 (2007).	50.00%	Transport and disposal of waste generated in EDP's activities (mainly gypsum and ashes from coal power plants). Categories that account for less than 1% of total scope 3 emissions or are not applicable to EDP are considered not relevant.
Business travel	Not relevant, calculated	9498	Life Cycle Assessment (LCA) study performed with Simapro software. Scope and emissions categorization defined to comply with the requirements of The GHG Protocol Value Chain (Scope 3) Accounting and Reporting Standard. Activity data sources: EDP; Ecoinvent database when primary data was not available. Emission factors source: calculated from publish data	50.00%	EDP employee business travel (air, train and road travel). Categories that account for less than 1% of total scope 3 emissions or are not applicable to EDP are considered not relevant.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			(national energy authorities and LCA studies). GWP source: IPCC Assessment Report 4 (2007).		
Employee commuting	Not relevant, calculated	4477	Life Cycle Assessment (LCA) study performed with Simapro software. Scope and emissions categorization defined to comply with the requirements of The GHG Protocol Value Chain (Scope 3) Accounting and Reporting Standard. Activity data sources: EDP; Ecoinvent database when primary data was not available. Emission factors source: calculated from publish data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 4 (2007).	50.00%	EDP employee commuting. Categories that account for less than 1% of total scope 3 emissions or are not applicable to EDP are considered not relevant.
Upstream leased assets	Not relevant, calculated	33997	Life Cycle Assessment (LCA) study performed with Simapro software. Scope and emissions categorization defined to comply with the requirements of The GHG Protocol Value Chain (Scope 3) Accounting and Reporting Standard. Activity data sources: EDP; Ecoinvent database when primary data was not available. Emission factors source: calculated from publish data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 4 (2007).	100.00%	Use of rented assets (especially machinery) in construction activities. Categories that account for less than 1% of total scope 3 emissions or are not applicable to EDP are considered not relevant.
Downstream transportation and distribution	Not relevant, calculated	712	Life Cycle Assessment (LCA) study performed with Simapro software. Scope and emissions categorization defined to comply with the requirements of The GHG Protocol Value Chain (Scope 3) Accounting and Reporting Standard. Activity data sources: EDP; Ecoinvent database	90.00%	Support activities (offices and stores) associated with electricity and gas retail. Categories that account for less than 1% of total scope 3 emissions or are not applicable to EDP are considered not relevant.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			when primary data was not available. Emission factors source: calculated from publish data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 4 (2007).		
Processing of sold products	Not relevant, explanation provided	0	Not applicable		EDP's products (electricity and gas) are supplied in their final consuming form, therefore they do not require processing. Categories that account for less than 1% of total scope 3 emissions or are not applicable to EDP are considered not relevant.
Use of sold products		6288397	Life Cycle Assessment (LCA) study performed with Simapro software. Scope and emissions categorization defined to comply with the requirements of The GHG Protocol Value Chain (Scope 3) Accounting and Reporting Standard. Activity data sources: EDP; Ecoinvent database when primary data was not available. Emission factors source: calculated from publish data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 4 (2007).	100.00%	Use of natural gas sold by EDP to clients.
End of life treatment of sold products	Not relevant, explanation provided	0	Not applicable		EDP's sold products (electricity and gas) do not generate waste, therefore no end of life treatment is required.
Downstream leased assets	Not relevant, explanation provided	0	Not applicable		EDP did not use downstream leased assets in the reporting year.
Franchises	Not relevant, explanation	0	Not applicable		EDP did not have franchised activities in the reporting year.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
	provided				
Investments	Not relevant, calculated	4127	Life Cycle Assessment (LCA) study performed with Simapro software. Scope and emissions categorization defined to comply with the requirements of The GHG Protocol Value Chain (Scope 3) Accounting and Reporting Standard. Activity data sources: EDP; Ecoinvent database when primary data was not available. Emission factors source: calculated from publish data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 4 (2007).	10.00%	Emissions from EDP's participated companies (minority interests). Categories that account for less than 1% of total scope 3 emissions or are not applicable to EDP are considered not relevant.
Other (upstream)	Not relevant, explanation provided	0			EDP has no emissions from upstream or downstream activities other than the ones reported in categories C1 to C15.
Other (downstream)	Not relevant, explanation provided	0			EDP has no emissions from upstream or downstream activities other than the ones reported in categories C1 to C15.

## CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

Third party verification or assurance process in place

# CC14.2a

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Verificatio n or assurance cycle in place	Status in the current reportin g year	Type of verificatio n or assuranc e	Attach the statement	Page/Sectio n reference	Relevan t standar d	Proportion of reported Sco pe 3 emissions verified (%)
Annual process	Complet e	Limited assurance	https://www.cdp.net/sites/2016/00/5300/Climate Change 2016/Shared Documents/Attachments/CC14.2a/EDP_AnnualReport2015_S3GHGAssuranceK PMG.zip	EDP Annual Report 2015, p. 90- 93 and p.422-425. Only relevant extract attached. Complete document is over 5MB.	ISAE300 0	100

## CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

## CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Purchased goods & services	Acquisitions	42	Increase	In 2015, EDP acquired 50% of Pecém coal power plant in Brazil (720 MW), which is now 100% owned and included in the Group's consolidation perimeter. Operation of this new power plant increased the company's consumption of chemical products and municipality water. Increase in this category's emissions was – although to a lesser extent – also influenced by adverse weather conditions in 2015 (IPH = 0.74 in Iberia) that reduced electricity generation from EDP's renewable assets and led to increased resort to the company's thermal generation fleet in Iberia, thus also increasing the consumption of the above mentioned products.
Capital goods	Change in output	10	Increase	In 2015, EDP added 1,24 GW renewable capacity to its portfolio, which involved the construction of new hydro and wind generation assets, thus increasing the emissions from capital goods.
Fuel- and energy- related activities (not included in Scopes 1 or 2)	Acquisitions	67	Increase	In 2015, EDP acquired 50% of Pecém coal power plant in Brazil (720 MW), which is now 100% owned and included in the Group's consolidation perimeter. Operation of this new power plant increased the company's coal consumption and thus the emissions from its upstream extraction and processing. Increase in this category's emissions was – although to a lesser extent – also influenced by adverse weather conditions in 2015 (IPH = 0.74 in Iberia) that reduced electricity generation from EDP's renewable assets and led to increased resort to the company's thermal generation fleet in Iberia, thus increasing fossil fuel consumption (coal and gas) and the corresponding upstream emissions. Finally, there was a significant increase in the electricity acquired by EDP for distribution and trade in Portugal, together with the overall emissions intensity increase, which influenced the change as well.
Upstream transportation & distribution	Acquisitions	159	Increase	In 2015, EDP acquired 50% of Pecém coal power plant in Brazil (720 MW), which is now 100% owned and included in the Group's consolidation perimeter. Operation of this new power plant increased the company's coal consumption and thus the emissions from its upstream transportation to the power plant. Increase in this category's emissions was – although to a lesser extent – also influenced by adverse weather conditions in 2015 (IPH = 0.74 in Iberia) that reduced electricity generation from EDP's renewable assets and led to increased resort to the company's thermal generation fleet in Iberia, thus increasing coal consumption and the corresponding emissions from its upstream transportation to the company's power plants.
Business travel	Change in output	23	Increase	In 2015, the continued growth of EDP Renewables overseas activity led to an increase in employee air travel, thus increasing emissions in this category.
Use of sold products	Change in	11	Decrease	The decrease is mostly due to a lower supply of gas to our customers

	Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
output		output			

#### CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our suppliers Yes, our customers

#### CC14.4a

#### Please give details of methods of engagement, your strategy for prioritizing engagement and measures of success

Supplier engagement

i) Methods of engagement include:

. Knowledge building and knowledge sharing – EDP developed a dedicated web portal (MaPA) that brings together detailed information on environmental best practice for suppliers, including energy and GHG efficiency;

. Collaborative projects – EDP is part of the international Bettercoal initiative. This is an association of energy companies that ensures more effective monitoring and mitigation of the environmental and social risks in the coal industry, through an annual plan of audits of the coal mines and the promotion of a code of conduct of good practices among coal suppliers;

. Performance screening - EDP regularly screens its largest suppliers (by sales) against environmental, labour, human rights and society impacts.

#### ii) Prioritization strategy

In 2015, EDP developed an extensive characterization study of its purchasing activity, aiming at a deeper knowledge of the economic, social and environmental impacts of the company's supply chain. The study, developed by PwC and based on ESCHER methodology, included, as one of three key environmental indicators, the GHG emissions associated with direct and indirect company's purchases. The results will now be used for better definition of the supply chain management priorities. Engagement with suppliers on climate change issues, specially GHG reduction, will focus on purchase categories that have been shown to represent the largest GHG supply chain sources.

ii) Measure of success

EDP uses the international platform RePro, developed by Achilles, to screen its suppliers against environmental, labour, human rights and society impacts. Implementation and certification of environmental management systems (EMS) is used as proxy for environmental performance, including GHG emissions management. In 2015, 1205 out of the 2010 suppliers holding sales above EUR 75 thousand (excluding fuel suppliers) where screened, showing a continued growth in the number of suppliers with EMS certification: 31% vs. 29% in 2014. The same proxy is used for fossil fuel supply.

#### Customer engagement

i) Methods of engagement are twofold:

1) Through a diversified portfolio of commercial low carbon energy solutions, targeted at the specific needs of different customer segments, which increase efficiency and avoid emissions in final energy consumption:

. For residential clients: heat pumps, solar PV and solar thermal systems; electric mobility packages; and compact smart energy management devices.

. For SMEs: Integrated energy management solutions.

. For large corporate clients: In Iberia, the Save To Compete (S2C) offering, which identifies energy reduction measures and funds its implementation through the induced savings. In Brazil, through the newly acquired energy services company APS - Soluções em Energia.

. For all client segments: supply of 100% certified renewable electricity.

2) Through voluntary or mandatory initiatives, including awareness raising campaigns and special projects that disseminate knowledge on climate change and provide practical information on energy and emissions savings:

. In Portugal: Participation in the plan to promote electricity consumption efficiency (PPEC), a voluntary program based on national tenders, managed by the Portuguese regulatory authority (ERSE), with projects encouraging the adoption of more efficient habits and equipment (e.g. Light bulb switching campaign, Smart plugs, Efficient street lighting, High efficient motors, variable speed drives).

. In Spain: Cuota Ahorro project (identification and implementation of energy saving opportunities targeted at the business segment) and the ENRIMA project (development of an integrated management system to assist the decisions of energy-efficient buildings and public space managers).

. In Brazil: Energy efficiency programs to encourage the use of electricity conscientiously and efficiently (e.g. Energy Efficiency in Public Buildings; Good Energy in Schools; The Good Energy Truck).

#### ii) Prioritization strategy

Engagement activities are prioritized according to both their energy and GHG savings potential and their relevance to EDP's commercial strategy. The delivery of energy efficiency solutions is one of EDP's climate pledges: In 2015, in the run-up to Paris Climate Conference, EDP committed to provide customers with ongoing access to energy efficiency products and services in order to reduce overall consumption by more than 1 TWh in accumulated energy savings by 2020 (compared with 2014).

#### iii) Measure of success

Success in customer climate engagement is measured mainly through induced energy and GH savings. The largest savings are delivered by:

. PPEC – the 16 measures carried out under the PPEC 2014-15 tender will result in 1,073 GWh accumulated savings and about 0.4 million tCO2 avoided over the lifetime of the measures

. S2C - by the end 2015, the program had induced accumulated savings of around 77 GWh and avoided 39,000 tons of CO2.

To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

Number of suppliers	% of total spend (direct and indirect)	Comment
368	30%	Suppliers holding sales above EUR 75 thousand (excluding fuel suppliers), screened against environmental, labour, human rights and society impacts and included in the RePro/Achilles database.

## CC14.4c

If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

How you make use of the data	Please give details
Identifying GHG sources to prioritize for reduction actions	In 2015, EDP developed an extensive characterization of its purchasing activity. The study, developed by PwC and based on ESCHER methodology, included, as one of three key environmental indicators, the estimation of GHG emissions associated with direct and indirect company's purchases, in each of the most relevant supply categories. The company will now use the results to set supply chain management priorities. Engagement with suppliers on climate change issues, specially GHG reduction, will focus on purchase categories that have been shown to represent the largest GHG supply chain sources.

#### CC14.4d

Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future

#### **Further Information**

# Module: Sign Off

## Page: CC15. Sign Off

CC15.1

#### Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
Rui Teixeira	Member of EDP's Executive Board with formal responsibility over electricity generation and sustainability issues.	Board/Executive board

#### **Further Information**

## Module: Electric utilities

#### Page: EU0. Reference Dates

#### EU0.1

Please enter the dates for the periods for which you will be providing data. The years given as column headings in subsequent tables correspond to the "year ending" dates selected below. It is requested that you report emissions for: (i) the current reporting year; (ii) one other year of historical data (i.e. before the current reporting year); and, (iii) one year of forecasted data (beyond 2020 if possible).

Year ending	Date range
2014	Wed 01 Jan 2014 - Wed 31 Dec 2014
2015	Thu 01 Jan 2015 - Thu 31 Dec 2015
2020	Wed 01 Jan 2020 - Thu 31 Dec 2020

#### Further Information

## Page: EU1. Global Totals by Year

#### EU1.1

In each column, please give a total figure for all the countries for which you will be providing data for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emission intensity (metric tonnes CO2e/MWh)
2014	22175	59903	16521553	0.276
2015	24128	63350	21518057	0.340
2020	28362	82578	18699195	0.226

#### **Further Information**

## Page: EU2. Individual Country Profiles - Brazil

EU2.1

Please select the energy sources/fuels that you use to generate electricity in this country

Coal - hard Hydro Other renewables

## EU2.1a

Coal - hard

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	0	0	0	0
2015	720	3028	3707933	1.225
2020	720	3894	3894213	1.000

## EU2.1b

## Lignite

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

#### EU2.1c

Oil & gas (excluding CCGT)

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

# EU2.1d

## CCGT

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

## EU2.1e

#### Nuclear

Year ending	Nameplate capacity (MW)	Production (GWh)

#### Waste

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

# EU2.1g

#### Hydro

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)
2014	1797	7236
2015	1797	5599
2020	1746	7520

#### EU2.1h

#### Other renewables

Year ending	Nameplate capacity (MW)	Production (GWh)
2014	84	236
2015	84	222
2020	584	2420

EU2.1i

#### Other

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

# EU2.1j

#### Solid biomass

Please complete for the "year ending" periods that you selected in answer to EU0.1



Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	0	0	0	0
2015	0	0	0	0
2020	0	0	0	0

## EU2.1k

# Total thermal including solid biomass

Please complete for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	0	0	0	0
2015	720	3028	3707933	1.225
2020	720	3894	3894213	1.000

# EU2.11

# Total figures for this country

Please enter total figures for this country for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes in CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	1881	7472	0	0
2015	2601	8849	3707933	0.419
2020	3051	13834	3894213	0.281

## Further Information

Other renewables include wind plants.

# Page: EU2. Individual Country Profiles - Portugal

## EU2.1

#### Please select the energy sources/fuels that you use to generate electricity in this country

Coal - hard CCGT Hydro Other renewables Other

## EU2.1a

Coal - hard

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	1180	8129	7398654	0.910
2015	1180	9657	8683899	0.899
2020	1180	8174	7350364	0.899

## EU2.1b

# Lignite

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

# EU2.1c

# Oil & gas (excluding CCGT)

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

# EU2.1d

## CCGT

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	2039	507	225128	0.444
2015	2039	2584	1010343	0.391
2020	2039	2145	838774	0.391

#### EU2.1e

#### Nuclear

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)

#### EU2.1f

#### Waste

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

# EU2.1g

# Hydro

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)
2014	5443	14997
2015	5555	9090
2020	6939	15727

# EU2.1h

#### Other renewables

Year ending	Nameplate capacity (MW)	Production (GWh)
2014	624	1652

Year ending	Nameplate capacity (MW)	Production (GWh)
2015	1247	1991
2020	1247	2913

# EU2.1i

## Other

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	24	574	139247	0.243
2015	24	505	123032	0.244
2020	25	521	134367	0.258

# EU2.1j

## Solid biomass

Please complete for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	0	0	0	0
2015	0	0	0	0
2020	0	0	0	0

## EU2.1k

# Total thermal including solid biomass

Please complete for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	3243	9210	7763029	0.843
2015	3243	12745	9817274	0.770
2020	3244	10840	8323505	0.768

# EU2.11

# Total figures for this country

Please enter total figures for this country for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes in CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	9310	25858	7763029	0.300
2015	10045	23826	9817274	0.412
2020	11429	29479	8323505	0.282

## Further Information

# Page: EU2. Individual Country Profiles - Rest of world

## EU2.1

Please select the energy sources/fuels that you use to generate electricity in this country

#### Other renewables

## EU2.1a

#### Coal - hard

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

#### EU2.1b

## Lignite

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

# EU2.1c

# Oil & gas (excluding CCGT)

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

## EU2.1d

#### CCGT

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

# EU2.1e

## Nuclear

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)

# EU2.1f

## Waste

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

## Hydro

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)

## EU2.1h

#### Other renewables

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)
2014	1413	2495
2015	1473	3225
2020	2078	4854

#### EU2.1i

#### Other

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

# EU2.1j

#### Solid biomass

Please complete for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	0	0	0	0
2015	0	0	0	0
2020	0	0	0	0

# EU2.1k

# Total thermal including solid biomass

Please complete for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	0	0	0	0
2015	0	0	0	0
2020	0	0	0	0

## EU2.11

# Total figures for this country

Please enter total figures for this country for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes in CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	1413	2495	0	0
2015	1473	3225	0	0
2020	2078	4854	0	0

#### Further Information

Page: EU2. Individual Country Profiles - Spain

# EU2.1

Please select the energy sources/fuels that you use to generate electricity in this country

Coal - hard CCGT Hydro Other renewables Other

# EU2.1a

#### Coal - hard

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	1463	6414	8141611	1.269
2015	1463	8946	7508797	0.839
2020	1224	7145	5993904	0.839

# EU2.1b

Lignite

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

## EU2.1c

## Oil & gas (excluding CCGT)

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

# EU2.1d

## CCGT

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	1698	656	280221	0.427
2015	1698	1082	448837	0.415
2020	1698	1092	452876	0.415

EU2.1e

Nuclear

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)

## EU2.1f

#### Waste

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

# EU2.1g

#### Hydro

Year ending	Nameplate capacity (MW)	Production (GWh)
2014	426	947
2015	426	793
2020	426	771

## EU2.1h

## Other renewables

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)
2014	2194	5176
2015	2194	4847
2020	2194	5125

# EU2.1i

## Other

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	93	731	336693	0.461
2015	25	680	35256	0.052
2020	26	673	34698	0.052

### Solid biomass

Please complete for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	0	0	0	0
2015	0	0	0	0
2020	0	0	0	0

## EU2.1k

## Total thermal including solid biomass

Please complete for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	3254	7801	8758524	1.123
2015	3186	10707	7992891	0.746
2020	2947	8909	6481478	0.727

# Total figures for this country

Please enter total figures for this country for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes in CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	5875	13925	8758524	0.629
2015	5806	16347	7992891	0.489
2020	5567	14806	6481478	0.438

#### **Further Information**

# Page: EU2. Individual Country Profiles - United States of America

#### EU2.1

Please select the energy sources/fuels that you use to generate electricity in this country

Other renewables

EU2.1a

Coal - hard

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

# EU2.1b

# Lignite

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

## EU2.1c

Oil & gas (excluding CCGT)

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

## CCGT

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

## EU2.1e

#### Nuclear

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)

## EU2.1f

#### Waste

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

## EU2.1g

## Hydro

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)

# EU2.1h

#### Other renewables

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)
2014	3697	10153
2015	4203	11103
2020	6237	19604

EU2.1i

Other

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)

# EU2.1j

#### Solid biomass

Please complete for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	0	0	0	0
2015	0	0	0	0
2020	0	0	0	0

## EU2.1k

## Total thermal including solid biomass

Please complete for the "year ending" periods that you selected in answer to EU0.1

# Year ending Nameplate capacity (MW) Production (GWh) Absolute emissions tonnes CO2e/MWh) tonnes CO2e/MWh)

#### EU2.1I

#### Total figures for this country

Please enter total figures for this country for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes in CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2014	3697	10153	0	0
2015	4203	11103	0	0
2020	6237	19604	0	0

**Further Information** 

## Page: EU3. Renewable Electricity Sourcing Regulations

#### EU3.1

In certain countries, e.g. Italy, the UK, the USA, electricity suppliers are required by regulation to incorporate a certain amount of renewable electricity in their energy mix. Is your organization subject to such regulatory requirements?

#### No

#### EU3.1a

Please provide the scheme name, the regulatory obligation in terms of the percentage of renewable electricity sourced (both current and future obligations) and give your position in relation to meeting the required percentages

Scheme name	Current % obligation	Future % obligation	Date of future obligation	Position in relation to meeting obligations

#### **Further Information**

## Page: EU4. Renewable Electricity Development

#### EU4.1

Please give the contribution of renewable electricity to your organization's EBITDA (Earnings Before Interest, Tax, Depreciation and Amortization) in the current reporting year in either monetary terms or as a percentage

Please give:	Monetary figure	%	Comment
Renewable electricity's contribution to EBITDA		48.00%	Includes all EDP Renewables plants (wind and solar) and hydropower plants in Portugal and Brazil

#### EU4.2

Please give the projected contribution of renewable electricity to your organization's EBITDA at a given point in the future in either monetary terms or as a percentage

Please give:	Monetary figure	%	Year ending	Comment

Please give:	Monetary figure	%	Year ending	Comment
Renewable electricity's contribution to EBITDA		63.00%	2020	Includes all EDP Renewables plants (wind and solar) and hydropower plants in Portugal and Brazil

## EU4.3

Please give the capital expenditure (capex) planned for the development of renewable electricity capacity in monetary terms and as a percentage of total capex planned for power generation in the current capex plan

Please give:	Monetary figure	%	End year of capex plan	Comment
Capex planned for renewable electricity development	480000000	70.00%	2020	Total planned capex of EDP Renewables according to the Business Plan 2016-2020

#### **Further Information**

CDP 2016 Climate Change 2016 Information Request