Module: Introduction

Page: Introduction

CC0.1

Introduction
Please give a general description and introduction to your organization.

EDP – Energias de Portugal, S.A. (EDP) is a listed company whose ordinary shares are publicly traded in the Eurolist by NYSE Euronext Lisbon. The company is established and headquartered in Portugal, being organized under Portuguese laws.

EDP is a vertically integrated utility company, with operational activities in power generation, distribution and supply of electricity and gas. It is the largest generator, distributor and supplier of electricity in Portugal, the third largest electricity generation company in Spain and has significant operations in gas in the Iberian Peninsula. In Brazil, EDP is the fifth largest private operator in electricity generation, has two electricity distribution concessions and is the fourth largest private supplier in the liberalised market.

Through its subsidiary EDP Renewables, EDP is also one of the largest wind power operators worldwide, with wind farms in the Iberian Peninsula, United States of America, Canada, Brazil, France, Belgium, Italy, Poland, Romania and Mexico and developing wind projects in the United Kingdom. Additionally, EDP generates power from photovoltaic plants in Portugal, Romania and the United States of America.

EDP has a significant presence in the world energy scene and is present in 14 countries, with 9.8 million electricity customers, 1.5 million gas customers and about 12 thousand employees worldwide. In 2016, the company generated 70 TWh of electricity worldwide, of which about 65% from renewable energy sources and, by year end, had an installed capacity of 25.1 GW (72.4% renewable).

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

Key figures 2016:

Turnover	14595 M€
EBITDA	3759 M€

Net profit	1200 M€
Net investment	1212 M€
Net debt	15923 M€
Total assets	44084 M€
Employees	11992 #
ISIN	PTEDP0AM0009
SEDOL	4103596

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
Fri 01 Jan 2016 - Sat 31 Dec 2016

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
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, companies in the electric utility sector, companies in the automobile and auto component manufacturing sector, companies in the oil and gas sector, companies in the information and communications technology sector (ICT) and companies in the food, beverage and tobacco sector (FBT) should complete supplementary questions in addition to the core questionnaire.
If you are in these sector groupings, the corresponding sector modules will not appear among the options of question CC0.6 but will automatically appear in the ORS 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 in CC0.6.

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 in Portugal and corporate-wide sustainability issues, including climate change.

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	Monetary rewards are dependent upon 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 multiannual variable remuneration. The indicator is

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
			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.
Board/Executive board	Monetary reward	Emissions reduction target	In 2016, EDP implemented a new Group wide sustainability KPIs system: at group level, all employees have their variable compensation dependent on DJSI performance. At BU level, team level and individual level, EDP applies KPIs based on the company's 2020 Business Plan and Sustainability Targets. These targets include the increase in renewable electricity generation capacity and the associated reduction in CO2 emissions per kWh (scope 1 emissions). KPI affects the variable remuneration of the Executive Board of Directors and Top Managers and is monitored through the volume of the associated investment (CAPEX).
Business unit managers	Monetary reward	Emissions reduction target	In EDP Renováveis (Group subsidiary for renewables), top managers have a KPI for the incremental installed capacity in renewable energies, impacting the company's reduction of CO2 specific emissions (scope 1). KPI affects the variable remuneration of such managers and is monitored through the volume of the associated investment (CAPEX).
Business unit managers	Monetary reward	Efficiency target	In EDP power supply Business Unit, top managers have a KPI for the marketing of energy efficiency services, which contributes to the improvement of energy end-use efficiency. KPI affects the variable remuneration of such managers and is monitored through the revenues from energy efficiency services / products.
Business unit managers	Monetary reward	Energy reduction target Efficiency target	In EDP electricity distribution Business Unit, top managers have a KPI associated with distribution networks energy efficiency. KPI affects the variable remuneration of such managers and is monitored through the reduction of technical losses in the distribution network.
Other: All Employees of specific Business Units (EDP Renováveis and EDP Brazil)	Monetary reward	Emissions reduction target	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 company's performance in the ISE BM&F BOVESPA index, which includes the CO2 reduction targets evaluation. EDP Brasil is listed in BM&F BOVESPA.

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	To whom are results 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, Romania and UK)	> 6 years	Climate change related risks and opportunities are fully integrated into EDP's risk management procedures (taxonomy, management phases and responsibilities). Climate-related risks/opportunities are assessed in a 1-50 years timeframe for impact on strategic development, business planning, investment decisions and operations management: i) Strategic development – EDP performed a specific risk analysis of climate change impacts on structural hydro and wind electricity volumes and activity disruption (electricity generation and distribution); ii) Business Plan – scenario analysis featuring weather volatility (regulatory and physical) in energy prices and volumes; iii) Project investment – Investment in renewable generation undergoes detailed resource evaluation encompassing scenario analysis: price volatility and changes due to volume fluctuations; iv) Operation – Business Units assess the exposure of their 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 update of main risks. Process is first conducted by Business Unit (BU) and then centrally coordinated by the Corporate Risk Management Dep., which is also responsible for obtaining and maintaining a global perspective and producing EDP's Global Risk Map. A top-down update of the risk map was recently conducted, based on interviews and work in conjunction with the Group's main 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), Strategic (e.g. structural hydro availability change) and Reputational risk categories. Specific analyses are also conducted centrally. Examples include EDP Water Risk Map, that identified strategic (reduction of hydro generation) and operational (reduction of thermal power plant efficiency or damage to distribution assets) risks driven by changes in precipitation patterns, temperature and extreme weather events resulting from climate change. Climate change opportunities are assessed by corporate departments (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 and opportunities over the life cycle of the assets. 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 contracts). 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?

Regarding risk and opportunity prioritization, the Group's Executive Board of Directors decides upon the company's risk appetite and acceptable level of risk exposure. This is a key risk prioritization. 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).

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

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

i. EDP's current business strategy (Strategic Agenda and Business Plan 2016-2020) sets five priorities:
1 - Growth oriented value creation, with priority to investment in long-term contracted renewable generation assets;
2 - Continued financial deleveraging;
3 – Preservation of low business risk profile through optimization of invested capital allocation and low exposure to CO2 and other environmental risks;
4 – Reinforcement of efficiency;
5 – Maintenance of a stable and 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 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. Climate Change explicitly influenced two of the priorities of the Strategic Agenda 2020:
- Organic growth focused on CO2-free technologies, mainly wind (international expansion, 60% of which in USA market) and hydro (conclusion of the Portuguese Hydro Programme and new capacity in Brazil). Target is to reach at least 75% of installed capacity on renewables by 2020.
- Low exposure to CO2 and other environmental risks, trough low-carbon electricity generation, management of CO2 portfolio and sustainability leadership. Target is to reduce CO2 emissions per TWh by 75% between 2005 and 2030. This strategic commitment is fully aligned with our new science based target, formally approved by the Science Based Target Initiative.

iii. EDP's business strategy has been influenced by the need to:
- Mitigate climate change – Reduce CO2 emissions from electricity generation;
- Adapt to climate change – Increase resilience of generation and distribution assets;
- Reduce exposure to climate-related regulatory and market risks – Reduce specific CO2 emissions, manage CO2 allowances and credits portfolio;
- Seize opportunities to develop new products and services – Deliver low carbon energy, decentralized renewable energy solutions and tailored energy efficiency services.

iv. and v. EDP's short/medium term strategy (up to 2020) is expressed by the company's Business Plan 2016-2020 which is focused on renewable generation growth and decrease in the portfolio's carbon intensity. EDP publicly committed to the following operational objectives:
- Exceeding 75% of renewables in its overall installed capacity by 2020;
- Reduce CO2 specific emissions by 75% before 2030 (compared to 2005 levels);
- Install smart meters in more than 90% of EDP's low-voltage clients in Iberia by 2030;
- Provide customers with ongoing energy efficiency products and services delivering more than 1 TWh in accumulated savings by 2020 (compared with 2014);
- Investing EUR 200 million in innovative clean energy, energy efficiency and smart grids projects by by 2020.

EDP's long term strategy (from 2020 onwards) is to continue decarbonization of electricity generation and to provide client solutions to further decarbonize the economy.

vi. This strategy has gained EDP strategic advantages over the competitors through:
- Profitability and reduced risk exposure – decarbonized generation portfolio (73% renewable installed capacity in 2016) and low exposure to CO2 regulatory risks (CO2 emissions per TWh down 57% from 2005 levels in 2016);
- Commercial differentiation – products (low carbon electricity) and services (energy efficiency services) that meet growing customers demand for low carbon solutions (accumulated client savings of 194 GWh since 2015, avoiding 32,8 kt CO2);
- Increased internal efficiency – Consistently increasing wind turbine load capacity (30%) and availability (>97%) and differentiation in wind farm development. Increase in thermal power plant efficiency (39,7% in 2016, up 4% from 2015) and reduction of electricity losses in distribution networks (9,2% in 2016, down 2% from 2015).

vii. In May 2016, EDP announced a net investment of € 1.4 bn/year for the 2016-2020 period, 70% of which in new renewable generation installed capacity. In 2020, EDP foresees its specific CO2 emissions will be 30% below 2015 levels, on track with the 2030 75% reduction commitment and science based target, thus contributing both to climate change mitigation (reduction of scope 1 emissions) and reduction of climate regulatory risks exposure. The company will also make a strong investment in low carbon client solutions (energy efficiency services, sustainable mobility and renewable microgeneration) and in distribution grids. This will contribute both to climate mitigation (reduction of scope 2 and scope 3 emissions) and adaptation (increased asset resilience). In 2016, EDP added over 1250 MW of renewable generation to its portfolio (+7,4% from 2015). It also marketed energy efficiency services that delivered accumulated client savings of over 194 GWh since 2015 and totalled EUR 93 million in revenues in 2016.

viii. EDP' vision and business strategy are fully aligned with the Paris Agreement. The company committed to a 2030 science based GHG reduction target, approved by the Science Based Targets Initiative and developed using a 2ºC scenario. EDP is also actively involved in the promotion of the vital role of renewable energy in the attainment of the 2ºC objective; it is a member of the Low Carbon Technology Partnership Initiative (LCTPi), a collaborative initiative led by the World Business Council for Sustainable Development that produced in-depth analysis demonstrating that the potential of existent business solutions can deliver 65% of the needs to achieve the 2ºC objective. EDP, along with 15 electricity utilities, signed an action plan whose implementation enables the installation of 1,5 TW renewable energy capacity worldwide, over the next 10 years.

ix. EDP used a forward looking 2ºC scenario to develop its GHG science based target (to reduce scope 1 and 2 emissions from electricity production in 55% per TWh by 2030, from 2015 levels, and to reduce absolute scope 3 emissions in 25% over the same time period) and for integration of the reduction commitment with its energy and business planning processes. EDP's SBT used an intensity reduction pathway derived from the application of the Sectoral Decarbonization Approach to the power sector. The emissions trajectory was based on the power sector 2DS scenario developed by the International Energy Agency in its Energy Technology Perspectives Report which, in turn, is consistent with the IPCC's 5th Assessment Report RCP 2.6 Scenario.

CC2.2b

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

CC2.2c

Does your company use an internal price on carbon?

Yes

CC2.2d

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

EDP uses an internal price on 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 the 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). For the timeframe 2016-2030, the average price for the base scenario is about EUR 25/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
Clean energy generation	Support	In 2016, The European Commission adopted the Winter Package, a reload of EU legislation under the name “Clean Energy for All Europeans” that is another step for the European Union’s Energy Union project. The document addressed energy policy objectives aiming at better engaging consumers in the energy transition through a set of new legislative proposals and initiatives. This legislation will impact the company’s electricity generation, distribution and supply activities in Europe (Iberia and other EU countries). EDP participated in this legislative process review with focus in renewable and energy efficiency issues. 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. The company 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.	EDP supports the European Commission’s ambition to achieve global leadership in renewable energies for Europe. For the power sector, this means reaching nearly 50% of renewable generation by 2030. However, for this to happen, stable investment and regulatory frameworks must be in place and improvements must be made in the Clean Energy Package. EDP defend the view that energy efficiency is a fundamental pillar of energy sector sustainability. In this context, electrification of the economy should take centre stage as the biggest driver of efficiency in energy systems. 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.
Cap and trade	Support with minor exceptions	In July 2015, the European Commission presented a legislative proposal to revise the EU emissions trading system (EU ETS) for the period after 2020. This legislation will impact EDP's electricity generation activities in Iberia. During 2016, the proposal was discussed in several associations in which	EDP supports a strong EU ETS as the cornerstone of the EU’s climate and energy policy. We support the EU ETS as a key driver for market-based investments in low-carbon electricity generation and, in particular, to strengthen the design parameters of the Market Stability Reserve (MSR) and to

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
		EDP participates (e.g. Eurelectric) and a position paper was produced and disclosed.	increase the Linear Reduction Factor (LRF) beyond the proposed 2.2%.
Energy efficiency	Support with major exceptions	In 2016, EDP participated in the public consultation process related to amendments proposed to the Decree-Law no. 68-A/2015, that transpose to the Portuguese legislation the Directive 2012/27/EU of the European Parliament and of the Council establishing a common framework of measures for the promotion of energy efficiency. This legislation will impact EDP's energy supply activities in Portugal. The proposed amendments are aimed at overcoming some shortcomings in the transposition of the above mentioned Directive to the Portuguese legislation.	In its engagement with policy makers, EDP conveys its support to energy efficiency measures, but defends that public authorities should lead by example, applying energy efficiency measures to public buildings and transport sectors. To fill the gaps, the contribution to a specific Fund to finance measures for non-compliance with energy efficiency obligations should be imposed upon retailers and not upon the Distribution System Operators
Other: National climate change policy plans	Support	In Brazil, EDP Energias do Brasil (EDP Group's subsidiary) participated in Brazilian fora related to climate change, created to discuss the Sectorial Plans proposed by the government in its National Policy on Climate Change. The Company is engaged mainly in meetings and working groups that discuss the roles of Brazilian energy sector in tackling climate change and reducing GHG emissions. Example of an important forum in which EDP was involved is "Energy for sustainability development – The National Policy on Climate Change within the Energy Sector"	EDP participated in discussions and proposed solutions for CDM and other emissions reduction programs. It corroborated the importance of the interaction between companies in the Energy Sector and the Federal Government in order to strengthening efforts in mitigation an adaptation to climate change events.

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 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 2016, Eurelectric participated in several European climate policy discussions and issued public statements, namely the legislative proposals to revise EU ETS Directive, which it welcomed.	EDP is a member of the Board of Directors. Since June 2015, EDP's CEO (António Mexia) is EURELECTRIC's President. EDP participates in several of the association's 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.
Wind Europe (WE)	Consistent	Wind Europe 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 2016, Wind Europe participated in the European Commission stakeholder consultation on the new renewable energy directive (REDII) for the period 2020-2030.	EDP Renewables (EDP Group's subsidiary for renewable energy generation) 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 generation support. EDP supports AWEA's position on climate change legislation.	EDP Renewables (EDP Group's subsidiary for renewable energy generation) is a member of the Board of Directors.
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	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?
		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	
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 and chairs the Board.
Associação de Energias Renováveis (APREN)	Consistent	APREN is a non-for-profit association that promotes the rational use of energy and renewable energy generation and energy efficiency services. EDP supports APREN's position on climate change legislation.	EDP 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 2016:

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 2016, EDP participated in 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 2ºC climate objective. EDP, through the “Rescale LCTPI”, is working on solutions to accelerate the deployment of RES and the transition to a low-carbon electricity system. The company is participating in three action plans to address some of the crucial barriers for renewables. 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.

CEBDS- Conselho Empresarial Brasileiro para o Desenvolvimento Sustentável (Brazilian Business Council for Sustainable Development): CEBDS is a non-for-profit civil association, member of the World Business Council for Sustainable Development global network. CEBDS recognizes the importance of climate change management for Brazilian business sector and its mission is to maintain an adequate forum so that Companies raise awareness about their role in tackling climate change, supporting the development of strategies and addressing risks and opportunities related to the GHG emissions reduction. EDP participates actively sharing experiences that contribute to raising awareness and knowledge regarding energy sector and climate change related issues.

In Brazil, EDP is also involved with: i) “Empresas Pelo Clima” (Businesses for Climate), a business platform whose goal is to mobilize, engage and involve corporate leaderships for managing and reducing GHG emissions, managing climate risks, and suggesting public policies and positive incentives in the context of climate change. Case studies and sharing of experience are mostly important for the Group discussions, which aims to enable engagement among different sectors and companies and disseminate Best Practices through benchmarking. EDP participates mostly by sharing experience and case studies. Examples include EDP´s project ClimaGrid on electricity distribution network climate resilience. The barriers and challenges faced by the Company are also explored during the meetings, so that common solutions may come up quicker and coherently within different sectors context; ii) The ONU´s Global Compact Brazilian Network, the 4th largest local network. EDP 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. This group is aligned with the International platform Caring For Climate.

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 with: i) the company’s direct participation, at CEO level, in COP21 Climate Conference (December 2015); ii) the announcement of five ambitious climate protection targets addressing emissions reduction, renewable electricity generation, smart grids expansion, energy services for clients and clean technologies R&D (December 2015); iii) the announcement of a GHG reduction science based target (set in 2016 and approved by the Science Based Target Initiative in early 2017). 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 North America): Market Analysis, Government and Regulatory Affairs, and Communications Departments
- Brazil: “Área de Assuntos Regulatórios” (Regulatory Issues Department), Environmental Department and ”Innovability” area.

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

CC2.3g

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+2 (location-based)	100%	42%	2015	22532150	2030	Yes, and this target has been approved as science-based by the Science Based Targets initiative	Target officially approved by SBTi, expressed in absolute terms assuming average hydro and wind conditions. Group-wide reduction target for combined scope 1 and scope 2 emissions, for all GHGs, set using the Sectoral Decarbonization Approach - Power Sector and IEA 2DS Scenario. 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 Agenda and Business Plan 2016-2020. 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). EDP has also committed to Eurelectric's pledge to achieve a carbon-neutral power supply in Europe by 2050.
Abs2	Other: Scope 3 (relevant categories)	99.6%	25%	2015	14757046	2030	Yes, and this target has been approved as science-based by the Science Based Targets initiative	Absolute target officially approved by SBTi. Group-wide reduction target for the company's relevant upstream and downstream scope 3 emissions categories: C1 (purchased goods and services); C2 (capital goods), C3 (fuel and energy related activities); C4 (upstream transportation and distribution); C6 (business travel) and C11 (use of sold products). Together, these categories represented 99,6% of total scope 3 emissions in base year. Target achievement will be supported by the reduction of the Group's activities in the gas sector and by supplier engagement activities focused on supply chain indirect 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	0.355	2030	Yes, and this target has been approved as science-based by the Science Based Targets initiative	Intensity target officially approved by SBTi. Group-wide reduction target for combined scope 1 and scope 2 emissions, for all GHGs, set using the Sectoral Decarbonization Approach - Power Sector and IEA 2DS Scenario. 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 Agenda and Business Plan 2016-2020. 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). EDP has also committed to Eurelectric's pledge to achieve a carbon-neutral power supply in Europe by 2050.
Int2	Scope 1	99.9%	75%	Metric tonnes CO2e per megawatt hour (MWh)*	2005	0.628	2030	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. Applies to all geographies and generation activities and is embedded in the strategic options set out in our 2016-2020 Business Plan. Target was publicly announced by EDP in anticipation of the Paris Climate Conference and is fully aligned with our Science Based Target set in 2016 and formally approved by SBTi in early 2017.

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	42	No change	0	Absolute emissions reduction in target year, assuming average hydro and wind conditions. No change is anticipated in scope 3 emissions, since target pertains only to scope 1 and scope 2. EDP has an absolute scope 3 emissions reduction target formally approved by the SBTi (Abs2).
Int2	Decrease	54	No change	0	Absolute emissions reduction in target year, assuming average hydro and wind conditions. Although the target cover only scope 1, anticipated change in scope 1 + scope 2 emissions has been estimated considering scope 1 emissions that represent, on average, 97% of EDP's scope 1+scope 2. No change is anticipated in scope 3 emissions, since target pertains only to scope 1 and scope 2. EDP has an absolute scope 3 emissions reduction target formally approved by the SBTi (Abs2).

CC3.1d

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 one of EDP's 2016-2020 Business Plan strategic targets: to ensure 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	7%	32%	This is the first year of target monitoring (base year is 2015). Target completion is ahead of schedule because of the increase in the share of renewable electricity production in 2016 (66% of total generation). This was due to a particular wet year in the Iberian Peninsula (33% higher than the average hydrologic year), higher wind generation, lower than planned load factor of coal-fired power plants, shut-down of one coal unit in Spain and increased load factor of CCGT plants.
Abs2	7%	73%	This is the first year of target monitoring (base year is 2015). Target completion is ahead of schedule mainly due to 25% reduction in the volume of supplied gas (category C11), especially in the wholesale market. Emissions from capital goods (C2) increased due to 1,2 GW of renewable capacity additions to EDP's generation portfolio, in 2016.
Int1	7%	37%	This is the first year of target monitoring (base year is 2015). Target completion is ahead of schedule because of the increase in the share of renewable electricity production in 2016 (66% of total generation). This was due to a particular wet year in the Iberian Peninsula (33% higher than the average hydrologic year), higher wind generation, lower than planned load factor of coal-fired power plants, shut-down of one coal unit in Spain and increased load factor of CCGT plants.

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Int2	44%	75%	Target achievement is ahead of schedule due to the faster than anticipated growth in renewable generation installed capacity and to the favourable hydro and wind conditions in the Iberian Peninsula that led to an increase in the share of renewable electricity production in 2016 (66% of total generation).
RE1	73%	92%	Target achievement is ahead of schedule due to the faster than anticipated growth in renewable generation installed capacity.

CC3.1f

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 electricity. EDP's strategic focus on renewable generation growth led to a progressive decarbonization of the company' electricity generation portfolio. In 2016, EDP's installed capacity worldwide was 72% renewable and the company generated 66% of its electricity from renewable sources, thus delivering electricity with an average low carbon content. In addition, 100% certified renewable electricity is also part of EDP's product portfolio. In 2020, EDP foresees its generation portfolio to be, at least, 75% renewable based and its emissions intensity to be 30% below 2015 levels, putting the company well on track to meet its 2030 reduction commitment (-75% CO2 per TWh, compared to 2005) and Science Based Target (-55% scope 1 and 2 CO2 per TWh, compared to 2015).	Low carbon product	Low Carbon Investment (LCI) Registry Taxonomy	16%	More than 40% but less than or equal to 60%	Under its Business Plan 2016-2020, EDP will invest € 1.4 bn/year for the next five years, 70% of which on new renewable generation installed capacity. EDP committed to exceeding 75% of renewables in its overall installed capacity by 2020 and to reduce CO2 specific emissions by 75% before 2030 (compared to 2005 levels).
Group of products	Energy efficiency services and low carbon client solutions. 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: i) For residential clients: Installation of heat pumps, and compact smart energy management devices; ii) For	Avoided emissions	Low Carbon Investment (LCI) Registry Taxonomy	1%	More than 20% but less than or equal to 40%	EDP committed to provide customers with ongoing and target energy efficiency products and services delivering more than 1 TWh in accumulated savings by 2020 (compared with 2014).

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
	SMEs: Integrated energy management solutions; iii) For large corporate clients: In Iberia, the Save To Compete offering, which identifies energy reduction measures and funds it implementation through the induced savings. By the end of 2016, Save To Compete had induced accumulated client savings of 143 GWh, avoiding de emission of 60000 tons of CO2. In Brazil, through Soluções em Energia, EDP is also expanding its presence in energy efficiency and distributed generation services, having carried out projects leading to 45 GWh savings and about 3700 tCO2 avoided. EDP also offers solar PV micro-generation solutions for residential clients, delivering up to 25% reduction in electricity bill and allowing for 100% renewable electricity self-consumption. By the end of 2016, 9.3 MW of photovoltaic generation had been installed, avoiding the emission of 3900 ton of CO2. EDP is also promoting sustainable 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.					

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

CC3.3a

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	280	0
To be implemented*	24	5000000
Implementation commenced*	13	4900000
Implemented*	17	3130000
Not to be implemented	0	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) and Brazil (119 MW)	840000	Scope 1	Voluntary	50000000	935000000	16-20 years	>30 years	3 projects (2 in Portugal and 1 in Brazil). CO2 savings based on avoided thermal generation and respective 2016 emission intensity by geography. Monetary savings based on avoided thermal generation costs (coal and gas), assuming average renewables load factors over the past 5 years and on avoided CO2, assuming EU-ETS spot price as of Dec. 31st 2016, i.e., 6,54€/tCO2. Investment based on real or 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 (429 MW), Mexico (200 MW), Europe (22 MW) and Brazil (120 MW)	2260000	Scope 1	Voluntary	92700000	1156500000	11-15 years	21-30 years	4 groups of projects (USA, Mexico, several EU countries and Brazil). CO2 savings based on avoided thermal generation and respective 2016 emission intensity by geography. Monetary savings based on avoided thermal generation costs (coal and gas), assuming average renewables load factors over the past 5 years and on avoided CO2, assuming EU-ETS spot price as of Dec. 31st 2016, i.e., 6,54€/tCO2. Investment based on real or typical values of

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
									CAPEX for the different type of renewable power plants.
Energy efficiency: Processes	Investment in electricity distribution networks to reduce energy losses - Portugal, Spain and Brazil	30000	Scope 2 (location-based)	Voluntary	38500000	214500000	4-10 years	21-30 years	3 groups of projects (Portugal, Spain and Brazil). CO2 savings based on 2016 location-based grid emission factors by geography. Monetary savings based on consumption tariffs and on avoided CO2, assuming EU-ETS spot price as of Dec. 31st 2016, i.e., 6,54 €/tCO2. Investment equals CAPEX on new distribution grid infrastruture in 2016.

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 5 main areas: (1) Cleaner Energy; (2) Smarter Grids; (3) Customer-Focused Solutions; (4) Energy storage and (5) Data Leap.

Method	Comment
Internal price on 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 6.1 – Climate Change, p. 95-99 (.pdf file all pages)	https://www.cdp.net/sites/2017/00/5300/Climate Change 2017/Shared Documents/Attachments/CC4.1/CC4.1_EDP Annual Report 2016_Climate Change.pdf	EDP Annual Report 2016 (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.

Publication	Status	Page/Section reference	Attach the document	Comment
In voluntary communications	Complete	EDP Corporate Website – Climate Change Section (all pages)	https://www.cdp.net/sites/2017/00/5300/Climate Change 2017/Shared Documents/Attachments/CC4.1/CC4.1_EDP Website_ClimateChange.pdf	EDP Corporate website – Climate Change section. Includes EDP Group's climate commitments.
In voluntary communications	Complete	EDP Capital Markets Day 2016, p. 119-p.124 (.pdf file all pages)	https://www.cdp.net/sites/2017/00/5300/Climate Change 2017/Shared Documents/Attachments/CC4.1/CC4.1_EDP Capital Markets Day_2016.pdf	EDP Capital Markets Day 2016 (only relevant extract 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 – The Importance of Renewables, p. 41-43 (.pdf file all pages)	https://www.cdp.net/sites/2017/00/5300/Climate Change 2017/Shared Documents/Attachments/CC4.1/CC4.1_EDPR Annual Report 2016.pdf	EDP Renováveis Annual Report 2016 (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

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

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 renewable energy generation support schemes. EDP subsidiary for renewables (EDP Renováveis) is currently present in 12 countries, namely EU countries, North America and Brazil, with a portfolio of 10GW, and is exposed to a wide spread of regulatory frameworks. These support schemes - feed-in tariffs, tax credits, green certificates or capital incentives – are being revised or subject to revisions and changes in those markets,	Other: Reduced revenues	3 to 6 years	Direct	More likely than not	Medium	Potential financial impact of inherent risk across all EDP Renováveis' markets is estimated to be around 1% of the Group's EBITDA.	Risk is mitigated through an active strategy of diversification across multiple technologies, geographies, asset maturity and markets regulatory design, as well as through a close follow up of regulatory bodies and governments. EDP 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 and 10% in Brazil.	Major risk mitigation process is EDP Renováveis' diversification strategy. EDP Renováveis net average annual investment in wind and solar expansion in 2016-2020 is c. 620 M€, distributed 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
	driven both by budget constraints resulting from economic crisis and from structural factors related to the maturity cycle of many technologies (e. g. wind). Reduction in incentives for renewable electricity generation resulting from changes in these regulations can have a negative impact on EDP Renovaveis' revenues and access to capital to finance further growth.								

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 driven by climate change induced reduction in mean precipitation. Both IPCC (Intergovernmental Panel on Climate Change) and EEA (European Environment Agency) long-term scenarios forecast a relevant decrease in average annual precipitation in the Iberian Peninsula (10% to 30%, depending upon scenarios). Hydro generation is an important source of value for EDP, mainly in Portugal but also in Brazil. A structural decrease in precipitation, and thus in hydro generation, can negatively affect EDP's revenues.	Reduction/disruption in production capacity	>6 years	Direct	More likely than not	Medium-high	In a long term perspective (up to 2035), decrease in EDP hydro generation in Iberia associated with inherent risk can represent a potential maximum yearly loss of 50 to 100 M€.	EDP manages the risk mainly through a diversified generation portfolio in terms of technologies and geographies. EDP's Business Plan 2016-2020 investments in new generation capacity are also diversified: 5 GW additions (30% hydro, 65% wind, 5% solar) in Europe (45%), North America (50%) and Brazil (5%). Geographic diversification significantly reduces the risk, as structural reduction in precipitation is not likely to occur in all geographies and with same magnitude. EDP developed	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 (net investment) 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
								a specific Water Risk Map (initial scope Iberia, currently being expanded to all geographies) and conducts a periodic assessment of generation assets exposure to water stress areas, using high level mapping tools (WBCSD Global Water Tool and WRI Aqueduct) and local level analysis (site specific data from local authorities). All new power plant project valuation considers sensitivities to lower inflows scenarios, thus enabling informed decision making.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
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 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	Other: Disruption in distributed electricity	>6 years	Direct	More likely than not	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 financial implications is currently available for EDP's distribution activities in Spain and Brazil.	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 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	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 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
	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.							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 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 takes part of the Compensation Insurance Consortium, a State-run	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								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 detects thunder storms, allowing real time intervention in the prevention of future grid shutdowns.	

CC5.1c

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Changing consumer behavior	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	3 to 6 years	Direct	More likely than not	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). In Brazil, EDP Soluções em Energia also provides energy efficiency services mainly for businesses in the liberalised market. By the end of 2016,	In 2016, EDP invested a total of 63 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 the Iberian Peninsula and Brazil.							through energy efficiency services and solutions in decentralised renewable generation, EDP had induced accumulated client savings of over 194 GWh since 2014, thus avoiding c. 40 ktCO2.	

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 changes in 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	Investment opportunities in new renewable generation	Investment opportunities	3 to 6 years	Direct	Very likely	High	EDP Renováveis (EDP subsidiary for	Planned investment in new generation capacity in	EDP's subsidiary EDP Renováveis will invest, on

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	capacity, in line with the electricity sector's crucial role in the transition to a decarbonized economy. Higher regulatory visibility in the US (with Production Tax Credits extended and clarified until 2020, with no impact from the new US Government Administration climate change policy stance), as well as European Union's Climate-Energy 2030 policy commitments (that entail the need to strengthen Member State's renewable electricity generation capacity) represent a major investment opportunity. EDP has a key						renewable energies) EBITDA is expected to grow 8% CAGR according to the Business Plan 2016-2020.	EDP's 2016-2020 Business Plan is entirely based on renewables. We expect to install c.700 MW/year, i.e., a total 3.5 GW capacity additions - 90% wind, 10% solar, 65% of which in North America, allowing the company to maximize the investment opportunity brought about by the new regulatory context in this geography.	average, c.620 M€/year in visible growth opportunities, keeping the USA and wind onshore at the core of the growing strategy.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	competitive advantage in seizing renewables growth opportunities, given the large pipeline of projects of its subsidiary for renewables (EDP Renováveis) in the USA and several EU countries.								

CC6.1b

Please describe your 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 temperature extremes	Increased electricity demand for operation of HVAC equipment. Higher temperatures	Increased demand for existing products/services	>6 years	Direct	More likely than not	Medium	EDP carried out an internal study for estimating the potential increase in electricity demand driven by temperature	In addition to the strong focus on generation capacity expansion, 30% of total investment included in	According to the company's Business Plan 2016-2020, EDP will invest a total of € 1.4 bn/year (net investment) in

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	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).						extremes. The main outcome of this study, recently updated, shows the excess demand to be in the order of 2 GWh/day for each ºC decrease in Winter and 1.5 GWh/day for each ºC increase in Summer. Assuming average temperature extreme growths in the range +/- 2 to 3ºC in the Iberian Peninsula and the current market share, the positive impact is estimated in the range of 0.5-1% of EBITDA in 2020.	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 2016-2020 period, 30% of which in distribution networks and supply business.

CC6.1c

Please describe your 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 behavior	Business opportunity in new energy 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 crucial to decarbonize the world economy and the sector is set to undergo a major transformation towards renewable and decentralized	New products/business services	1 to 3 years	Direct	Virtually certain	Medium-high	In 2016, the EDP Group generated around EUR 93 million revenues from energy efficiency products and services (+16% than in 2015). In Brazil, analysts estimate the global value of the energy services market amount to 930 M€ in 2018.	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 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 R&D on clean energy technologies, energy efficiency and smart grids,	According to the company's Business Plan 2016-2020, EDP plans to invest more than EUR 300 million in the development of decentralised renewable generation solutions, energy efficiency services for clients and smart grids.

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.							by investing EUR 200 million in innovative projects by 2020. Anticipating the new electricity sector paradigm (development of infrastructure and applications of smart grids focused on customers and operations, distributed generation, prosumers), 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 services that avoid emissions in final energy consumption. In order to foster	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								the Brazilian market potential for energy services, in late 2015 EDP Brasil acquired the company APS - Soluções em Energia (which is now part of EDP Soluções em Energia - EDP Energy Solutions), assuming its commitment of expanding its presence in energy efficiency services. Also in 2016, EDP Brasil entered the photovoltaic distributed generation market through a new company EDP Solar.	

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 changes in 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 Fifth Assessment Report (AR5 - 100 year)
CH4	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	IPCC Fifth Assessment Report (AR5 - 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 and market based)	263	kg CO2 per MWh	Electricity national emission factor - Portuguese Regulator (ERSE) and TSO (REN)
Other: Electricity Spain (location and market based)	256	kg CO2 per MWh	Electricity national average emission factor - Spanish TSO (REE)
Other: Electricity Brazil (location and market based)	82	kg CO2 per MWh	Electricity national emission factor – Brazil Minister of Science and technology
Other: Electricity USA - offices (location and market based)	566	kg CO2 per MWh	Electricity emission factor of the states in which EDP is operating
Other: Electricity USA - wind farms (location and market based)	539	kg CO2 per MWh	Electricity emission factor of the states in which EDP is operating
Other: Electricity France (location and market based)	57	kg CO2 per MWh	Electricity national emission factor - IHS-CERA, Global Insight
Other: Electricity Belgium (location and market based)	116	kg CO2 per MWh	Electricity national emission factor - IHS-CERA, Global Insight
Other: Electricity Poland (location and market based)	888	kg CO2 per MWh	Electricity national emission factor - IHS-CERA, Global Insight
Other: Electricity Romania (location and market based)	486	kg CO2 per MWh	Electricity national emission factor - IHS-CERA, Global Insight
Other: Electricity Italy (location and market based)	302	kg CO2 per MWh	Electricity national emission factor - IHS-CERA, Global Insight
Other: Electricity UK (location and market based)	246	kg CO2 per MWh	Electricity national emission factor - IHS-CERA, Global Insight

Further Information

Base year data refers to our first Group-wide complete GHG inventory (scope 1, 2 and 3 emissions). Nevertheless, base year for our active reduction targets are 2005 (scope 1 target) and 2015 (Science Based Target for scope 1, scope 2 and scope 3). 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. Scope 2 emission results are the same for location-based and market-based methods because almost all electricity consumed by EDP and included in this scope (electricity consumption in office buildings, renewable power stations self-generation and electricity losses in distribution networks) was generated by the EDP Group and therefore emissions are accounted for under scope 1. Exceptions are markets where EDP distributes more electricity than it generates (Portugal and Brazil) and markets where EDP does not have supply activities and, therefore, consumes electricity supplied by third parties (USA and European countries other than Portugal and Spain). In such cases, as no information on individual power generators/suppliers was available, a single emission factor for each geography has been calculated, accounting for the share of grid electricity not generated by EDP. This emission factor has been applied for both location-based and market-based calculations.

Page: CC8. Emissions Data - (1 Jan 2016 - 31 Dec 2016)

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

18931326

CC8.3

Please describe your approach to reporting Scope 2 emissions

Scope 2, location-based	Scope 2, market-based	Comment
We are reporting a Scope 2, location-based figure	We are reporting a Scope 2, market-based figure	Scope 2 emission results are the same for location-based and market-based methods because almost all electricity consumed by EDP and included in this scope (electricity consumption in office buildings, renewable power stations self-generation and electricity losses in distribution networks) was generated by the EDP Group and therefore, in accordance with The GHG Protocol guidance, such emissions are accounted for under scope 1. Exceptions are markets where EDP distributes more electricity than it generates (Portugal and Brazil) and markets where EDP does not have supply activities and, therefore, consumes electricity supplied by third parties (USA and European countries other than Portugal and Spain). In such cases, as no information on individual power generators/suppliers was available, a single emission factor for each geography has been calculated, accounting for the share of grid electricity not generated by EDP. This emission factor has been applied for both location-based and market-based calculations.

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
564915	564915	Scope 2 emission results are the same for location-based and market-based methods because almost all electricity consumed by EDP and included in this scope (electricity consumption in office buildings, renewable power stations self-generation and electricity losses in distribution networks) was generated by the EDP Group and therefore, in accordance with The GHG Protocol guidance, such emissions are accounted for under scope 1. Exceptions are markets where EDP distributes more electricity than it generates (Portugal and Brazil) and markets where EDP does not have supply activities and, therefore, consumes electricity supplied by third parties (USA and European countries other than Portugal and Spain). In such cases, as no information on individual power generators/suppliers was available, a single emission factor for each geography has been calculated, accounting for the share of grid electricity not generated by EDP. This emission factor has been applied for both location-based and market-based calculations.

CC8.4

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

No

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

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 (reasonable assurance level). EDP considers as an acceptable figure an uncertainty of less than 2%.
Scope 2 (location-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) and distribution grids. There is no significant difference in data accuracy between these installations. Values are fully audited (reasonable assurance level). EDP considers as an acceptable figure an uncertainty of less than 2%.

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
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) and distribution grids . There is no significant difference in data accuracy between these installations. Values are fully audited (reasonable assurance level). 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

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2017/00/5300/Climate Change 2017/Shared Documents/Attachments/CC8.6a/CC8.6_EDP Annual Report 2016_Scope 1.pdf	EDP Annual Report 2016, p. 95-99 (Climate Change section), p. 135 (Environmental Indicators Table), p. 433 (GRI Sustainability	ISAE3000	100

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
				Reporting Table) and p.462-466 (Independent Assurance Report). Only relevant extract attached. Complete document is over 5MB. (.pdf file all pages).		

CC8.6b

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

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission

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

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Location-based	Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2017/00/5300/Climate Change 2017/Shared Documents/Attachments/CC8.7a/CC8.7_EDP Annual Report 2016_Scope 2.pdf	EDP Annual Report 2016, p. 95-99 (Climate Change section), p. 135 (Environmental Indicators Table), p. 433 (GRI Sustainability Reporting Table) and p.462-466 (Independent Assurance Report). Only relevant extract attached. Complete document is over 5MB. (.pdf file all pages).	ISAE3000	100
Market-based	Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2017/00/5300/Climate Change 2017/Shared Documents/Attachments/CC8.7a/CC8.7_EDP Annual Report 2016_Scope 2.pdf	EDP Annual Report 2016, p. 95-99 (Climate Change section), p. 135 (Environmental Indicators Table), p. 433 (GRI Sustainability Reporting Table) and p.462-466 (Independent Assurance Report). Only relevant extract attached. Complete document is over 5MB. (.pdf file all pages).	ISAE3000	100

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 2016 – Performance chapter and Sustainability Reporting appendix.
Year on year change in emissions (Scope 2)	Verification under third party independent assurance of EDP Annual Report 2016 – Performance chapter and Sustainability Reporting appendix.
Year on year change in emissions (Scope 3)	Verification under third party independent assurance of EDP Annual Report 2016 – Performance chapter and Sustainability Reporting appendix.
Year on year emissions intensity figure	Verification under third party independent assurance of EDP Annual Report 2016 – 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 2016 – Performance chapter and Sustainability Reporting appendix.
Renewable energy products	Verification under third party independent assurance of EDP Annual Report 2016 – Performance 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

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)

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	8834978
Spain	4908283
Brazil	5186493
United States of America	1276
Rest of world	293

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)
Electricity generation, distribution and supply	18925433
Gas distribution and supply	5893

CC9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude

CC9.2c

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

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	18918201
CH4	4984
N2O	269

GHG type	Scope 1 emissions (metric tonnes CO2e)
SF6	7872

CC9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
Stationary combustion in thermal power plants	18900401
Mobile combustion in company fleet	17638
SF6 fugitive emissions	7872
Natural gas self-consumption	483
Natural gas leaks in distribution grids	4933

Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)

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	348489	348489	5661829	0
Spain	0	0	443081	0
Brazil	191125	191125	3575450	0
United States of America	17496	17496	32369	0
Rest of world	7804	7804	15188	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, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Electricity generation, distribution and supply	564915	564915
Gas distribution and supply	0	0

CC10.2b

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

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

CC10.2c

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

Activity	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Electricity losses in distribution networks	539614	539614
Power plants self-consumption	23737	23737
Electricity consumption in office buildings	1563	1563

Further Information

Scope 2 emission results are the same for location-based and market-based methods because almost all electricity consumed by EDP and included in this scope (electricity consumption in office buildings, renewable power stations self-generation and electricity losses in distribution networks) was generated by the EDP Group and therefore, in accordance with The GHG Protocol guidance, are accounted for under scope 1. Exceptions are markets where EDP distributes more electricity than it generates (Portugal and Brazil) and markets where EDP does not have supply activities and, therefore, consumes electricity supplied by third parties (USA and European countries other than Portugal and Spain). In such cases, as no information on individual power generators/suppliers was available, a single emission factor for each geography has been calculated, accounting for the share of grid electricity not generated by EDP. This emission factor has been applied for both location-based and market-based calculations. All electricity consumed in our gas distribution and supply business is generated by the Group and therefore no scope 2 emissions are accounted for in this Business Unit.

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	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

61274196

CC11.3a

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

Fuels	MWh
Bituminous coal	47106042
Natural gas	10877784
Diesel/Gas oil	63971
Other: Fuel oil	103502
Blast furnace gas	2479248
Coke oven gas	312418
Oxygen steel furnace gas	262322
Other: Fuels for mobile combustion (Gasoline, diesel oil, alcohol, LNG)	68909

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	Emissions factor (in units of metric tonnes CO2e per MWh)	Comment
No purchases or generation of low carbon electricity, heat, steam or cooling accounted with a low carbon emissions factor	0	0	Most of the electricity consumed by EDP and included in scope 2 (electricity consumption in office buildings, renewable power stations self-generation and electricity losses in distribution networks) is generated by the EDP Group and therefore, in accordance with The GHG Protocol guidance, such emissions are accounted for under scope 1. They are excluded from scope 2 in order to avoid double counting. Exceptions are markets where EDP distributes more electricity than it generates (Portugal and Brazil) and markets where EDP does not have supply activities and, therefore, consumes electricity supplied by third parties (North America and European countries other than Portugal and Spain). In such cases, as no information on individual power generators/suppliers was available, a single emission factor for each geography has been calculated, accounting for the share of grid electricity not generated by EDP. This emission factor has been applied for both location-based and market-based calculations. No specific low carbon emission factor was applied.

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
9727917	3877257	68772482	45611198	5641031	Total electricity consumed: office buildings, renewable power stations self-consumption and distribution grid losses. Consumed electricity purchased: only electricity not generated by EDP. Applies to geographies where EDP distributes more electricity than it generates (Portugal and Brazil) and markets where EDP does not have electricity supply activities (North America and Europe except Iberia). Consumed renewable electricity produced by company: for geographies where EDP has electricity supply activities, the % of renewable electricity in EDP generation mix in 2016 was considered. In all other geographies, as no renewable origin certification instruments where purchased, it was assumed zero.

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?

Decreased

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	10	Decrease	Emission reduction activities implemented in 2016 (entry into operation of 1 255 MW new renewable electricity generation capacity and reduction of energy losses in distribution networks, as reported in CC 3.3b) contributed significantly to the reduction of EDP's S1 and S2 emissions. Total emissions reduction from these activities amounted to 2333600 tCO2e, which represents a 10% decrease in EDP's combined S1 + S2 emissions from 2015: (2333600/22532150)*100 = 10%
Divestment	8	Decrease	In 2016, EDP shut down one coal-fired unit in its Soto power plant (Spain). This led to an estimate reduction of 1873769 tCO2e in S1 emissions, which represents a 8% decrease in EDP's combined S1 + S2 emissions from 2015: (1873769/22532150)*100 = 8%.
Acquisitions	0	No change	No change in combined scope 1 and scope 2 emissions from previous year resulting from acquisitions.
Mergers	0	No change	No change in combined scope 1 and scope 2 emissions from previous year resulting from mergers.
Change in output	10	Decrease	In 2016, EDP increased its total electricity generation by 6,3 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) an additional 2269630 tCO2e, which represent a 10% increase in EDP's combined S1 + S2 emissions from 2015: (2269630/22532150)*100 = 10%.
Change in methodology	0	No change	No change in combined scope 1 and scope 2 emissions from previous year resulting from changes in methodology.
Change in boundary	0	No change	No change in combined scope 1 and scope 2 emissions from previous year resulting from changes in boundary.
Change in physical operating conditions	8	Decrease	In 2016, favourable weather conditions (hydroelectric capability index IPH = 1,33 in Iberia) increased electricity generation from EDP's renewable assets. Reduced resort to the company's thermal generation fleet reduced S1 emissions by 1886666 tCO2e compared with an average hydrological year, representing a 8% reduction in EDP's combined S1 + S2 emissions from 2015: (1886666/22532150)*100 = 8%.
Unidentified	0	No change	No change in combined scope 1 and scope 2 emissions from previous year resulting from unidentified reasons.
Other	0	No change	No change in combined scope 1 and scope 2 emissions from previous year resulting from other reasons.

CC12.1b

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
0.001336	metric tonnes CO2e	14595164000	Location-based	8	Decrease	Gross S1 + S2 emissions decreased by 13% despite a 10% growth in electricity output compared to 2015. This was the result of the combined effect of emission reduction activities, shut down of a coal-fired unit in Spain and weather conditions in Iberia particularly favourable to renewable generation. In 2016, EDP's consolidated revenue decreased by 6% compared to 2015, thus rendering a 8% decrease 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
0.280	metric tonnes CO2e	megawatt hour (MWh)	69633892	Location-based	21	Decrease	Gross S1 + S2 emissions decreased by 13% despite a 10% growth in electricity output compared to 2015. This was the result of the combined effect of emission reduction activities, shut down of a coal-fired unit in Spain and weather conditions in Iberia particularly favourable to renewable generation. Metric denominator includes net electricity generation and thermal energy production in co-generations power plants.

Further Information

2015 emissions were recalculated since EDP's last year's response to CDP, in line with audited values published in the company's Annual Report 2016. Recalculation was due to facility scope adjustment (scope 1) and the need to avoid double counting (scopes 2 and 3).

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	Fri 01 Jan 2016 - Sat 31 Dec 2016	75196	18409433	13720498	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 2016, only one CHP plant in Portugal got allowances allocated for free. The power plants covered by the EU ETS emitted about 13,7 Mton of CO2 in 2016, 24% less than in 2015, which was explained by an increase in hydropower and CCGT power plants generation.
In 2016, 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).

CC13.2

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

No

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 CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits canceled	Purpose, e.g. compliance

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	54548	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%	Purchase of chemicals products and use of municipality water. 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
Capital goods	Relevant, calculated	286943	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	7091244	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: IPCC Assessment Report 4 (2007).	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.
Upstream transportation and distribution	Relevant, calculated	303684	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%	Transportation of fuels (coal, natural gas, forest biomass, fuel oil and diesel) used by EDP for electricity generation.

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).		
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	10522	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 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.
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	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.

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).		
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 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).	0.00%	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.
Processing of sold products	Not relevant, explanation provided	0	Not applicable	0.00%	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	Relevant, calculated	4722204	Life Cycle Assessment (LCA) study performed with Simapro software. Scope and emissions	100.00%	Use of natural gas sold by EDP to clients.

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).		
End of life treatment of sold products	Not relevant, explanation provided	0	Not applicable	100.00%	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	90.00%	EDP did not use downstream leased assets in the reporting year.
Franchises	Not relevant, explanation provided	0	Not applicable	0.00%	EDP did not have franchised activities in the reporting year.
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	Not applicable	0.00%	EDP has no emissions from upstream or downstream activities other than the ones reported in categories C1 to C15.

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
Other (downstream)	Not relevant, explanation provided	0	Not applicable	0.00%	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

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)
Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2017/00/5300/Climate Change 2017/Shared	EDP Annual Report 2016, p. 95-99 (Climate Change	ISAE3000	100

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)
			Documents/Attachments/CC14.2a/CC14.2_EDP Annual Report 2016_Scope 3.pdf	section), p. 135 (Environmental Indicators Table), p. 433 (GRI Sustainability Reporting Table) and p.462-466 (Independent Assurance Report). Only relevant extract attached. Complete document is over 5MB. (.pdf file all pages).		

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	Change in output	2.8	Increase	Although the use of chemical products for the power plants decreased, the slight increase in this category was due to a higher use of municipal water in Brazil's Pecém coal power plant.
Capital goods	Acquisitions	14.4	Increase	In 2016, EDP added 1,2 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)	Change in physical operating conditions	7.1	Decrease	Several factors influenced this decrease: the high hydrologic index in the Iberian Peninsula (33% above the average year), leading to a lower use of fossil fuel power plants and the shutdown of one coal plant's unit in Spain.
Upstream transportation & distribution	Other: Emission factors	21.1	Decrease	Lower emission factors in all geographies where EDP has distribution activities.
Business travel	Change in output	10.8	Increase	In 2016, 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 output	24.9	Decrease	Decrease by 25% in the volume of gas supplied (category C11), especially in the wholesale market.

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 engagements and measures of success

Supplier engagement
i) Methods
In 2016, EDP developed its sustainable supply chain management plan. New structures and methodologies addressing the extension of the risk and sustainability analysis to the whole supply chain led to more in-depth procedures and initiatives, notably:
. A new sustainable purchasing area at EDP's corporate website;
. The prototyping of new risk assessment and supplier segmentation methodologies;
. The expansion of training, consultation and dialogue activities with suppliers;
. The drafting of a corporate internal procedure Protocol.

Throughout the year, EDP held suppliers' workshops and regular meetings where, amongst other, sustainability issues where addressed, including climate change and GHG emissions. In September, EDPartners Supplier Relationship Workshop was attended by some 200 suppliers.

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.

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

ii) Prioritization
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. Engagement with suppliers on climate 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 2016, 1406 out of the 2260 suppliers holding sales above EUR 75 thousand (excluding fuel suppliers) where screened. Share of suppliers with EMS certification remained at 30%. The same proxy is used for fossil fuel supply, where 82% of suppliers have EMS certified according to ISO 14001.

Customer engagement
i) Methods:
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: energy efficiency services; decentralized renewable micro-generation; sustainable mobility; and supply of 100% certified renewable electricity. By the end of 2016, energy efficiency services for large corporate clients in Iberia under Save To Compete programme had induced accumulated client savings of 143 GWh, avoiding de emission of 60000 tons of CO2.

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: plan to promote electricity consumption efficiency (PPEC), a voluntary program based on national tenders, managed by the Portuguese regulatory authority (ERSE), encouraging the adoption of more efficient habits and equipment (e.g. Light bulb switching, Smart plugs, Efficient street lighting, High efficiency motors, among others). In 2016, new tender EDP Group had 19 measures approved. It is estimated that the implementation of these measures will allow for savings of roughly 1157 GWh and a reduction of 428 kt of CO2, taking into account the lifetime of the equipment.

. In Spain: Cuota Ahorro project (implementation of energy saving opportunities in business segment) and ENRIMA project (integrated energy management system for buildings).
. 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
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: 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 is measured mainly through induced energy and GHG savings.
EDP's energy efficiency services delivered accumulated client savings of over 194 GWh and avoided 32,8 ktCO2e since 2014, totalling EUR 93 million in revenues in 2016.

CC14.4b

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

Type of engagement	Number of suppliers	% of total spend (direct and indirect)	Impact of engagement
Other: Supplier screening	1406	30%	Numbers refer to 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. Suppliers are screened 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.

CC14.4c

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 2021 if possible).

Year ending	Date range
2015	Thu 01 Jan 2015 - Thu 31 Dec 2015
2016	Fri 01 Jan 2016 - Sat 31 Dec 2016
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)
2015	24128	63350	21518097	0.340
2016	25067	69641	18900401	0.271
2020	28362	82578	18699195	0.226

Further Information

Projections for 2020 are based on the most recent EDP's Business Plan 2016-2020, assuming average hydrologic year.

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)
2015	720	3028	3707933	1.225
2016	720	4432	5179903	1.169
2020	720	3894	3894212	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)

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)

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

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)
2015	1797	5599

Year ending	Nameplate capacity (MW)	Production (GWh)
2016	1745	4448
2020	1746	7520

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)
2015	84	222
2016	204	666
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)
2015	0	0	0	0
2016	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)
2015	720	3028	3707933	1.225
2016	720	4432	5179903	1.169
2020	720	3894	3894212	1.000

EU2.1l

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 CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2015	2601	8849	3707933	0.419
2016	2670	9546	5179903	0.543
2020	3051	13834	3894212	0.281

Further Information

Projections for 2020 are based on the most recent EDP's Business Plan 2016-2020, assuming average hydrologic year.

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

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)
2015	1180	9657	8683899	0.899
2016	1180	8082	7316936	0.905
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)

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)
2015	2039	2584	1010343	0.391
2016	2039	3602	1386003	0.385
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

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)
2015	5555	9090
2016	5934	15761
2020	6939	15727

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)
2015	1247	1991
2016	1251	3047
2020	1251	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)
2015	24	505	123032	0.244
2016	24	477	115971	0.243
2017	24	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)
2015	0	0	0	0
2016	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)
2015	3243	12745	9817274	0.770
2016	3243	12162	8818910	0.725
2020	3244	10840	8323505	0.768

EU2.1l

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 CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2015	10045	23826	9817274	0.412
2016	10428	30969	8818910	0.285
2020	11429	29479	8323505	0.282

Further Information

Projections for 2020 are based on the most recent EDP's Business Plan 2016-2020, assuming average hydrologic year.

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

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)

EU2.1b

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

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

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)

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)
2015	1473	3225
2016	1541	3257
2020	2078	4854

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)
2015	0	0	0	0
2016	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)
2015	0	0	0	0
2016	0	0	0	0
2020	0	0	0	0

EU2.1l

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 CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2015	1473	3225	0	0
2016	1541	3257	0	0
2020	2078	4854	0	0

Further Information

Projections for 2020 are based on the most recent EDP's Business Plan 2016-2020

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)
2015	1463	8946	7508797	0.839
2016	1224	5150	4209959	0.817
2020	1224	7145	5993904	0.839

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

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)
2015	1698	1082	448837	0.415
2016	1698	1640	641026	0.391
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

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)
2015	426	793
2016	426	930
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)
2015	2194	4847
2016	2194	4926
2020	2194	5125

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)
2015	25	680	35256	0.052
2016	25	647	50603	0.078
2020	25	673	34698	0.052

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)
2015	0	0	0	0
2016	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)
2015	3186	10707	7992891	0.746
2016	2946	7436	4901588	0.659
2020	2946	8909	6481478	0.727

EU2.1l

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 CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2015	5806	16347	7992891	0.489
2016	5567	13293	4901588	0.369
2020	5567	14806	6481478	0.438

Further Information

Projections for 2020 are based on the most recent EDP's Business Plan 2016-2020, assuming average hydrologic year.

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

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)

EU2.1b

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

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

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)

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)
2015	4203	11103
2016	4861	12576
2020	6237	19604

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)
2015	0	0	0	0
2016	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)
2015	0	0	0	0
2016	0	0	0	0
2020	0	0	0	0

EU2.1l

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 CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2015	4230	11103	0	0
2016	4861	12576	0	0
2020	6237	19604	0	0

Further Information

Projections for 2020 are based on the most recent EDP's Business Plan 2016-2020.

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		54%	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
Renewable electricity's contribution to EBITDA		63%	2020	Includes all EDP Renewables plants (wind and solar) and hydropower plants in Portugal and Brazil. Figures are based on EDP's Business Plan 2016-2020

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	4800000000	70.00%	2020	Total planned capex of EDP Renewables (net investment) according to the current Business Plan (2016-2020)

Further Information

CDP