

Investor CDP 2015

Climate Change Information Request

0. Introduction to the document

EDP responds to the CDP since 2009. This activity has helped evolve upon our Climate Change knowledge, mitigation, adaptation, emissions strategy, targets and projects.

We hope that you enjoy reading our CDP answer as much as we have enjoyed doing it. We attach a pdf file in order to provide a friendlier working version.

Please feel free to give us your feedback on any issue (luisa.serra@edp.pt).

0. Introduction to CDP

Please give a general description and introduction to your organization

Following our full disclosure policy, all information about Energias de Portugal (EDP) can be accessed in www.edp.pt. In addition EDP strongly recommends the consultation of the 2014 Annual Report.

EDP has a relevant presence in the world energy outlook, being present in 14 countries, with more than 9.7 million electricity customers and 1.3 million gas customers and almost 12,000 employees around the world. On December 31, 2014, EDP had an installed capacity of 22,5GW, generating 60.2TWh, of which 73% comes from renewable sources.

EDP is a vertically integrated utility company. It is the largest generator, distributor and supplier of electricity in Portugal, the third largest electricity generation company in the Iberian Peninsula and one of the largest gas distributors in the Iberian Peninsula.

EDP is one of the largest wind power operators worldwide with facilities for energy generation in the Iberian Peninsula, the United States, Canada, Brazil, France, Belgium, Italy, Poland and Romania and is developing wind projects in the United Kingdom and Mexico. Additionally, EDP generates solar photovoltaic energy in Portugal, Romania and the United States. In Brazil, EDP is the fourth largest private operator in electricity generation, has 2 electricity distribution concessions and is the third largest private supplier in the liberalized market.

2014 in short figures:

| | |
|------------------------|--------------|
| Turnover | 16,294 M€ |
| Gross Operating Profit | 3,642 M€ |
| Net profit | 1,264 M€ |
| Employees | 12,179 |
| Net assets | 42,873 M€ |
| Equity | 11,969 M€ |
| Net debt | 17,042 M€ |
| ISIN | PTEDPOAM0009 |
| SEDOL | 4103596 |

EDP's vision is to be a global energy providing company, leader in creating value, innovation and sustainability.

EDP's values are: initiative, innovation, trust, excellence and sustainability.

EDP is strongly committed with Sustainability, People, Results and Clients.

In what regards Climate Change EDP is committed to reduce in a sustainable manner the specific greenhouse gas emissions of the energy it produces. EDP is also committed to promote energy efficiency and the access to energy.

0. Reporting year

01.01.2014 – 31.12.2014

0. Country list configuration

Please select the countries for which you will be supplying data. This selection will be carried forward to assist you in completing your response

Portugal

Spain

USA

Brazil

RoW (Rest of the World- France, Belgium, UK, Italy, Poland and Romania)

0. Currency selection

Euro

Management

CC1. Governance

Group and Individual Responsibility

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

Board or individual/Sub set of the board or other committee appointed by the board.

CC 1.1a. Please identify the position of the individual or name of the committee with this responsibility

i. identify the job title of the individual

ii. description of his position within the corporate structure

Rui Teixeira is a member of EDP's Corporate Executive Board. He has formal responsibility over electric generation and sustainability issues.

He is also a Member of the Board of Directors of several subsidiaries of the Company's Group.

Individual Performance

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

Yes

If yes: 1.2a Please complete the table

| Who is entitled to benefit from these incentives? | The type of incentives | Incentivized performance indicator | Comment |
|---|------------------------|------------------------------------|--|
| Board/Executive Board | Monetary reward | Emission reduction target | Indicator is monitored through EDP's performance in the Dow Jones Sustainability index. This includes three performance vectors: economic, environmental and social. CO2 emissions reduction is included in the environmental vector. The methodology is based on the Dow Jones Sustainability Index. Depending on the Dow Jones Sustainability index performance the Board is entitled to a monetary reward. |
| Environment/sustainability managers | Monetary reward | Emission reduction target | Indicator is monitored through EDP's performance in the Dow Jones Sustainability index. This includes three performance vectors: economic, environmental and social. CO2 emissions reduction is included in the environmental vector. The methodology is based on the Dow Jones Sustainability Index. The employees entitled to this benefit are: <ul style="list-style-type: none"> - The Corporate Sustainability Department - Members of Financial Control Department of EDP - Some colleagues from the BUs working in sustainability. Depending on the Dow Jones Sustainability index performance these employees are entitled to a monetary reward. |

| | | | |
|----------------------|-----------------|---------------------------|---|
| Employees EDP Brazil | Monetary reward | Emission reduction target | <p>Indicator is monitored through EDP Brazil's performance in ISE BOVESPA index that includes CO2 emission reduction in its environmental vector evaluation.</p> <p>All employees of EDP Brazil have this incentivized performance indicator factored into their individual KPI's.</p> <p>Depending on EDP Brazil's performance in ISE Bovespa all employees are entitled to a monetary reward.</p> |
|----------------------|-----------------|---------------------------|---|

CC2. Strategy

Risk Management Approach

CC 2.1 Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities.

Integrated into multidisciplinary companywide risk management processes

If “integrated into company-wide risk management process”, “a specific climate change risk management process”, or “a process that forms part of the company’s overall approach to governance/compliance” are selected:

2.1a Please provide further details on your risk management procedures with regard to climate change risks and opportunities

| Frequency of monitoring | to whom are the results reported | Geographical areas considered | How far into the future are risks considered | Comment |
|-------------------------|---|---|--|---|
| Annually | Individual/Sub-set of the Board or committee appointed by the Board | Portugal Spain Brazil USA Rest of the World | >6 years | <p>Assessment of both risk and opportunities related to Climate Change considers a time range from 1 to 100 years and addresses possible impacts on EDP’s project investment, operation and business plan.</p> <p>PROJECT INVESTMENT – Investment in renewable generation always goes through a detailed resource evaluation encompassing scenario analysis: Price volatility and changes due to volume fluctuations are included in all wind and hydro investments evaluation.</p> <p>OPERATION – Business Units assess their exposure to Climate Change through the ClimEDP project.</p> <p>BUSINESS PLAN – EDP current business plan (2014-2017) underwent scenario analyses featuring climate change effects.</p> |

2.1b Please describe how your risk and opportunity identification processes are applied at both company and asset level

Company level:

The Executive Board is responsible for the Risk Management Policy and decides upon risk appetite, overall limits and management. The Corporate Risk Management Dep. is responsible for assessment (global risk map was updated in 2014), key indicators, specific risks evaluation and support to the Board in Crises Management and Business Continuity.

Corporate risk management encompasses Strategic, Business, Market, Operational, Credit and Regulatory Risks. Climate Change (CC) risks are dealt within the Strategic and Operational categories, through an on-going project, ClimEDP, in which impacts and management actions, including adaptation, are addressed. Strategic CC risks are then evaluated by the Corporate Risk Dep. and followed at Board level. Multi-dimensional stress tests and scenario analysis are also applied to business plan and budget activities, including statistical models integrating precipitation and wind variability as well as tail risks (extreme weather events) and their impacts on liberalized market price and volume.

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

Asset level:

Operational CC Risk is managed by Business Units (BUs) and monitored at corporate level. BUs use country specific meteorological data to assess risks and opportunities across the life cycle of generation assets. On design phase, resource usage is technically maximized and mitigation/prevention is planned. 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, possible damage from extreme events is managed through risk transfer (insurance, if available). Risk mitigation includes planning of critical activities (e.g. overhauls) for periods with least probability of extreme weather.

2.1c How do you prioritize the risks and opportunities identified?

The Executive Board decides upon the company's risk appetite and acceptable level of risk exposure. This is a key risk prioritization. The Board is supported by a group of committees, including the Risk Committee, chaired by the CEO and composed of senior management members that assist the Board on risk identification, evaluation, management, control and prioritization.

Climate Change risk/opportunity prioritization is based on a materiality analysis, which evaluates its impact on both BUs and EDP Group. In a small BU a risk may be important, but when evaluated at group level it may be almost irrelevant, either because of its value, or because it is naturally hedged. All risks/opportunities are evaluated taking into account these two vectors. A high impact risk at group level is immediately addressed.

Risk assessment is facilitated by the "risk map" (updated in 2014) and by a proprietary software (Risk Portal) that consistently collects information on each relevant operational risk. The Risk Portal automatically generates the following two-dimensional risk maps: (1) risk manageability vs. expected risk; (2) risk control vs. expected risk; (3) manageability-control gap vs expected risk where "expected risk"= frequency x severity.

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

Business Strategy

CC 2.2 Is climate change integrated into your business strategy?

Yes

If yes: CC2.2a Please describe the process and outcomes

i. How the business strategy has been influenced, i.e., internal communication/reporting processes that achieve this

EDP's current business strategy (EDP Strategic Agenda 2014-2017, announced in may 2014), sets out four strategic guidelines:

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

EDP's Board defines the corporate strategy based on the inputs from corporate departments such as Strategic Planning, Risk, Sustainability and also from relevant Business Units (Bus): generation, electrical distribution, gas distribution, among others. These inputs cover market, scenario, technology and regulation analysis and incorporate important climate change data such as current and future emissions regulation, CO2 price history and forecast and climate trends, including frequency of extreme weather events. Fuel use and availability are also considered.

ii. What aspects of climate change have influenced the strategy, e.g., need for adaptation, regulatory changes, opportunities to develop green business

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

- Mitigate – Reduce CO2 emissions from the electricity generation portfolio;
- Adapt – Increase resilience of generation and distribution assets;
- Reduce exposure to regulatory and market risks – Management of CO2 allowances and credits portfolio;
- Seize opportunities to develop new products and services – renewable energy, green energy retail, micro and mini generation from renewable sources and energy services, including energy efficiency.

iii. The most important components of the short term strategy that have been influenced by climate change

Integration of Climate Change issues is explicitly stated in two of the four macro-objectives of EDP's current business strategy (EDP Strategic Agenda 2014-2017, announced in May 2014):

- 1 - **Continued growth** – Organic growth focused on CO2-free technologies, mainly wind and hydro generation. The

company has set the goal of rising the share of renewables on its generation portfolio from 69% in 2013 to 75% in 2017. In 2014, renewable generation contributed to 73% of EDP's electricity output. The company will also continue to invest in smart grids, green energy retail, micro generation and energy services (316 M€ of revenue in 2014);

2- Low business risk profile – Low exposure to CO₂ and other environmental risks. The company has set the goal of reducing CO₂ emissions from its global thermal generation by 20% in 2015, compared to 2005 and to maintain leadership in sustainability best practice (EDP is Utilities Industry Leader in Dow Jones Sustainability Index). It will also keep its investment in increasing facilities' resilience to extreme weather events and manage CO₂ financial instruments portfolio (EU-ETS allowances and Clean Development Mechanism/Joint Implementation credits).

iv. The most important components of the long term strategy that have been influenced by climate change

EDP's long term growth strategy is focused on renewable generation and the company is today one of the largest wind power operators worldwide. EDP has set the long term objective of reducing by 70% its CO₂ emissions per electricity output in 2020 (120 gCO₂e/kWh), compared to 2008 levels (400 gCO₂e/kWh).

v. How this is gaining you strategic advantage over your competitors

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

- Profitability and reduced risk exposure – Increasingly decarbonized generation portfolio (with high share of renewables) and more resilient generation assets
- Commercial differentiation – Delivery of products (low carbon electricity and fuels) and services (energy efficiency services) that meet growing customers demand for solutions that reduced their own energy consumption and carbon footprint, such as "RE:DY".
- Increased internal efficiency – Example EDP wind turbine load capacity (30%) and availability (>97%) have been consistently increasing. EDP has also become differentially good in wind farm development.

vi. what have been the most substantial business decisions made (or if none, this is stated) (both the business decision and the aspect of climate change that has influenced the business decision must be made clear)

As announced in the Financial Report, several relevant substantial business decisions occurred in 2014 that were related with Climate Change:

- EDP Brazil ended the Santo Antônio do Jari hydropower plant, installed capacity is 373 MW. It also continued the construction of São Manuel (700 MW) Hydro power plant.
 - Program Save to Compete (www.savetocompete.com/pt), which identifies measures to reduce energy consumption, promoting their implementation and funding through the savings generated. Since the launch of the program in Portugal (2012) and in Spain (2013), 235 applications have been registered. By the end 2014, the program has already provided savings of 39 GWh, leading to 4.7 M€ reduction and avoiding 20,000 tons of CO₂. These results are registered online and can be viewed on the Save to Compete website.
 - PT - Since 2010 EDP leads the Portuguese electric mobility project (www.mobie.pt) – 1300 charging points and more than 1000 users,
 - PT – Wind off shore - EDP has a pioneer demonstration project, Windfloat a 2 MW sea wind turbine. Windfloat has proven its resilience in deep sea water, it has resisted the Hercules storm, it has maintained its operation till now it has produced more than 11 GWh. This project is currently included in an EU I&D project DemoWfloat that aims to develop a pre-commercial phase. The next step will be to build up a sea wind farm with 3 to 5 windfloat units.
- iii. The cost of the windfloat demonstration project is 20 M€.
- PT – Sunlab –This project aims at demonstrating commercial photovoltaic (PV) technologies and carry out performance comparisons amongst different technologies in distinct locations (radiation, temperature variations) and varying panel positioning. In 2014 data from the operation of the systems was collected and a report about its performance was made and disseminated among EDP business units.
 - Foundation of the A2E (Access to Energy) Company – A business unit to promote the access to energy in less favored regions of developing countries
 - EDP's 2050 energy simulator (www.2050.edp.pt) this tool allows several energy simulations and scenarios for Portugal, European Union, China and United States thus providing a physical and economical model to assess the strategic options that can be taken in the energy sector.
 - SF6 – All electrical transformers are being replaced by sealed for life ones.
 - EDP participates in I&D:
 - Carbior2014 – Spain - Clean combustion of coal through co-combustion of coal and biomass.
 - Life Biogrid – Spain - Biogas production (algae + criogenic systems) for cars.
 - TECA2014- Spain – CCGT modeling to ascertain failure probability

- WindFloat Atlantic – PT - Pre -commercial phase – Pre-commercial development of an offshore park with 3 to 5 wind turbines with per piece capacity of 5 to 8 MW. The first pilot, 2 MW, has already generated more than 11 GWh.
- SunLab – PT – Test platform for photovoltaic modules (6 different technologies) in 4 climatic regions and with different orientations to ascertain the best technologies and arrangements.
- LEANWIND – PT – Offshore Wind turbine supply chain evaluation aiming at energy cost reduction.

Companies should explain what they mean by long and short term

Less than 4/5 years - short term, more than 4/5 years medium/long term.

CC 2.2c Does your company use an internal price of carbon?

Yes

CC 2.2d Please provide details and examples of how your company uses an internal price of carbon

EDP uses an internal price on carbon for all geographies, in those covered with Emission trading schemes and in those where these schemes have not yet been implemented.

The internal price on carbon is always used in investment evaluation. In markets with trading schemes it is considered a cost and it is used within scenarios to assess the investment risk and to perform sensitivity analyses. In other markets an internal carbon price is considered in the evaluation scenarios.

The internal price on carbon is also used in the Business plan, in investment decisions and in risk evaluation of energy price and volume.

The CO2 price is assigned to scope 1 emissions.

The price considered is included in the ranges [5-60 €/ton CO2] and it is translated in an estimated forward curve, which is yearly updated.

The CO2 forward curve is defined by the Energy planning Department.

Engagement with Policy Makers

2.3 Do you engage in activities that could either directly or indirectly influence policy on climate change through any of the following?

| | |
|---|--------------------------------|
| X | Direct Engagement |
| X | Trade Associations |
| X | Funding Research Organizations |
| X | Other |
| | No |

2.3a On what issues have you been engaging directly?

| Focus of legislation | Corporate position | Details of engagement | Proposed solution |
|---|--------------------|--|---|
| Cap and trade | Support | EDP has supported a cap and trade approach to GHG emissions. This position was expressed in Eurelectric in the “Environmental and Sustainable Development Policy Committee” and in the “Energy Policy and Generation” Committee. Follow-up with the Portuguese Government of the PNALE (Climate Change National Plan). | EDP supports the European Union Emission Trading Scheme and during 2014 has been keen on defending back-loading, that is a more effective market stability reserve. |
| Energy efficiency | Support | EDP is a member of Eurelectric and is strongly engaged in promoting Energy efficiency through its action in the “Energy Efficiency” Working Group. EDP is a member of the Portuguese Tariff Council and Advisory Council of the Portuguese Energy Services Regulator, participating in public discussions regarding : (1) the consumer efficiency promotion plans, (2) technical advices on the electrical grid operation and commercialization regulation | EDP has strongly supported the “Energy Efficiency directive” transposition into Portuguese legislation. |
| Clean energy generation | Support | EDP participated in the public discussion of the PNAER (National Renewable Energies Action Plan) EDP is a member of the Portuguese Tariff Council and Advisory Council of the Portuguese Energy Services Regulator, participating in public discussions regarding (1) technical advices on the electrical grid operation and commercialization regulation, (2) harmonization of integration of renewable and special regime production in MIBEL, (3) Electricity and Gas regulations | EDP has strongly supported the renewable energy promotion provisions of PNAER (National Renewable Energies Action Plan). |
| Adaptation resilience | Support | EDP has worked with the Portuguese government in the Portuguese Adaptation Strategy (for the energy sector) | EDP has indorsed: - the increase of asset resilience - The dissemination of information about adaptation And has promoted co-joint efforts to stimulate climate change adaptation, among private companies and public entities. |
| Climate finance | Support | EDP has subscribed and strongly supported Climate Finance in Eurelectric, in the “Environmental and Sustainable Development Policy Committee” and in the “Energy Policy and Generation” Committee. | EDP has subscribed and strongly supported Climate Finance, namely the adequate CO2 price to allow the EU-ETS market to work. |
| Other – Climate change in the energy sector | Support | EDP in Brazil participates in the Brazilian fora related to climate change that were created to discuss the proposed Sectorial Plans from the governmental National Policy on Climate Change. EDP is engaged in meetings and working groups to discuss the responsibility of the Brazilian energy sector in tackling climate change and reducing GHG emissions. Example of an Fora to which the Company is engaged - “Energy for sustainability development – The National Policy on Climate Change within Energy Sector” | EDP has participated in discussions and proposed solutions for CDM and other emissions reduction programs. Furthermore, the Company supported the interaction between the Energy Sector Companies and Federal government to achieve mitigation an adaptation to climate change events. |
| Other – Climate change in the energy sector | Support | EDP in Brazil participates in working groups supporting renewable energy | EDP defends a strong support to renewable generation |

2.3b Are you on the Board of any trade associations or provide funding beyond membership?

Yes

2.3c 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? |
|---|--|--|--|
| APE – Portuguese Energy Association | Consistent | APE is the Portuguese Association that represents the World Energy Council. APE strongly supports: cap and trade, energy efficiency, clean energy generation and adaptation and resilience. | EDP has a strong influence in APE. Usually EDP is a member of the board, either president or Vice-president. |
| Eurelectric | Consistent | <p>EU institutions: should promote GHG reduction, give strong support to EU-ETS, support intelligent grids and transport electrification, R&D and incentives for early deployment of not-yet-mature renewable technologies.</p> <p>Eurelectric defends:</p> <ul style="list-style-type: none"> - An efficient EU-ETS market - The non-retroactivity in renewable state aid review | <p>EDP is a member of the Board of Directors and participates in several groups such as the “Environmental and Sustainable Development Policy Committee”, in the “Energy Policy and Generation” Committee, among others.</p> <p>EDP defends:</p> <ul style="list-style-type: none"> - An efficient EU-ETS market - The non-retroactivity in renewable state aid review |
| European Wind Energy Association - EWEA | Consistent | <p>Voice of the wind industry, actively promoting the utilization of wind power in Europe and worldwide, and representing the wind sector development before the European Commission.</p> <p>EWEA defends wind generation support.</p> | <p>EDP Renewables member of the Board.</p> <p>EDP defends wind generation support.</p> |
| ADENE – Agência para a Energia | Consistent | <p>The association promotes the rational use of energy and renewable energy generation.</p> <p>ADENE promotes efficiency services.</p> | <p>EDP is a member of the social bodies.</p> <p>EDP defends the support to efficiency services.</p> |
| Asociación Empresarial Eólica - AEE | Consistent | <p>Association with the objectives of overcoming the technical and statutory barriers that affects the growth of wind power, maintaining and consolidating the retributive regimen of the electrical production of wind origin that allows the sustainable development of the sector.</p> <p>AEE - defends wind generation support</p> | <p>Rocio Sicre del Rosal (EDP Renewables). EDP Renováveis Europe. Vice-President of the Board</p> <p>EDP defends wind generation support.</p> |
| APREAN Renewable Spain | Consistent | <p>APREAN Renewable works as a negotiator/speaker with the Autonomic, Central and Local Administration and with any public or private organization. Its main objective is to represent, coordinate and defend the common professional, economic and business interests of its members and as an instrument to participate in the development of policies, especially energetic and environmental.</p> <p>APREAN - defends renewable generation support</p> | <p>Ricardo Sancho Benito (EDP Renewables) – Member of the board.</p> <p>EDP defends renewable generation support.</p> |
| APREN - Associação Portuguesa de Produtores de Energia Eléctrica de Fontes Renováveis | Consistent | <p>Non-profit association that aims the coordination and representation of its Associates, in developing energetic and environmental policies in renewable energies (hydro, wind, biomass, biogas, solar, offshore).</p> <p>AEE - defends renewable generation support</p> | <p>António Lobo Gonçalves (EDP) – member of the board.</p> <p>António Castro (EDP) – member of the board.</p> <p>EDP - defends renewable generation support.</p> |

| | | | |
|---|------------|---|--|
| AWEA | Consistent | US trade association representing wind power project developers, equipment suppliers, services providers, parts manufacturers, utilities, researchers, and others involved in the wind industry. AWEA represents wind energy advocates from around the world. AWEA defends wind generation support | Represented in governance bodies EDP defends wind generation support. |
| 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 | Represented in governance bodies EDP defends wind generation support. |
| World Business Council for Sustainable Development- CEBDS- Conselho Empresarial para o Desenvolvimento Sustentável. | Consistent | CEBDS is a civil association that leads Business Sector efforts for reaching excellence in sustainability practices, effectively acting together with companies, governments and civil society. The greatest Brazilian Companies are associated to CEBDS, which develops its activities based on the concept of triple bottom line. CEBDS recognizes 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 of risks and opportunities related to the GHG emissions reduction. They act mainly through - Offering consistent platform for sharing experience and best practices among different companies and sectors; - Reaching and offering tools that enables and support emissions management and reduction; and - Represent CEBDS ideals and position towards tackling climate change. | EDP participates actively sharing experiences that contributes for raising and construction of knowledge regarding energy sector and climate change related issues. In 2013 CEBDS launched a guideline that assessed climate change challenges for the energy sector. The study was concluded by a consultant and took into consideration positions and context of energy companies in Brazil. EDP defends that Climate Change should be internalize in business and business should be supported in their mitigation and adaptation efforts. |

2.3d Do you publically disclose a list of all the research organizations that you fund?

Yes

2.3e Do you fund any research organizations to produce public work on climate change?

Yes

2.3f please describe the work and how it aligns with your own strategy on climate change

EDP has financed a study on “Biodiversity and Climate Change in the Iberian Peninsula” by the Museu Nacional de Ciências Naturais de Madrid and the Évora Rui Nabeiro CBIO Catedra. This study has performed a thorough evaluation of the effects of Climate Change on the Iberian biodiversity and has proposed adaptation measures, thus contributing to scientific knowledge on climate change impacts and adaptation strategies in the region.

EDP has also supported (among others):

- Carbitor2014 – Spain - Clean combustion of coal through co-combustion of coal and biomass.
- Life Biogrid – Spain - Biogas production (algae + criogenic systems) for cars.
- TECA2014- Spain – CCGT modeling to ascertain failure probability
- WindFloat Atlantic – PT - Pre -commercial phase – Pre-commercial development of an offshore park with 3 to 5 wind turbines with per piece capacity of 5 to 8 MW. The first pilot, 2 MW, has already generated more than 11 GWh.

- SunLab – PT – Test platform for photovoltaic modules (6 different technologies) in 4 climatic regions and with different orientations to ascertain the best technologies and arrangements.

- LEANWIND – PT – Offshore Wind turbine supply chain evaluation aiming at energy cost reduction.

All the projects supported by EDP's envisage energy reduction, CO2 emissions reduction and/or Climate Change resilience at the current and on the long term.

2.3g Please provide details of the other engagement activities that you undertake

1. engagement process

EDP has dedicated structures in each geography that manage the relation with the supervisory bodies of the energy sector:

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

i. Method of engagement

Through trade/Industry organization (among others):

- EURELECTRIC, the European electricity sector association, EDP is a member of the Board and participates amongst others, in the Environmental and Sustainable Development Policy Committee, in the Markets Committee, the Energy Policy and Generation Committee and in the "Climate Change", "Environmental Protection" and "Energy Efficiency" Working Groups, among others.
- APE, Portuguese Energy Association
- NGVA, Natural and bio gas Vehicle Association
- WEC, World Energy Council
- AGN, Natural Gas Association
- APREN, Portuguese renewable energy association
- COGEN, Portuguese cogeneration association
- AEE, Wind Industrial Association (Spain)
- SER-FEE - French Wind Energy Federation, EDP participates in the technical groups: acoustics, dangers studies, environmental, security, economic, law and regulation, offshore and marine energy and site
- WEWAG - Wind Energy Whopping Crane Action Group – EDPR collaborates with WEWAG that is developing a habitat conservation plan to address the potential impacts of wind energy. WEWAG works in coordination with the U.S. Fish and Wildlife Service and nine state wildlife agencies
- ABRADEE - Brazilian electric distribution association
- ABEEólica – Brazilian wind generation association

Through ONG:

- Joint projects with WWF
- Participation in the COP side events
- WBCSD - World Business Council for Sustainable Development (www.wbcsd.org), a CEO-led, global association of some 200 companies dealing exclusively with business and sustainable development issues
- BCSD Portugal - the Portuguese Business Council for Sustainable Development, member of the WBCSD regional network
- CBDES Brazilian council for sustainable development

Through Institutional Authorities:

- Portuguese government - Contribution to the Portuguese Climate Change Adaptation Strategy with technical expertise on the energy sector. Participation in the public discussion of the PNAER (National Renewable Energies Action Plan) and PNAEE (National Energy Efficiency Action Plan). Follow up of the PNALE - (Climate Change National Plan). Participation in ENAAC, the Portuguese National Adaptation Strategy Plan. Participation in green tax reform public discussions.
- ERSE Portuguese Energy Services Regulator – Member of the Tariff Council and the Advisory Council, participation in public discussions: (1) consumer efficiency promotion plans, (2) technical guidelines on the electrical grid operation and commercialization regulation, (3) harmonization of integration of renewable and special regime production in MIBEL, (4) Electricity and Gas regulations
- EER European Energy Regulators – EDP participated in Public Consultation on Harmonization of Renewable Support

Schemes and CEER's advice on the take-off of a demand response electricity market with smart meters
- DG Competition – Public discussion on guidelines for State Aid related to environmental projects

Through knowledge dissemination:

- EDP has developed the energy simulator - www.2050.edp.pt

ii. topic of engagement – EDP's position

- CO2 emissions regulation
- EU-ETS
- MIBEL Iberian electricity market
- EU regulation
- EU Regulatory trends
- Climate change Risk and Opportunities
- Climate change mitigation and adaptation
- Energy efficiency
- Renewable energy
- Offshore energy
- Wave energy
- Photovoltaic
- Electrical / Natural gas mobility

iii. nature of engagement

EDP participates in all forms: (1) Answer to consultations: EURELECTRIC, Government, among others. (2) Participation in working groups: SER-FEE, WEWAG, ENAAC, WBCSD, among others. (3) participation in research: Winfloat (off-shore wind energy), Sunlab (photovoltaic), (4) Meetings with ERSE, EU, USA, Government Officials

(2) actions advocated – the nature of the advice given/endorsement or opposition of policy proposals or were you encouraging action on mitigation /adaptation

EDP supports both mitigation and adaptation. Examples:

- At the COP 15 in Copenhagen EDP produced a statement sustaining the summit objectives: global participation of countries, strong support to renewable energy and to implementation mechanisms.
- Encouraging adaptation strategy and actions, through participation in ENAAC, among others.
- Development of clean electrical production, through the support to renewable generation, namely the Sunlab photovoltaic and windfloat off-shore wind turbine projects, among others.

2.3h 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 has been stated since 2006 when EDP has announced a strategic shift towards sustainable energies. This approach has allowed EDP to address Climate Change from both the mitigation and the adaptation perspectives.

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

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

These structures ensure the overall alignment of EDP's position with the corporate climate strategy, namely the strong support to:

- Effective CO2 markets, aiming to curb emissions and to enforce the Kyoto protocol objectives;
- Clean generation as the key to a more sustainable future;
- Businesses responsibility in shaping a more sustainable global future.

EDP defends a new market design that allows for an efficient integration of low-carbon technologies, including the support for RES via long-term contracts with ex-ante competition via, centralized and decentralized auctions, binding

targets for RES and a well-functioning EU-ETS.

EDP believes that predictability and regulatory stability in the Energy sector are essential to create the conditions for the needed investments.

CC2.4 Would your organization's board of directors support an international agreement between governments on climate change, which seeks to limit global temperature rise to under two degree Celsius from pre-industrial levels in line with IPCC scenarios such as RCP2.6?

Yes

CC2.4a Please describe your board's position on what an effective agreement would mean for your organization and activities that you are undertaking to help deliver this agreement at the 2015 United Nations Climate Change Conference in Paris (COP 21)

EDP Group supports an effective climate change agreement. EDP's Board of Directors approved a strategic plan supportive of climate change, with growth objectives through 2017 primarily driven by investment in new hydro and wind capacity, thus fundamentally in line with climate change policies which are currently under discussion internationally. EDP Group has ambitious targets for reduction of carbon emissions, driven by investment in clean technologies, offering energy efficiency services and supporting the development of mobility solutions (electric and gas powered) among others.

An effective climate agreement would likely contribute to EDP's strategy as long as it defines specific targets for a reasonable time frame in parallel with power market redesign, e.g., promoting ex-ante competition for long term power contracts rather than competition on marginal markets, or adjusting the supply on CO2 markets to match current demand forecasts.

EDP Group actively supports an effective agreement in all the fora where it participates, e.g., Eurelectric and WBCSD.

CC3. Targets and Initiatives

Targets

CC3.1 Did you have an emissions reduction target that was **active** (ongoing or reached completion) in the reporting year?

Yes. Absolute and Intensity targets.

If it is an absolute 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 | Target year | Comment |
|-----|---------|-------------------------|----------------------------|-----------|---------------------|-------------|---|
| A-1 | Scope 1 | 99.8% | 20% | 2005 | 28 255 000 ton CO2 | 2015 | Group-wide reduction target for GHG emissions from stationary combustion in the company's electricity generation assets This target applies to all geographies and generation activities. This target is fully aligned with our 2020 corporate intensity target and is embedded in the strategic options set out in our 2014-2017 Business Plan |

If it is an intensity target:

CC3.1b Please provide details of your **intensity** target

| ID | Scope | % of emissions in Scope | % reduction from base year | Metric | Base year | Base year emissions | Target year | Comment |
|-----|---------|-------------------------|----------------------------|-------------|-----------|---------------------|-------------|--|
| I-1 | Scope 1 | 99.8% | 70% | Ton CO2/MWh | 2008 | 0.400 ton CO2/MWh | 2020 | Group-wide reduction target for GHG emissions from stationary combustion in the company's electricity generation assets In 2009, EDP committed to reduce its electricity generation emission factor in 2020 by 70%, in comparison to 2008, in order to achieve an EF of 0.120 tonCO2/MWh. This target applies to all geographies and generation activities. This target is fully aligned with our 2015 corporate absolute target and is embedded in the strategic options set out in our 2014-2017 Business Plan. |

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 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 |
|-----|---|---|---|--|--|
| I-1 | Decrease | 50 | No change | 5 | Reduction of GHG emissions from stationary combustion in the company's electricity generation assets |

For all your targets:

CC3.1d Please provide details on your progress against this target made in the reporting year

| | % complete (time) | % complete (emissions) | Comment |
|-----|-------------------|------------------------|-----------------------------------|
| A-1 | 90% | 100% | Target was exceeded in 2014. |
| I-1 | 50% | 44% | Reaching 2020 target is on track. |

Emissions Reduction Initiatives

CC3.2 Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?

Yes

If yes: 3.2a Please provide details

i. How emissions are avoided by a third party

ii and iii. An estimate of the amount of the emissions that are avoided over the time and the methodology

1 –Low carbon electricity supply, as a result of the progressive decarbonisation of EDP’s generation portfolio (reduction of client’s scope 2 emissions)

Due to the strategic decision to invest in renewable power generation (hydro, wind, solar and biomass) EDP’s electricity generation portfolio relies less and less on fossil fuels. This allows for the delivery of electricity with a lower CO2 content than the average grid electricity of the countries in which the company operates, thus enabling its clients to avoid scope 2 emissions. In 2014, EDP generated 73% of its electricity from renewable sources and delivered electricity with an average carbon content of 276 gCO2/kWh. This emission intensity was lower than the national values in Portugal (277 gCO2/kWh), USA (592 gCO2/kWh) and in the ROW (526 gCO2/kWh). This energy generated from renewables resulted in avoided emissions of 33.8 Mt CO2.

2 – The sale of natural gas, which is a low carbon fossil fuel (reduction of the client’s scope 1 emissions)

Natural gas (56 gCO2/GJ) is used by clients in replacement of other fossil fuels, with higher carbon content, namely fuel oil (77 g CO2/GJ), LPG (63 gCO2/GJ) and diesel oil (74 g CO2/GJ). Approximately 2 Mt CO2 were avoided during 2014.

3 – The provision of energy efficiency services, that help clients reduce their energy consumption (reduction of the client’s scope 1 and scope 2 emissions).

EDP has a vast portfolio of energy services, that address the needs of specific client groups and help them reduce their energy (fossil fuel or electricity) consumption. EDP’s energy services portfolio includes:

3.1 - - Program Save to Compete (www.savetocompete.com/pt), which identifies measures to reduce energy consumption, promoting their implementation and funding through the savings generated. Since the launch of the program in Portugal (2012) and in Spain (2013), 235 applications have been registered. By the end 2014, the program has already provided savings of 39 GWh, leading to 4.7 M€ bill reduction and avoiding 20,000 tons of CO2. These results are registered online and can be viewed on the Save to Compete website.

3.2 - PPEC – Plan for Promoting the Efficient Electricity Consumption (PPEC) promoted by the Energy Services Regulatory Authority (ERSE). EDP had 16 measures approved: energy savings of about 1073 GWh through their lifetime, scope 1 and 2 emission reduction of 397 ktons of CO2 and a global benefit of about EUR 105 million. For more information about these measures, visit www.erse.pt/pt/planodepromocaodaeficiencianoconsumoppec/ppec1314/Paginas/default.aspx

3.3 - EDP has a special program in Portugal to promote energy efficiency with, in particular, an exclusive web page for this theme - www.eco.edp.pt - where consumers can find, for example:

- Information and advice on energy efficiency;
- Energy efficiency and CO2 emissions simulators;
- Practical guide for an efficient home.

3.4 -The investment in energy efficiency in Brazil attained BRL 25.7 million in 2014, allowing energy savings

estimated at 30,631 MWh avoiding about 4.1 kt CO₂ and a reduction in peak demand of 13,345 kW. The amount spent is established on the basis of the electricity sector legislation, which defines the annual investment of 0.5% of the net operating income of distributors in energy efficiency program. The initiatives carried out aim to show to society the importance and the cost-effectiveness of actions to fight energy waste and improve energy efficiency of equipment, processes and final energy use (www.edp.com.br/inovacao-sustentabilidade/programa-de-eficiencia-energetica):

3.5 - Since 2010 EDP leads the Portuguese electric mobility project (www.mobie.pt) – 1300 charging points, 50 fast charging points and more than 1 000 clients thus avoiding about 1 300 t CO₂.

3.6 - A2E access to energy program - based on renewable energy solutions, mainly solar, in order to contribute towards the social, economic and environmental development of the communities less favored. The projects allow scope 1 emission reductions since in most cases they allow for the replacement of wood combustion. The ongoing projects are:

- Brazil access to electricity distribution grid, Portable Light Project, electrical equipment donation, street light donation in less-favored neighborhoods and households.

- Cabiri Solar Village, in Angola - implementation of sustainable energy solutions to meet basic needs of local population – app. 3,000 people - 505 solar photovoltaic systems installed in 500 family houses and social and 83 solar street lighting posts (<http://www.fundacaoedp.pt/en/access-to-energy/mission/sustainable-development/166>)

- New projects – in geographies where EDP does not have distribution and supply activities. In 2014, EDP carried out studies and development of projects in São Tomé and Príncipe, Mozambique and Peru, based on micro-generation solutions in remote locations. These solutions consist of mini-grids with generation, distribution and sale of electricity to rural areas, using renewable technologies (photovoltaics, biomass, and micro-wind turbines). Examples: (1) - Titimane (Moçambique) Project – 150 tCO₂ annual emission reductions achieved due to newly electricity generation (MW) e.g. from renewable energy system(s) installed: 160 kW (100kWp solar PV + 60 kW biomass+ 340 kWh storage). The amount of energy generated from renewable energy systems installed: 232 MWh in the first year and 442 MWh after 20 years;

- (2) Pestana Group (São Tomé) Project - Annual tCO₂eq emission reductions: 120t of CO₂, due to newly installed electricity generation (MW) e.g. from renewable energy system(s) installed: 60 kW (solar PV). The amount of energy generated (MWh) e.g. from renewable energy systems installed: 78 MWh

3.7 - Micro and mini generation projects – in 2014 EDP installed 12 MW systems with and estimated annual production of 18 GWh/year, which corresponds to avoided emissions of about 5 ktCO₂. This has allowed clients to reduce their scope 2 emissions.

3.8 – EDP Gás has a natural gas refueling station at Braga with an investment of 500 k€, that provides fuel to public buses. In 2014 EDP Gás supplied 1350GJ of CNG to Braga public bus, avoiding 23.1 tCO₂e per year.

iii. The methodology, assumptions, emission factors and global warming potentials (if you have expressed your carbon saving figure in CO₂e) used for your estimations.

The annual emission factors for each country is based on the following sources: Portugal - EDP, Turbogás, Pego, Rede Eléctrica Nacional (REN), and Entidade Reguladora dos Serviços Energéticos (ERSE); Spain - Rede Eléctrica de Espanha (REE); Brazil - Ministry of Science and Technology - SIN (National Interconnected System); USA - state emission factors; Other European countries - CERA, Global Insight.

Emissions avoided from the use of natural gas by EDP clients assumed an average EF for the list of fuels replaced. Emissions factors from Portuguese Environmental Authority (APA 2013): Natural gas (56.6 gCO₂/GJ), fuel oil (78,9 g CO₂/GJ), LPG (63,1 gCO₂/GJ) and diesel oil (74,1 g CO₂/GJ)

These activities will not generate CERs or ERUs.

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.

If yes, complete questions 3.3a, 3.3b and 3.3c:

CC3.3a Please identify the total number of projects at each stage of development, and for those in the implementation stages, estimated CO2e savings

| Stage of development | Number of projects | Total estimated annual CO2e savings (only for rows marked *) | Comments |
|---------------------------|--------------------|--|--|
| Under investigation | 4 | | Carbitor - Spain - Clean combustion of coal through co-combustion of coal and biomass Life biogrid- Spain - Biogas production (algae + criogenic systems) for cars Sun Lab - Portugal – Test platform for photovoltaic modules (6 different technologies) in 4 climatic regions and with different orientations to ascertain the best technologies and arrangements LEANWIND – Portugal – Offshore Wind turbine supply chain evaluation aiming at energy cost reduction |
| To be implemented* | 2 | 96 000 t CO2 318 732 t CO2 | 1 GW offshore wind in France 180 MW wind in Mexico |
| Implementation commenced* | 12 | 5 300 000 tCO2 | 5 hydro power plants in Portugal 2 hydro power plants in Brazil About 1 GW in windfarms in USA, Poland and Brazil. |
| Implemented* | 12 | 1 171 665 t CO2 | 766 MW installed capacity in: -hydro in Brazil -wind in USA Rest of Europe - Solar in USA - Grid losses reduction project – 385 GWh losses reduction corresponding to 106.7 ktCO2 avoided |
| Not to be implemented | 0 | | |

CC3.3b For those initiatives implemented in the reporting year, please provide details in the table below

| Activity | Activity type | Description of Activity | Estimated annual CO2e savings [Metric Ton CO2] | Scope | Voluntary/ Mandatory |
|----------|--------------------------------|---|--|-------|----------------------|
| (1) | Low carbon energy installation | New renewable energy generation capacity - Jarí 1 hydro power plant in Brazil 373 MW | 383 000 | 1 | Voluntary |
| (2) | Low carbon energy installation | New renewable energy generation capacity – 2 wind farms - Rising Tree North (99MW) and Headwaters (200 MW) in USA– total 299 MW | 529 000 | 1 | Voluntary |
| (3) | Low carbon energy installation | New renewable energy generation capacity - Total 64 MW: – 6 wind farms in: Ilza Poland 4 MW, Repowering Portugal 2 MW, Preuseville France 6 MW, Radziejow Poland 18 MW, San Giovanni Italy 20 MW and Truc de L’Homme France 12 MW - 1 Solar PV in Estarreja 2 MW | 115 000 | 1 | Voluntary |
| (4) | Low carbon energy installation | New renewable energy generation capacity – 1 solar farm in California in USA – 30 MW | 38 000 | 1 | Voluntary |
| (5) | Energy efficiency processes | EDP owns the concession of four distribution grids: 2 in Brazil, 1 in Portugal and 1 in Spain. There was a reduction in the distribution losses in 2014 compared to 2013 (about 5%) due to actions on non-technical and technical losses: (1) construction and commissioning of 32 new HV/MV substations; (2) Construction of 9,700 km of HV and MV network lines; (3) new theft and fraud control program; (4) new Energy Data Management to manage the growing number of smart grids. | 106 665 | 2 | Voluntary |

| Activity | Annual monetary Savings [€] | Investment [€] | Payback Period [year] | Estimated lifetime [year] | Comment |
|----------|-----------------------------|----------------|-----------------------|---------------------------|---|
| (1) | 41 000 000 | 746 000 000 | 16 | 50 | Annual monetary savings obtained considering the renewable energy replaces ½ gas and ½ coal production. |
| (2) | 29 000 000 | 448 500 000 | 16 | 20 | Annual monetary savings obtained considering the renewable energy replaces ½ gas and ½ coal production |
| (3) | 6 000 000 | 96 000 000 | 16 | 20 | Annual monetary savings obtained considering the renewable energy replaces ½ gas and ½ coal production |
| (4) | 2 000 000 | 60 000 000 | 16 | 25 | Annual monetary savings obtained considering the renewable energy replaces ½ gas and ½ coal production |
| (5) | 17 560 185 | 46 000 000 | 2.6 | 30 | Source: ERSE investments, and estimated lifetime for grids. |

CC3.3c What methods do you use to drive investment in emissions reduction activities?

| Method | Comment |
|---|--|
| Compliance with regulatory requirements/standards | <ul style="list-style-type: none"> - Switching electrical generation from gas and coal to wind and hydro is also a consequence of the restrictions to CO2 emissions due to the European Trading System EU-ETS. - In Brazil, according to the regulatory obligation, electricity distributors allocate 0.2% of their net operating revenue to R&D projects and generation companies allocate 0.4% of this revenue. The investment in 2014 was EUR 2.19 million by the distribution companies and EUR 2.24 million by the generation companies. |
| Dedicated budget for energy efficiency | <ul style="list-style-type: none"> - Save to compete - program launched in June 2012 to promote energy savings in B2B, consisting in intervention in the energy infrastructure to reduce energy consumption and achieve effective savings and significant results in the shortest time frame without compromising safety conditions, productivity and equipment reliability. For this program EDP has allocated 20 M€, value that could be leveraged with financial institutions funds. Main achievements: (1) Average savings 4% to 8%, up to 20% in the most successful cases; (2) 47 GWh savings, (3) 5.5 M€ energy costs reduction; (4) About 23 kt CO2 emissions avoided; (5) The savings can be monitored real time online at https://energia.edp.pt/corporate/savetocompete.aspx - Re:dy (remote energy dynamics) for B2C market. This allows residential electricity consumption monitoring and active management. The client can control electrical appliances through internet and smartphone (iOS and Android) - https://energia.edp.pt/particulares/servicos/redy.aspx, https://redy.edp.pt/EDPPortal. This product was conceived, projected and manufactured in Portugal. For this program EDP has allocated 1 M€. - InovGrid aims to implement a smart power grid, thus promoting energy efficiency in consumption and losses reduction in the distribution grid. The first pilot - InovCity – was carried out in Évora between 2009 and 2012, with the installation of about 30,000 smart meters. This resulted in about 3.9% savings in clients. In 2014, EDP installed about 60,000 Smart Meters, reaching 100,000 customers in Portugal. In the first phase of this program (2008) EDP allocated to it 12 M€. Currently, under the EU Framework program FP7, EDP has allocated about 7.7 M€. |
| Dedicated budget for low carbon product R&D | <p>EDP has a dedicated budget for R&D that is allocated to 4 main areas: (1) Cleaner Energy; (2) Smarter Grids; (3) Customer-Focused Solutions and (4) Data Leap.</p> <p>The investment in R&D+i on the Iberian Peninsula was EUR 27.2 million</p> <p>In Brazil, according to the regulatory obligation, electricity distributors allocate 0.2% of their net operating revenue to R&D projects and generation companies allocate 0.4% of this revenue. The investment in 2014 was EUR 2.19 million by the distribution companies and EUR 2.24 million by the generation companies.</p> <p>EDP has a cleantech risk capital fund. By the end of 2014, EDP Ventures had invested over EUR 19 million in cleantech companies and innovative funds and made an additional commitment to invest EUR 2 million in the future. The following investments stand out: (1) Arquiled - LED lighting solutions; (2) Feedzai - real time big data solutions; (3) Zypho - drain water heat recovery solution for showers and baths; (4) Principle power - floating platform for offshore wind energy; (5) International Cleantech funds (USA and UK); (6) Support the implementation of pilots among Portuguese start-ups (Egg Electronics, Vertequip and Eggy)</p> |
| Dedicated budget for other emissions reduction activities | <ul style="list-style-type: none"> - EDP promotes electric mobility and fuel switching from gasoline to gas. EDP is leading the Portuguese national electric mobility pilot since 2010 (www.mobie.pt). EDP is the main shareholder of SGORME the company that manages the public charging network in collaboration with all the operators of the electric vehicle-charging infrastructure. This is in operation since 2011. In 2014 it had about 1000 users and 1,300 charging points, the 2014 CO2 avoided emissions were 1.3 kt CO2. The investment in electrical mobility is about 3 M€. |
| Employee engagement | Electricity, water and paper consumption reductions in EDP's buildings, as well as waste management, are internal energy efficiency projects developed mainly by employees. |
| Other | New Business - Emission reduction activities represent in some cases new business areas, and in a short time they can deliver an interesting contribution to EDP's revenue. |
| Internal price of CO2 | Factor taken into account when analyzing investments in new projects such as new power plants. |

CC4. Communications

CC4.1 Have you published information about your company'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)

Note – Only “complete” documents were attached.

| Type of publication | Page/Section reference | Attach the document |
|--|---|--|
| In mainstream financial reports but have not used the CDSB Framework | 4; 36; 43; 44; 49; 68; 71; 73; 82 – 90; 100; 109-111; 177; 178; 263; 270 | 2014 EDP Annual Report http://www.edpannualreport.edp.pt/en/ |
| In voluntary communications | http://www.edp.pt/PT/SUSTENTABILIDADE/AMBIENTE/ALTERACOESCLIMATICAS/Pages/alt_climaticas.aspx | EDP website |
| In voluntary communications | All | EDP 2050 website www.2050.edp.pt |
| In voluntary communications | http://www.edpr.com/es/sostenibilidad/medio-ambiente-y-cambio-climatico/cambio-climatico/ | EDP Renováveis website |
| In mainstream financial reports but have not used the CDSB Framework | 6; 10; 13; 19; 29-38; 57; 66; 86; 88-93 | 2014 EDP Renováveis Annual Report http://www.edpr.com/investors/reports-and-results/ |
| In voluntary communications | http://www.save-as.org/ | Save as portal |
| In voluntary communications | http://www.edp.pt/en/sustentabilidade/acessoEnergia/projetos/Pages/Projetos.aspx | A2E website |
| In voluntary communications | http://en.sostenibilidadedp.es/ | EDP Spain website |
| In voluntary communications | https://energia.edp.pt/corporate/savetocompete.aspx | Save to compete website |

Risks & Opportunities

CC5. Climate Change Risk

CC5.1 Have you identified any climate change risks (current or future) that have the potential to generate a substantive change in your business operations, revenue or expenditure?

CC5.1.a. Risks driven by changes in regulation:

| ID | Risk Driver | Description | Potential impact | Timeframe | Direct/Indirect | Likelihood of impact | Magnitude of impact | Estimated Financial implications | Management Method | Cost of management |
|------|-----------------------------------|--|------------------------------|-----------|-----------------|----------------------|---------------------|--|--|---|
| RR01 | Fuel energy taxes and regulations | Impact of EU Energy/CO2 related regulation: - Energy-climate package - 2030 framework for climate and energy - The package includes a binding domestic greenhouse gas reduction target of at least 40%, an EU-level renewables target of 27% and an indicative energy efficiency target of 27% - EU-ETS evolution, namely the MSR – (1) Directive 2004/101/EC of the European parliament and of the council; (2) Directive 2008/101/EC of the European parliament and of the council (3) Regulation (EC) n° 219/2009 of the European parliament and of the council of 11 March Directive 2009/29/EC of the European parliament and of the | Other – Decrease in revenues | Current | Direct | Likely | Medium | There is incertitude regarding the impact of this legislation. Nevertheless this risk is considered currently to be about 2% of the EBITDA. | EDP is much protected due to its diversified generation mix, diversified geographies, diversified asset maturities and diversified activities. This risk is also mitigated through a close follow up of regulatory bodies. Further on EDP works with governments, in Portugal EDP is a Member of the Tariff Council and the Advisory Council of ERSE Portuguese Energy Services regulator. Under this membership EDP has participated in several public discussions: (1) the consumer efficiency promotion plans, (2) technical issues about the electrical grid operation and commercialization, just to name a few. | Diversification costs: investment, in 2014, on renewable energy (wind) of 515 M€, 531 M€ hydro power in Portugal and 60 M€ hydro power in Brazil. These investments are part of EDP's Strategic Plan. The costs associated with regulatory follow: annual budget for Departments with regulatory follow-up responsibilities. These Departments exist for Portugal Spain, Brazil and USA. Their budget is about 5 M€ per year. |

| | | | | | | | | | | |
|------|-----------------------------------|---|------------------------------|---------|--------|----------------------|------------|---|--|--|
| | | <p>council; (4) Decision no 1359/2013/EU of the European parliament and of the council of 17 December 2013 (5) Regulation (EU) no 421/2014 of the European parliament and of the council of 16 April 2014</p> <ul style="list-style-type: none"> - Post-Kyoto agreement (in discussion) - EU Single energy market (in discussion) - 2012 Energy Efficiency Directive (Directive 2012/27/EU of the European parliament and of the council, of 25 October) establishes a set of binding measures to help the EU reach its 20% energy efficiency target by 2020. These legislation pieces apply to the EU countries and can impact upon EDP generation and trading. If they do not effectively enforce clean generation EDP's cash flow generation can be affected. | | | | | | | | |
| RR02 | Fuel energy taxes and regulations | <p>Changes in the legislator incentives to wind and solar energy. These incentives can be a feed in tariff, a tax credit or a capital incentive. Its decrease can cause a reduction in wind power</p> | Other – Decrease in revenues | Current | Direct | More likely than not | Low-medium | <p>The potential financial implications of the risk before taking action depend on the country and on the intervention from the regulators/policy makers. It may affect the remuneration of the current wind farms, but mostly it can also affect</p> | <p>EDP is much protected due to its diversified generation mix, diversified geographies, diversified asset maturities and diversified activities. This risk is also mitigated through a close follow up of regulatory bodies. Further on EDP works with governments,</p> | <p>Diversification costs: investment, in 2014, on renewable energy (wind) of 515 M€, 531 M€ hydro power in Portugal and 60 M€ hydro power in Brazil. These investments</p> |

| | | | | | | | | | | |
|------|-----------------------------------|--|------------------------------|---------|--------|--------------------------|--------|---|--|--|
| | | <p>revenues in Europe, USA and Brazil.</p> <p>Also the transition of renewables energy from Special tariffs to market can cause the wind assets to be exposed to market and resource volatilities thus their generation will not always be dispatched.</p> <p>This legislation can impact EDP's cash flow generation.</p> | | | | | | <p>company's growth (the intervention may make new investments less attractive). In 2014 the regulation changes in Spain had a negative impact of 17 M€ on EDPPR's EBITDA. In the future it is expected that this figure will be smaller.</p> <p>As for the transition of renewables energy generation assets from Special tariffs to market, this risk is considered currently to be less than 1 M€.</p> | <p>in Portugal EDP is a Member of the Tariff Council and the Advisory Council of ERSE Portuguese Energy Services regulator. Under this membership EDP has participated in several public discussions either at national level in Portugal either at EU level through its representation at Eurelectric: (1) the consumer efficiency promotion plans, (2) technical issues about the electrical grid operation and commercialization, just to name a few.</p> | <p>are part of EDP's Strategic Plan.</p> <p>The costs associated with regulatory follow: annual budget for Departments with regulatory follow-up responsibilities.</p> <p>These Departments exist for Portugal Spain, Brazil and USA. Their budget is about 5 M€ per year.</p> |
| RR03 | Fuel energy taxes and regulations | <p>Environmental laws and regulations that constrain the location of power plants and/or distribution grids.</p> <p>Example: Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy.</p> <p>This regulation can increase capital costs, namely due to project adjustments.</p> <p>On Environmental Impact Assessment theme, a recent European EIA law (Directive 2014/52/EU, of 16 April 2014) shall be laid down on State-members law till May 2017.</p> | Other – Decrease in revenues | Current | Direct | About as likely than not | Medium | <p>This risk affects capex expenditure and can also decrease the revenues from the project.</p> <p>This risk can add up till 10% of investment costs.</p> | <p>During all the project phases the project team takes into account all the possible constrains that may appear.</p> | <p>The marginal cost of this action is zero since they are included in the current activities.</p> |

CC5.1.c. Risks driven by changes in physical climate parameters:

| Risk ID | Risk Driver | Description | Potential impact | Timeframe | Direct/Indirect | Likelihood of impact | Magnitude of impact | Estimated Financial implications | Management Method | Cost of management |
|---------|-----------------------------------|--|--|-----------|-----------------|----------------------|---------------------|---|---|---|
| RPC01 | Precipitation and wind volatility | <p>Hydro generation is an important component of our generation assets, especially in Portugal and Brazil.</p> <p>Any climate change implying a high volatility in rainfall results in less hydropower generation and consequently less cash flow generated. This decrease may not be balanced by higher energy prices.</p> <p>The wind volatility affects wind farms production.</p> <p>According to the IPCC AR5:</p> <p>(1) Observed climate trends and future climate projections show regionally varying changes in temperature and rainfall in Europe (high confidence)</p> <p>(2) After 2050, the wind energy potential in Northern, Continental, and most of Atlantic Europe may increase during winter and decrease in summer. For Southern Europe, a decrease in both seasons is expected.</p> <p>(3) For hydropower, in Continental and part of Alpine Europe, reductions in electricity production by 6 to 36% were estimated. For Southern Europe, production is expected to decrease by 5 to 15% in 2050 compared to 2005.</p> | Other – Decrease in operational income | Current | Direct | More likely than not | Low-medium | <p>Depending on the regulatory context the financial implications of this risk could go from a negligible value until about a 200 M€ (value estimated for losses due to the 2014/2015 drought in Brazil).</p> | <p>EDP manages this risk through:</p> <p>(1) A conjoint task force composed by Sustainability and Risk experts is addressing the Climate Change impact in EDP business. Till now the task force has already identified and evaluated the water related risks.</p> <p>(2) Emergency preparedness (82% // 29% of net installed capacity in Portugal // Spain, covered by EMAS system registration. 96% of global installed net capacity under ISO 14001 certification that addresses emergency preparedness and response).</p> <p>(3) Insurance (the maximum physical risk cost incurred is mostly transferred out of the EDP Group, except partial revenue losses and tail-end events. EDP has also a strategic captive insurance policy based in Luxembourg (Energia RE)).</p> <p>(4) Geographical and technical diversification (Examples: reversible hydropower plants, wind farms, offshore wind</p> | <p>This risk is addressed by the new hydropower plants that EDP is building have investment costs. They provide the additional benefit of contributing to manage this risk. Currently EDP is investing in</p> <ul style="list-style-type: none"> - New hydro plants in Portugal: 5 hydro plants under construction to be commissioned in 2014-16: ~1,450MW: - New hydro plants in Brazil: 2 hydro plants under construction to be commissioned in 2015/17: ~600MW <p>The costs associated with these actions are the investment, in 2014, on renewable energy (wind) of 515 M€, 531 M€ hydro power in Portugal and 60 M€ hydro power in Brazil. These investments are part of EDP's Strategic Plan.</p> |

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| | | | | | | | | | farms, among others). (5) EDP has been working in adaptation its assets and process to Climate Change, example: pump storage dams in hydro, cooling tower in thermal. | |
| RPC02 | Change in temperature extremes | <p>Impact on generation Higher temperatures can disturb power plant normal operation, due to the cooling source's temperature being already outside of its legally admissible values even before its use at the power plant.</p> <p>Higher temperatures decrease the volume compressed air inserted in the combustion chambers thus decreasing energy generation</p> <p>Impact on water demand Higher temperatures can also result in increased population's water consumption, thus reducing available water in multiple use reservoirs.</p> | Other – Decrease in operational income | Current | Direct | More likely than not | Low | The potential financial implications is less than 500 thousand Euro, this value was obtained for an outage of a typical CCGT for a full week. | <p>The EDP Group has 82% and 29% of net installed capacity in Portugal and Spain, respectively, covered by EMAS system registration. EDP Group has also 96% of global installed net capacity under ISO 14001 certification. The ISO 14001 section that addresses these subjects is 4.4.7 – emergency preparedness and response.</p> <p>There is also a range of insurances for the Group's assets in operation. Therefore, the maximum physical risk cost incurred is mostly transferred out of the EDP Group (except for partial revenue losses and tail-end events). EDP has also a strategic captive insurance policy based in Luxembourg (Energia RE) that secures the small losses not covered by the insurers' pool.</p> | EDP's generation mix, geographical, asset maturity and market diversification also mitigates this risk. EDP's Capex is not a direct cost but this risk will be partially mitigated by the new plants and infrastructures, it is a collateral benefit. The costs associated with these actions are the investment, in 2014, on renewable energy (wind) of 515 M€, 531 M€ hydro power in Portugal and 60 M€ hydro power in Brazil. These investments are part of EDP's Strategic Plan. |
| RPC03 | Change in extreme precipitation and droughts | Events, such as abnormal precipitation, droughts, extremely strong winds, pronounced sea waiving at seashore and sudden increases in algae coming in from the sea, can be accentuated by climate | Increased operational costs | Current | Direct | More likely than not | Low | The potential financial implications is less than 500 thousand Euro, this value was obtained for an outage of a | The EDP Group has 82% and 29% of net installed capacity in Portugal and Spain, respectively, covered by EMAS system registration. EDP Group has also 96% of global installed net capacity | The costs of these actions are evaluated, per example the algae cleaning systems did cost around 1.5 M€ |

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| | | <p>changes and have caused rare business interruptions at both thermal and hydropower plants. Extreme precipitation can also cause floods, dam overflow and landslides.</p> <p>Droughts may imply extra reservoir water expenditure in activities such as irrigation and maintenance of ecological flows, with inherent loss of energy generation/revenue, when these water flows are not turbinated or when they are released during off-peak hours (lower energy prices).</p> | | | | | | <p>typical CCGT for a full week.</p> | <p>under ISO 14001 certification. The ISO 14001 section that addresses these subjects is 4.4.7 – emergency preparedness and response.</p> <p>There is also a range of insurances for the Group’s assets in operation. Therefore, the maximum physical risk cost incurred is mostly transferred out of the EDP Group (except for partial revenue losses and tail-end events). EDP has also a strategic captive insurance policy based in Luxembourg (Energia RE) that secures the small losses not covered by the insurers’ pool.</p> <p>This risk is managed through risk prevention measures, such as: placing equipments at a superior height (Ribatejo), algae cleaning systems (in Sines the algae explosive growth in the cooling source was due to a local increase in sea temperature), in hydropower plants duplication of floodgates circuits and the placement of diesel emergency groups in flood protected sites.</p> <p>During the dry and the flood seasons EDP closely works with the Meteorological and Civil Protection authorities thus achieving better performance. EDP’s</p> | |
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| | | | | | | | | | hydropower plants are also projected to support the so called “flood of the millennium”. | |
| RPC04 | Tropical cyclones | <p>Under extreme winds, wind farms shut down for safety purposes. The increased frequency of wind automatic cut-off shut could have an effect on the turbine’s wear, thereby increasing maintenance costs and/or reducing life span.</p> <p>Extreme winds can also affect distribution and the transmission grids likely limiting EDP’s capacity to generate and supply energy in power stations.</p> <p>In the last years the frequency and the intensity of these extreme weather events are increasing. These can be particularly severe when there is a combination of extreme rain and extreme winds like the ones that occurred during the Gong Storm (2013) in Portugal.</p> | Increased operational costs | Current | Direct | Likely | Medium | The potential financial implications are about than 15 M€ (before insurance). Insurance considerably reduces this cost. | <p>The EDP Group has 82% and 29% of net installed capacity in Portugal and Spain, respectively, covered by EMAS system registration. EDP Group has also 96% of global installed net capacity under ISO 14001 certification. The ISO 14001 section that addresses these subjects is 4.4.7 – emergency preparedness and response.</p> <p>There is also a range of insurances for the Group’s assets in operation. Therefore, the maximum physical risk cost incurred is mostly transferred out of the EDP Group (except for partial revenue losses and tail-end events). EDP has also a strategic captive insurance policy based in Luxembourg (Energia RE) that secures the small losses not covered by the insurers’ pool.</p> <p>EDP has created Business Continuity Departments in strategic areas to ensure that even under extreme weather events the key processes will not be affected.</p> <p>In Brazil, EDP developed ClimaGrid to manage the physical risks of the grid. This system automatically</p> | <p>In Portugal the distribution company manages the storm and the wildfire seasons differently from the rest of the year increasing the material storage and enlarging the number of the emergency teams. All preventing activities are evaluated and its costs allocated. As an example a Business Continuity Department annual budget is around 500 k€. In 2013 the ClimaGrid project had an investment of approximately 600 000 USD.</p> |

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| | | | | | | | | | detects thunder storms that usually precede grid shutdowns, allowing real time intervention in the prevention of future grid shutdowns. | |
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CC5.1.e. Risks driven by changes in other climate-related developments:

| Risk ID | Risk Driver | Description | Potential impact | Timeframe | Direct/Indirect | Likelihood of impact | Magnitude of impact | Estimated Financial implications | Management Method | Cost of management |
|---------|-------------|---|----------------------------|-----------|-----------------|----------------------|---------------------|--|--|---|
| RCC01 | Reputation | Social liabilities - Operations in dam's reservoirs during floods - Water discharges in dam's reservoirs, in successive flood situations, are not always well understood by some stakeholders, such as environmental NGO. This may affect EDP's reputation and consequently affect EDP's share value, EDP's financing cost, among others. | Wider social disadvantages | Current | Direct | likely | Medium-low | The potential financial implications of this risk can be brand value degradation. EDP's brand is evaluated (2014) in 2,260 M€, if this risk occurs a reasonable value is about 5%, 113 M€. | EDP has been developing a pilot project, ComPro (Comunicação de Grandes Projectos - Communication Plans and Procedures for major Projects), whose main objective is the strengthening of the bi-directionality of the communication with stakeholders and the improvement of communication in sustainability and environmental issues. This project is being applied to some new investments such as new hydropower plants. In the near future, EDP aims to extend the ComPro methodology to the major investments. EDP also has a dedicated website for the communication of new hydropower plants (www.a-nossa-energia.edp.pt). EDP has developed social innovation projects in some of the regions in which new hydropower plants are being constructed. These projects include entrepreneurship enhancement through capacity building development (human | The dedicated website cost around 65 thousand Euro to implement and 5 thousand Euro annually to maintain. Social innovation projects in 2014 represented about 26 M€. |

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| | | | | | | | | | capital), through product promotion in new markets, namely emerging ones, and through the empowerment in social institutions, among others. | |
| RCC02 | Induced changes in human and cultural environment | Personnel risk related to climate change, both directly, through death or illness in the event of extreme weather conditions (ex: heat waves, cold waves, hurricanes, bush fires, among others), and indirectly, through epidemics and facilitated disease spreading (ex: after floods), or chaos and disorder (ex: inability to reach working place or leave their home). This risk can cause a disruption in processes, and thus loss of revenue. This can be a loss in generation, distribution and commercialization. | Reduction/Disruption in generation capacity | Current | Direct | likely | Medium-low | The cost associated with this risk is the loss of revenue. This can be a loss in generation, distribution and commercialization; this would be less than 15 million. | EDP has a Corporate procedure that establishes the principles, structure and procedures regarding the Crises and Business Continuity Plans (CCBCP), that must be produced by the main BU, these must address the mitigation actions that must be taken when some exceptionally harmful event occur. These plans are being developed, or already exist for key areas/events such as power plants, electrical distribution, main data processors, pandemics, among others. The plans (will) include emergency plans and frequent emergency drills. All key workers are (will be) identified, have (will have) a VPN access and know (will know) which should be their actions to cope with the situation. EDP has also personnel insurance that covers most of these events and support employees. | The costs associated with the management of these risks are included in the Corporate Risk Department and in the Health and Safety Department Budgets, about 2 M€. |
| RCC03 | Uncertainty in market signals | Climate change may cause consumer demand volatility or industrial | Reduced demand for goods/services | Current | Direct | unlikely | Medium-low | The impact is measured as a percentage of | EDP manages the future risk through scenario analysis performed by | The costs of these risks are included in the |

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| | | consumption reduction or changes in sector tariffs causing reduction of energy market value in the energy sector. | | | | | | revenue 4%. | the Energy Strategic Department. EDP performs long term energy outlook studies for new investment decisions, for adapting to new government or EU energy strategy. These were performed to renewable energy and electrical vehicle investments and demand trends, such as decentralized generation, decentralized storage, amongst others. EDP has developed side demand models that incorporate changes in consumer volatility. This is perceived as a business opportunity and EDP has created EDP Serviços an ESCO company that provide efficiency and CO2 services | Department budgets, about 2 M€. |
| RCC04 | Change in consumer behavior | EDP's Consumers (B2B and B2C) might be subjected to Climate Change Regulations like the use of low emission products. In order to cope with it, EDP clients may be forced into extra costs. | Reduced demand for goods/services | Unknown | Indirect | unlikely | Medium-low | This risk is rather unlikely and its impact is very much uncertain. The financial impact is a reduction on electricity sales. The impact is measured as a percentage of revenue, about 4%. | EDP manages the future risk through scenario analysis performed by the Risk and the Energy strategy department. | The costs of these risks are included in the Department budgets and are about 2 M€. |

CC6. Climate Change Opportunities

CC6.1 Have you identified any climate change opportunities (current or future) that have the potential to generate a substantive change in your business operations, revenue or expenditure?

CC6.1.a. Opportunities driven by changes in Regulation:

| Op ID | Opportunity driver | Description | Potential impact | Timeframe | Direct/Indirect | Likelihood of impact | Magnitude of impact | Estimated Financial implications | Management Method | Cost of management |
|-------|-----------------------|---|---------------------------------------|-----------|-----------------|----------------------|---------------------|---|--|--|
| OR01 | Cap and trade schemes | Cap and trade will push businesses, including utilities towards less CO2 intensive products and services splitting the world in those companies that are able to cope with these restrictions and those which not being able to do it will most likely put out of business. For utilities there is a growing demand for low carbon electricity as well as for other services related with energy saving and CO2 footprint reduction. | Increase demand for products/services | Current | Direct | Virtually certain | High | There is a considerable market for renewable energy reinforced by CO2 markets. In the forthcoming years it is estimated that the operating cash flow from renewable will constantly grow. Since 2012 renewable revenues surpass the billion Euro. | Regulatory opportunities are constantly monitored by the Regulation and Competition Department in different companies and geographies, as well as by the Energy Strategic Departments, in Iberia and Brazil. In Brazil the Sustainability Department also follows this opportunity. This opportunity is managed by EDP Board using the inputs from the Regulation and Competition Department and the Energy Planning Departments. The strategy is implemented via the EDP Renewable company, EDPR. | The cost associated with this opportunity is the Capex on wind and Hydro. Capex in 2014, on renewable energy (wind) of 515 M€, 531 M€ hydro power in Portugal and 60 M€ hydro power in Brazil. These investments are part of EDP's Strategic Plan. |
| OR02 | Fuel energy | Taxes and | New products/ | 1-5 years | Direct | Virtually | High | The potential market for electrical mobility | Regulatory | Investment |

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| | taxes and regulations | <p>regulations on fossil fuel will most probably force the shift towards clean mobility (electric and natural gas). Clean mobility Fuel energy taxes and regulations such as green taxation in Portugal.</p> <p>Clean mobility is an opportunity because: it consumes electricity and gas. In electrical mobility vehicles have zero local emissions and can consume electricity mostly during off-peak hours this might help to regulate the grid. In natural gas mobility CO2 savings are materially relevant thus compensating other business emissions.</p> | business | | | certain | | <p>for EDP is the sale of electricity for mobility that will account for about 8.5 M€, based on 19 000 vehicles for 2020. The potential market for natural gas mobility is about 10 M€.</p> | <p>opportunities are constantly monitored by the Regulation and Competition Department in different companies and geographies, as well as by the Energy Strategic Departments, in Iberia and Brazil. In Brazil the Sustainability Department is also developing this opportunity. In Portugal EDP EDP is progressively replacing its conventional fleet, with over 3,700 vehicles, with new, more efficient and less carbon emitting vehicles (hybrid, PLG, natural gas and electric). The latter represented, in 2014, about 13% of the total fleet vs. 8% in 2012, with the following breakdown: 403 hybrid (gasoline + electric), 22 PLG, 25 electric and 69 natural gas. EDP has also installed several charging locations. In next years it is planned</p> | <p>associated – Electrical mobility 2 M€. Natural gas mobility – 300 thousand euro per new client (infrastructure).</p> |
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| | | | | | | | | | <p>to develop the business in two lines: pilot project of public charging infrastructure with 1300 charging points, 50 fast ones, more than 1000 users. EDP has commercial products tailored for clients with electric cars – “energy2move”</p> <p>In Spain EDP has a partnership with Mitsubishi in which when a car is sold EDP installs the charging system at the client’s house.</p> <p>EDP in Brazil there are actually 26 points in the Brazilian states of São Paulo and Espírito Santo, in 2013 3 points were installed in Mogi das Cruzes city, São Paulo University and at the Portuguese Consulate.</p> <p>In Portugal EDP is already selling natural gas for the public transport of Braga and Oporto.</p> | |
| OR03 | Other regulatory | Regulation to support to | Increase demand for | Current | Direct | Virtually certain | Medium | There is a considerable market for renewable energy reinforced by CO2 | Regulatory opportunities are | Investment associated: |

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| | drivers | renewable generation: (1) In countries where renewables is currently underdeveloped (2) through Wind offshore generation EDP is present in many renewable emerging markets, such as Poland and Romania, EDP has since January 2010 the permission to develop (with sea energy) 1.3 GW of offshore wind turbines in Scotland. | products/services Increased generation capacity | | | | | markets In 2014 EDPR revenues continue to surpass the billion Euro. The potential market for offshore wind power is about 3 GW/year worldwide. EDP R being the third wind power company will most surely capture some of these opportunities. These opportunities may arise from: (1) Economies that have not fully developed their renewable potential, example Romania and Poland (2) Less favored regions with restricted energy access. EDP created a company A2E that aims to providing access to energy, by disseminating renewable energy generation and use, namely in cooking, in lightning (to allow night study and work) and in water purification. These second type of opportunities have as main objective the improvement of human conditions (http://www.fundacaoedp.pt/en/access-to-energy/mission/sustainable-development/166) (3) Technology improvement such as offshore generation. | constantly monitored by the Regulation and Competition Department in different companies and geographies, as well as by the Energy Strategic Departments, in Iberia and Brazil. In Brazil the Sustainability Department also follows this opportunity. EDP renewable company, EDPR is the world third renewable player. In 2014 EDP had 9 GW of installed power, a net capacity factor of 30% worldwide (1% above average) and has generated 19.8 TWh with an outstanding availability factor of 97.5%. EDP is focused in doing business in countries with under exploited wind potential and adequate incentive framework. Those incentives can be power purchase agreements, tax credits, among | (1) Capex in 2014, on renewable energy (wind) of 515 M€, 531 M€ hydro power in Portugal and 60 M€ hydro power in Brazil. (2) Windfloat demonstration project capex 20 M€. |
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| | | | | | | | | | others. Wind offshore generation is an opportunity and may be supported by regulation. EDP has a pioneer demonstration project, Windfloat a 2 MW sea wind turbine. Windfloat has proven its resilience in deep sea water, it has resisted the Hercules storm, it has maintained its operation and during 2014 has produced 11 GWh. This project is currently included in an EU I&D project DemoWfloat that aims to develop a pre-commercial phase. The next step will be to build up a sea wind farm with 3 to 5 windfloat units | |
| OR04 | Other regulatory drivers | European and national legislation concerning ESCOs create a business opportunity in utilities | New products/ business | Current | Direct | Very Likely | Medium | In 2014 EDP's has sold 314 M€ in energy services worldwide, the potential ESCO market is considered to be about 1300 M€. In 2014 EDP has invested 20 M€ in the Program Save to Compete program (www.savetocompete.com/pt), which identifies measures to reduce energy consumption in business, promoting their | Regulatory opportunities are constantly monitored by the Regulation and Competition Department in different companies and | The costs associated with this opportunity are the commercial selling structures that not only sell these products but also sell |

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| | | | | | | | | <p>implementation and funding through the savings generated. Since the launch of the program in Portugal (2012) and in Spain (2013), 235 applications have been registered. By the end 2014, the program has already provided savings of 39 GWh, leading to 4.7 M€ bill reduction and avoiding 20,000 tons of CO2.</p> | <p>geographies, as well as by the Energy Strategic Departments, in Iberia and Brazil. In Brazil the Sustainability Department also follows this opportunity. EDP has created an ESCO company, EDP Serviços and ESCO company to supply energy efficiency and CO2 services.</p> | <p>electricity. A pro rata of the structure costs would be about 5 M€ per year.</p> |
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CC6.1.c. Opportunities driven by changes in changes in Physical Climate parameters:

| Op ID | Opportunity driver | Description | Potential impact | Timeframe | Direct/Indirect | Likelihood of impact | Magnitude of impact | Estimated Financial implications | Management Method | Cost of management |
|-------|---------------------------------|---|--|-----------|-----------------|----------------------|---------------------|---|---|---|
| OPC01 | Change in precipitation pattern | <p>Water scarcity is a strong scenario. EDP uses water in the thermal power plants cooling system and in the hydropower plant. Through the installation of cooling towers, instead of condensers, EDP has substantially reduced water use.</p> <p>Also the hydro reversible power plants have contributed to a decrease water use guaranteeing additional power generation.</p> | <p>Increase generation capacity</p> <p>Increase power plant resilience</p> | Current | Direct | Virtually certain | Medium - High | <p>The potential financial revenue of this opportunity is: (1) the marginal revenue that EDP obtains from its pump and storage, (2) the water use savings associated with cooling towers vs. condenser cooling units.</p> | <p>The EDP Group has 82% and 29% of net installed capacity in Portugal and Spain, respectively, covered by EMAS system registration. EDP Group has also 96% of global installed net capacity under ISO 14001 certification. The ISO 14001 section that addresses these subjects is 4.4.7 – emergency preparedness and response.</p> <p>These certifications guarantee that EDP is already prepared to a range of climatic events thus gaining an advantage regarding its competitors that do not have such a preparation.</p> <p>Water scarcity is a strong scenario. EDP uses water in thermal power plants cooling systems and in hydropower plants. Through the installation of cooling towers instead of condensers, EDP has substantially reduced water use.</p> <p>To benefit from this opportunity EDP has invested in technologies that use less water and allow the storage of the resource to better manage</p> | <p>The new hydropower plants that EDP is building have investment costs. They provide the additional benefit of contributing to manage this risk. Currently EDP is investing in</p> <ul style="list-style-type: none"> - New hydro plants in Portugal: 5 hydro plants under construction to be commissioned in 2014-16: ~1,450MW: - New hydro plants in Brazil: 2 hydro plants under construction to be commissioned in 2015/17: ~600MW <p>Capex in 2014, on renewable energy (wind) of 515 M€, 531 M€ hydro power in Portugal and 60 M€ hydro power in Brazil. These investments are part of EDP's Strategic Plan.</p> |

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| | | | | | | | | | it. As an example the Sabor dam, now finalized, is a reservoir dam located in an upstream position of Douro, the most affluent river in Portugal. This dam will allow water storage for consumption and energy generation in such a quantity that Portugal will have electrical consumption independency for peak hours for 30 days. | |
| OPC02 | Change in average temperature | Higher temperatures during summer and mild temperatures in winter may lead to increased electricity and/or gas sales in these periods as a result of intensive use of HVAC equipments. | Increase demand for products/services | Current | Direct | likely | Medium | Higher temperatures during summer may lead to increased electricity and/or gas sales in these periods as a result of intensive use of HVAC equipments. Increased electricity and/or gas sales will positively impact the company cash flow in about 2 a 3 %. | The EDP Group has 82% and 29% of net installed capacity in Portugal and Spain, respectively, covered by EMAS system registration. EDP Group has also 96% of global installed net capacity under ISO 14001 certification. The ISO 14001 section that addresses these subjects is 4.4.7 – emergency preparedness and response. These certifications guarantee that EDP is already prepared to a range of climactic events thus gaining an advantage regarding its competitors that do not have such a preparation. EDP manages this opportunity by always providing energy supply, even in summer peaks, this is achieved by the diversified investments that EDP has done in generation. | The new hydropower plants that EDP is building have investment costs. They provide the additional benefit of contributing to manage this risk. Currently EDP is investing in - New hydro plants in Portugal: 5 hydro plants under construction to be commissioned in 2014-16: ~1,450MW: - New hydro plants in Brazil: 2 hydro plants under construction to be commissioned in 2015/17: ~600MW Capex in 2014, on renewable energy (wind) of 515 M€, 531 M€ hydro power in Portugal and 60 M€ hydro power in Brazil. These investments |

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| | | | | | | | | | | are part of EDP's Strategic Plan. |
| OPC03 | Change in extreme temperature | Resilient technologies may be needed to cope with extreme temperature and weather. Utilities should be able to develop this technologies in the market (ex: conductors for HV lines and cables that can bear higher temperatures with lower losses) and eventually lower the cost of both new and existing technologies by scale effect, e.g.: underground HV cables. | New business/products | 1-5 years | Direct | Likely | Medium | The potential financial implications are insurance costs reduction. A possible value would be savings about 10% of the captive value. | The EDP Group has 82% and 29% of net installed capacity in Portugal and Spain, respectively, covered by EMAS system registration. EDP Group has also 96% of global installed net capacity under ISO 14001 certification. The ISO 14001 section that addresses these subjects is 4.4.7 – emergency preparedness and response. These certifications guarantee that EDP is already prepared to a range of climactic events thus gaining an advantage regarding its competitors that do not have such a preparation. | The cost can be about 10% of investment costs. |
| OPC04 | Increase grid resilience | Decentralized electrical generation and smart grids to improve the electrical system resilience to extreme weather events. | New business/products | Current | Direct | Likely | High | Decentralized generation and smart grids to improve the electrical system resilience to extreme weather events. The potential market for smart grids is about 600 to 1000 M€, just considering the distribution component. The micro generation, the electric vehicles and all other services will add up to this amount. The European Union has ruled that in 2020 80% of | The EDP Group has 82% and 29% of net installed capacity in Portugal and Spain, respectively, covered by EMAS system registration. EDP Group has also 96% of global installed net capacity under ISO 14001 certification. The ISO 14001 section that addresses these subjects is 4.4.7 – emergency preparedness and response. These certifications guarantee that EDP is already prepared to a range of climactic events thus gaining an advantage regarding its competitors | EDP's investment in smart grids totals about 30 M€. |

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| | | | | | | | | | electricity clients should be connected via smart grids. | that do not have such a preparation. Smart grids allow a much more efficient electrical grid management, and the integration of grid remote management, micro generation, distributed generation, electric vehicles, among others. Currently in Portugal smart grid connects 100 000 clients and in Brazil 11 500. | |
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CC6.1.e Opportunities driven by changes in other climate-related developments:

| ID | Opportunity driver | Description | Potential impact | Timeframe | Direct/Indirect | Likelihood of impact | Magnitude of impact | Estimated Financial implications | Management Method | Cost of management |
|-------|--------------------|---|---|-----------|-----------------|----------------------|---------------------|--|---|--|
| OCC01 | Other drivers | <p>Economy decarbonization increase EDP's competitive advantage due to its low CO2 generation</p> <p>EDP is one of the largest Renewable energy company in the world, and was one of the first utilities to move into the renewable business thus achieving advantageous know how. As an example EDP renewables has one of the highest load factor of the market – 30% world wide (in 2014).</p> <p>In 2014 renewable energy represented 73% of EDP's generation.</p> <p>EDP has also a low specific emissions in 2014 was 276 g/kWh.</p> <p>The strong support given to sustainable business is a key factor that has positioned EDP at the Top of the Dow Jones Sustainability index for utilities.</p> | Increased demand for existing products/Services | Current | Direct | Virtually certain | Medium - High | <p>The potential market for wind generation by 2020 will be between 500 and 1100 GW (IEA, Global wind Energy Outlook) depending on the policies.</p> | <p>EDP is strongly investing in renewables, Capex in 2014, on renewable energy (wind) of 515 M€, 531 M€ hydropower in Portugal and 60 M€ hydropower in Brazil. These investments are part of EDP's Strategic Plan.</p> <p>Renewable energy company in the world, and was one of the first utilities to move into the renewable business thus achieving advantageous know how. As an example, EDP renewables has one of the highest load factor of the market – 30% world wide (in 2014).</p> <p>In 2014 renewable energy represented 73% of EDP's generation.</p> <p>EDP has also a low specific emissions in 2014 was 276 g/kWh.</p> <p>The strong support given to sustainable business is a key factor that has positioned EDP at the Top of the Dow Jones Sustainability index for utilities.</p> | <p>The costs associated with this opportunity is the Capex. In the Capex was on renewable energy (wind) of 515 M€, 531 M€ hydro power in Portugal and 60 M€ hydro power in Brazil. These investments are part of EDP's Strategic Plan.</p> |
| OCC02 | Other drivers | <p>Economy decarbonization increase EDP's competitive advantage due to its services in efficiency, green</p> | Increased demand for existing products/Services | Current | Direct | Virtually certain | Medium - High | <p>The potential market for energy efficiency services is well above the 1300 M€</p> | <p>Economy decarbonization increase EDP's competitive advantage due to its low emissions generation (in 2014 EDP's specific emission was 276 g/kWh</p> | <p>The costs associated with these opportunities are related to existing structures, and are about 150 k€ per</p> |

| | | | | | | | | | | |
|-------|-------------------|--|---------------------------------|----------|--------|--------|---------------|---|--|---|
| | | energy and CO2 compensation. EDP has been one of the first movers into this market. | | | | | | | and renewable energy represented 73% of EDP's generation) and also to the services in energy efficiency, green energy and CO2 compensation that it is providing for some years now. Also, under the decarbonization trend, many businesses are actually under great pressure to cope with voluntary sustainability evaluations in which these products are key factors. | year. |
| OCC03 | Consumer behavior | Clean mobility. EDP is strongly supporting electric mobility and fuel switching to gas. In electrical mobility, EDP is already working with automotive suppliers and has the experience of having developed a grid in Portugal for the electrical supply for cars. In gas mobility, EDP has been providing gas for the public transport in Porto and Braga. In both businesses EDP is establishing first mover advantage generating know how and enforcing customer relations. | New products /business services | 10 years | Direct | likely | Medium - High | The potential market for electrical mobility for EDP is the sale of electricity for mobility that will account for about 8.5 M€, based on 19 000 vehicles for 2020. The potential market for natural gas mobility is about 10 M€. | In Portugal EDP has currently several electrical vehicles and EDP has also installed several charging locations. In next years it is planned to develop the business in two lines: pilot project of public charging infrastructure with 1300 charging points, 50 fast charging points and more than 1000 users. EDP is currently creating commercial products tailored for clients with electric cars – “energy2move”. In Spain EDP has partnerships with Toyota, Mitsubishi and BYD to promote the use of the electric car. EDP in Brazil there are actually 26 points in the Brazilian states of São Paulo and Espírito Santo, in 2013 3 points were inaugurated in Mogi das Cruzes city, São Paulo University and at the Portuguese Consulate. In Portugal EDP is already | Investment associated – Electrical mobility 2 M€. Natural gas mobility – 300 thousand euro per new client (infrastructure). |

| | | | | | | | | | | |
|-------|--|---|---------------------------------|---------|--------|-------------|---------------|---|---|--|
| | | | | | | | | | selling natural gas for the public transport of Braga and Oporto. | |
| OCC04 | Consumer behavior | Smart grids. EDP has a considerable experience in smart grids being a developer since 2009. Through the years, EDP has acquired a considerable know-how, has enforcing customer relations and has strongly participated in public discussions supporting smart grids. | New products /business services | 5 years | Direct | Likely | Medium - High | The potential market for smart grids is about 600 to 1000 M€, just considering the distribution component. The micro generation, the electric vehicles and all other services will add up to this amount. The European Union has ruled that in 2020 80% of electricity clients should be connected via smart grids. | Smart grids allow a much more efficient electrical grid management, and the integration of grid remote management, micro generation, distributed generation, electric vehicles, among others. Currently in Portugal smart grid connects 100 000 clients and in Brazil 11 500. | EDP's investment in smart grids totals about 30 M€s. |
| OCC05 | Induced changes human and cultural environment | Green electricity generation - RECs - Renewable Energy Certificates | New products /business services | Current | Direct | likely | Medium - High | The potential market for RECs is about 10 M€. | RECs are certificates that proof that one megawatt-hour (MWh) of electricity was generated from a renewable energy resource. Currently EDP has the sourcing and a small client portfolio. The sourcing is produced in the new hydropower plants that are not under any special feed-in tariff. The clients exist and will increase due to the growing number of voluntary sustainability evaluations in which EDP's clients will need to score to keep up with their peers. | The costs associated with this opportunity are the commercial selling structures that not only sell these products but also sell electricity. A pro rata of the structure costs would be 50 K€ per year. |
| OCC06 | Consumer behavior | Energy services – efficiency and CO2 compensation | New products /business services | Current | Direct | Very likely | Medium - High | The potential market for CO2 services can be up to 7 M€ and for energy efficiency about 1300 M€. | Efficiency services provide positive return; the major drawback is for some projects is its payback period. On the other hand CO2 compensation is a | The costs associated with this opportunity are the commercial selling structures that not only sell these products but also sell |

| | | | | | | | | | | |
|-------|-------------------|------------------------------|----------------------------------|---------|--------|-------------------|--------|---|--|--|
| | | | | | | | | In 2014 EDP sold 316 M€ of energy services worldwide. | promising area because many businesses are actually under great pressure to cope with voluntary sustainability evaluations in which these products are key factors. A good business opportunity is to provide clients with finance and technology solutions. | electricity. A pro rata of the structure costs would be about 50 K€ per year. |
| OCC07 | Consumer behavior | Clean electricity production | New products, business, services | Current | Direct | Virtually certain | Medium | EDP has created a Business Unit dedicated to the development of renewable cost effective energy supply in less favored regions: the A2E. Its objective is to promote the access to energy worldwide (and access to the 1.3 billion people currently without it). The world potential market is 2.5 billion Euro in investment to provide access to energy worldwide. | EDP has created a Business Unit dedicated to the development of renewable cost effective energy supply in less favored regions: the A2E. Its objective is to promote the access to energy Through the supply of solar portable light, solar ovens, water purifiers, and solar home systems, among others. A2E has performed a pilot in the Kakuma refugee camp and in the next 3 years is going to develop 6 projects in 3 continents that will impact the life of more than 70 thousand extremely poor people. In 2014 EDP has implemented more projects: (1) Titimane - Newly installed electricity generation (MW) e.g. from renewable energy system(s) installed: 160 kW (100kWp solar PV + 60 kW biomass+ 340 kWh storage). Amount of energy generated (MWh) e.g. from renewable energy systems installed: 232 MWh in the first year and 442 MWh after 20 years. (2) Grupo Pestana – São | The investment in the first project – in Kakuma – represented an investment of 1.3 M€. |

| | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | Tomé - Newly installed electricity generation (MW) e.g. from renewable energy system(s) installed: 60 kW (solar PV). Amount of energy generated (MWh) e.g. from renewable energy systems installed: 78 MWh Many more will follow. | |
|--|--|--|--|--|--|--|--|--|--|--|--|

CC7. Emissions Methodology

Base year

CC7.1 Please provide your base year and base year emissions (Scopes 1 and 2).

Use the table in the ORS to provide the following details for Scopes 1 and 2:

| Scope | Base year | Base year emissions |
|---------|-----------|---------------------|
| Scope 1 | 2008 | 19 813 643 |
| Scope 2 | 2008 | 1 571 028 |

Methodology

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

European Union Emissions Trading Scheme (EU ETS): The Monitoring and Reporting Regulation (MRR) – General Guidance for Installations;
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition).

CC7.3 Please give the source for the global warming potentials you have used

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

CC7.4 Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

| Fuel/Material/Energy | Emission Factor | Unit | Reference |
|---|-----------------|---------------|--|
| Electricity Emission factor Portugal (Scope 2) 2014 | 277.0 | kg CO2e/MWh | Electricity national emission factor - Portuguese Regulator (ERSE) and TSO (REN) |
| Electricity Emission factor Spain (Scope 2) 2014 | 248.1 | kg CO2e/MWh | Electricity national average emission factor - Spanish TSO (REE) |
| Electricity Emission factor Brazil (Scope 2) 2014 | 135.5 | kg CO2e/MWh | Electricity national emission factor – Brazil Minister of Science and technology |
| Electricity Emission factor USA (Scope 2) 2014 | 591.9 | kg CO2e/MWh | Electricity emission factor of the states in which EDP is operating. |
| Electricity Emission factor RoW (Scope 2) 2014 | 521.2 | kg CO2e/MWh | Average weighted electricity emission factor of the countries in which EDP is operating – CERA, Global Insight |
| Gasoline (Europe and USA) | 2.40 | kg CO2e/liter | Mobile combustion - GHG emissions calculation tool – version 2.3 |
| Gasoline (Brazil) | 2.27 | kg CO2e/liter | National emission factor – GHG Protocol Brazilian Program |
| Diesel (Europe and USA) | 2.68 | kg CO2e/liter | Mobile combustion - GHG emissions calculation tool – version 2.3 |
| Diesel (Brazil) | 2.67 | kg CO2e/liter | National emission factor – GHG Protocol Brazilian Program |
| CNG | 2.00 | kg CO2e/m3 | National emission factor – GHG Protocol Brazilian Program |
| Alcohol (Brazil) | 1.18 | kg CO2e/liter | National emission factor – GHG Protocol Brazilian Program |

CC8. Emissions Data

Boundary

CC8.1 Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Select from

| | |
|---|---|
| x | Financial control |
| | Operational control |
| | Equity share |
| | Climate Change Reporting Framework (CCRF) |
| | Other |

Scope 1 and 2 Emissions Data

CC8.2 Please provide your gross global **Scope 1** emissions figures in metric ton CO_{2e}

16 551 216

CC8.3 Please provide your gross global **Scope 2** emissions figures in metric ton CO_{2e}

2 214 333

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

Data Accuracy

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 |
|-------|--------------------------|----------------------------------|---|
| 1 | Less than or equal to 2% | Metering/Measurement Constraints | Source of uncertainty is fuel control and measurement equipment in thermal power plants. There is no significant difference in data accuracy between these installations. Values are fully audited. EDP considers as an acceptable figure an uncertainty of less than 2%. |
| 2 | Less than or equal to 2% | Metering/Measurement Constraints | Source of uncertainty is fuel control and measurement equipment in thermal power plants. There is no significant difference in data accuracy between these installations. Values are fully audited. EDP considers as an acceptable figure an uncertainty of less than 2%. |

External Verification or Assurance

CC8.6 Please indicate the verification/assurance status that applies to your reported **Scope 1** emissions

Third party verification or assurance complete

CC8.6a Please provide further details of the verification/assurance undertaken for your **Scope 1** emissions, and **attach the relevant statements**

| Type of verification or assurance | Attach the document | Page/Section reference | Relevant standard | Proportion of reported Scope 1 emission verified (%) |
|-----------------------------------|------------------------|------------------------|-------------------|--|
| Reasonable Assurance | EDP Annual Report 2014 | Pag. 386 - 389 | ISAE 3000 | 100% |

CC8.7 Please indicate the verification/assurance status that applies to your reported **Scope 2** emissions

Third party verification or assurance complete

CC8.7a Please provide further details of the verification/assurance undertaken for your **Scope 2** emissions, and **attach the relevant statements**

| Type of verification or assurance | Attach the document | Page/Section reference | Relevant standard | Proportion of reported Scope 1 emission verified (%) |
|-----------------------------------|------------------------|------------------------|-------------------|--|
| Reasonable Assurance | EDP Annual Report 2014 | Pag. 386 - 389 | ISAE 3000 | 100% |

CC8.8 Please identify if any data points other than emission figures have been verified as part of the third party verification work undertaken (new for CDP 2014)

| Additional data point verified | Comment |
|---|---------|
| Year on year change in emissions (Scope 1 and 2) Year on year emissions intensity figure Emissions reduction activities | |

Further information

Avoided emissions were also audited.

Carbon Dioxide Emissions from Biologically Sequestered Carbon

CC8.9 Are carbon dioxide emissions from the combustion of biologically sequestered carbon (i.e. carbon dioxide emissions from burning biomass/biofuels) relevant to your company?

No.

Further information

The consolidation perimeter currently does not include any biomass power plant.

CC9. Scope 1 Emissions Breakdown

Electric utilities should report emissions by country/region using the tables in EU2.

CC9.1 Do you have Scope 1 emissions sources in more than one country?

Yes

If yes: CC9.1a Please break down your total gross global Scope 1 emissions by country/region

| Country/Region | Scope 1 metric ton CO2e |
|---|-------------------------|
| Portugal | 7 779 238 |
| Spain | 8 764 266 |
| Brazil | 6 545 |
| USA | 917 |
| RoW (Rest of World- France, Belgium, UK, Italy, Poland and Romania) | 250 |

CC9.2 Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

| | |
|-------------------------------|---|
| By business division (CC9.2a) | X |
| By facility (CC9.2b) | |
| By GHG type (CC9.2c) | X |
| By activity (CC9.2d) | |

CC9.2.a Scope 1 Breakdown by business division

| Activity | Scope 1 metric ton CO2e |
|---|-------------------------|
| Electricity generation and distribution | 16 546 319 |
| Gas transport and distribution | 4 898 |

CC9.2.c Scope 1 Breakdown by GHG type

| GHG Type | Scope 1 metric ton CO2e |
|-------------------------------------|-------------------------|
| CO2 | 16 510 184 |
| SF6 (GWP=22,800) | 7 074 |
| CH4 (Gas leakage and fleet, GWP=25) | 4 008 |
| N2O (Fleet, GWP= 298) | 286 |

CC10. Scope 2 Emissions Breakdown

CC10.1 Do you have Scope 2 emissions sources in more than one country?

Yes

If yes: CC10.1a Please break down your total gross global Scope 2 emissions by country/region

| Country/Region | Scope 2 metric tonnes CO2e | Purchased (MWh) | Purchased low carbon (MWh) |
|--|----------------------------|-----------------|----------------------------|
| Portugal | 1 540 912 | 1 261 480 | 0 |
| Spain | 122 194 | 119 374 | 0 |
| Brazil | 527 256 | 25 629 | 0 |
| USA | 17 619 | 29 824 | 0 |
| RoW (Rest of the world - France, Belgium, UK, Italy, Poland and Romania) | 6 352 | 12 187 | 0 |

CC10.2 Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

| | |
|--------------------------------|---|
| By business division (CC10.2a) | X |
| By facility (CC10.2b) | |
| By activity (CC10.2c) | |
| By legal structure (CC10.2d) | |

CC10.2a Scope 2 Breakdown by business division

| Activity | Scope 2 metric ton CO2e |
|---|-------------------------|
| Electricity generation and distribution | 2 214 091 |
| Gas transport and distribution | 242 |

CC11. Energy

CC11.1 What percentage of your total operational spend in the reporting year was on energy?

88.2%

CC11.2 Please state how much fuel, electricity, heat, steam, and cooling in MWh your organization has consumed during the reporting year

| Energy Type | MWh |
|-------------|------------|
| Fuel | 44 864 343 |
| Electricity | 9 989 429 |
| Heat | 0 |
| Steam | 0 |
| Cooling | 0 |

CC11.3 Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

| Fuel Type | MWh |
|--|------------|
| Coal | 37 409 900 |
| Natural Gas | 3 579 583 |
| Gasoil | 48 580 |
| Fuel oil | 108 508 |
| Blast Furnace Gas | 3 124 048 |
| Coke Oven Gas | 192 073 |
| Oxygen Steel Furnace Gas | 329 747 |
| Fuel for mobile (Gasoline, diesel oil, alcohol, LNG) | 71 903 |

CC11.4 Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the Scope 2 figure reported in CC8.3

| Basis for applying a low carbon emission factor | MWh associated with low carbon electricity, heat, steam or cooling | Comments |
|---|--|---|
| No purchases or generation of low carbon electricity, heat, steam or cooling accounted with a low carbon emissions factor | 0 | EDP did not purchased electricity, heat, steam or cooling accounted with a low carbon emission factor." |

CC12. Emissions Performance

Emissions History

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 | Direction of change | Comment |
|--------------------------------|-----------------|---------------------|---|
| Emissions reduction activities | 6.2% | Decreased | The entry into operation of new renewable capacity (766 MW of wind and solar PV) led to further decarbonisation of EDP's generation portfolio, which resulted in reduced scope 1 emissions – CO2 emission reduction of 1065 kt CO2. Additionally, efficiency improvement measures undertaken in the electricity distribution network led to a decrease in losses in the electricity distribution business, resulting in a reduction of scope 2 emissions of about 5%. Distribution losses represent about 80% of scope 2 emissions. This was |

| | | | |
|--|--|--|---|
| | | | <p>obtained through: (1) the construction and commissioning of 32 new HV/MV substations and 9700 km of HV and MV network lines; (2) new theft and fraud control program; (3) installation of telemetering at all 66k MV/LV transformers; (4) installation of telemetering in the public lighting network, and in domestic customers within the Inovgrid program; (5) Implementation of a new Revenue Assurance system; (6) Implementation of Energy Data Management (EDM) that allows the management of the increasing metering data provided by the smartgrid program. – CO2 emission reduction of 106.7 kt CO2.</p> <p>S1 Emission [2013] = 16 633 kt CO2 S2 Emission [2013] = 2 336 kt CO2 Decrease [%] = (1065+106.7)/(16633+2336) = 6.2%</p> |
|--|--|--|---|

Emissions Intensity

CC12.2 Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric ton CO2e per unit currency total revenue

| Intensity figure | Metric numerator [mtCO2e] | Metric denominator [Turnover €] | % change from previous year | Direction of change from previous year | Reason for Change |
|------------------|---------------------------|---------------------------------|-----------------------------|--|--|
| 0.001 1517 | 18 765 549 | 16 293 900 000 | 1.2% | Decreased | Scope 1+2 emissions decreased (-1.1%) and turnover increased (+0.1%), resulting in a 1.2% decrease in the intensity figure from previous year. |

CC12.3 Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric ton CO2e per full time equivalent (FTE) employee

| Intensity figure | Metric numerator [mtCO2e] | Metric denominator [FTE employee] | % change from previous year | Direction of change from previous year | Reason for Change |
|------------------|---------------------------|-----------------------------------|-----------------------------|--|--|
| 1 590.6 | 18 765 549 | 11 798 | 2.1% | Increased | Both scope 1+2 emissions (-1.1%) and FTE (-3.1%) decreased compared to previous year. However, FTE decreased more than emissions, so the overall result is an increase in the intensity figure from previous year. |

CC12.4 Please provide an additional intensity (**normalized**) metric that is appropriate to your business operations

| Intensity figure | Metric numerator [mtCO2e] | Metric Denominator (MWh) | % change from previous year | Direction of change from previous year | Reason for Change |
|------------------|---------------------------|--------------------------|-----------------------------|--|--|
| 0.313 | 18 765 549 | 59 954 345 | 0.7% | Decreased | Both net electricity generation (-0.4%) and scope 1+2 emissions (-1.1%) decreased. However, net generation decreased less than emissions, resulting in a decrease in the intensity figure (-0.9%). |

CC13. Emissions Trading

13.1 Do you participate in any emissions trading schemes?

Yes.

If 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 ton CO2e | Details of ownership |
|-------------|-----------------------------------|----------------------|----------------------|---------------------------------------|---|
| EU - ETS | Year 2014 | 469 954 | 6 976 000 | 16 521 553 | Facilities EDP owns and operates Most of the CO2 licenses used in 2014 were EDP's banked licenses. |

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 2014, only some CHP plants got allowances allocated for free (see pages 86 and 341 of EDP Annual Report 2014).

The power plants covered by the EU ETS emitted 16.5 Mton of CO₂ in 2014, about 1% less than in 2013. Overall emission intensity fell slightly from 0.277 tCO₂/MWh in 2013 to 0.276 tCO₂/MWh in 2014, due to the increase in CO₂ free generation, compensating the increase in thermal power generation from coal.

In 2014 to comply with EU-ETS EDP has used allocated allowances, allowances purchased and banked allowances (allowances that EDP had been not using in the last years).

CC13.2 Has your organization originated any project-based carbon credits or purchased any within the reporting period?

No

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 ton CO2e | Methodology | % of emissions calculated using data obtained from suppliers or value chain partners | Explanation |
|--|--------------------------|-----------------|---|--|--|
| C.01 Purchased goods and services | Relevant, calculated | 37 465 | 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 | Purchased of chemicals products. Municipality Water. There was a modification in the GHG Scope 3 methodology implementation. In previous years the electricity generated by others and distributed or commercialized by EDP was included in C.01 Purchased goods and services. From 2014 onwards it was included in C.03 Fuel-and-energy-related activities. |
| C.02 Capital goods | Not relevant, calculated | 231 721 | 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 | Facilities (power plant and buildings) construction and equipment acquisition. For the "non-relevant" categories we use the data calculated in 2013. |
| C.03 Fuel-and-energy-related activities (not included in Scope 1 or 2) | Relevant, calculated | 6 728 235 | 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 | Generation/processing of electricity and natural gas purchased for retail. Production (extraction and processing) of fuels (coal, natural gas, forest biomass, fuel oil and diesel) used by EDP for electricity generation (excluding transport/transmission). There was a modification in the GHG Scope 3 methodology implementation. In previous years the electricity generated by others and distributed or commercialized by EDP was included in C.01 Purchased goods and services. From 2014 onwards it was included in C.03 Fuel-and-energy-related activities. |

| | | | | | |
|---|--------------------------|---------|---|-----|--|
| C.04 Upstream transportation and distribution | Relevant, calculated | 955 071 | 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 | Transportation of coal and transmission/distribution of electricity purchased by EDP from other suppliers for retail. |
| C.05 Waste generated in operations | Not relevant, calculated | 22 300 | 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 | Transport and disposal of waste generated in EDP's activities (mainly gypsum and ashes from coal power plants). For the "non-relevant" categories we use the data calculated in 2013. |
| C.06 Business travel | Not relevant, calculated | 7 730 | 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 | EDP employee business travel (air, train and road travel). For the "non-relevant" categories we use the data calculated in 2013. |
| C.07 Employee commuting | Not relevant, calculated | 4 477 | 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 | EDP employee commuting. For the "non-relevant" categories we use the data calculated in 2013. |
| C.08 Upstream leased assets | Not relevant, calculated | 33 997 | 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 | 100 | Use of rented assets (especially machinery) in construction activities. For the "non-relevant" categories we use the data calculated in 2013. |

| | | | | | |
|---|------------------------------------|-----------|---|------|--|
| | | | and LCA studies). GWP source: IPCC Assessment Report 4. | | |
| C.09 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). | 90 | Support activities (offices and stores) associated with electricity and gas retail. For the “non-relevant” categories we use the data calculated in 2013. |
| C.10 Processing of sold products | Not relevant, explanation provided | n.a. | n.a. | n.a. | EDP’s products (electricity and gas) are supplied in their final consuming form, therefore they do not require processing. |
| C.11 Use of sold products | Relevant, calculated | 7 104 384 | 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 | Use of natural gas sold by EDP to clients. |
| C.12 End of life treatment of sold products | Not relevant, explanation provided | n.a. | n.a. | n.a. | EDP’s sold products (electricity and gas) do not generate waste, therefore no end of life treatment is required. |
| C.13 Downstream leased assets | Not relevant, explanation provided | n.a. | n.a. | n.a. | EDP did not use downstream leased assets in the reporting year. |
| C.14 Franchises | Not relevant, explanation provided | n.a. | n.a. | n.a. | EDP did not have franchised activities in the reporting year. |
| C.15 Investments | Not relevant, calculated | 4 127 | 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 | Emissions from EDP’s participated companies (minority interests). For the “non-relevant” categories we use the data calculated in 2013. |

Annexed: Scope 3 project results

CC14.2 Please indicate the verification/assurance status that applies to your Scope 3 emissions

Limited Assurance

CC14.2a Please provide further details of the verification/assurance undertaken, and attach the relevant statements

| Type of verification or assurance | Attach the document | Page/Section reference | Relevant standard | Proportion of reported Scope 1 emission verified (%) |
|-----------------------------------|------------------------|------------------------|-------------------|--|
| Limited Assurance | EDP Annual Report 2014 | Pag. 386 - 389 | ISAE 3000 | 100% |

CC14.3 Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

If yes: CC14.3a Please identify the reason 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 |
|--|---|------------------------------|---------------------|---|
| C.01 Purchased goods and services | Change in physical operating conditions | 7.7% | increase | There was a modification in the GHG Scope 3 methodology implementation. In previous years the electricity generated by others and distributed or commercialized by EDP was included in C.01 Purchased goods and services. From 2014 onwards it was included in C.03 Fuel-and-energy-related activities. 2013 C01 Scope 3 value recalculated is 34.8 ktCO ₂ . The increase in emissions was due to a greater consumption of chemicals such as hydrochloric acid and ammonia. |
| C.03 Fuel-and-energy-related activities (not included in Scope 1 or 2) | Change in physical operating conditions | 20.7% | decrease | There was a modification in the GHG Scope 3 methodology implementation. In previous years the electricity generated by others and distributed or commercialized by EDP was included in C.01 Purchased goods and services. From 2014 onwards it was included in C.03 Fuel-and-energy-related activities. 2013 C03 Scope 3 value recalculated is 8 489.6 ktCO ₂ . The decrease in emissions was due to a reduction in emissions related with electricity distribution in Portugal and gas distribution in Spain. |
| C.04 Upstream transportation and distribution | Change in physical operating conditions | 34.7% | decrease | Less combined CCGT and coal production and reduction in distribution activity in Spain and Brazil. |
| C.06 Business travel | Change in output | 62.6% | increase | The increase is mostly due to the growing business of EDP Renewables overseas |

CC14.4 Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies?

Yes.

| | |
|-------------------------------------|---------------------------------------|
| <input checked="" type="checkbox"/> | Yes our suppliers |
| <input checked="" type="checkbox"/> | Yes our customers |
| <input type="checkbox"/> | Yes other partners in the value chain |
| <input type="checkbox"/> | No, we do not engage |

CC14.4.a Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success:

Suppliers:

EDP is currently working with suppliers on sustainability performance enhancement. Recent relevant actions include:
1. At Sines power plant EDP gave training for 300 suppliers in Lean methodology, thus achieving considerable energy and CO2 savings.

2. In 2013 EDP joined the Bettercoal initiative. This organization associates 12 European's companies that intend to improve the sustainability in the coal supply chain. This has been identified by utilities as a critical supplier with medium/high ESG's risks mainly on water/biodiversity issues and on human rights. The year 2014 has been the first full working year and the associated companies promoted due diligences and self-assessments directly in coal mines. Members agreed to include Bettercoal Code in a growing number of acquisition contracts and have specified a number of KPIs for that. Stakeholders have been associated with the initiative, namely community's NGO's. EDP is a full time member of Bettercoal participating in every action plans as well in special work groups.

3. Furthermore, EDP scrutinizes suppliers performance using the Achilles database that contains important sustainability data such as if the supplier has implemented and certified environmental management systems, which is used as a proxy for sustainability performance, including GHG emissions management. The number of registered suppliers in the Achilles database is 2 506 - 50% of purchase volume - 667 of them are 14.001 certified - represent 24% of purchase's.

Customers:

1. Delivery of low carbon electricity, as a result of the progressive decarbonisation of EDP's generation (reduction of client's scope 2 emissions)

Resulting from the strategic decision to investment in renewable power generation, EDP delivers electricity with a lower CO2 content than the average grid electricity. In 2014, EDP generated 73% of its electricity from renewable sources and delivered electricity with an average carbon content of 276 gCO2/kWh, lower than the national values in Portugal (277 gCO2/kWh), USA (592 gCO2/kWh) and in the ROW (526 gCO2/kWh). This energy generated from renewables resulted in avoided emissions of 33.8 Mt CO2.

2. The sale of natural gas, which is a low carbon fossil fuel (reduction of the client's scope 1 emissions)
Natural gas (56 gCO2/GJ) is used by clients in replacement of other fossil fuels, with higher carbon content, namely fuel oil (77 g CO2/GJ), LPG (63 gCO2/GJ) and diesel oil (74 g CO2/GJ). Approximately 2 Mt CO2 were avoided during 2014.

3. Supply of energy efficiency services - clients reduce scope 1 and scope 2 emissions.
EDP address the needs of specific client groups and helps them to their energy consumption (fossil fuel or electricity). EDP's energy services portfolio includes:

3.1 Program Save to Compete (www.savetocompete.com/pt), which identifies measures to reduce energy consumption, promoting their implementation and funding through the savings generated. By the end 2014, the program has provided savings of 39 GWh, 4.7 M€ bill reduction 20,000 tons of CO2 avoided.

3.2 Plan for Promoting the Efficient Electricity Consumption (PPEC) promoted by the Energy Services Regulatory Authority. EDP had 16 measures approved: energy savings of 1073 GWh through their lifetime, scope 1 and 2 emission reduction of 397 tons of CO2 and a global benefit of 105 M€. Further information:
www.erse.pt/pt/planodepromocaodaeficiencianoconsumoppec/ppec1314/Paginas/default.aspx

3.3 EDP has a program in Portugal to promote energy efficiency in - www.eco.edp.pt - where there is:

- Information and advice on energy efficiency;
- Energy efficiency and CO2 emissions simulators;
- Practical guide for an efficient home.

3.4 -The investment in energy efficiency in Brazil attained BRL 25.7 million in 2014, estimated energy savings 30,631 MWh, 4.1 kton CO2 avoided and a reduction in peak demand of 13,345 kW. The annual investment is 0.5% of the net operating income of distributors.

(www.edp.com.br/inovacao-sustentabilidade/programa-de-eficiencia-energetica)

3.5 Since 2010 EDP leads the Portuguese electric mobility project (www.mobie.pt) – 1300 charging points, 50 fast charging points and more than 1 000 clients, 1 300 t CO2 avoided.

3.6 A2E access to energy program - based on renewable energy solutions, mainly solar, in order to contribute towards the social, economic and environmental development of the communities less favored. The projects allow scope 1 emission reductions since in most cases they allow for the replacement of wood combustion. New projects:

- In geographies where EDP does not have distribution and supply activities. In 2014, EDP carried out studies and development of projects in São Tomé and Príncipe, Mozambique and Peru, based on micro-generation solutions in remote locations. These solutions consist of mini-grids with generation, distribution and sale of electricity to rural areas, using renewable technologies (photovoltaics, biomass, and micro-wind turbines). Examples: (1) - Titimane (Moçambique) Project – 150 tCO₂ annually avoided due to newly electricity generation from renewable energy system(s) installed: 160 kW (100kWp solar PV + 60 kW biomass+ 340 kWh storage). Amount of energy generated: 232 MWh in the first year and 442 MWh after 20 years;

(2) Pestana Group (São Tomé) Project – 120 tCO₂ tCO₂eq annually avoided due to newly renewable installed electricity generation: 60 kW (solar PV). Amount of energy generated 78 MWh

3.7 - Micro and mini generation projects – in 2014 EDP installed 12 MW systems with annual production of 18 GWh/year, 5 ktCO₂ avoided emissions, clients reduce their scope 2 emissions.

3.8 EDP Gás has a natural gas refueling station at Braga, investment 500 k€, that provides fuel to public buses. In 2014 EDP Gás supplied 1350GJ of CNG to Braga public bus, avoiding 23.1 tCO₂e per year.

CC14.4.b To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

| Number of suppliers | % total spend | Comment |
|---------------------|---------------|---|
| 2 506 | 50% | Suppliers assessed using Achilles database. |

CC14.4.c If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

| How you make use of the data | Please give details |
|---|--|
| Managing physical risks in the supply chain | EDP scrutinizes suppliers performance using the Achilles database that contains important sustainability data such as if the supplier has implemented and certified environmental management systems, which is used as a proxy for sustainability performance, including GHG emissions management. The number of registered suppliers in the Achilles database is 2 506, they represent about 50% of purchase volume. 667 of them are 14.001 certified and those represent about 24% of purchase's volume. |

CC15.1: Please provide the following information for the person that has signed off (approved) the CDP response

| Name | Job title | Corresponding job category |
|--------------|--|----------------------------|
| Rui Teixeira | Rui Teixeira has responsibility over electric generation and sustainability issues. He is also a Member of the Board of Directors of several subsidiaries of the Company's Group. | Board/Executive board |