



The Carbon Disclosure Project (CDP) (www.cdproject.net) is an independent not-for-profit organization which holds the largest database of corporate climate change information in the world. The data is obtained from responses to CDP's annual information requests, issued on behalf of institutional investors, purchasing organizations and government bodies. Since its formation in 2000, CDP has become the gold standard for carbon disclosure methodology and process, providing primary climate change data for the global marketplace.

Following our full disclosure policy, all information about EDP can be accessed in www.edp.pt. EDP strongly recommends the consultation of our 2010 Annual Report.

EDP is a European utility company, based in Portugal but also present in 12 other countries, being the most relevant in the CO₂ context Spain, Brazil, USA, etc. 2010 in short figures:

Turnover	14,171 EUR Million
Gross Profit	5,404 EUR Million
Net profit	1,079 EUR Million
Employees	12,096
Assets	40,489 EUR Million
Equity	7,855 EUR Million
Liabilities	29,756 EUR Million
ISIN	PTEDP0AM0009
SEDOL	4103596



GOVERNANCE

1. GROUP AND INDIVIDUAL RESPONSIBILITY

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

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

The executive board, in particular Jorge Cruz de Morais, the member of the executive board that has the responsibility upon Sustainability issues.

Individual Performance

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

Yes.

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator
Board/Executive Board	Monetary	Sustainability index that includes three performance vectors: economic, environmental and social. CO ₂ emissions reduction is specifically stated in the environmental vector. The methodology is based in the one from the Dow Jones Sustainability Index.
Environment/sustainability managers	Monetary	The employees entitled to this benefit are: - The Corporate Sustainability Department - Sustainability Department of EDP Distribution company (part of) - Sustainability Department of EDP Generation company (part of) - Sustainability Department of EDP Gás company (part of) - A member of DCF Financial Control Department of EDP The benefit is calculated using the Sustainability index that includes three performance vectors: economic, environmental and social. CO ₂ emissions reduction is specifically stated in the environmental vector. The methodology is based in the one from the Dow Jones Sustainability Index.
Business unit managers	Monetary	Sustainability index that includes three performance vectors: economic, environmental and social. CO ₂ emissions reduction is specifically stated in the environmental vector. The methodology is based in the one from the Dow Jones Sustainability Index.



2. STRATEGY

Risk Management Approach

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.

EDP has a Corporate Policy on Enterprise-Wide Risk Management (CPEWRM), that states: Objectives, Principles, Structure and Governance and identifies all company departments that have responsibilities in risk management. Governance and Control are established in CPEWRM and were stated by the Executive Board of Directors (EBD). The EBD decides about the company's risk appetite and the acceptable level of risk exposure, it also delegates tasks and responsibilities, defines the overall risk limits and ensures that risk management policies and procedures are observed.

The EBD is supported by a group of committees, amongst them the Risk Committee, chaired by the CEO, composed by: CFO, CRO, Corporate Financial Department Director, Iberian Trading Unit manager, Energy Strategic Planning Department Director and other senior management members who are invited upon agenda request. The main tasks of the Risk Committee are: to monitor key risks and risk appetite of EDP Group, to approve reporting and monitoring mechanisms, to approve or define recommendations concerning key risks or extraordinary risk events and approve or define recommendations concerning the Group Risk Policy, procedures and limits.

At corporate level, the Risk Management Department (RMD) is responsible for independent risk control, supervision and continuously report on overall compliance (with the established procedures and limits), as well as, the development of specific models and methods for risk management.

Business Units (BU) manage their own risks (down side) and opportunities (upside) within the established mandates. BU Risk Officers articulate both with their hierarchies, and with the CRO, thus ensuring the alignment of objectives, processes, report and control.

The methodology developed for risk management (identification, scoring and monitoring) is supported by a software platform, web based, named Portal de Risco do Grupo EDP (Risk Portal- EDP Group). This was internally developed for the consistent collection of information on each relevant risk. It is widely used in EDP Group and provides data with a qualitative and quantitative assessment of risks. All actions regarding a particular risk are registered and can be followed up on the tool. In the Risk Portal the risk maps are automatically produced for all the identified risks (please see Risk Types at EDP Risk Portal). EDP incorporates a third dimension and work with 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. These types of risk maps are outputs of Risk Portal- EDP Group and can be delivered by company or group of companies.

Financial and Business Risks exposure is otherwise analyzed with Monte Carlo simulations and stochastic methods, as applied to VaR, CFaR, PaR, corporate Pension Fund liquidity and other exposures.

Credit risks (counterparty or client default) are also analyzed by external or internal rating multivariate methodologies, which allow the identification of financial and business risk exposures.

Multi-dimensional stress tests and scenario analysis were also applied to the bi-annual business plan and budget, 2011-2012.



Specifically about water and climate risks and crisis management responsibilities at EDP, the ultimate responsibility for this is delegated in the CEO and in the Board. In order to succeed in this mission, the CEO is assisted by the board, the responsible for Environment and Sustainability and the responsible for the Generation. Operational Climate Change Risk is managed by the BUs and followed at corporate level by the Corporate Risk Management Department and by the Sustainability Department. The Sustainability Department has developed a project, ClimEDP, transversal to the company, which aims to assess the impact of Climate Change Risk in EDP's processes and assets. This project is included in the Risk Portal.

Risks are followed up depending on their materiality and on their control status, that is, risks which can cause a major impact or that are not properly managed are followed up on a regular basis that can range from weekly to bi-annual. Usually, risks in this situation are under some corrective action towards mitigation, either by increasing its control either by transferring them. The most usual monitoring frequency is annual.

The risk materiality is decided upon its impact on the BU as well as its impact on EDP Group. In a small BU a risk may be important, but when evaluated at group level it may be almost irrelevant. All risks are evaluated taking into account these two vectors. A risk that has an important impact at Group Level is considered a priority and is addressed in an urgent manner with actions to diminish or transfer it. The actions/projects developed to correct these risks are reported to BU management as well as to the Risk Management corporate Department and when they are truly important, also to the Board.

Furthermore EDP answers to the SAM Dow Jones Sustainability Index. In 2010, EDP was recognized as the world leader in the electricity sector. This is the third year in which the company has been included in the DJSI World and DJSI Europe indexes. For the first time, EDP is in the DJSI Enlarged Index created recently by SAM.

EDP maintains prominent position in the Social Dimension, being the 1st time considered Best in Class.

In the Economic Dimension, EDP continues to be one of the best companies in the sector, being Best in Class with a maximum score in the criteria Price Risk Management, Scorecards and Measurement Systems and Risk & Crisis Management.

In the Environmental Dimension, EDP top scored on the criteria Biodiversity, Climate Strategy, and has the best score on the criterion Electricity Generation.

EDP was assessed on the basis of 22 criteria and achieved the top score of 8 in 10 of them. In relative terms, EDP is the isolated leader in three criteria: management control system tools, electricity generation and social reporting.

2.2 Is climate change integrated into your business strategy?

EDP's strategy is based on three pillars: controlled risk, superior efficiency and focused growth. Controlled risk means that many types of risk are thoroughly addressed: Strategic, Business, Market, Operational, Credit and Regulatory Risks. Climate risk is dealt with in the Strategic and Operational risks, namely through an on-going project, ClimEDP, in which adaptation is the main objective.

EDP's Executive Board of Directors (EBD) define the corporate strategy based on the inputs from corporate departments such as Energy Strategic Department, Risk Department, relevant BU, such as electrical generation company, electrical distribution, gas distribution, etc. These inputs include market analysis, scenario analysis, technology analysis, regulation analysis, etc. The data produced incorporates important climate change issues such as emissions regulation, CO₂ price, extreme weather events, etc. Fuel use and availability is also considered, although it is not directly connected with climate change. The key factors that have



shaped EDP's strategy are CO₂ and fuel prices. EDP's emission reduction decreases its contribution to climate change, but also decreases its exposure to CO₂ and fuel price volatility risk. EDP's strategy also incorporates climate change in the short term, through adaptation measures that EDP has undertaken in order to reduce climate change impacts on its assets, such as the construction of protection walls (Setúbal), the placement of equipments at a superior height (Ribatejo), the installation of algae cleaning systems (in Sines the algae explosive growth in the cooling source was due to a local increase in sea temperature), the duplication of floodgates circuits and the placement of diesel emergency groups in flood protected sites in hydropower plants. These initiatives are registered and followed up by the ClimEDP project. The next steps will be the incorporation of climate change weather scenarios in the climate change risk analysis. These scenarios will be produced by the Portuguese Meteorological Institute and will be available by 2012.

EDP's strategic plan, issued by the Executive Board on Investor's Day in 2008, stated that CO₂ emission factor (EF) would be reduced by 56% by 2012 in comparison with 2005 emissions. EF would drop from 600 tCO₂/MWh in 2005 to 270 tCO₂/MWh by 2012. In 2010 EDP has already surpassed the target having reduced 59% of specific emissions, more than the 56% target.

In 2009, EDP committed itself to a more ambitious target, to reduce by 2020 by 70% EF, in comparison to 2008. EF will drop from 400 tCO₂/MWh in 2008 to 120 tCO₂/MWh by 2020. This reduction is a result of the Group's Strategy and will be achieved through substantial business decisions:

- Investment in wind power – CO₂ free electricity generation,
- Switch from coal and fueloil to CCGT - contributes to CO₂ intensity reduction
- Construction of new dams/ hydropower plants, most of them with pumped storage capability – CO₂ free electricity generation
- Repowering existing hydropower plants – CO₂ free electricity generation
- Investment in smart grids – increases electrical system efficiency
- Investment in innovative efficiency projects in demand side management- increases electrical system efficiency

The Emission factor has been steadily reducing for some years now:

- In 2006: 490 tCO₂/MWh
- In 2007: 460 tCO₂/MWh
- In 2008: 400 tCO₂/MWh
- In 2009: 360 tCO₂/MWh
- In 2010: 244 tCO₂/MWh

In 2010, EDP had already surpassed the 2012 target having reduced by 59% when the target was a 56% reduction by 2012. It is important to notice that 2010 was a very wet and windy year thus helping EDP meeting its targets.

The strategy adopted by EDP has proven to be successful. The significant investment EDP has made in low or zero emissions technologies at the generation level, namely in wind generation, has allowed EDP to own the third global wind generation



company – EDP Renováveis. This company is a paradigmatic case of success. Through the mother company EDP, EDP Renováveis has easy access to the credit market that has allowed it to move fast into emerging markets in which incentives were being given to green power generation, thus being allowed to collect most of the economic incentives at the time. Those incentives can be power purchase agreements, tax credits, etc. Due to the global economy downturn, these incentives are declining and the companies that were able to collect them in due time did win a very strong competitive advantage.

2.3 Do you engage with policy makers to encourage further action on mitigation and/or adaptation?

Yes.

EDP is often requested by policy makers and other institutional authorities to contribute on how to encourage further action on mitigation and/or adaptation. EDP also engages in public consultations by policy makers and other authorities helping them to take informed decisions. Whenever EDP identifies the need and/or convenience of raising issues and proposing solutions or actions to policy makers, it proactively does so. Being a company focused on mitigation and adaptation, EDP strongly encourages these issues within policy makers and other institutional authorities. The actions advocated include support to CO₂ market (EU-ETS), the need for an adequate climate change risk analysis, the need for the establishment of mitigation measures, the urgency of adaptation measures, etc.

Portugal: at corporate level, there is a Corporate Regulation and Competition Department, dedicated to all regulation issues. In Spain there is a Regulación y Relaciones Institucionales Department (Regulation and Institutional Relationship Department). EDPR (Europe and USA): there is a Market Analysis & Regulation Department. These Departments manage the relation with different supervisory bodies of the energy sector. They monitor the development and implementation of new European internal market and competition directives for electricity and natural gas sectors, as well as the impact of MIBEL (Iberian Electricity Market). They monitor legislative, regulatory and organizational changes in the energy sector that might impact the company's profitability.

Main European regulatory trends: EDP participates in EURELECTRIC, the European electricity sector association, which represents the common interests of the electricity industry at pan-European level (www.eurelectric.org). EDP is represented, amongst others, in the Environmental and Sustainable Development Policy Committee and in some of its various working groups, subgroups and task forces, namely the Working Groups "Climate Change", "Environmental Protection" and "Energy Efficiency".

Brazil: there is a "Área de Assuntos Regulatórios" (Regulatory Issues Department) in coordination with the Energy Strategic Department and with Energetic Risks Department, follows up all regulatory issues while managing the relation with the different supervisory bodies of the energy sector.

EDP is a member of the 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. WBCSD provides a platform for companies to explore sustainable development, share knowledge, experiences and best practices and to advocate business positions on these issues in a variety of fora, working with governments, non-governmental and intergovernmental organizations. EDP's objective when participating on the Forum is to achieve an insight about what the future trends might be and to start working on them today, hence anticipating risks and gaining a competitive advantage.

EDP is also a founding member of BSCD Portugal, the Portuguese Business Council for Sustainable Development, member of the WBCSD regional network.



EDP also intervenes at a “policy making” level through other Corporate Departments, namely the Energy Strategic Department and the corporate Risk Department, and also through other BU such as EDP Produção, a EDP Distribuição, a HC Energia, a EDP Gás and EDP Inovação.

Some examples of EDP's intervention:

- European Union and EURELECTRIC - Participation in public discussions regarding energy infrastructures, medium and long term strategy for the energy sector, ETS auctions, smart grids, efficiency, mobility, renewable integration and power stations.
- Government – Contribution to the Portuguese Climate Change Adaptation Commission with technical inputs on adaptation and mitigation.
- Government – Contribution with information, opinions and recommendations concerning new legislation regarding co-generation and the transposition into national law of the EU energy legislation.
- Government – Participation in the public discussion of the PNAER – Plano Nacional de Acção para as Energias Renováveis (National Renewable Energies Action Plan) and PNAEE (National Energy Efficiency Action Plan).
- Government – Follow up of the PNALE - Plano Nacional para as Alterações Climáticas (Climate Change National Plan)
- Government – Participation in the public discussion, concerning the allowance's auctioning and follow up of the hydropower plants of the PNBEPH – Programa Nacional de Barragens de Elevado Potencial Hidroeléctrico (High Potential Hydroelectric Dams National Program), participation in the public tender for the construction of new dams.
- Government - Participation in the promotion of the energy efficiency services sector in Portugal
- ERSE Energy Services regulator – Participation in the public discussions of the consumer efficiency promotion plans PPECs - Planos de Promoção de Eficiência no Consumo (Promotion of Energy End-use Efficiency Programme).
- ERSE Energy Services regulator – Public discussion and several technical advices on the electrical grid operation regulation.
- ERSE Energy Services regulator – Public discussion and several technical advices on the Commercial relations regulation.

3. TARGETS AND INITIATIVES

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

Yes.

ID	Scope	% Of emissions in Scope	% Reduction from base year	Metric denominator (intensity targets only)	Base year	Base year emissions	Target year	Comment
I-1	Scope 1	100%	56%	kWh	2005	Total: 28,255kt Specific: 731g/kWh	2012	CO ₂ emission factor (EF) will be reduced in 56% by 2012 in comparison with 2005 emissions. EF will drop from 600 tCO ₂ /MWh in 2005 to 270 tCO ₂ /MWh in 2012. In 2010 EF was 244, so EF was already reduced by 59%.
I-2	Scope 1	100%	70%	kWh	2008	Total: 19,814kt Specific: 387g/kWh	2020	In 2009, EDP committed itself to a more ambitious target, to reduce in 2020 by 70% emission factor (EF), in comparison to 2008, EF will drop from 400 tCO ₂ /MWh in 2008 to 120 tCO ₂ /MWh in 2020.

3.1.b Please provide details of your intensity target

EDP's strategic plan, issued on Investor's Day in 2008, stated that CO₂ emission factor (EF) will be reduced by 56% by 2012 in comparison with 2005 emissions. EF will drop from 600 tCO₂/MWh in 2005 to 270 tCO₂/MWh by 2012. In 2009, EDP committed itself to a more ambitious target, to reduce by 2020 by 70% EF, in comparison to 2008. EF will drop from 400 tCO₂/MWh in 2008 to 120 tCO₂/MWh by 2020. This reduction is a result of the Group's Strategy and will be achieved through substantial business decisions.

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

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Comment
I-1	Decrease	56	EDP has attained the target before its final date. This achievement was a consequence of EDP's investments in renewable energy and swift in fuel
I-2	Decrease	70	EDP has attained the target before its final date. This achievement was a consequence of EDP's investments in renewable energy and swift in fuel



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

ID	% complete (time)	% complete (emissions)	Comment
I-1	71%	100 %	EDP has attained the target before its final date. This achievement was a consequence of EDP's investments in renewable energy and swift in fuel
I-2	17%	39 %	EDP has made substantial progresses to attain the target before its final date. This achievement was a consequence of EDP's investments in renewable energy and swift in fuel

Emissions Reduction Initiatives

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

Yes.

In Portugal EDP has created an ESCO company – EDP Serviços – that provides energy efficiency services. In 2010, EDP has developed 13 types of services that reduce energy consumption and CO₂ emissions. The expected energy consumption reduction of the 2010 projects are approximately one thousand Gigawatt-hour and the emissions avoided are approximately 380,000 CO₂ Ton. The projects were:

Industry and agriculture:

- eCube controlling cooling systems (Food industry): cost 1,395,826 EUR; Total energy consumption avoided (life time) 684,300,960 KWh; CO₂ emissions avoided 253,191,355 kg; Project timescale: 20 years; eCube is a device placed inside the cooling chamber that simulates the food thermal properties, not the ambient temperature inside the fridge and sends this information to the thermostat thus reducing the cooling cycles, saving energy and avoiding CO₂ emissions;
- eCube cooling systems (Food processing industry): cost 260,626 EUR; Total energy consumption avoided 38,395,200 KWh; CO₂ emissions avoided 14,206,224 kg; Project timescale: 20 years; eCube is a device placed inside the cooling chamber that reduces cooling cycles;
- CFLs: cost 196,065 EUR; Total energy consumption avoided 22,402,505 KWh; CO₂ emissions avoided 8,288,927 kg; Project timescale: 2 years;
- Efficient lighting: cost 36,332 EUR; Total energy consumption avoided 2,952,690 KWh; CO₂ emissions avoided 1,092,495 kg; Project timescale: 16 years;
- Variable speed drivers: cost 20,000 EUR; Total energy consumption avoided 2,242,975 KWh; CO₂ emissions avoided 897,241 kg; Project timescale: 15 years;
- Power factor correction: cost 458,000 EUR;

**Services:**

- Astronomical watches for street lighting: cost 898,625 EUR; Total energy consumption avoided 80,279,640 KWh; CO₂ emissions avoided 29,703,467 kg; Project timescale: 6 years; Astronomical watches are power controllers that are regulated by daytime, this allows for huge savings in street lighting.
- CFLs: cost 1,128,400 EUR; Total energy consumption avoided 125,924,453 KWh; CO₂ emissions avoided 46,592,048 kg; Project timescale: 2 years;
- Efficient lighting: cost 95,156 EUR; Total energy consumption avoided 458,880 KWh; CO₂ emissions avoided 169,786 kg; Project timescale: 16 years;

Residential:

- Solar Thermal systems – Energy manager: cost 313,736 EUR; Total energy consumption avoided 13,317,880 KWh; CO₂ emissions avoided 2,850,026 kg; Project timescale: 20 years;
- Solar thermal systems Sell and install: cost 36,138 EUR; Total energy consumption avoided 1,163,520 KWh; CO₂ emissions avoided 248,993 kg; Project timescale: 20 years;
- CFLs exchange in poor neighbourhoods: cost 985,000 EUR; total energy consumption avoided 86,507,190 KWh; CO₂ emissions avoided 32,007,660 kg; Project timescale: 7 years;

None of these actions was included in the UNFCCC framework of CDM or JI for CERs or ERUs generation.

Calculation methodology: The CO₂ avoided emissions were obtained considering the systems with and without the project, calculating the avoided electrical energy consumption obtained in comparison with the market reference for these appliances full life cycle and converting it into CO₂ emissions using the national electrical conversion factor. Given that the company EDP Serviços only operates in Portugal, the factor used was the Portuguese one.

EDP has a portfolio of CDM projects in Brazil that includes five projects already registered in the Executive Board of UN FCCC and two in the validation process, the Santa Fé mini-hydroelectric power station and a block comprising the increase in the capacity of machines 1, 2 and 3 at the Mascarenhas power station, the Suiça power station and the Rio Bonito mini-hydroelectric power station. In 2010 EDP sold 24,790 VERs (Verified Emission Reductions) on the European market. These VERs were conform to the VCS standard (Voluntary Carbon Standard), resulting from the repowering project of Mascarenhas hydropower plant.

The strong investment in renewables in the different countries where EDP operates has also a significant impact on the CO₂ emissions avoided from conventional thermal power plants. In 2010, this figure was over 18,2 Mton, compared with 13,8 Mt in 2009.

3.3 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.



Activity type	Description of activity S1 ou 2ou 3	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback Period
Low carbon energy installation	Investment in renewable wind energy - S1	350 MEuro	1,231.7 MEuro	Not available
Low carbon energy installation	Investment in hydropower plants - S1	200 MEuro	342 MEuro	Not available
Behavioural change	Programme of internal awareness to reductions of: electrical energy water - S2	Energy: 10 Million Euro Water:110 KEuro		0 Years

3.3b What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	Switching electrical generation from gas and coal to wind and hydro is an energy efficiency measure that diminishes the use of fossil fuel primary energy (coal, gas and oil), thus avoiding CO ₂ emissions
Employee engagement	Electricity, water and paper consumption reductions in EDP's buildings
Financial optimization calculations	Factor taken into account when analyzing investments in new projects such as wind power
Internal price of CO ₂	Factor taken into account when analyzing investments in new projects such as wind power



4. COMMUNICATIONS

4.1 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)

Publication	Page/Section reference
EDP Annual report 2010	7; 18; 20; 67-68; 70; 82-84; 91; 98-100; 125; 135
EDP in Brasil – Annual Report 2010	51-52; 108; 114; 117-121
EDP Renewables – Annual Report 2010	8; 15; 19; 29-30; 32-33; 43; 46; 47; 70; 73; 76; 83; 130-133
2010 Gira Externalities internalization - EDP	11-12; 14-16; 18
Presentation Lisbon MBA	All the pages
Energy Policy	3; 5-6; 8; 10-16
Carbon Conference	3-17; 20
HC Energia –Annual Report 2010	
EDP website	www.edp.pt > Sustainability> Environment> Climate Change

If you can't find these informations on EDP's website, please contact: daniela.pereira@edp.pt or luisa.serra@edp.pt



RISKS & OPPORTUNITIES

5. CLIMATE CHANGE RISK

5.1.a. 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? Please identify the relevant categories

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

Risks driven by changes in regulation

ID	Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
RR01	Fuel energy taxes and regulations	Changes in the legislator incentives to wind 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 revenues in Europe and USA	Other – Decrease in revenues	Current	Direct	More likely than not	Medium-High
RR02	Fuel energy taxes and regulations	Changes in wind farms permit regulation. Decrease in wind farms authorizations	Increased operational costs	Current	Direct	Very unlikely	Medium-High
RR03	CO ₂ Taxes	CO ₂ regulation in Europe. Decrease in thermal revenues, reduction in security of supply due to the limited use of fossil fuel generation plants	Other – Decrease in revenues	Current	Direct	likely	Medium-High
RR04	Fuel energy taxes and regulations	Environmental laws and regulations that constrain the location of power plants and/or distribution grids	Increase in capex expenditure, decrease in revenues	Current	Direct	About as likely than not	Medium-High
RR05	Cap and trade schemes	CO ₂ regulation in Europe. Decrease in thermal revenues, reduction in security of supply due to the limited use of fossil fuel generation plants, consequently lower thermal power plant efficiency.	Other - Decreased operational revenues	Current	Direct	About as likely than not	Medium-High



5.1.b) Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions.

EDP has the EMAS registration for 28.3% of installed capacity. In Portugal and Spain, most of the facilities are ISO 14001 certified, 69.3% of installed capacity, thus that guaranteeing that they are ready to deal with extreme events. In EDP Brazil, physical risks such as dam overflow are fully identified, and most of the assets are certified by ISO 14001 and OHSAS 18001. The ISO 14001 section that addresses these subjects is 4.4.7 – emergency preparedness and response.

EDP has an Enterprise-Wide Risk Management system in which governance and control are established according with the company's risk appetite.

There is also a range of insurances for the Group's assets in operation. So, 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 on an insurers' pool that covers the main assets. Also it has a fund in Luxembourg (Energia RE) that secures the small losses not covered by the insurers' pool.

Risk RR01 - Fuel energy taxes and regulations - Changes in the legislator incentives to wind energy. These incentives can be a feed in tariff, a tax credit or a capital incentive. Decrease in wind power revenues can impact in Europe and USA. The potential financial implications of the risk before taking action depend on the country and also on the intervention measure from the regulators/policy makers. It may affect the remuneration of the current wind farms (decreasing their profitability) and can also affect company's growth (the intervention may make new investments less attractive).

The methods used to manage this risk: This risk is mitigated through a close follow up of regulatory bodies and through geographical diversification.

The costs associated with these actions: The main cost associated with the regulatory follow-up is the annual budget for the Departments that accomplish the regulatory follow-up. These Departments exist for Portugal Spain, Brazil and USA. On the other hand geographical diversification of EDP's generation assets in itself has no cost since it is consequence of an investment strategy.

Risk RR02 - Fuel energy taxes and regulations - Changes in wind farms permit regulation. Decrease in wind farms authorizations.

The potential financial implications of the risk before taking action: This risk may affect company's targets in terms of growth.

The methods used to manage this risk: This risk is mitigated through a close follow up of regulatory bodies and through geographical diversification.

The costs associated with these actions: The main cost associated with these actions is the annual budget for the Departments that accomplish the regulatory follow-up. These Departments exist for Portugal, Spain, Brazil, USA and for EDP as well as for the renewable branch. Geographical diversification of EDP's generation assets in itself has no cost since it is consequence of an investment strategy.

Risk RR03 - CO₂ Taxes - CO₂ regulation in Europe. Decrease in thermal revenues, possible restrictions on the use and construction of fossil fuel generation plants



The potential financial implications of the risk before taking action: CO₂ regulation heavily impact on generation from fossil fuels, increasing its operational costs and decreasing plant efficiency, many plants are not working for the base load anymore, but are filling the supply gaps due to the volatility of renewable.

The methods used to manage this risk: This risk was largely mitigated through the change in the generation mix of EDP, namely the conversions from coal to gas and the investment in renewable – wind and hydro – This contributed to a more balanced technology portfolio.

The costs associated with these actions: the investment, in 2010, on renewable energy (wind) of 1,231.7 Million Euro and on Hydro 324 Million Euro, besides the investment costs already incurred for the CCGT construction.

Risk RR04 - Fuel energy taxes and regulations - Environmental laws and regulations that constrain the location of power plants and/or distribution grids.

The potential financial implications of the risk before taking action: This risk affects capex expenditure and can also decrease the revenues.

The methods used to manage this risk: During the project phase the project team takes into account the possible restrictions that might appear. This is done in the Thermal plants company as well as in the distribution one. The cost of this action is imbedded in the project phase cost, thus being impossible to disaggregate.

Risk RR05 - Cap and trade schemes- CO₂ regulation in Europe. Decrease in thermal revenues, reduction in security of supply due to the limited use of fossil fuel generation plants

The potential financial implications of the risk before taking action: This risk can seriously impact on EDPs cash flow generation because it constrains the fuel that can be used.

The methods used to manage this risk: EDP manages this risk through fuel diversification. EDP produces electrical energy thermally from coal, gas and biomass. It produces also from hydro and wind energy thus having a balanced generation mix guaranteeing that each supply only plays a part

The costs associated with these actions: Geographical diversification of EDP's generation assets in itself has no cost since it is consequence of an investment strategy.

The costs associated with these actions are 1,231.7 Million Euro investment for 2010 on renewable energy (wind) and 324 Million Euro investment for Hydro.

5.1.c) Risks driven by changes in physical climate parameters

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
RPC01	Change in mean (average) precipitation	The hydro generation is an important component of our generation assets, especially in Portugal and Brazil. Any climate change implicating a decrease in rainfall results in less hydropower generation. This decrease may not be balanced by higher energy prices.	Other – Decrease in operational income	Current	Direct	More likely than not	Low-medium
RPC02	Change in temperature extremes	<p>Higher temperatures can disturb power plant normal operation, because sometimes the cooling source's temperature is 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>Higher temperatures can also result in increased population's water consumption. When this water is pumped directly from the Group's reservoirs to water supply networks, such volumes do not generate energy and it's likely that the company won't be compensated for this. Droughts may imply extra reservoir water expenditure in activities such as irrigation and maintenance of ecological flows, with inherent loss of energy/revenue, when these water flows are not turbinated or when they are released during off-peak hours (lower energy prices).</p>	Other – Decrease in operational income	Current	Direct	More likely than not	High
RPC03	Change in extreme precipitation and droughts	Events, such as abnormal precipitation, droughts, extremely strong winds, pronounced sea agitation at seashore and sudden increases in algae coming in from the sea, can be accentuated by climate changes and have caused known business interruptions at both thermal and hydropower plants. Extreme precipitation can also cause floods, dam overflow and landslides.	Increased operational costs	Current	Direct	More likely than not	Medium-high
RPC04	Tropical cyclones	<p>Under extreme winds, wind farms shut down, for safety purposes. The increased frequency of wind speeds above cut-off wind speed automatic shut-down 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 the distribution and the transmission grids likely limiting EDP's capacity to generate energy in power stations.</p>	Increased operational costs	Current	Direct	Likely	Medium
RPC05	Other physical climate drivers	Episodic events of particularly frequent and intense storms with lightning can be very damaging to electrical grids, wind turbines and any weather exposed electrical device in general. This impact must be considered since the frequency of such storms may increase due to climate changes.	Increased operational costs	Current	Direct	Likely	Medium
RPC06	Other Physical climate drivers	Under a varying atmospheric pressure, the operation of natural gas pipelines, such as the ones EDP has in Portugal and Spain, can become more demanding, since safety controls are particularly sensitive to pressure, increasing the risk of preventive shut-down and, over time, increased wear of pipelines and valves, increasing operation and maintenance costs and/or reducing life span.	Increased operational costs	Current	Direct	Likely	Medium



5.1.b) Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions - physical climate parameters

EDP has the EMAS registration for 28.3% of installed capacity.

In Portugal and Spain, most of the facilities are ISO 14001 certified, 69.3% of installed capacity, thus ensuring that they are ready to deal with extreme events. EDP in Brazil, physical risks such as dam overflow are fully identified, and most the assets are certified by ISO 14001 and OHSAS 18001. The ISO 14001 section that addresses these subjects is 4.4.7 – emergency preparedness and response.

EDP has an Enterprise-Wide Risk Management system in which governance and control are established accordingly with the company's risk appetite.

There is also a range of insurances for the Group's assets in operation. So, 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 on an insurers' pool that covers the main assets. Also it has a fund in Luxembourg (Energia RE) that secures the small losses not covered by the insurers' pool.

Risk RPC01 – EDP is building reversible hydropower plants that allow hydro generation in drought situations, but also to store electricity generated in wind farms. The Sabor dam, under construction, 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 about 30 days. The new hydropower plants that EDP is building have investment costs. These are not direct costs associated with the management of this risk, but this risk will be partially mitigated by the new hydropower plants, it is a collateral benefit from building the dams.

Investment costs of new hydropower plants: Sabor 170 MW hydro reversible power plant (HRPP) reservoir dam (RD), 491 million Euro (EuroM); Ribeiradio-Ermida 77 MW RD, 171 EuroM; Foz Tua 251 MW HRPP RD, 293 EuroM; Fridão 238 MW two dams to help improve flow modulation, 262 EuroM; Alvito 225 MW HRPP, 356 EuroM; Carvão-Ribeira 555 MW HRPP RD, 333 EuroM; Picote II 246 MW repowering RD, 149 EuroM; Bemposta II 191 MW HRPP repowering RD, 134 EuroM; Alqueva II 256 MW HRPP repowering RD, 295 EuroM; Venda Nova III 736 MW HRPP repowering RD, 134 EuroM; Salomonde II 204 MW HRPP repowering RD, 201 EuroM; Paradela III 318 MW HRPP repowering RD, 274 EuroM.

Risk RPC02 - In new thermal power plants, the cooling system is based on cooling towers instead of condenser, using a much lower water volume and introducing a much smaller change in temperature. In new CCGTs at higher temperatures there is also a decrease in efficiency, at high temperature the volume of compressed fed into the combustion chamber is lower than at moderate temperatures. As an example of power plants build up with this technology, in Portugal, one has the Termoeléctrica do Ribatejo and Lares CCGT power station.

Risk RPC03 - This risk is managed through risk prevention measures, such as the construction of protection walls (Setúbal), 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 the duplication of floodgates circuits and the placement of diesel emergency groups in flood protected sites.

The costs of these actions are evaluated, per example the algae cleaning systems did cost around 1.5 EUR Million.

EDP's hydropower plants are also projected to support the so called "flood of the millennium".



Risk RPC04 - In Brazil, EDP developed SITRaios to manage the grid physical risks. This system automatically detects thunder storms (that usually precede grid shutdowns), allowing real time intervention in the prevention of future grid shutdowns. The SITRaios project has an investment of approximately 850 thousand EUR.

In electricity distribution, extreme winds can cause major incidents. In order to assess its influence, EDP (in Portugal) created an incident database and some conclusions are already available about predictable future risks. The extreme wind phenomena can cause supply interruptions causing an economic and image company costs: the fall of electric lines, the impossibility of power plants to connect to the grid and sell their generation, etc. The Distribution Company is developing a geo-referenced platform that will allow the assessment of any event's severity and help define operation, maintenance or engineering actions. In Portugal, during the storm and fire seasons, EDP manages differently the emergency teams and the stocks ensuring a faster and more effective corrective action. In the most important urban area, substations are also redundant. These actions reduce interruption in the event of a catastrophe.

Risk RPC05 - In Brazil, EDP developed SITRaios to manage the physical risks of the grid. This system automatically detects thunder storms that usually precede grid shutdowns, allowing real time intervention in the prevention of future grid shutdowns. The SITRaios project has an investment of approximately 850 thousand EUR. In Portugal the distribution company manages the storm and the wildfire seasons differently from the rest of the year increasing the material stock and enlarging the number of the emergency teams.

Risk RPC06 - The gas grid project incorporates best practices in what regards the avoidance of risk areas. These include the gas grid ring layout that prevents supply interruptions.

EDP's gas company has also special procedures focused on physical risks, which are: the safety and health manual, the accident's analysis and the two-monthly meeting.

The costs of these actions are incorporated into the Gas Technical Division budget therefore not easy to quantify, but one can roughly estimate about 80 thousand Euro per year in Portugal.



5.1.c) Please describe your risks that are driven by changes in other climate-related developments

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
RCC01	Reputation	<p>Social liabilities - Operations in dam's reservoirs, in successive flood situations in Portugal and Brazil and during winter.</p> <p>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 the company's reputation.</p>	Wider social disadvantages	Current	Direct	likely	Medium
RCC02	Induced changes in human and cultural environment	<p>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, etc), 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).</p>	Reduction/Disruption in generation capacity	Current	Direct	unlikely	Medium
RCC03	Uncertainty in market signals	<p>Climate change may cause consumer demand volatility or industrial consumption diminution or changes in sector tariffs causing energy market risks in the energy sector</p>	Reduced demand for goods/services	Current	Direct	unlikely	Medium
RCC04	Change in consumer behaviour	<p>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, companies may be forced into extra costs, falling into difficult economic situations.</p>	Reduced demand for goods/services	Unknown	Indirect	unlikely	Medium

5.1.d) Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions - physical climate parameters

Risk RCC01 - Reputation

The methods used to manage this risk: EDP is 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 local 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 capital), through product promotion in new markets, namely emerging ones, and through the empowerment in social institutions, etc.

The costs associated with these actions: The dedicated website cost around 65 thousand Euro to implement and 5 thousand Euro annually to maintain.

Social innovation projects – About 800 thousand Euro in 2010.

Risk RCC02 – Induced changes in human and cultural environment

The methods used to manage this risk: 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, bird flu, main data processors, etc. 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.

The costs associated with these actions: The costs of these risks are included in the Corporate Risk Department and in the Health and Safety Department Budgets.

Risk RCC03 – Uncertainty market signals

The methods used to manage this risk: EDP manages the future risk through scenario analysis performed by the Risk and the Energy Strategic Department.

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 will provide efficiency and CO₂ services

The costs associated with these actions: The costs of these risks are included in the Department budgets.

Risk RCC04 – Changing consumer behaviour

EDP manages the future risk through scenario analysis performed by the Risk and the Energy strategy department.

The costs associated with these actions: The costs of these risks are included in the Department budgets.



6. CLIMATE CHANGE OPPORTUNITIES

6.1 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?

Yes.

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

6.1 a) Opportunities driven by changes in regulation

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
OR01	Cap and trade schemes	Cap and trade impact the generation mix forcing utilities to use less fossil fuel sources. EDP's strategy strongly supports renewable energy generation thus gaining a competitive advantage.	Increase demand for products/services	Current	Direct	Virtually certain	High
OR02	Fuel energy taxes and regulations	Taxes and regulations on fossil fuel mobility will most probably force the shift towards electric mobility.	New products/ business	1-5 years	Direct	Virtually certain	High
OR03	Voluntary agreements	CO ₂ services and green energy are a new interesting business area	New business/products	Current	Direct	Virtually certain	High
OR04	Cap and trade schemes	CDM projects developed by EDP in Brazil.	New products/ business	Current	Direct	Virtually certain	High
OR05	Other regulatory drivers	Renewable generation in countries where wind power is currently underdeveloped	Increase demand for products/services	Current	Direct	Virtually certain	High
OR06	Fuel energy taxes and regulations	In regulated activities (distribution and last resource supply) costs may be recognized, if proven the necessity to invest more in assets in order to guarantee service quality levels, while selling electricity at a fixed price.	New products/ business	Current	Direct	Virtually certain	High
OR07	Other regulatory drivers	Wind offshore generation regulation in Europe will most probably give EDP new opportunities. EDP has since January 2010 the permission to develop (with sea energy) 1,3 GW of offshore wind turbines in Scotland.	Increased generation capacity	Current	Direct	Virtually certain	High
OR08	Other regulatory drivers	European and national legislation concerning ESCOs create a business opportunity in utilities		Current	Direct	Virtually certain	Medium



6.1.b) Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions – opportunities in regulation

Regulatory opportunities are constantly monitored by the Regulation and Competition Department in the different companies and geographies, as well as by the Energy Strategic Departments, in Iberia and Brazil.

The Regulation and Competition Department at the corporate center in Portugal is dedicated to all regulation issues. In Spain there is a Regulación y Relaciones Institucionales Department (Regulation and Institutional Relationship Department). In EDPR (Europe and USA) there is a Market Analysis & Regulation Department. These Departments manage the relation with different supervisory bodies of the energy sector. They also monitor the development and implementation of new European internal market and competition directives for electricity and natural gas sectors, as well as the impact of MIBEL (Iberian Electricity Market). Furthermore they monitor legislative, regulatory and organizational changes in the energy sector that might impact the company's profitability.

The Energy Strategic Department is responsible for the definition of EDP's energy portfolio (electricity and gas) strategy, annually and long term. This strategy is submitted to the board that will decide upon it.

This Department is also responsible for the long term fuel price forecast (till 2050). This is done through scenario analysis that incorporate regulatory opportunities and risk.

OR01 - Cap and trade schemes - generation mix

This risk is managed by the Board using the inputs from the Regulation and Competition Department and the Energy Planning Departments. The cost of following up this risk is included in the Departments general costs and it is impossible to disaggregate, it is part of the Department current activity. The risk mitigation measures are the investment costs in clean generation can be included in this risk management cost. These are for 2010: investment in wind energy 1,231.7 Million Euro and in Hydro 342 Million Euro.

OR02 - Fuel energy taxes and regulations – Electrical mobility

EDP considers that electrical mobility is an opportunity because: it consumes electricity; vehicles will have zero local emissions and will mostly consume electricity during off-peak hours and might help to regulate the grid. The electrical vehicle recharging system is a business very much related with EDP's strategy. In Portugal EDP has currently 12 electrical cars and 5 electrical motorbikes and EDP has also installed 400 charging locations. 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. In 2010 EDP in Brazil has inaugurated the first electric vehicle recharging network, with 20 points in the Brazilian states of São Paulo and Espírito Santo. The network is used for recharging 90 bicycles donated by EDP to military and municipal police forces and environmental authorities.

OR03 - Voluntary agreements – CO₂ services and green energy

Presently EDP sells green energy, energy certified by RECs, Renewable energy certificates issued by AIB, the Association of Issuing Bodies, to a small group of clients. EDP is currently developing a green services business area that will provide the clients with efficiency services, green energy and CO₂ footprint evaluation and compensation. This is a promising area because many businesses are actually under great pressure to cope with voluntary sustainability evaluations in which these products are key factors.



OR04 - Cap and trade schemes - CDM projects developed by EDP in Brazil generating voluntary certificates.

EDP has a CDM portfolio in Brazil that includes five projects already registered with the Executive Board of UN FCCC and two in the validation process. These are the Santa Fé mini-hydropower system and a block comprising the increase in the capacity of machines 1, 2 and 3 at the Mascarenhas power station, the Suiça power station and the Rio Bonito mini-hydropower system. In 2010, 24,790 VERs (Verified Emission Reductions) conform to the VCS standard (Voluntary CO₂ Standard), resulting from the repowering project of Mascarenhas hydropower plant, were sold on the European market.

OR05 - Other regulatory drivers - Renewable generation in countries where wind power is underdeveloped

EDP renewable company, EDPR is the third world wind player. In 2010 EDP had 6.6 GW of installed power, a load factor that ranged of 27 in Europe and 32 in the USA and a 31.7 GW pipeline. EDP is focused in doing business in countries with under exploited wind potential in which strong incentives exist. Through the mother company EDP, EDP Renováveis has better access to the credit market thus being allowed to move fast into emerging markets in which incentives are being given to green power generation. Those incentives can be power purchase agreements, tax credits, etc.

OR06 - Fuel energy taxes and regulations - In regulated activities (distribution and last resource supply) costs may be recognized, if proven the necessity to invest more in assets in order to guarantee service quality levels, while selling electricity at a fixed price. This regulatory issue can decrease operational costs, increasing the margin and also contributing to a better reputation because EDP is able to invest more in these areas.

OR07 - Other regulatory drivers - Wind offshore generation regulation. Wind offshore generation regulation in Europe will most probably give EDP new opportunities. EDP has, since January 2010, the permission to develop (with Sea Energy) 1.3 GW offshore wind farms in Scotland. EDP is also developing a demonstration project – windfloat – to test the off-shore Technology.

OR08 - European and national legislation concerning ESCOs create a business opportunity in utilities. EDP has created an ESCO company, EDP Serviços and ESCO company to supply energy efficiency and CO₂ services.

6.1.c) Opportunities driven by physical climate parameters

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
OPC01	Change in precipitation pattern	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. Also the hydro reversible power plants have contributed to a decrease water use guaranteeing the same power generation.	Increase generation capacity	Current	Direct	Virtually certain	Medium - High
OPC02	Change in mean (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
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

6.1.d) Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions – opportunities in physical climate parameters

EDP has the EMAS registration for 28.3% of installed capacity.

In Portugal and Spain, most of the facilities are ISO 14001 certified: 69.3% of installed capacity, thus ensuring that they are well prepared to manage extreme events. In EDP in Brazil, physical risks such as dam overflow are fully identified, and most the assets are certified by ISO 14001 and OHSAS 18001. 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 climacteric events thus gaining an advantage regarding its competitors that do not have such a preparation.

OPC01 - Change in precipitation pattern - 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.

Also the hydro reversible power plants have contributed to a use of a smaller amount of water guaranteeing the same power generation. These power plants allow hydro generation in drought situations and also pump water back from the second to the first reservoir storing the energy generated in wind farms mainly in off-peak hours. The Sabor dam, under construction, 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. EDP is building new hydropower plants that have investment costs. These are not direct costs associated to the management of this risk, but this risk will be partially mitigated by the new hydropower plants, it is a collateral benefit from building the dams. Investment costs of new hydropower plants: Sabor 170 MW hydro reversible power plant (HRPP) reservoir dam (RD), 491 million Euro (EuroM); Ribeiradio-Ermida 77 MW RD, 171 EuroM; Foz Tua 251 MW HRPP RD, 293 EuroM; Fridão 238 MW two dams to help improve flow modulation, 262 EuroM; Alvito 225 MW HRPP, 356 EuroM; Carvão-Ribeira 555 MW HRPP RD, 333 EuroM; Picote II 246 MW repowering RD, 149 EuroM; Bemposta II 191 MW HRPP repowering RD, 134 EuroM; Alqueva II 256 MW HRPP repowering RD, 295 EuroM; Venda Nova III 736 MW HRPP repowering RD, 134 EuroM; Salomonde II 204 MW HRPP repowering RD, 201 EuroM; Paradela III 318 MW HRPP repowering RD, 274 EuroM. These new power plants will increase EDP's cash flow because they will produce energy only with maintenance costs, they will not have fuel costs. In new thermal power plants the cooling system is based on cooling towers instead of condenser using a much lower water volume and introducing a much smaller change in temperature. In Portugal, the power plants build up with this technology are Termoelétrica do Ribatejo and Lares CCGT power stations.

OPC02 - Change in mean (average) temperature - 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.

OPC03 - Change in mean (average) temperature - Resilient technologies may be needed to cope with extreme temperature and weather. Utilities should be able to support the development of 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. These technologies will decrease operational costs.

6.1.e) Opportunities driven by changes in other climate related parameters

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
OCC01	Other drivers	Economy decarbonization increase EDP's competitive advantage due to its low CO ₂ generation and also to its services in efficiency, green energy and CO ₂ compensation.	Increased demand for existing products/Services	Current	Direct	Virtually certain	Medium - High
OCC02	Changing consumer behavior	Electric mobility	New products /business services	10 years	Direct	likely	Medium - High
OCC03	Changing consumer behavior	Smart grids	New products /business services	5 years	Direct	Likely	Medium - High
OCC04	Changing consumer behavior	RECs	New products /business services	Current	Direct	likely	Medium - High
OCC05	Changing consumer behavior	Energy services – efficiency and CO ₂ compensation	New products /business services	Current	Direct	Very likely	Medium - High
OCC06	Other drivers	Diversification – assets, geography and processes	Other – protects assets and the free cash flow from generation	Current	Direct	Very likely	Medium - High

6.1.f) Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions – opportunities in physical climate parameters.

OCC01 - Economy decarbonization increase EDP's competitive advantage due to its low emissions generation and also to its services in energy efficiency, green energy and CO₂ compensation. Also, under the decarbonization trend, EDP sells green energy - energy certified by RECs, Renewable Energy Certificates issued by AIB, the Association of Issuing Bodies - to a small group of clients. EDP is currently developing a green services business area that will provide the clients with energy efficiency services, green energy and CO₂ footprint evaluation and compensation. This is a promising area because many businesses are actually under great pressure to cope with voluntary sustainability evaluations in which these products are key factors.

OCC02 - Electric mobility – Increasing emission regulations will cause the swift from fossil fuel mobility to electric one. EDP considers that electric mobility is an opportunity because: it consumes electricity; vehicles will have zero local emissions and will mostly consume electricity during off-peak hours and might help to regulate the grid. The electric vehicle recharging system is a business very much related with EDP's strategy. In Portugal EDP has currently 12 electric cars and 5 electric motorbikes and EDP has also installed 400 charging locations. 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. In 2010 in Brazil has inaugurated the first electric vehicle recharging network, with 20 points in the Brazilian states of São Paulo and Espírito Santo. The network is used for recharging 90 bicycles donated by EDP to military and municipal police forces and environmental authorities.

OCC03 - Smart grids. Smart grids are the new technology that will allow a much more efficient electrical grid management and the incorporation of several features into the grid such as energy remote management, microgeneration, distributed generation, electric vehicles, etc. Foreseeing this, EDP has launched a project, InovGrid, which is now in demonstration phase. Under this project, 70 million Euros will be invested in smart grids and in 200 thousand energy boxes (smart meters). With this project EDP will address three main drivers of the electrical sector: energy remote management, microgeneration and smart grids. The project is now in demonstration in Évora where it was implemented in 31,000 consumers' homes. Success in these consumers will allow EDP to opt for a full rollout to consumers in Portugal, Spain and Brazil. To quantify the expected impact of this project EDP have also set our goals in terms of Key Performance Indicators, to be assessed at the main site in Évora after 2013. The project is aligned with the current European 20-20-20 goals and aims to demonstrate a full featured implementation of the smart Grid concept and show how to harness its potential to increase the share of small to medium size distributed generation. It will do so by enlisting the active participation of consumers and small producers, including them as relevant market-shaping forces. EDP's investment in smart grids totals 15 million Euros (31,300 smart meters installed; integration of IT systems; setting up communications infrastructures, remote network control systems).

OCC04 – Renewable Energy Certificates (RECs). RECs are certificates that proof that one megawatt-hour (MWh) of electricity was generated from a renewable energy resource. EDP has currently the sourcing and a small client portfolio. The development of this business is an opportunity specially because EDP has the sourcing and the clients. The sourcing is produced in the new hydropower plants that are not under any special feed-in tariff. The clients exist and will grow due to the growing number of voluntary sustainability evaluations in which companies will need to score to keep up with their peers.

OCC05 - Energy services – energy efficiency and CO₂ compensation. Efficiency services are an existing opportunity because services have a positive return, the major drawback is for some projects its payback period. On the other hand CO₂ compensation is a promising area because many businesses are actually under great pressure to cope with voluntary sustainability evaluations in which these products are key factors. And EDP has already the product and the sourcing at competitive prices.



OCC06 - Diversification – assets, geography and processes. EDP operates in 13 countries, in four main business areas: generation (thermal and hydro), renewable generation (wind), transport (gas) and distribution (gas and electricity). Businesses have natural hedges among themselves; per example in case of an oil price peak the cash flow from thermal assets will decrease, being partially compensated by the cash flow from renewable. Another example occurs in the case of increasing CO₂ license prices, the cash flow from thermal assets will decrease, being compensated by the cash flow from renewable. The 13 countries are located in USA, Brazil and throughout Europe thus guaranteeing that if an extreme event such as a violent storm or earthquake occur, part of the assets will be protected somewhere else.



EMISSIONS

7. EMISSIONS METHODOLOGY

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

Base year	Scope 1	Scope 2
2005	28 255 003	1 861 319
2008	19 813 643	1 571 028

Methodology

7.2 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 Directive no. 2003/87/CE - EDP Scope 1 stationary combustion emissions were calculated using the methodology defined by the European Directive no. 2003/87/CE. This methodology calculates CO₂ emissions from fuel consumption using measured data, emission factor and oxidation factor.

GHG protocol <http://www.ghgprotocol.org/> - EDP's Scope 1 fleet emissions and Scope 2 emissions were calculated using the GHG protocol guidelines and EDP data.

Portugal - methodology approved by APA (Agência Portuguesa do Ambiente, the Portuguese Environment Agency- www.apambiente.pt) - Each EDP power plant in Portugal reports greenhouse gas emissions using the methodology approved by APA for the GHG national inventories. These reports are verified by APA certified auditors.

In Spain, EMEP-CORINAIR an IPCC international methodology - In Spain, all EDP power plants quantify greenhouse gas emissions using the EMEP-CORINAIR an IPCC international methodology.

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

Gas	Reference
SF6	the 4th Assessment Report of the IPCC GWP over a 100 year time span



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

Fuel/Material/Energy	Emission Factor	Unit	Reference
For Trains in Spain	26,19	gCO ₂ /t/km	RENFE's Report (GRI A+ and is audited by AENOR)
For trucks in Spain	128,15	gCO ₂ /t/km	RENFE's Report (GRI A+ and is audited by AENOR)
Airplane	110	gCO ₂ /t/km	GHG Protocol Mobile emissions based on distance
Train	60	gCO ₂ /t/km	GHG Protocol Mobile emissions based on distance
Marine Shipping	10	gCO ₂ /t/km	GHG Protocol Mobile emissions based on distance
Inland shipping	35	gCO ₂ /t/km	GHG Protocol Mobile emissions based on distance
Diesel heavy truck	922,6	gCO ₂ /t/km	GHG Protocol Mobile emissions based on distance
small gas	193,2	gCO ₂ /t/km	GHG Protocol Mobile emissions based on distance
diesel auto	269,1	gCO ₂ /t/km	GHG Protocol Mobile emissions based on distance
Bus diesel	186,2	gCO ₂ /t/km	GHG Protocol Mobile emissions based on distance
Motor Bike	93,4	gCO ₂ /t/km	GHG Protocol Mobile emissions based on distance
Metro	105,6	gCO ₂ /t/km	GHG Protocol Mobile emissions based on distance
Electric Emission factor Portugal	226,7	Kg/MWh	Electricity national emission factor Portuguese Regulator
Electric Emission factor Spain	171	Kg/MWh	Electricity national average emission factor Spanish Regulator
Electric Emission factor Brazil	51,1	Kg/MWh	Electricity national emission factor – Brazil Minister of Science and technology
Electric Emission factor USA and ROE	643,3	Kg/MWh	Electricity emission factor of the states in which EDP is operating weighted by generation



8. EMISSIONS DATA

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

Other - Financial and operational. Scope 1 and 2 Emissions Data

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

14 744 282.

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

1 027 109.

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

Yes.

Source	Scope	Explain why the source is excluded
Methane	Scope 1	Not material relevant
N ₂ O	Scope 2	Not material relevant
N ₂ O	Scope 1	Not material relevant

8.5 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%	Fuel measurement (uncertainty 1.5%)	In Europe, GHG emissions are subjected to Commission Decision n. 2007/589/CE. EDP's methodology is approved by APA (Agência Portuguesa do Ambiente) the Portuguese environmental authority nominated to manage the national registry system and CO ₂ licenses.
2	Less than or equal to 2%	GHG Protocol conversion factors	In Scope 2, emissions were obtained using company data and converting into CO ₂ using conversion factors of the GHG Protocol. The values are fully audited. EDP considers as an acceptable figure an error of less than 2%.

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

Verification or assurance complete.

8.6a Please indicate the proportion of your Scope 1 emissions that are verified/assured

More than 90% but less or equal to 100%.



8.6b Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Type of verification or assurance	Relevant standard
Limited assurance	ISAE 3000

8.7 Please indicate the verification/assurance status that applies to your Scope 2 emissions and indicate the proportion of your Scope 2 emissions that are verified/assured

More than 90% but less or equal to 100%

8.7b Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Type of verification or assurance	Relevant standard
Limited assurance	ISAE 3000

Carbon Dioxide Emissions from Biologically Sequestered Carbon

8.8 Are carbon dioxide emissions from the combustion of biologically sequestered carbon (i.e. carbon dioxide emissions from burning biomass/biofuels) relevant to your company? Please provide the emissions in metric tons CO₂e.

Yes. 1,775.



9. SCOPE 1 EMISSIONS BREAKDOWN

Electric utilities should report emissions by country/region using the tables in question EU2. Oil and gas sector companies are requested to provide breakdowns of emissions by value chain segment and activity as shown in OG2 and OG3

9.1 Do you have Scope 1 emissions sources in more than one country or region (if covered by emissions regulation at a regional level)?

Yes.

Country/Region	Scope 1 metric tons CO ₂ e
Portugal	7 015 095
Spain	7 721 783
Brazil	5 156
USA	2 247

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

<input checked="" type="checkbox"/>	By business division (9.2a)
<input type="checkbox"/>	By facility (9.2b)
<input checked="" type="checkbox"/>	By GHG type (9.2c)
<input type="checkbox"/>	By activity (9.2d)

Where a breakdown option has been ticked, a table appears to allow you to enter the relevant emissions data 9.2a)

Business Division	Scope 1 metric tones CO ₂ e
Electricity generation and distribution	14 727 698
Gas transport and distribution	16 624

9.2b)

GHG type	Scope 1 metric tones CO ₂ e
CO ₂	14 736 037
SF6	8 245



10. SCOPE 2 EMISSIONS BREAKDOWN

Oil and gas sector companies are requested to provide the breakdown of emissions by value chain segment as shown in OG2

10.1 Do you have Scope 2 emissions sources in more than one country or region (if covered by emissions regulation at a regional level)?

Yes.

Country/Region	Scope 2 metric tons CO ₂ e
Portugal	865 983
Spain	68 468
Brazil	92 017
USA	642
ROE	0

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

<input checked="" type="checkbox"/>	By business division (10.2a)
<input type="checkbox"/>	By facility (10.2b)

Where a breakdown option has been ticked, a table appears to allow you to enter the relevant emissions data

10.2a)

Business Division	Scope 2 metric tonnes CO ₂ e
Electricity	1 026 808
Gas	301



11. SCOPE 2 CONTRACTUAL EMISSIONS

11.1 Do you consider that the grid average factors used to report Scope 2 emissions in question 8.3 reflect the contractual arrangements you have with electricity suppliers?

Yes.

11.1a You may report a total contractual Scope 2 figure in response to this question. Please provide your total global contractual Scope 2 GHG emissions figure in metric tones CO₂e.

Yes.

11.1b Explain the basis of the alternative figure (see guidance)

NA

Type of certificates	Number of certificates	Comments
Renewable Energy Certificates	180 076	Generated: 231000 Transferred: 162000 Redeem: 18076



12. ENERGY

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

More than 50% but less than or equal to 55%.

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

Energy type	MWh
Fuel	45 937 958
Electricity	14 907
Heat	0
Steam	2 042 171
Cooling	0

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

Fuel	MWh
Fuel	45 937 958
Coal	22 726 752
Gas (excluding OCGT, CCGT and CHP)	0
Gas (CCGT)	17 589 954
Gas (OCGT)	21 656
Fuel oil	434 979
Gasoil	56 993
CHP	4 196 556
Solid biomass	911 069

13. EMISSIONS PERFORMANCE

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

Decreased.

Reason	Emissions value (%)	Direction of change	Comment
Emissions reduction activities	26	Decrease	<p>The company is becoming increasingly more efficient and creating more value; Also in Portugal 2010 was a year with a high hidraulicity (wet year) and eolicity (windy year);</p> <p>Furthermore the intensity reduction was attained by:</p> <ul style="list-style-type: none"> - Investment in wind power electricity generation, - Switch from coal and fueloil to CCGT - Construction of new dams/ hydropower plants, most of them with pumped storage capability - Repowering existing hydropower plants - Investment in smart grids – increases electrical system efficiency - Investment in innovative efficiency projects in demand side management- increases electrical system efficiency.

Emissions Intensity

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

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Explanation
1 113	metric tonnes CO ₂ e	Million Euro	36	Decrease	<p>The company is becoming increasingly more efficient and creating more value.</p> <p>Also in Portugal 2010 was a year with a high hidraulicity (wet year) and eolicity (windy year).</p> <p>Furthermore the intensity reduction was attained by:</p> <ul style="list-style-type: none"> - Investment in wind power electricity generation, - Switch from coal and fueloil to CCGT - Construction of new dams/ hydropower plants, most of them with pumped storage capability - Repowering existing hydropower plants - Investment in smart grids – increases electrical system efficiency - Investment in innovative efficiency projects in demand side management- increases electrical system efficiency.



13.3 Please describe your gross combined Scope 1 and 2 emissions for the reporting year in metric tons CO₂e per full time equivalent (FTE) employee

Intensity figure	Metric numerator mtCO ₂ e	Metric denominator FTE employee	% change from previous year	Direction of change from previous year	Explanation
1304	metric tonnes CO ₂ e	FTE Employee	26	Decrease	<p>The company is becoming increasingly more efficient and creating more value. Also in Portugal 2010 was a year with a high hydraulicity (wet year) and eolicity (windy year). Furthermore the intensity reduction was attained by:</p> <ul style="list-style-type: none"> - Investment in wind power electricity generation; - Switch from coal and fueloil to CCGT; - Construction of new dams/ hydropower plants, most of them with pumped storage capability; - Repowering existing hydropower plants; - Investment in smart grids – increases electrical system efficiency; - Investment in innovative efficiency projects in demand side management- increases electrical system efficiency.

13.4 Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator mtCO ₂ e	Metric denominator	% change from previous year	Direction of change from previous year	Explanation
0.244	metric tonnes CO ₂ e	Megawatt hour (MWh)	39	decrease	<p>The company is becoming increasingly more efficient and creating more value. Also in Portugal 2010 was a year with a high hydraulicity (wet year) and eolicity (windy year). Furthermore the intensity reduction was attained by:</p> <ul style="list-style-type: none"> - Investment in wind power electricity generation; - Switch from coal and fueloil to CCGT; - Construction of new dams/ hydropower plants, most of them with pumped storage capability; - Repowering existing hydropower plants; - Investment in smart grids – increases electrical system efficiency; - Investment in innovative efficiency projects in demand side management- increases electrical system efficiency.



14. EMISSIONS TRADING

14.1 Do you participate in any emissions trading schemes?

Yes.

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tons CO ₂ e	Details of ownership
European Union ETS	1.1.2010 to 31.12.2010	18 358 710	0	13 860 030	Facilities EDP own and operate

And if “yes” or “we don’t currently, but we anticipate doing so within the next 2 years”:

14.1b what is your strategy for complying with the schemes in which you participate or anticipate participating?

EDP is currently involved in the European Trading Scheme (EU ETS). This has already entered the Kyoto period (2008-2012), with stricter requirements than the pilot phase for utilities. The recently approved PNALE II (in Portugal) and PNA (in Spain) allocated 30% less CO₂ allowances to EDP’s generating facilities than in the pilot phase.

EDP’s strategic plan, issued on Investor’s Day in 2008, stated that CO₂ emission factor (EF) would be reduced by 56% by 2012 in comparison with 2005 emissions. EF would drop from 600 tCO₂ /MWh in 2005 to 270 tCO₂/MWh by 2012. By 2010 EDP did already surpassed the target having reduced 59% of specific emissions, more than the 56% target.

In 2009, EDP committed itself to a more ambitious target, to reduce by 2020 in 70% EF, in comparison to 2008. EF will drop from 400 tCO₂/MWh in 2008 to 120 tCO₂/MWh by 2020. This reduction is a result of the Group’s Strategy and will be achieved through substantial business decisions.

In order to diversify risk and optimize the alternatives presented in the Kyoto Protocol, in 2007 EDP signed emissions reduction purchase agreements (ERPAs) resulting from CDM projects with several entities.

EDP also participates in the voluntary CO₂ credit market and generated several tonnes of VERs – Verified Emission Reductions. Some of these VERs were redeemed to neutralise Group events, while the rest was traded.

As far as CO₂ funds are concerned, EDP is continuously monitoring and seeking new investment opportunities, always aiming at the diversification of its generation mix and geographical locations. Furthermore, emission credits were also purchased with guaranteed delivery on the forward market.



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

Yes.

Credit origination/ credit purchase?	Project type	Project Identification	Verified to which standard?	Number of credits (metric tonnes CO ₂ e)	Number of credits (metric tonnes CO ₂ e) Risk Adjusted Volume	Credits retired	Purpose e.g. compliance
Credit Origination	Hydro	PCH Paraíso http://cdm.unfccc.int/Projects/DB/BVQI1188558574.2/view	CDM	303095	No	No	Compliance
Credit Origination	Hydro	PCH São João	CDM	226408	No	No	Compliance
Credit Origination	Hydro	PCH Santa Fé http://cdm.unfccc.int/Projects/DB/SGS-UKL1218641241.99/view	CDM		No	No	Compliance
Credit Origination	Hydro	UHE Mascarenhas http://cdm.unfccc.int/Projects/DB/SGS-UKL1183734827.45/view	CDM	353262	No	No	Compliance
Credit	Wind	Água Doce http://cdm.unfccc.int/Projects/DB/SGS-UKL1156244716.38/view	CDM	95928		No	Compliance
Credit	Wind	Horizonte http://cdm.unfccc.int/Projects/DB/SGS-UKL1151534607.76	CDM	43587		No	Compliance



15. SCOPE 3 EMISSIONS

Global scope 3 emissions: 24 990 tCO₂

15.1 Please provide data on sources of Scope 3 emissions that are relevant to your organization:

Sources of Scope 3 emissions	metric tons CO ₂ e	Methodology
Business Travel	8 593	GHG emission factors applied to EDP's data that exist on the company Sustainability Data System
Material and by-products transport	3 255	GHG and RENFE emission factors applied to EDP's data that exist on the company Sustainability Data System
Employee commuting	1 974	GHG emission factors applied to EDP's data that exist on the company Sustainability Data System
Construction works outsourcers	10 321	GHG emission factors applied to EDP's data that exist on the company Sustainability Data System
Rented vehicles	846	GHG emission factors applied to EDP's data that exist on the company Sustainability Data System

Auto-manufacturers should refer to the sector module before completing question 15.1

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

Verification or assurance complete.

If Scope 3 emissions have been verified or assured (complete or underway), answer questions 15.2a and 15.2b:

15.2a Please indicate the proportion of your Scope 3 emissions that are verified/assured

More than 90% but less than or equal to 100%.

15.2b Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Type of verification or assurance	Relevant standard
Limited assurance (qualified)	ISAE 3000

15.3 How do your absolute Scope 3 emissions for the reporting year compare to the previous year?

Increased.

Reason	Emissions value (%)	Direction of change	Comment
Calculations are not yet stabilized.	80	Increase	<p>Scope 3 (S3) values have risen by 80%. This is not an increase in the emission value, it is a consequence of the growth on the scope of the inventory. In 2009 S3 didn't include:</p> <ul style="list-style-type: none"> - Plane business travel in EDP HC (Spain) and in EDP Renováveis; - Train business travel in HC (Spain) and Brazil; - Rented vehicles; - Construction works outsourcers. <p>Scope 3 calculations are not yet fully stabilized due to the current partial incompleteness of EDP's inventory. EDP's inventory is being improved each year, but still lacks some relevant data like the emissions regarding commuting in Brazil, in EDP Gas in Spain and in ROE (rest of Europe).</p>