Welcome to your CDP Climate Change Questionnaire 2021

C0. Introduction

C0.1

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

EDP – Energias de Portugal, S.A. (EDP) is a listed, multinational vertically integrated utility company, whose ordinary shares are publicly traded in the Euronext Lisbon. The company is established and headquartered in Portugal, being organized under Portuguese laws.
Throughout its more than 40 years of history, EDP has been building a relevant presence in the world energy scene, being present in 21 countries in 4 continents. EDP has around 12 thousand employees and is present throughout the whole value chain of electricity and in the activity of gas supply: power generation, distribution and supply of electricity in Portugal, Spain and Brazil, electricity transmission in Brazil and gas supply in Portugal and Spain. Through its subsidiary EDP Renewables, EDP is also one of the largest wind power operators worldwide, with on-shore wind farms in Europe (Iberian Peninsula, France, Belgium, Italy, Poland, Romania, Greece), North America (United States of America, Canada and Mexico) and South America (Brazil, Chile), and developing off-shore wind projects in Portugal, UK, Belgium, France and the USA. Additionally, EDP generates power from photovoltaic plants in Portugal, Romania, USA and Mexico.
EDP supplies electricity to 8.6 million customers and gas to 0.7 million customers. In 2020, the company generated about 64 TWh of electricity worldwide, of which 74% from renewable energy sources and, by year end, had an installed capacity of 24 GW (79% renewable). Highlighting its renewable energy portfolio, it is well positioned for the challenges of the energy transition.
EDP's vision is to be a global energy company, leading the energy transition to create superior value. Our values are Innovation, Sustainability and Humanization and our commitments are towards accelerated and sustainable growth, building a future-proof organization and ESG excellence and attractive returns.
The company assumes the power sector's key role in the transition to a low-carbon economy and sets a strategic agenda based on organic growth focused on renewables and low exposure to CO2 and sustainability risks. EDP publishes detailed information on its financial and sustainability performance and governance practices in its Annual Report and Sustainability Report, available on www.edp.com.
Key financial figures in 2020:

Turnover: EUR 12,448 million
EBITDA: EUR 3,950 million
Net profit: EUR 801 million
Net investment: EUR 2,037 million
Net debt: EUR 12,243 million
Total assets: EUR 42,947 million
ISIN: PTEDP0AM0009
SEDOL: 4103596

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Reporting year	January 1, 2020	December 31, 2020	No

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

Belgium
Brazil
Canada
Chile
France
Greece
Italy
Mexico
Poland
Portugal
Romania
Spain
United Kingdom of Great Britain and Northern Ireland
United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

EUR

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Financial control

C-EU0.7

(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.

Row 1

Electric utilities value chain

Electricity generation
Transmission
Distribution

Other divisions

Smart grids / demand response

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Director on board	A Director on EDP's Corporate Executive Board has formal responsibility over sustainability issues (CSO), including climate change. The Director currently in charge is assigned with all the company's cross-cutting critical themes, namely risk management and sustainability. This Director is responsible for: submitting to Board's approval the company's climate targets, policies and actions; ensuring inclusion of climate risks in the company's risk profile (e.g. impact of transition risks in EDP's business as well as acute and chronic physical risks in electricity generation and distribution assets) ; integrating climate-related issues into Business Plan development and investment/divestment analysis (e.g. forecast of carbon price impact on new generation assets profitability); reporting on climate-related issues to EDP's General and Supervisory Board (GSB), the highest-level corporate body below the General Shareholders Meeting, which includes a Corporate Governance and Sustainability Committee, headed by the GSB chairman.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	The Executive Board of Directors, in the person of the Director responsible for sustainability (CSO), is briefed at least monthly by the company's Corporate Sustainability Department – coordinating, whenever needed, with the Corporate Risk Management Office and the company's Business Units – on sustainability issues, including climate change. Reports include: i) regular updates on the implementation of the company's climate-related policies, actions and targets (e.g. performance against CO2/kWh targets in electricity generation business unit; performance against client energy savings from energy services in electricity supply business unit); ii) results of in-depth climate risk analysis (e.g. extensive exercise, conducted in 2020-21, of climate related risks analysis and valuation, aligning the climate strategy with the recommendations of the Task Force for Climate Financial Disclosures - TCFD; iii) inputs for analysis of investments or divestments on electricity generation, impacting business plans and annual budgets (e.g. impact of changing CO2 prices); iv) proposal for new climate policies, actions and targets, aligned with EDP's corporate sustainability strategy. The Executive Director in charge of sustainability regularly takes the most relevant climate-related issues to the Executive Board meetings. The Executive Director also reports on climate-related issues to EDP's General and Supervisory Board, oversees the Corporate Sustainability and Risk Management Offices and chairs the Sustainability Committee, where the top management of the most relevant business units discuss the Group's environmental performance and its annual Operational Environment and Sustainability Plan. Additionally, The CEO and CSO chair the Environment and Sustainability Board, an external advisory Board dependent on the Executive Board of Directors, which

		comprises 5 experts elected at the general shareholders' meeting. This corporate body is periodically consulted for advising and supporting corporate sustainability strategy, with Climate being a constant issue for debate. From 2021 on, the General and Supervisory Board receives a monthly flash with the most relevant ESG performance indicators, including actual and previous year CO2 emissions (absolute and specific).

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Other C-Suite Officer, please specify Head of Corporate Sustainability DepartmentOffice	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

Highest-level management position (i.e below Executive Board level) for climate-related issues lies with the Head of EDP's Corporate Sustainability Department. Corporate departments are structures of EDP Corporate Centre, headed by the company's most senior managers, who report directly to the company's Executive Board of Directors. The Head of the Corporate Sustainability Department is responsible for assisting the Executive Board in defining corporate sustainability policies, actions and targets, including those related to climate, and for monitoring their implementation at Business Unit level. In 2020 he was also the Head of the company's Corporate Risk Management Office, thus facilitating the integration of climate-related transition and physical risks into the company's risk profile and risk management procedures (assessment, integrated analyses of return-risk, mitigation strategies and monitoring). The Head of the Corporate Sustainability Department reports directly, at least monthly, to the company's Executive Board Director in charge of sustainability. Reports include updates on the implementation of climate-related policies, actions and targets (e.g. corporate target of reduction in CO2/kWh in 2030 from 2015 levels); results of in-depth climate risk analysis (e.g. value at risk from climate change-induced structural change in water and/or wind volumes, affecting the operation of renewable electricity generation assets); climate-related inputs for analysis of investments/divestments; and proposal for new climate policies, actions and targets, namely the new 2030 ambition targets, approved and presented to the market through the EDP

Strategic Update 2021-2025. Another important organizational structure is the Environment and Sustainability Board (ESB), an external advisory Board dependent on the Executive Board of Directors. The ESB comprises 5 experts elected at the general shareholders' meeting. This corporate body is periodically consulted for advising and supporting corporate sustainability strategy, including climate action. The corporate Sustainability Department also reports to the General and Supervisory Board, on a monthly basis, the ESG key performance indicators, including CO2 emissions performance.

C1.3

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

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity inventivized	Comment
Board Chair	Monetary reward	Emissions reduction target	The CEO and the other members of EDP's Executive Board of Directors (EBD), in accordance with EDP's policy of remuneration for EBD members, have their variable annual performance factored into the Group's sustainability performance based on the Dow Jones Sustainability Index score and their multiannual variable remuneration based on CO2 emissions reduction and the increase of share of renewable energy production.
Business unit manager	Monetary reward	Company performance against a climate-related sustainability index	All business unit managers have the company's sustainability performance in several indices (DJSI, FTSE4Good, MSCI and Sustainalytics), as well as the CDP Climate Change score, factored into their annual variable remuneration. As far as climate change is concerned, the variable remuneration is based on the CDP

			Climate Change performance, with overall score A as the baseline, and depending on the scoring level (A, A- ou B) in the 11 categories' scores. This KPI includes, among others, the attainment of the explicit CO2 reduction targets committed by the company and the alignment with the TCFD recommendations. This target is operationalized through the commitments made in EDP's Strategic Update 2021-2025: i) To reach 100% of installed capacity and electricity generation from renewables by 2030; ii) To double solar+wind capacity by 2025; iii) To be coal-free by 2025; iv) To be carbon neutral by 2030; v) To reduce CO2 emissions intensity (scope 1&2) in 98% by 2030 (updated target approvedby the Science Based Target initiative).
All employees	Monetary reward	Company performance against a climate-related sustainability index	At Business Unit level, team level and individual level, all employees have the company's sustainability performance in several indices (DJSI, FTSE4Good, MSCI and Sustainalytics), as well as the CDP Climate Change score, factored into their annual variable remuneration. As far as climate change is concerned, the variable remuneration is based on the CDP Climate Change performance, with overall score A as the baseline, and depending on the scoring level (A, A- ou B) in the 11 categories' scores. This KPI includes, among others, the attainment of the explicit CO2 reduction targets committed by the company and the alignment with the TCFD recommendations. This target is operationalized through the commitments made in EDP's Strategic

			Update 2021-2025: i) To reach 100% of installed capacity and electricity generation from renewables by 2030; ii) To double solar+wind capacity by 2025; iii) To be coal-free by 2025; iv) To be carbon neutral by 2030; v) To reduce CO2 emissions intensity (scope 1&2) in 98% by 2030 (updated target approved by the Science Based Target initiative).

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	5	Focus is until 2025. Timeframe allows foresight of the most immediate consequences of possible transition and physical risks and opportunities. This time horizon, at the time of answering this questionnaire, corresponds to the 2021-2025 period, which is the time horizon of EDP's Business Plan.
Medium-term	5	10	Focus is until 2030. Timeframe allows foresight of possible transition and physical risks and opportunities, with an impact on the company's strategy. This time horizon, at the time of answering this questionnaire, corresponds to the 2025-2030 period, in which EDP still has several targets defined.
Long-term	10	30	Focus is on the long-term company strategy (until 2050). It foresees transition risks and opportunities and particularly the consequences of structural changes in climate patterns, such as chronic physical impacts which are not immediate and can only be truly assessed in the long-term. Long-term horizon, at the time of answering this questionnaire, corresponds to the period 2030-2050. This timeframe is in line with the global objective set by the Paris Agreement to avoid the

			increase of average global temperatures above 2ºC, and working to limit them to 1.5ºC, in the second half of the century.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

A substantive financial impact considers risks over 1M€, which refers to the dimension of the impact assessed by BUs and/ or Group. All risks are assessed at Business Unit level, regarding the specificities of each business and geography, and afterwards consolidated at Group level providing the total climate risk (in terms of EBITDA at Risk). Though all risks should be identified, only risks with a substantial financial impact (over 1M€) are quantify.
Climate-related risks are fully integrated into EDP's periodic risk identification, assessment and management process. They are identified across different categories of EDP's risk taxonomy and are a relevant input to assess the impact on strategic development, business planning, investment decisions and operations management (mainly in short-term). To provide a more detailed analysis and evaluate longer timeframes, there is a specific process for Climate Risks Assessment, that aims to identify and quantify climate risks and opportunities (physical and transition) together with all Business Units. The climate-related risks quantification process considers expected loss (average scenario) and maximum loss (worst case scenario), which allows for the prioritization of risks according to their materiality, across different timeframes and different climate scenarios (based on IEA and IPCC-RCP climate scenarios).

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

Climate Risk Assessment and Quantification – annual dedicated process, streamlined by the corporate Risk Management Department and the corporate Sustainability Department, that seeks to assess the main physical and transition climate risks and opportunities in all Business Units, in which the EDP Group has a material and consolidated turnover, namely EDP Produção, E-REDES, EDP Comercial, EDP Spain, EDP Renewables, and EDP Brasil. The process includes:
(1) review of risk and opportunities taxonomy (based on TCFD recommendations and aligned with the corporate risk management taxonomy);
(2) definition of climate scenarios (aggregated physical and transition scenarios);
(3) definition of risk physical parameters and market variables (physical and transition);
(4) quantification through stochastic analysis of physical and transition risks and opportunities at BU level (e.g., reduction of hydro availability, increase of extreme weather events – storms, cyclones, floods, wildfires – additional taxes, exposure to litigation, uncertainty in market signs, use of new technologies, access to new markets, among others); and
(5) consolidation of results and estimation through stochastic analysis of Climate Value at Risk (EBITDA at Risk related with climate).

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term

Description of process

Risk Report and Risk Appetite Dashboard – reports developed fortnightly and every 3-months (respectively) by the Risk Management Department. The aim is to follow up on more volatile risks and update EDP's exposure to the key sources of risk (strategic, markets, regulatory, financial and operational). There is a follow up on climatic conditions by addressing physical and transition risks. The physical risks, namely chronic shifts, are evaluated, for example, in hydro volume production which is impacted by precipitation and inflows, and in wind volume production, which depends on the wind intensity and frequency, allowing to identify possible changes in structural patterns. Another physical risk is the evolution in terms of frequency and severity of incidents covered by insurance that are climate related (acute events) that results from extreme weather events, such as cyclones and floods. Additionally, transition risks are also considered by stating relevant climate regulatory developments, namely emerging regulation that includes, for example, changes in renewable energy generation support

schemes.
As an example, the physical risk of uncertainty of hydro availability, either by reduction of inflows or precipitation, is assessed through stochastic simulation and/or sensitivity analysis. The various paths are analyzed, the value at risk for the 95% percentile is identified and its impact on EDP's EBITDA is assessed and evaluated. This quantification is then used to determine the price hedging strategy of the company in order to avoid the risk of having too large a sold position relative to own generation. Additional mitigation measures also include geographical and technological diversification to decrease exposure, in relative terms, to hydro generation.
An additional example is the price of CO2 (transition risk) that is identified and modeled through stochastic analysis, assuming the estimated price, and considering the volatility calculated based on its historical series. The impact of the CO2 price variation is evaluated in the company's EBITDA, and its exposure to each Business Unit is also calculated. In terms of mitigation measures, in addition to a diversified portfolio focused on renewable energies, EDP has also in place a defined limit structure for the CO2 exposure and regularly hedges this exposure to avoid price shocks on its open position.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term

Description of process

Risk map (Group and Business Unit-level) – identification and categorization of risks (incl. business, financial, and operational) and their mapping according to expect loss (average scenario) and maximum loss (worst case scenario). This allows for the prioritization of risks according to their materiality and for the setting of a risk agenda focused on relevant topics. Climate-related strategic physical risks (e.g. structural reduction of hydro productivity) and transition risks (e.g. change in renewables support regulation; changes in CO2 trading schemes; technological breakthroughs) are assessed through sensitivity and stochastic analysis at Group level. At operational level, risks related to generation and distribution asset losses and damages from increased frequency of extreme weather events are also assessed.
As an example, the physical risk of uncertainty of hydro availability, either by reduction of inflows or precipitation, is assessed through stochastic simulation and/or sensitivity analysis. The various paths are analyzed and the value at risk for the 95% percentile is identified and its impact on EDP's EBITDA is assessed and evaluated. This

quantification is then used to determine the price hedging strategy of the company in order to avoid the risk of having too large a sold position relative to own generation. Additional mitigation measures also include geographical and technological diversification to decrease exposure, in relative terms, to hydro generation.
An additional example is the price of CO2 (transition risk) that is identified and modeled through stochastic analysis, assuming the estimated price, and considering the volatility calculated based on its historical series. The impact of the CO2 price variation is evaluated in the company's EBITDA, and its exposure to each Business Unit is also calculated. In terms of mitigation measures, in addition to a diversified portfolio focused on renewable energies, EDP has also in place a defined limit structure for the CO2 exposure and regularly hedges this exposure to avoid price shocks on its open position. Besides the current response throughout the year, this analysis also informs on the risk of capital allocation and M&A strategies, that can result in the reshuffling or disposal of some assets. One example is the sale of hydro assets to reduce the exposure to hydro risk (physical risk) and the sale of CCGTs in Spain that also allows to reduce exposure to transition risks (e.g., CO2 prices) that might reduce the economic value of these assets in the future.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term

Description of process

Budget – annual exercise that identifies possible transition risks for the next year with impact on EDP's results through sensitivity and stochastic analysis to several indicators (e.g., impact of hydro coefficient variation under several scenarios).

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Every two years

Time horizon(s) covered

Medium-term

Description of process

Business Plan – bi-annual prospective exercise of the company's activity for the next 4 years, taking into account risks that may affect EDP's results, including climate-related risks. Strategic decisions, business plans and targets are defined after a structured reflection about market conditions that consider historical and prospected evolution of: transition risks, namely regulation and policies, and costs of technologies, among others; and physical risks (e.g., incl. renewable volumes). Sensitivity and stochastic analysis to EBITDA@Risk and NI@Risk according to different scenarios assumed is also performed.

As an example, the physical risk of uncertainty of hydro availability, either by reduction of inflows or precipitation, is assessed through stochastic simulation and/or sensitivity analysis. The various paths are analyzed and the value at risk for the 95% percentile is identified and its impact on EDP's EBITDA is assessed and evaluated. This quantification is then used to determine the price hedging strategy of the company in order to avoid the risk of having too large a sold position relative to own generation. Additional mitigation measures also include geographical and technological diversification to decrease exposure, in relative terms, to hydro generation.

An additional example is the price of CO2 (transition risk) that is identified and modeled through stochastic analysis, assuming the estimated price, and considering the volatility calculated based on its historical series. The impact of the CO2 price variation is evaluated in the company's EBITDA, and its exposure to each Business Unit is also calculated. In terms of mitigation measures, in addition to a diversified portfolio focused on renewable energies, EDP has also in place a defined limit structure for the CO2 exposure and regularly hedges this exposure to avoid price shocks on its open position. Besides the current response throughout the year, this analysis also informs on the risk of capital allocation and M&A strategies, that can result in the reshuffling or disposal of some assets. One example is the sale of hydro assets to reduce the exposure to hydro risk (physical risk) and the sale of CCGTs in Spain that also allows to reduce exposure to transition risks (e.g., CO2 prices) that might reduce the economic value of these assets in the future.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Medium-term
Long-term

Description of process

Energy outlook scenario analysis – annual exercise performed by EDP's corporate energy planning department, based on World Energy Outlook scenarios, that prospects transition risks/opportunities impact for the medium and long term. It sets scenarios according to different decarbonisation paths and defines different evolution trends for demand, fuels and CO2 prices, capacities, among others, forecasting different generation mixes, RES generation shares and capacity changes.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Every three years or more

Time horizon(s) covered

Long-term

Description of process

Emerging risks survey – exercise developed every 3 years to assess main concerns of EDP Group top management for the next 10 years of the company (focused on Strategic risks). The first exercise was focused on identifying all the key trends and define a framework, based on a benchmark of several sources (internal and external), that focus on 6 dimensions: geopolitics, economic, social, technological, environmental and sectorial. In 2019 the first cyclical process for emerging risks assessment was launched, which consisted of interviews and survey to the top management, followed by the consolidation of results and comparison with external sources, and finally a definition of an action plan. Climate risks/opportunities (physical and transition) are present in several dimensions, namely increase of frequency and severity of extreme weather events such as cyclones and floods, and a structural reduction of precipitation (physical risks), as well as rise of political and regulatory pressures for decarbonisation (transition risk).

Value chain stage(s) covered

Direct operations

Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Not defined

Time horizon(s) covered

Medium-term

Description of process

Deep dive analysis – Specific deep dive analysis, performed whenever necessary. Examples include: a) EDP Water Risk Map, developed in 2015, where EDP characterized strategic risks associated with physical risks, namely structural changes in precipitation patterns (reduction of hydro generated production) and operational risks associated with the increase in global temperature (reduction of thermal power plant cooling systems efficiency) and extreme weather events (damage to physical generation and distribution assets); b) Extensive exercise, conducted in 2017, to identify of key emerging trends (global and utility-related), highlighting climate change transition (e.g., introduction of additional taxes and fees to promote decarbonization, or increase in EV penetration) and physical risks (e.g., structural decrease in precipitation and increase in temperature, or increase in frequency of extreme weather events).

Value chain stage(s) covered

Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term

Description of process

Prices and Volumes report – follow up on climate conditions (current and prospected) to assess transition risks, namely the impact on prices (power, fuels, and CO2) and volumes of energy, regulatory pressure, among others. The report is produced and discussed in a specific committee with top-management on a quarterly basis.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Climate and energy related regulation – at international, European Union and national levels – can have a significant financial impact on EDP's electricity generation, distribution and retail businesses (reduced revenues and margins, increased operating costs). Examples include regulation on renewables support schemes, emissions trading mechanisms or carbon pricing. The regulatory context of the different markets where EDP operates and the corresponding developments are closely analysed by a dedicated corporate department, the Regulation Department. Together with the Energy Planning Department and the Risk Management Department, the Regulation Department quantifies potential impacts on the company of changes to the different regulatory contexts, according to different scenarios. Regulatory framework related with climate is a priority concern and is part of several analysis namely, investment analysis, budget and business plan.
Emerging regulation	Relevant, always included	The creation of additional regulatory measures by policy makers, in order to achieve a carbon-free economy, may create pressure on the business-as-usual and (possibly) demands operational and strategic adjustments. Similarly to the current regulation risk type previously mentioned, new climate and energy related regulations may materialize at international, European Union and national levels and can also have a significant financial impact on EDP's electricity generation, distribution and retail businesses (reduced revenues and margins, increased operating costs). Examples include additional requirements to carbon-intensive technologies (coal), or in the worst-case scenario the early decommissioning of thermal plants. Follow-up on possible changes to the regulatory context of the different markets where EDP operates is conducted by a dedicated corporate department, the Regulation Department (including the participation in several forums of discussion with experts, scientists & academics and policy-makers). Together with the Energy Planning Department and the Risk Management Department, the Regulation Department quantifies potential impacts on the company of additional requirements to the different regulatory contexts, according to different scenarios, from business-as-usual to scenarios aligned with the Paris Agreement transition needs.
Technology	Relevant, always included	Technological breakthroughs (e.g. advances in smart grids, decentralized generation, energy storage or electric vehicles, trends in renewables' levelized cost of electricity) are key to the implementation

		of EDP's low carbon transition plan and climate targets. For example, the failure to anticipate and integrate advances in smart grids can compromise the company's performance, leading to competitive disadvantages. EDP Innovation Business Unit and EDP Corporate Energy Planning Department closely follow-up technological developments that can impact EDP low carbon strategy. Emerging technology studies are carried out by the Innovation Business Unit, where technological risks and opportunities are accounted for, such as the development of storage technologies, different sources of mobility, particularly the evolution of electric mobility, as well as the evolution of LCOEs of renewables that are analysed and incorporated in the different scenarios. Additionally, the recurrent Energy Outlook scenarios analysis exercise is performed by the Energy Planning Department.
Legal	Relevant, always included	Climate-related legal risks (penalties, compensations, agreements) can arise from non-compliance with associated laws and regulation, or future compliance costs (e.g. decommissioning of thermal power plants). Legal risks are analysed and followed up by EDP Legal Department with a view to ensure compliance and monitor on-going contingencies of different natures, including environmental and climate change related contingencies. Together with the Risk Management department, sensitivity analysis is performed to assess different scenario for legal losses. EDP constitutes provisions for decommissioning of power plants. Also, increasing exposure to litigation is assessed by BUs in Climate Risks Assessment annual process. Examples include penalties, taxes, compensations resulted from non-compliance with associated laws or regulation, or future compliance costs. A specific example would be a possible increase in compliance costs (direct or loss of revenue) with hydro basins' water management in increasingly dry or even drought contexts.
Market	Relevant, always included	Volatility in commodity prices (e.g. fuel; CO2), in generation volumes of renewables (especially hydro and wind), and in energy consumption (including energy efficiency) are market risks that can be influenced by climate change. Examples include the spill-over effect of new emissions trading schemes on CO2 prices or the reduction in electricity demand brought upon by new energy efficiency regulations and public policy targets. These risks can have a negative impact on EDP's results. These variables are always included in the company's climate risks analysis, as they are a key driver of EDP's results. Assessment is performed through sensitivities analysis of several market indicators, assuming different global energy scenarios with different underlying decarbonisation pathways. Additionally, different scenarios for prices of commodities are considered in the Climate Risks Assessment annual process, impacting differently EDP's results, e.g., rise on CO2 price

		with a positive impact due to EDP's long position, while shrunk of overall pool price with negative impact on results.
Reputation	Relevant, always included	The energy sector, including electric utilities, is at the forefront of societal awareness on climate change and the role of the private sector. For example, failure to commit to ambitious targets on climate change mitigation and adaptation and to deliver on these commitments can cause reputational damages leading to the reduction of EDP brand value and investor interest and loss of market competitiveness. Additionally, difficulty in managing extreme weather events without an effective response to storms, floods, droughts, or wildfires can also have a negative reputational impact. EDP Group sees reputation as an impact instead of a risk, which means that all climate risks have a potential impact on EDP's reputation. For that reason, reputation is always included in risk analysis, along with economic, environmental and personnel impacts' assessment. In the Climate Risks Assessment annual process BUs are requested to quantify the impact on reputation across different time horizons and climate scenarios. However, EDP Group already shows some resilience regarding this matter, as it already started its decarbonisation pathway.
Acute physical	Relevant, always included	Increase in the frequency and severity of extreme weather events, foreseen by IPCC scenarios, represents an operational risk to EDP's activities, in particular to electricity distribution. For example, damage to assets in operation (overhead lines, poles and substations) and service disruption can have a negative financial impact, namely in investment and insurance costs. Acute climate-related physical risks (e. g. precipitation extremes, floods, storms) are periodically assessed in the Climate Risks Assessment process, by each BU and across different climate scenarios and time horizons. Also, the matter was object of corporate-level deep-dive analysis of emerging risks, using IPCC scenarios, and Business Unit level analysis by prevention teams in order to create preventive measures for asset management and service assurance.
Chronic physical	Relevant, always included	Chronic physical risks are also analysed, in particular the structural decrease in precipitation that is foreseen for the Iberian Peninsula and Brazil, by IPCC and the European Environment Agency scenarios. This is a major long-term risk for EDP's hydro electricity generation activities. Chronic physical risks are accounted in medium/ long term analysis and assessed by the Climate Risks Assessment process, namely regarding water availability, temperature increase, and sea level rise.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Legal

Exposure to litigation

Primary potential financial impact

Other, please specify

Policy and legal: Increased costs and/or reduced demand for products and services resulting from fines and judgments; Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company-specific description

Decarbonization and joint efforts for a cleaner economy already introduced some legal and regulatory additional requirements to fulfil international commitments. As time goes by, it is expected a tightening of requirements, introducing more restrictive measures (incl. to renewable generation) and increasing exposure to litigation (i.e., leading to additional costs related with possible fines and other legal costs as well as higher compliance costs).

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

5,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The estimated financial impact is 5,000,000, which corresponds, on a yearly basis, to the maximum loss at P95% and is calculated based on the accumulated value for the 2021-2030 time period. This figure is calculated considering the IEA NPS scenario for a 10-year time horizon (2021-2030) and assuming EDP's defined strategy for this time horizon (closure of thermal power plants, investment in renewables and the end of some hydro concessions).

Cost of response to risk

4,800,000,000

Description of response and explanation of cost calculation

Risk is mitigated through an active strategy of diversification across multiple technologies, geographies, asset maturity and markets regulatory design, as well as through a close follow up of regulatory bodies and governments. EDP manages this risk through a diversified asset portfolio in terms of technologies, businesses and geographies. EDP accumulated investment for the period of 2021-2025 in renewables is ~ EUR 24 bn, i.e. ~EUR 4.8 bn per year, and is distributed across diversified markets (40% in Europe, 40% in North America, 15% in Brazil & LatAm and 5% in the rest of the world) and businesses (80% in renewables, 15% in networks, and 5% in client solutions & energy management). In terms of installed capacity, it considers the addition of 20 GW (40% solar, 51% wind on-shore and offshore, 7% solar DG and 2% storage) 45% of which in North America, 35% in EU, 15% in Latin America and 5% in the rest of the world.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact

Other, please specify

Reduced revenues due to lower sales/output

Company-specific description

Structural reduction of water availability with impact in hydro generation mainly in Portugal and Brazil. This risk was evaluated considering the RCP scenarios (2.6, 4.5 and 8.5) and their respective variations regarding the average precipitation for 2025, 2030 and 2050, which were provided by World Group Bank and Copernicus data sources. It is projected a structural reduction of water availability of ~10% to 15% in Portugal and ~10% to 40% in Brazil in 2050.
The company's exposure to this risk was reduced with the sale of the hydro assets in 2020 in Portugal, and EDP manages this risk through a diversified generation portfolio in terms of technologies and geographies.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

15,000,000

Potential financial impact figure – maximum (currency)

50,000,000

Explanation of financial impact figure

Based on data provided by World Group Bank and Copernicus data sources, it is expected a structural reduction of water availability of ~10% to 15% in Portugal and ~10% to 40% in Brazil in 2050, depending on the RCP scenario.
The estimated financial range impact (from 15,000,000 to 50,000,000) considers the RCP scenarios (RCP 2.6, RCP 4.5 and RCP 8.5) for a 30-year time horizon (until 2050), assuming EDP's defined strategy for the different time horizons (closure of thermal power plants, investment in renewables and the end of some hydro concessions).
The values presented, on a yearly basis, are the maximum loss at P95% (for different scenarios) and are calculated considering the incremental variation compared to today, based on the accumulated estimates for the period of analysis.

Cost of response to risk

3,800,000,000

Description of response and explanation of cost calculation

EDP manages this risk through a diversified generation portfolio in terms of technologies and geographies. EDP accumulated net expansion investment for the period of 2021-

2025 in renewables is ~ EUR 19 bn, i.e. ~EUR 3.8 bn per year, distributed across diversified markets and technologies. EDP's Strategic Update 2021-2015 investments in new generation capacity are also diversified: addition of 20 GW (40% solar, 51% wind on-shore and offshore, 7% solar DG and 2% storage) 45% of which in North America, 35% in EU, 15% in Latin America and 5% in the rest of the world. Geographic diversification significantly reduces the risk, as structural reduction in precipitation is not likely to occur in all geographies and with same magnitude.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact

Other, please specify

Increased capital costs (e.g., damage to facilities) and Increased insurance premiums and potential for reduced availability of insurance on assets in "high-risk" locations

Company-specific description

Operational disruption of electricity distribution activities. Extreme weather events, such as storms, floods, wildfires and landslides – frequently associated also with extreme winds and precipitation – can have a negative impact in several EDP business activities, in particular electricity distribution, resulting in damage to assets in operation (overhead lines, poles and substations). To a lesser extent, damage can also occur during the company's hydro power plant construction phase, as cofferdams may be insufficient to hold large water inflows, causing flooding in some elements of the work.

As there is no academic consensus on the evolution of the frequency and intensity of extreme weather events (wind and rain), it was assumed a conservative approach, considering the estimation of IPCC SRES that the frequency of extreme weather events will pass from 1 in 20 years to 1 in 5 years in 2100. This trend, assuming a regression, is adjusted to 2025, 2030 and 2050. The increase in the frequency of these extreme events will impact EDP, increasing the risk of disruption in its energy distribution and/or supply activities, as well as increasing the operational and capital cost from damage recovery.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

1,000,000

Potential financial impact figure – maximum (currency)

10,000,000

Explanation of financial impact figure

The estimated financial range impact (from 1,000,000 to 10,000,000) considers the average and maximum financial impacts of damage to generation assets or distribution networks, based on the impacts experienced from historical events that occurred in EDP Produção, E-REDES and EDP Comercial, EDP Spain, EDP Renewables and EDP Brasil. Frequency of extreme events considers the estimation of IPCC SRES that events will pass from 1 in 20 years up to 1 in 5 years in 2100 (depending on the aggregated scenario considered), assuming a regression for 2025, 2030 and 2050. The values presented, on a yearly basis, are the maximum loss at P95% (for different scenarios) and correspond to the incremental variation compared to today, based on the accumulated estimates along the time period of analysis.

Cost of response to risk

16,000,000

Description of response and explanation of cost calculation

Risk is firstly mitigated by the operational areas of BUs, who propose and implement best practice (e.g. regular inspections and preventive maintenance) and have specific plans for catastrophic events' crisis management and business continuity. Yearly cost of risk transfer through insurance and costs associated with the company's Business Continuity Plan and structures is equivalent to 0.4% of EBITDA (c. 16 million euros in 2020), including specialized outsourced services. EDP has Business Continuity Departments in strategic company areas and, in 2015, revised its crisis management and business continuity policies, in line with international best practices. A significant part of the remaining risk is mitigated through a comprehensive range of insurance policies (property damage and civil and environmental responsibility) that mitigate the financial impact of large-scale events (e.g., associated with extreme and comprehensive weather phenomena, non-availability of revenue generating assets or significant compensation to third parties) as well as much less frequent incidents with catastrophic impact (e.g., earthquakes). In Spain, EDP takes part of the Compensation Insurance Consortium, a State-run initiative targeted at extreme events risk mitigation for the

electricity sector. In Brazil, EDP developed ClimaGrid to manage the physical risks of the grid, a system that automatically detects thunder storms, allowing real time intervention in the prevention of future grid shutdowns.

Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Market

Other, please specify

Primary potential financial impact

Other, please specify

Decreased revenues due to new competitors

Company-specific description

Decarbonisation lead to the rise of new competitors in green electricity markets, namely new technological providers (e.g., batteries, Demand Side Management solutions), as well as more interest on renewable generation by conventional electric utilities. This will lead to additional pressure on markets shares, namely regarding generation system services share – e.g., EDP may to lose ~50% of secondary and tertiary electric generation markets in Iberia.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

10,000,000

Explanation of financial impact figure

The estimated financial range impact (from 0 to 10,000,000) considers the IEA SDS, STEPS and CPS scenarios for a 10-year time horizon (2021-2030), assuming EDP's defined strategy for the different time horizons (closure of thermal power plants, investment in renewables and the end of some hydro concessions).The values presented, on a yearly basis, are the maximum loss at P95% (for different scenarios) and are calculated considering the accumulated estimates for the period of analysis.

Cost of response to risk

4,800,000,000

Description of response and explanation of cost calculation

To assure EDP's presence in green markets, and follow up on transition challenges, the company's strategy to 2025 establishes a target for investment in energy transition of ~EUR 24bn for the period of 2021-2025, i.e., ~EUR 4.8 bn. This investment includes expansion CAPEX in renewables (80%), maintenance of CAPEX in networks (15%), and client solutions and energy management solutions (5%). In terms of installed capacity, it considers the addition of 20 GW (40% solar, 51% wind on-shore and offshore, 7% solar DG and 2% storage) 45% of which in North America, 35% in EU, 15% in Latin America and 5% in the rest of the world.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Upstream

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of more efficient modes of transport

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Economy decarbonization lead to the rise of more efficient modes of transport, namely the rise of electric vehicles (EV) market. According to the IEA SDS scenario, it Is expected that, in 10-years time, the EV market will evolve from 10M in 2020 to 200M in 2030. EDP aims to take advantage of this opportunity, investing in e-mobility and smart mobility services. For the next 5 years, EDP plans to increase the installation of public and private charging points from 1.9k to 40k. Internally, EDP committed to electrify 100% of its light-duty fleet and 50% of the heavy-duty fleet.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

5,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The estimated financial impact is 5,000,000, which corresponds, on a yearly basis, to the maximum loss at P95% and is evaluated based on the accumulated value for the 2021-2030 time period. This figure is calculated considering the IEA SDS scenario for a 10-year time horizon (2021-2030) and assuming EDP’s defined strategy for the different time horizons (closure of thermal power plants, investment in renewables and the end of some hydro concessions).

Cost to realize opportunity

26,670,000

Strategy to realize opportunity and explanation of cost calculation

According to EDP's Strategic Update 2021-2025, in terms of CAPEX, EDP accumulated investment in e-mobility for the period 2021-2025 is ~ EUR 133 million, i.e. ~EUR 26.7 million per year.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Other, please specify

Access to new markets

Primary potential financial impact

Increased revenues through access to new and emerging markets

Company-specific description

Rise of renewable generation presence across new emerging markets, leading to an increase in revenues. This opportunity is motivated by an increase of interest in renewable generation, namely through the rise of partnership with local governments, companies or other institutions. EDP expects to increase its installed capacity across different geographies according to its Strategic Update 2021-2025 investments.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

1,000,000

Potential financial impact figure – maximum (currency)

10,000,000

Explanation of financial impact figure

The estimated financial range impact (from 1,000,000 to 10,000,000) considers the IEA SDS, STEPS and CPS scenarios (until 2030), assuming EDP's defined strategy for the

different time horizons (closure of thermal power plants, investment in renewables and the end of some hydro concessions).
The values presented, on a yearly basis, are the maximum loss at P95% (for different scenarios) and are calculated considering the accumulated estimates for the time period of analysis.

Cost to realize opportunity

3,800,000,000

Strategy to realize opportunity and explanation of cost calculation

EDP expects to increase its installed capacity across different geographies according to its Strategic Update 2021-2025 investments: addition of 20 GW – 40% solar, 51% wind on-shore and offshore, 7% solar DG and 2% storage, where 45% of which in North America, 35% in EU,15% in Latin America and 5% in rest of world. In terms of CAPEX, EDP accumulated net expansion investment for the period of 2021-2025 in renewables is ~ EUR 19 bn, i.e. ~EUR 3.8 bn per year, distributed across diversified markets and technologies.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Other, please specify

Increase of electric power demand

Primary potential financial impact

Other, please specify

Increased revenues resulting from increased electric power demand

Company-specific description

Decarbonisation and joint efforts for a cleaner economy already introduced additional requirements to fulfil international commitments, namely regarding electric mobility and energy efficient solutions and services. These will likely lead to an increase on electricity demand through increased sectors electrification, as a means to substitute fuels fossils and other non-sustainable solutions.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

5,000,000

Explanation of financial impact figure

The estimated financial range impact (from 0 to 5,000,000) considers the IEA SDS, STEPS and CPS scenarios for a 10-year time horizon (until 2030), assuming EDP's defined strategy for the different time horizons (closure of thermal power plants, investment in renewables and the end of some hydro concessions).
The values presented, on a yearly basis, are the maximum loss at P95% (for different scenarios) and are calculated considering the accumulated estimates for the period of analysis.

Cost to realize opportunity

240,000,000

Strategy to realize opportunity and explanation of cost calculation

According to EDP's Strategic Update 2021-2025, EDP plans to invest in Client Solutions and Energy Management, including energy efficiency products and services, e-mobility and distributed PV solar generation, ~ EUR 1.2bn, i.e, ~ EUR 240 million/year.

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Is your organization's low-carbon transition plan a scheduled resolution item at Annual General Meetings (AGMs)?

	Is your low-carbon transition plan a scheduled resolution item at AGMs?	Comment
Row 1	Yes	EDP's strategy for a low-carbon transition plan is not specifically scheduled in a resolution item to the Annual General Shareholders' Meetings. However, the Annual General Shareholders' Meeting usually includes, besides the election of corporate bodies when required and other financial and corporate approvals, the approval of strategic matters including annual and sustainability reports that describe our low-carbon transition plan. Furthermore, EDP's governance structure is based on the dual model and consists of the General Meeting, Executive Board of Directors (EBD), General and Supervisory Board (GSB) and the Statutory Auditor. The separation of management and supervision roles is embodied in an EBD, who is responsible for the management of the company's business and for setting the objectives and management policies of the company and the group, and a GSB, composed by independent members and shareholders' representatives, the highest supervisory body. The GSB also issues opinions on all materially relevant matters (strategic plan, business plan, budget, acquisitions and divestments of assets, financing, establishment or termination of strategic partnerships and transactions of particular strategic significance). Under this organization, all strategic matters including specifically low-carbon transition plans are underpinned by the monitoring and management roles of those two decision layers. The latest Business Plan for the 2021-2025 period was presented by such corporate bodies in February 2021.

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
RCP 2.6 RCP 4.5 RCP 8.5	EDP has developed aggregated scenarios, based on physical and transition scenarios to assess the impact of climate risks and opportunities. Regarding physical scenarios, EDP uses IPCC scenarios to assess climate-related physical risks, taking into account forecasts for the long-term evolution of precipitation and wind patterns and temperature. EDP uses IPCC's RCP 8.5 RCP 4.5 and RCP 2.6 (aggressive CO2 emission reductions) scenarios, to identify the most relevant chronic and acute risks and evaluate potential impacts on its electricity generation and distribution activities from present time until 2050, as physical risks require a long-term analysis to identify any structural change in their pattern or frequency/severity of occurrence. Physical parameters are updated based on data sources aligned with RCP scenarios (e.g., World Bank Group, Copernicus, and some local data sources) and BUs access and quantify the impact of those changes in their businesses. Results highlighted two key risks (with higher impact for the RCP 8.5): structural reduction of water availability in Iberia and Brazil, affecting the productivity of hydroelectric generation assets in Portugal, Spain and Brazil (chronic physical risk); and increased occurrence and severity of extreme weather events (precipitation extremes, floods, wildfires, landslides and extreme winds), causing damage to our electricity distribution assets (acute physical risk). EDP's business strategy is shaped in order to mitigate chronic risk through a diversified generation portfolio in terms of technologies and geographies. Geographic diversification significantly reduces the risk, as structural reduction in precipitation is not likely to occur in all geographies and with the same magnitude. Example of this is the investment in other renewable sources besides hydro (i.e., solar and wind) in different markets (European markets, North America and Brazil). To manage the acute risk, EDP has strengthened its business continuity and crisis management capabilities, implemented a set of preventive measures and defined a comprehensive range of insurance policies (property damage and civil and environmental responsibility).
IEA Sustainable development scenario IEA NPS IEA CPS	EDP has developed aggregated scenarios, based on physical and transition scenarios to assess the impact of climate risks and opportunities. Regarding transition scenarios, EDP uses IEA scenarios to assess climate-related transition risks, taking into consideration forecasts for demand, energy capacity additions (renewable), commodity prices and technology realized prices evolution. EDP integrates IEA CPS (Current Policy Scenario) and NPS (New Policy Scenario) into the energy planning exercise (until 2050) and evaluates the impact on its business portfolio, taking into account EDP Group Business Plan. Internal assumptions are used regarding demand forecast and taxation and scenario analysis and stress tests are performed against current OTC (Over the Counter) scenario. In the annual Climate Risk Assessment process, and based on the transition

	variables projections for all SDS, NPS, and CPS scenarios, BUs access and quantify major risks and opportunities (higher than 1M€). Though risks and opportunities are evaluated for all time horizon (until 2050), the focus of the transition risks and opportunities analysis is up to 2030 since regulatory scenarios are more concrete and tangible. Results show, for example, that a CO2 price increase does not have a significant negative effect on EDP operational results, given the decreasing importance of thermal generation in our overall electricity generation portfolio. Another example is the increase of electric mobility and energy efficient solutions and service (transition opportunity), with greater impact in the SDS scenario. EDP's business strategy in aligned with a low carbon energy system and has proven resilient under the different scenarios analysis. By the end of 2020, 79% of its electricity generation installed capacity was based on renewable sources and its strategic agenda is based on organic growth focused on renewables. Additionally, new downstream retail focus on energy services (e.g. energy management solutions, Re:dy) and decentralized production (e.g., distributed generation solar PV), contribute to capturing the opportunity in transition. One good example is the Save to Compete programme that EDP has developed to supports businesses in implementing integrated energy efficiency products.
IEA B2DS	EDP used IEA B2DS Scenario for setting its GHG reduction science-based target (SBT). EDP's SBT was formally approved by the Science Based Target Initiative in early 2017 and updated in 2019 through the voluntary target ambition update process. An intensity reduction pathway for our entire business portfolio up to 2030 was derived from the application of the Sectoral Decarbonization Approach (SDA) to the power sector. The trajectory was based on the power sector B2DS scenario. We used the assumptions of EDP Group Business Plan (electricity demand, installed capacity and electricity output per generation technology) to test the alignment of our global portfolio carbon intensity (scope 1 and 2 CO2e/kWh) against the SDA intensity reduction pathway. Our target has proven aligned with the well below 2ºC trajectory. Nevertheless, this target was again updated in late 2020 and in 2021, using another scenario aligned with the 1.5ºC decarbonization trajectory (MESSAGE-GLOBIOM).
MESSAGE-GLOBIOM	EDP used the SBTi scenario based on the IPCC's Special Report on Global Warming of 1.5°C 's for setting its updated GHG reduction science-based target (SBT), using the Sectoral Decarbonisation Approach for the power sector. EDP's SBT updated ambition was voluntarily submitted and formally approved by the Science Based Target Initiative in late 2020 (-90% scope 1+2 emissions intensity in 2030 from 2015 levels) an more recently in June 2021 (-98% scope 1+2 emissions intensity in 2030 from 2015 levels). Both targets has proven aligned with the 1.5ºC decarbonisation pathway.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	EDP continues to promote new products and services and smart and efficient energy management solutions. The company aims to maximize the value of its existing portfolio exploring new services and becoming more efficient, increasing its gross margin from ~330M€ to ~590M€ in the period 2021-2025. The key drivers of growth are established across energy services (including energy efficiency services) from 0.9M contracts in 2020 to 1.4M contracts in 2025, solar decentralized generation and mobility, This strategy will be combined with increasing digitalization. In the residential segment, EDP reinforced its energy efficiency strategy in Iberia by introducing large efficient appliances within its range of equipment, a highly competitive market with a major impact on energy consumption. In the corporate segment, EDP supports companies in implementing integrated energy efficiency services, through the Save to Compete programme, also extended to SMEs. This programme identifies measures to reduce energy consumption, promoting its implementation and costing through the savings generated. The company's strategy for electric mobility involves reinforcing the number of customers with electric mobility solutions, and strengthening the electrical vehicle charging infrastructure, both in terms of the number of charging points (increasing from 1.9k in 2020 to 40k in 2025) and in terms of their geographical spread, so that electric mobility can increasingly reach more people. Additionally, EDP offers distributed generation solutions from renewable sources adapted to customers and local characteristics. In 2020, EDP Group has already provided its customers with 0.3 GW installed capacity in decentralized solar generation, and it is estimated to increase to 3.7 GW in 2030. Improving energy efficiency, together with the promotion of renewable energies, is critical for the decarbonisation of the electricity sector. EDP, focusing in generating economic

		value by investing in decarbonization, has defined a set of goals, namely 10+ GW centralised and distributed solar capacity, 15 MtCO2 of cumulative avoided emissions (2015-2025) related to the products and services provided, 100% smart meters worldwide by 2030 and 100% light-duty fleet electrification by 2030.
Supply chain and/or value chain	Yes	Improving energy efficiency, together with the promotion of renewable energies, is critical for the decarbonisation of the electricity sector. EDP promotes energy efficiency throughout the value chain, both internally, from the generation of electricity, to distribution and consumption, and externally, providing its customers with low carbon products and services. This contributes to the reduction of primary energy upstream, and to greater efficiency in the end use of energy downstream, for customers in the various activity sectors. Supply chain-related risks and opportunities are considered of low impact for EDP's business. The largest risk is related to fossil fuel sourcing (natural gas and coal), which could be subject to disruption caused by extreme weather events (acute risks) and by reduced water availability (chronic risk), however EDP's commitment to fully decarbonize until 2030 highly reduces the risk. Currently renewable intermittency can also be a risk for business continuity, requiring flexibility services, in order to increase efficiency of generation. To minimise this risk, EDP is investing in storage technologies and plans to install around 400 MW of flexible capacity by 2025. The increasing exposure to renewable volumes is also affected by physical risks, posing additional challenges to renewable generation.
Investment in R&D	Yes	R&D and innovation (RDi) are a priority for the EDP Group and are strongly rooted in its DNA, its vision and its culture, enabling it to anticipate the new challenges of the energy sector. In a context of transition for the sector, with the challenges of climate change, EDP has reinforced the need to adopt innovative strategies and technologies. EDP has been promoting and developing new technologies, products, services or business models, with the aim of providing the Group with competitive advantages and contributing to EDP's image as a leader in the development and implementation of innovative and creative solutions for value creation. Innovation at EDP is in line with the Company's strategy, with a focus on areas essential to the decarbonization of the economy, such as renewable

		energies, smart grids, customer focused efficient solutions, storage and digitalization as an area encompassing the entire innovation process. EDP continues to focus on partnerships and the balance between its own financing and competitive public financing for its RDi activity, Technological RDi activities and projects are structured in five areas: Cleaner Energies, to boost the renewable energy business; Smarter Grids, which develop solutions for a more intelligent management of electrical grids; Customer-Centred Solutions, which promotes consumer electrification solutions, improved energy efficiency and distributed generation; Digital Innovation (Data Leap), which aims to place the latest advances in information technologies - Internet of Things (IoT), artificial intelligence and Big Data technologies - at the service of business and customers; and, finally, Energy Storage and flexibility, which tests new storage technologies, flexibility management and identifies new business models. Recently, EDP entered the green hydrogen business, currently with an installed electrolyzed capacity lower than 1 GW, and it is expected to rise to 80 GW in 2030. Moreover, EDP is planning to invest in its energy transition plan EUR 24Bn in the period 2021-2025, including EUR 2,000 million accumulated investment in R&D+i and digitalisation by 2025 from 2020 level. aiming at becoming a more efficient and digital organization.
Operations	Yes	Climate-related physical risks, both chronic (structural reduction in precipitation) and acute (increased frequency and severity of extreme weather events) are expected to impact EDP's operations, causing a reduction in electricity output of our hydro generation assets and damage to electricity distribution networks, respectively. Impact is expected to be intensified in the long-term and have a medium-high impact on EDP's revenues from electricity generation as well as operational and capital cost from damage recovery. Ensuring the resilience of electricity generation and distribution infrastructures is a natural concern within EDP. With the effect of climate change beginning to be felt, it is essential to carry out an internal and ongoing analyse of the physical risks to which the infrastructures may be subject. EDP has set a goal to have Adaptation Plans in place in its Business Units by 2022 which ensure the resilience of infrastructures that may be exposed to extreme events of higher intensity and frequency.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures Capital allocation Acquisitions and divestments Access to capital Assets Liabilities	1- Revenues: i) negative impact - reduction in hydro volume influenced by a structural reduction of precipitation, leading to a reduction in hydro electricity production. The magnitude of the impact on company revenues, associated with risk 2 identified in C2.3a (Changes in precipitation patterns and extreme variability in weather patterns), is medium, given that the reduction of hydro production is partially compensated by the increased value of such production; ii) positive impact – increase in electric mobility and in new energy solutions and services favours renewable sources, namely hydro,wind and solar, due to a higher electricity generation. The magnitude of the impact, associated with opportunity 3 identified in C2.4a (rise of power demand), is medium to high. This positive impact is further strengthened by the forecasted increase in the electrification of final energy consumption which is also driven by the enabling effect of electricity in the decarbonisation of energy consumption in other sectors. 2- Operation (direct and indirect) costs: i) negative impact - reduced margins due to regulatory/policy penalization of carbon intensive fuels, leading to reduced thermal power plant margins; ii) positive impact –renewable (74% of EDP's total electricity generation) portfolio optimization resulting from higher CO2 prices, as well as higher e-mobility and efficient energy solutions and services, associated with opportunity 3 described in C2.4a (rise of power demand). The net balance between the above-mentioned positive and negative impacts is positive and the overall magnitude is medium to high. 3-Capital expenditures/ allocation: i) negative impact - investment on additional features of the electricity distribution grid to increase resilience to extreme weather events, has described in risk 3 identified in C2.3a (Operational disruption of electricity distribution activities). The magnitude of this negative impact is low; ii) positive impact - focus on generation portfolio, leveraging current portfolio mix of the Group and internal know-how, motivated by renewable favourable regulatory frameworks. The magnitude of this positive impact, associated with opportunity 2 identified in C2.4a (access to new markets), is high. 4- Acquisitions and divestments:

		Identified climate-related opportunities have the potential to impact EDP's acquisitions decisions, namely wind/solar generation pipeline projects as well as the acquisition of downstream businesses (energy efficiency, decentralized renewable generation). The magnitude of this impact, associated with opportunity 2 (access to new markets) and opportunity 3 (rise of power demand) identified in C2.4a, is high. 5- Access to capital: Identified climate-related risks and opportunities (e.g. related to changing consumer behavior and/or investor interest) can, depending on positive or negative impacts on EBITDA and operational results (e.g., renewable volumes, regulation, extreme events), have an impact on capital structure and liquidity (improve/deteriorate) impacting cost of capital. These impacts cover a range of identified risks and opportunities, and therefore their magnitude can range from medium to high. 6- Assets: Identified climate-related transition and physical risks can impact EDP's assets by causing damage to facilities, loss of value or impairment resulting from changing consumer behaviour or climate-related regulation. These impacts cover a range of identified risks (e.g., risk 3 - Operational disruption of electricity distribution activities - and 4 - Pressure on generation system services share driven by new competitors - described in C2.3a). The most exposed assets to damage are distribution assets. 7- Liabilities: Identified climate-related risks can, depending on positive or negative impacts on EBITDA and operational results (e.g., renewable volumes, regulation, extreme events), have an impact (increase/decrease) on EDP's debt levels. These impacts cover a range of identified risks and opportunities, but the impact is mostly indirect, and the magnitude is considered low. The time horizon covered by revenues, operation costs (direct and indirect) and liabilities is the business plan horizon, i.e. from 1 to 5 years, while capital expenditures and capital allocation, acquisitions and divestments, access to capital and assets are covered for a longer and undetermined time.

C3.4a

(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

1. Climate-related issues are embedded in the priorities of EDP's current business strategy (Strategic Update 2021-2025), aiming at becoming carbon-neutral (scope 1 and 2) by 2030:
a) organic growth with strong focus on CO2-free technologies, mainly wind and solar, adding 20 GW of new capacity (EBITDA and equity) by 2025: 45% of which in North America, 35% in Europe and 15% in South America and 4% in the rest of the world. Target is to reach at least 90% of installed capacity on renewables by 2025 and 100% by 2030; and

b) low exposure to CO2 and other environmental risks, through low-carbon electricity generation, management of CO2 portfolio and sustainability leadership. Target is to reduce CO2/kWh levels (combined scope 1 and 2 emissions) by 70% in 2025 and by 98% in 2030 versus 2015 levels. The latter is a science-based target approved by the Science Based Target initiative (SBTi).
EDP further publicly committed to the following medium/long term operational objectives:
a) Become coal-free by 2025.
b) Accelerate the roll-out of smart meters, covering 100% of EDP's low-voltage delivery points by 2025 in Iberia and by 2030 in Brazil;
c) Provide customers with ongoing energy efficiency products and services, including sustainable mobility, distributed PV generation and green electricity supply, avoiding 15 million tons of CO2 emissions, accumulated from 2015 to 2025;
d) Promote sustainable mobility either internally (100% of our light-duty fleet electrified by 2030) or to our customers: 180k with mobility services by 2025 and installation of 100k electric vehicles charging points by 2030.
e) Investing EUR 200 million in innovative clean energy, energy efficiency and smart grids projects by 2020 - target already achieved in 2018. A new target was set in 2020: to invest 2,000 M€ in R&D+I and Digitalization by 2025.
f) Achieving 5 GW of centralised solar PV installed capacity and 3.7 GW of distributed PV on customers by 2025.

2. Our business priorities are explicitly linked to an emissions reduction target and to a renewable energy target. Both are corporate-wide strategic commitments and performance is regularly reported to the market (e.g. annual investor presentations, corporate annual reports, sustainability report). The emissions reduction target is fully aligned with EDP's science-based target, formally approved by the Science Based Target Initiative in early 2017 and further updated in 2019 and 2020: to reduce direct (scope 1) and indirect (scope 2) emissions from electricity production 95% per TWh by 2030, from 2015 levels, aligned with the 1.5ºC trajectory. The company also commits to reduce absolute indirect emissions (scope 3) by 50% over the same time period. More recently (2021), EDP further updated its scope 1 and 2 intensity target to 98% reduction in 2030 from 2015 levels, which was also approved by the SBTi.

3. In February 2021, EDP announced an expansion investment of EUR 24 bn for the 2021-2025 period (Strategic Update 2021-2025), 80% of which in new renewable generation installed capacity, 15% in networks and 5% in client solutions and energy management. By 2025, EDP foresees its specific scope 1 and 2 CO2 emissions will be 70% below 2015 levels, on track with the science-based target, thus contributing both to climate change mitigation (reduction of scope 1 and 2 emissions) and reduction of climate regulatory risks exposure. The company will also make a strong investment in low carbon client solutions (energy efficiency services, sustainable mobility and distributed PV generation) and in distribution grids. This will contribute both to climate mitigation (reduction of scope 2 and scope 3 emissions) and adaptation (increased asset resilience). In 2020, EDP marketed energy efficiency products and services that delivered client accumulated savings of 3.6 TWh, avoided 1.4 Mt of CO2 emissions and generated EUR 245 million in revenues.

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

5. This strategy has gained EDP strategic advantages over the competitors through:
a) Profitability and reduced risk exposure – carbonized generation portfolio (79% renewable installed capacity by the end of 2020) and low exposure to CO2 regulatory risks (long term target to reduce CO2/kWh in line with climate science);
b) Commercial differentiation – products (low carbon electricity) and services (energy efficiency services) that meet growing customers demand for low carbon solutions (total accumulated client savings of 3.6 TWh since 2015, avoiding 1.4 Mt CO2);
c) Increased internal efficiency – consistently increasing wind turbine load capacity (30%) and availability (>97%) and differentiation in wind farm development; reduction of technical and commercial electricity losses in distribution networks.

6. EDP' vision and business strategy are fully aligned and even more ambitious than the Paris Agreement goals. The company committed to a 2030 carbon-free generation, a science based GHG reduction target, approved by the SBTi and aligned with the 1.5ºC pathway. EDP is also actively involved in the promotion of the vital role of renewable energy in the attainment of the 1.5ºC objective; joined the UN Global Compact *Business Ambition for 1.5* °C; is a member of the Low Carbon Technology Partnership Initiative (LCTPi), a collaborative initiative led by the World Business Council for Sustainable Development that produced in-depth analysis demonstrating that the potential of existent business solutions can deliver 65% of the needs to achieve the Paris Agreement objective. EDP, along with 15 electricity utilities, signed an action plan whose implementation enables the installation of 1,5 TW renewable energy capacity worldwide, over the next 10 years. In 2020, EDP In 2020, EDP also joined other initiatives in the field of climate action, namely the Uniting Business and Governments to Recover Better, promoted by SBTi with the support of the UN Global Compact (UNGC), CDP, WWF, WRI and We Mean Business Coalition, and the Green Alliance for a Green Recovery launched in the European Parliament and appealing for a green recovery from the COVID-19 pandemic.

7. EDP has also committed to follow the recommendations of the TCFD (Taskforce on Carbon-related Financial Disclosures), with regard to governance, strategy, analysis of risks and opportunities and the financial impact of climate change on the Company.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Both absolute and intensity targets

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number
Abs 1

Year target was set
2020

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 1+2 (location-based)

Base year
2015

Covered emissions in base year (metric tons CO2e)
22,532,018

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)
100

Target year
2030

Targeted reduction from base year (%)
90

Covered emissions in target year (metric tons CO2e) [auto-calculated]
2,253,201.8

Covered emissions in reporting year (metric tons CO2e)
9,905,012.6

% of target achieved [auto-calculated]
62.2669749332

Target status in reporting year
Revised

Is this a science-based target?
Yes, and this target has been approved by the Science-Based Targets initiative

Target ambition

1.5°C aligned

Please explain (including target coverage)

The target officially approved by SBTi in 2020 is on Scope 1 and 2 emissions intensity. This absolute target is the expression of the emissions intensity target, but expressed in absolute terms, assuming average hydro and wind conditions. This target was updated from a previous target approved in 2019, which was aligned with well below 2ºC trajectory.

Group-wide reduction target for combined scope 1 and scope 2 emissions, for all GHGs, was set using the Sectoral Decarbonization Approach - Power Sector of the SBTi. Applies to all geographies and is fully aligned with our public commitment to reduced specific CO2 emissions from electricity generation by 90% in 2030, compared with 2015 levels. This goal was part of EDP's Strategic Update 2019-2022.

In early 2021, EDP released its Strategic Update 2021-2025 with even more ambitious goals: 100% renewable installed capacity and electricity generation by 2030 and to reach carbon neutrality in 2030 (scope 1 and 2). As a consequence, EDP submitted to the SBTi a target ambition update (-98% vs. 2015 levels).

Target achievement is supported by the strategic focus on renewable generation growth (scope 1 emissions reduction), phase-out of the coal -fired power plants before 2025 and CCGT before 2030, and continued investment in distribution grids, thus reducing electricity losses (scope 2 emissions reduction).

Target reference number

Abs 2

Year target was set

2020

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 3 (upstream & downstream)

Base year

2015

Covered emissions in base year (metric tons CO2e)

14,622,760

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

99.6

Target year
2030

Targeted reduction from base year (%)
40

Covered emissions in target year (metric tons CO2e) [auto-calculated]
8,773,656

Covered emissions in reporting year (metric tons CO2e)
11,572,195

% of target achieved [auto-calculated]
52.1543983489

Target status in reporting year
Underway

Is this a science-based target?
Yes, and this target has been approved by the Science-Based Targets initiative

Target ambition
Well-below 2°C aligned

Please explain (including target coverage)
Absolute target officially approved by SBTi.

Group-wide reduction target for the company's relevant upstream and downstream scope 3 emissions categories: C1 (purchased goods and services); C2 (capital goods), C3 (fuel and energy related activities); C4 (upstream transportation and distribution); C6 (business travel) and C11 (use of sold products). Together, these categories represented 99,6% of total scope 3 emissions in base year.

Target achievement is supported by the reduction of the Group's activities in the coal and gas sectors and by supplier engagement activities focused on supply chain indirect emissions reduction.

In early 2021, EDP released its Strategic Update 2021-2025 with even more ambitious goals: 100% renewable installed capacity and electricity generation by 2030 and to reach carbon neutrality in 2030 (scope 1 and 2). As a consequence, EDP submitted to the SBTi a target ambition update on scope 3 (-50% vs. 2015 level).

C4.1b

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

Target reference number
Int 1

Year target was set
2020

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 1+2 (location-based)

Intensity metric
Metric tons CO2e per megawatt hour (MWh)

Base year
2015

Intensity figure in base year (metric tons CO2e per unit of activity)
0.361

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure
100

Target year
2030

Targeted reduction from base year (%)
90

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]
0.0361

% change anticipated in absolute Scope 1+2 emissions
90

% change anticipated in absolute Scope 3 emissions
40

Intensity figure in reporting year (metric tons CO2e per unit of activity)
0.157

% of target achieved [auto-calculated]
62.7885503232

Target status in reporting year
Revised

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

1.5°C aligned

Please explain (including target coverage)

Intensity target officially approved by the Science Based Target initiative.

Group-wide reduction target for combined scope 1 and scope 2 emissions, for all GHGs, was set using the SBTi Sectoral Decarbonization Approach - Power Sector. Applies to all geographies and is fully aligned with our public commitment, to reduced specific CO2 emissions from electricity generation by 90% in 2030, compared with 2015 levels. This is part of EDP's Strategic Update 2019-2022. This goal was part of EDP's Strategic Update 2019-2022.

In early 2021, EDP released its Strategic Update 2021-2025 with even more ambitious goals: 100% renewable installed capacity and electricity generation in 2030 and to reach carbon neutrality in 2030 (scope 1 and 2). As a consequence, EDP submitted to the SBTi a target ambition update (-98% vs. 2015 levels).

Target achievement is supported by the strategic focus on renewable generation growth (scope 1 emissions reduction), phase-out of the coal -fired power plants before 2025 and CCGT before 2030, and continued investment in distribution (smart) grids, thus reducing electricity losses (scope 2 emissions reduction).

Absolute emissions reduction in target year were calculated assuming average hydro and wind conditions. We anticipate a reduction of at least 40% in absolute scope 3 emissions, which is the reduction target formally approved by the SBTi (Abs2).

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2019

Target coverage

Company-wide

Target type: absolute or intensity

Intensity

Target type: energy carrier

Electricity

Target type: activity

Production

Target type: energy source

Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)

MWh

Target denominator (intensity targets only)

megawatt hour (MWh)

Base year

2019

Figure or percentage in base year

74

Target year

2030

Figure or percentage in target year

85

Figure or percentage in reporting year

79

% of target achieved [auto-calculated]

45.4545454545

Target status in reporting year

Revised

Is this target part of an emissions target?

Target is not formally part of an emissions reduction target but EDP's strategic focus on renewable growth is essential for the achievement of our emissions reduction targets.

Is this target part of an overarching initiative?

Other, please specify

LCTPI - Low-Carbon Technology Partnerships initiative

Please explain (including target coverage)

This is one EDP's 2019-2022 Strategic Update targets: to ensure at least 85% of renewable installed capacity by 2030. It is a corporate-wide target and applies to all geographies where the Group operates. EDP joined the REscale LCTPi initiative, contributing to accelerate the deployment of renewables and the transition to a low-carbon electricity system, aiming at achieving an additional 1.5 TW of deployment by 2025.

More recently, in early 2021, EDP released its Strategic Update 2021-2025 with even more ambitious goals: 100% renewable installed capacity and electricity generation in 2030 and to reach carbon neutrality in 2030 (scope 1 and 2).

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	190	
To be implemented*	43	2,970,854
Implementation commenced*	37	3,499,561
Implemented*	37	2,852,907
Not to be implemented	0	

C4.3b

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

Initiative category & Initiative type

Low-carbon energy generation

Wind

Estimated annual CO2e savings (metric tonnes CO2e)

2,843,207

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

141,600,000

Investment required (unit currency – as specified in C0.4)

927,000,000

Payback period

4-10 years

Estimated lifetime of the initiative

21-30 years

Comment

Several wind farms and solar PV parks that became fully operational in 2020 - USA, Portugal, Spain, France, Belgium, Brazil Poland and Mexico - totaling 1099 MW installed power. Assumptions made:
- CO2 savings based on avoided thermal generation and respective 2020 emission intensity by geography.
- Monetary savings based on avoided thermal generation costs (coal and gas), assuming average renewables load factors over the past 5 years and on avoided CO2 emissions and assuming EU-ETS spot price as of Dec. 31st 2020, i.e., 32,59 €/tCO2.
- Investment based on real or typical values of CAPEX for wind farms and solar parks

Initiative category & Initiative type

Energy efficiency in production processes

Other, please specify

Distribution losses and power plant self-consumption reduction

Estimated annual CO2e savings (metric tonnes CO2e)

9,700

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

9,800,000

Investment required (unit currency – as specified in C0.4)

36,800,000

Payback period

1-3 years

Estimated lifetime of the initiative

21-30 years

Comment

Energy efficiency program – distribution grids loss reduction initiatives; backfeed power reduction in wind farms and solar parks; self-consumption hydropower reduction; PV in office buildings. Assumptions made:
- CO2 savings based on global (grid) emission factors by geography
- Monetary savings based on retail electricity prices and avoided CO2 emissions, assuming EU-ETS spot price as of Dec. 31st 2020, i.e., 32,59 €/tCO2.
- Investment related to distribution grid losses reduction activities

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	Focus on renewable generation allows for the reduction of exposure to risk of further regulatory restrictions on CO2 emissions.
Dedicated budget for low-carbon product R&D	EDP has a dedicated budget for R&D that is allocated to 5 main areas: (1) Clean Energy; (2) Smart Grids; (3) Customer-Focused Solutions; (4) Energy Storage and Flexibility; and (5) Digital Innovation. In 2020, R&D expenditure amounted to EUR 111 million.
Internal price on carbon	EDP uses internal price of carbon to assess the impact of current and future carbon regulation on energy prices and volumes, existing assets' value and to evaluate capital investments in new electricity generation assets.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Group of products

Description of product/Group of products

Renewable electricity. EDP's strategic focus on renewable generation growth led to a progressive decarbonization of the company' electricity generation portfolio. In 2020, EDP's installed capacity worldwide was 79% renewable and the share of renewables to the total electricity generation was 74% , thus delivering electricity with a significant low carbon content. In addition, 100% certified renewable electricity is also part of EDP's product portfolio. According to the most recent Strategic Update released, in 2025 EDP foresees its generation portfolio to be, at least, 84% renewable based and its emissions intensity to be 70% below 2015 levels, putting the company well on track to meet its 2030 commitment: 100% renewable capacity portfolio and reaching carbon neutrality in 2030 (scope 1 and 2). More recently, EDP submitted to the Science Based Target initiative and got approval of a new, updated reduction target: -98% scope 1 and 2 CO2 emissions per TWh, compared to 2015.

Are these low-carbon product(s) or do they enable avoided emissions?

Low-carbon product and avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Low-Carbon Investment (LCI) Registry Taxonomy

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

21

Comment

Under its Strategic Update 2021-2025, EDP will invest c. EUR19.2 bn in renewables (expansion CAPEX), increasing its installed capacity to 29 GW (18.6 GW in 2020). EDP had committed to exceeding 84% of renewables in its overall installed capacity by 2025 and further committed to reduce CO2 specific emissions by 70% in 2025 and by 90% before 2030 (compared to 2015 levels).

More recently, in early 2021, EDP released its Strategic Update 2021-2025 with even more ambitious goals: 100% renewable installed capacity and electricity generation in 2030 and to reach carbon neutrality in 2030 (scope 1 and 2).

Level of aggregation

Group of products

Description of product/Group of products

Energy efficiency services and low carbon client solutions.
EDP has a diversified portfolio of energy efficiency services targeted at the specific needs of different customer segments in Portugal, Spain and Brazil (and more recently in Italy, Poland and the USA), which increases efficiency and avoids emissions in final energy consumption. This portfolio includes: distributed generation (distributed solar PV solutions), home storage systems, smart appliances, heat pumps, LED lighting, energy management devices, fuel switching projects, energy audits, electric mobility solutions,

education projects and awareness campaigns. For SMEs and large corporate customers in Iberia, the Save To Compete (S2C) programme identifies energy savings measures and funds its implementation through the induced savings. By the end of 2020, S2C had induced accumulated savings of about 328 GWh, corresponding to approximately 127 thousand tonnes of CO2 emissions avoided.
In Brazil, through Soluções em Energia, the energy efficiency and distributed generation projects carried out in 2020 represented 15 GWh savings and a reduction of 30 ktCO2.
EDP also offers solar photovoltaic (PV) generation solutions for different clients' segments, allowing for 100% renewable electricity self-consumption: by the end of 2020, c. 145 MW of PV capacity had been installed in our customer's premises. EDP is also promoting sustainable mobility by offering attractive packages combining special prices for electricity, home EV charging stations and partnerships with electric car manufacturers. For light duty vehicles and average yearly mileage, electric mobility delivers annual savings of 1,2 t CO2 compared to conventional mobility.
Total accumulated savings provided to our customers since 2015, have now reached 3.6 TWh, avoiding 1.4 Mt of CO2 emissions. This means EDP is well on track to meet the target set for 2022: to improve our customer's energy efficiency by inducing up to 5 TWh accumulated savings from 2015. This target includes the measures carried out by EDP under the PPEC programme in Portugal – Plan for Promoting Efficiency in Electricity Consumption (PPEC), promoted by the Portuguese Regulator - which have already generated accumulated savings, since the start of the programme in 2007, of 4.9 TWh, with 1.8 Mt of CO2 emissions avoided.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Low-Carbon Investment (LCI) Registry Taxonomy

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

1

Comment

EDP committed to provide its customers with ongoing energy efficiency products and services, delivering up to 5 TWh in accumulated savings in the period 2015-2022 and avoiding more than 1.5 MtCO2 in the same period.
More recently, in 2021, EDP established a new target of 15 MtCO2 avoided, accumulated in the period 2015-2025, which includes energy efficiency, electric mobility, distributed solar generation and green electricity supply to our customers.

C-EU4.6

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

Methane emissions are not relevant to EDP's operation. In 2017, EDP sold its gas distribution assets in Portugal and Spain and is currently active only in the supply segment of the gas

business. Therefore, leaks in gas distribution networks, the only previous material source of methane emissions, are no longer associated with EDP Group. However, there are areas in which we estimate and manage our methane emissions.

Stationary combustion in thermal power plants accounts for 99,6% of EDP's total scope 1 GHG emissions. The company monitors GHG emissions from its thermal generation assets according to the European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations. These guidelines do not contemplate CH4 emissions, as they are immaterial in thermal electricity generation. According to official data from the Portuguese Environmental Agency, CH4 emissions from fuel combustion in electricity generation account for 0,08% of total GHG emissions (expressed in CO2e) from that activity. (Source: Portugal National Inventory Report 2017. CRF Table 1.s1 - 1.a - Public Electricity and Heating. Five-year average for the most recent available years).

Mobile combustion in the company fleet represents less than 0,1% of EDP's total scope 1 GHG emissions and the company accounts for the immaterial methane emissions associated with this source. EDP is implementing a plan to renew its company fleet to more efficient vehicles, including electric and hybrid vehicles, having committed to achieve electrification of 100% of its light-duty fleet segment by 2030. Since 2010, the number of electric vehicles has grown more than 20-fold representing, by the end of 2020, 12% of the total light-duty fleet of about 2400 vehicles. Methane emissions are incorporated into our absolute (Abs 1) and intensity (Int 1) GHG emissions reduction Science Based Targets, as they pertain only to our scope 1 and scope 2 emissions, including all GHGs.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1, 2015

Base year end

December 31, 2015

Base year emissions (metric tons CO2e)

21,550,247

Comment

The base year for our active reduction targets is 2015 (science-based target for scope 1, scope 2 and scope 3).

Scope 2 (location-based)

Base year start

January 1, 2015

Base year end

December 31, 2015

Base year emissions (metric tons CO2e)

981,772

Comment

The base year for our active reduction targets is 2015 (science-based target for scope 1, scope 2 and scope 3).

Scope 2 emission results are the same for location-based and market-based methods because almost all electricity consumed by EDP and included in this scope (electricity consumption in office buildings, renewable power stations self-consumption and electricity losses in distribution networks) was generated and supplied by the EDP Group and therefore emissions are accounted for under scope 1. Exceptions are markets where EDP distributes more electricity than it generates (Portugal and Brazil) and markets where EDP does not have supply activities and, therefore, consumes electricity supplied by third parties (North America and European countries other than Portugal and Spain).

In Brazil no country-wide Guarantees of Origin system is currently in place, therefore residual mix figures, used to calculate our scope 2 emissions in this markets according to the market-based method, is very similar to average grid emission factors, used in the location-based method. Markets where we don't distribute or supply electricity (North America and Rest of Europe) contribute only marginally to our electricity consumption and, therefore, even if we use RECs to certify 100% of our North America consumption, scope 2 global figures are the same calculated with the two methods.

Scope 2 (market-based)

Base year start

January 1, 2015

Base year end

December 31, 2015

Base year emissions (metric tons CO2e)

981,772

Comment

The base year for our active reduction targets is 2015 (science-based target for scope 1, scope 2 and scope 3).

Scope 2 emission results are the same for location-based and market-based methods because almost all electricity consumed by EDP and included in this scope (electricity

consumption in office buildings, renewable power stations self-consumption and electricity losses in distribution networks) was generated and supplied by the EDP Group and therefore emissions are accounted for under scope 1. Exceptions are markets where EDP distributes more electricity than it generates (Portugal and Brazil) and markets where EDP does not have supply activities and, therefore, consumes electricity supplied by third parties (North America and European countries other than Portugal and Spain).

In Brazil no country-wide Guarantees of Origin system is currently in place, therefore residual mix figures, used to calculate our scope 2 emissions in this markets according to the market-based method, is very similar to average grid emission factors, used in the location-based method. Markets where we don't distribute or supply electricity (North America and Rest of Europe) contribute only marginally to our electricity consumption and, therefore, even if we use RECs to certify 100% of our North America consumption, scope 2 global figures are the same calculated with the two methods.

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol: Scope 2 Guidance

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

9,310,612

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

Almost all electricity consumed by EDP and included in this scope (electricity consumption in office buildings, renewable power plants self-consumption and electricity losses in distribution networks) was generated and supplied by the EDP Group and therefore emissions are accounted for under scope 1. Exceptions are markets where EDP distributes more electricity than it generates (Portugal and Brazil) and markets where EDP does not have supply activities and, therefore, consumes electricity supplied by third parties (North America and European countries other than Portugal and Spain).

In Portugal, the Guarantees of Origin (GoO) system is not yet in place, therefore residual mix figures, used to calculate our scope 2 emissions according to the market-based method, are very similar to average grid emission factors, used in the location-based method. Markets where we don't distribute or supply electricity (North America and Rest of Europe) contribute only marginally to our electricity consumption. The total compensation of emissions through schemes like Renewable Energy Certificates (RECs) or GoO, in the USA, Spain and Brazil, result in a slight improvement of scope 2 emissions (-3%) calculated with the market-based method.

C6.3

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

Reporting year

Scope 2, location-based

594,400.8

Scope 2, market-based (if applicable)

573,856.2

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

17,631

Emissions calculation methodology

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 published data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 5 (2014).

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

50

Please explain

Purchase of chemicals products and use of municipality water. Categories that account for less than 1% of total scope 3 emissions or are not applicable to EDP, are considered not relevant.

Capital goods

Evaluation status

Relevant, calculated

Metric tonnes CO2e

334,602

Emissions calculation methodology

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 published data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 5 (2014).

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

20

Please explain

Facilities construction (power plant, mainly wind farms) and equipment acquisition

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

Evaluation status

Relevant, calculated

Metric tonnes CO2e

6,806,808

Emissions calculation methodology

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 published data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 5 (2014).

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

50

Please explain

Production (extraction and processing) of fuels (coal, natural gas, fuel oil and diesel) used by EDP for electricity generation. Generation/processing of electricity and natural gas purchased for retail.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

933,149

Emissions calculation methodology

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 published data (national energy authorities, GHG Protocol Transport tool and LCA studies). GWP source: IPCC Assessment Report 5 (2014).

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

50

Please explain

Transportation of fuels (coal, natural gas, fuel oil and diesel oil) used by EDP for electricity generation

Waste generated in operations

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

22,300

Emissions calculation methodology

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 published data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 5 (2014).

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

50

Please explain

Transport and disposal of waste generated in EDP's activities (mainly gypsum and ashes from coal power plants). Categories that account for less than 1% of total scope 3 emissions or are not applicable to EDP are considered not relevant.

Business travel

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

1,888

Emissions calculation methodology

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. Emission factors source: calculated from published data (national energy authorities or default data from GHG Protocol Transport tool). GWP source: IPCC Assessment Report 5 (2014).

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

50

Please explain

EDP employee business travel (air, train and road travel). Categories that account for less than 1% of total scope 3 emissions or are not applicable to EDP are considered not relevant.

Employee commuting

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

22,736

Emissions calculation methodology

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, based on the results of a Group wide mobility survey. Emission factors source: calculated from published data (national energy authorities or default data from GHG Protocol Transport tool). GWP source: IPCC Assessment Report 5 (2014).

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

50

Please explain

EDP employee commuting. Categories that account for less than 1% of total scope 3 emissions or are not applicable to EDP are considered not relevant.

Upstream leased assets

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

33,997

Emissions calculation methodology

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 published data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 5 (2014).

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

100

Please explain

Use of rented assets (especially machinery) in construction activities. Categories that account for less than 1% of total scope 3 emissions or are not applicable to EDP are considered not relevant.

Downstream transportation and distribution

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

712

Emissions calculation methodology

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 published data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 5 (2014).

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

0

Please explain

Support activities (offices and stores) associated with electricity and gas retail. Categories that account for less than 1% of total scope 3 emissions or are not applicable to EDP are considered not relevant.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

This category is not applicable to EDP. EDP's products (electricity and gas) are supplied in their final consuming form, therefore they do not require further processing.

Use of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO2e

3,478,117

Emissions calculation methodology

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. Emission factors source: calculated from published data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 5 (2014).

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

100

Please explain

Use of natural gas sold by EDP to its customers.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

This category is not applicable to EDP. EDP's sold products (electricity and gas) do not generate waste, therefore no end of life treatment is required.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

EDP did not use downstream leased assets in the reporting year

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

EDP did not have franchised activities in the reporting year

Investments

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

4,127

Emissions calculation methodology

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 published data (national energy authorities and LCA studies). GWP source: IPCC Assessment Report 5 (2014).

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

10

Please explain

Emissions from EDP's participated companies (minority interests). Categories that account for less than 1% of total scope 3 emissions or are not applicable to EDP are considered not relevant.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

EDP had no emissions from upstream or downstream activities other than the ones reported in categories C1 to C15.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

EDP had no emissions from upstream or downstream activities other than the ones reported in categories C1 to C15.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.000796

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

9,905,012.6

Metric denominator

unit total revenue

Metric denominator: Unit total

12,448,204,729

Scope 2 figure used

Location-based

% change from previous year

25

Direction of change

Decreased

Reason for change

Despite a decrease in the total revenue (-12%) from previous year, the global combined scope 1 and 2 emissions decreased 35% from previous year, due to higher renewable generation and less fossil fuels use, specially coal, which explains the 25% decrease of this intensity figure in 2020 compared with the previous year. This result already reflects the strategic decision to reduce the electricity generation from fossil fuels and become 100% renewable by 2030.

Intensity figure

0.156

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

9,905,012.6

Metric denominator

megawatt hour generated (MWh)

Metric denominator: Unit total

63,677,177

Scope 2 figure used

Location-based

% change from previous year

32

Direction of change

Decreased

Reason for change

Despite a small decrease in the total MWh generated (-4%) from previous year, the global combined scope 1 and 2 emissions decreased 35% from previous year, due to higher renewables generation and less fossil fuels use, specially coal, which explains

the 32% decrease of this intensity figure in 2020 compared to the previous year. This result already reflects the strategic decision to reduce the electricity generation from fossil fuels and become 100% renewable by 2030.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	9,293,374	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	30	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	202	IPCC Fifth Assessment Report (AR5 – 100 year)
SF6	17,006	IPCC Fifth Assessment Report (AR5 – 100 year)

C-EU7.1b

(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives	0	0	0.274	17,006	Corresponds to SF6 fugitive emissions in gas insulated switchgears and transformers from generation and distribution activities

Combustion (Electric utilities)	9,273,373	0	0	9,273,373	CO2 emissions from thermal power plants, calculated according with the European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations. These guidelines do not contemplate the calculation of CH4 emissions, as they are immaterial in thermal electricity generation. According to official data from the Portuguese Environmental Agency, CH4 emissions from fuel combustion in electricity generation account for 0,08% of total GHG emissions (expressed in CO2e) from that activity. (Source: Portugal National Inventory Report 2017. CRF Table 1.s1 - 1.a - Public Electricity and Heating. Five-year average for the most recent available years).
Combustion (Gas utilities)	0	0	0	0	There are no combustion emissions associated with EDP's gas business. In 2017, EDP sold its gas distribution assets in Portugal and Spain, alienating its gas distribution networks and solely maintaining the gas supply activity.
Combustion (Other)	20,001	1,072	0	20,233	Emissions from stationary (natural gas consumption in office buildings) and mobile (company fleet) combustion in support activities. Gross scope 1 emissions include 202 tCO2e corresponding to N2O emissions from fleet.

Emissions not elsewhere classified	0	0	0	0	All gross scope 1 emissions are accounted for in the previous categories.

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Portugal	3,983,589.4
Spain	3,498,549.8
Brazil	1,826,571.1
North America [1]	1,521.6
Other, please specify Rest of Europe (FR, BE, IT, PL, RO, UK)	379.9

[1] North America includes activities in the USA, Canada and Mexico

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By activity

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Stationary combustion in thermal power plants	9,273,372.9
Fugitive emissions	17,006.1
Mobile combustion in company fleet	19,951.5
Natural gas consumption (office buildings)	281.3

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions,	Comment

	metric tons CO2e	
Electric utility activities	9,290,379	Total refers to EDP's scope 1 emissions from stationary combustion of fossil fuels in our thermal power plants and to SF6 fugitive emissions from electricity generation and distribution equipment. Together, these sources represent 99.8% of our total scope 1 GHG emissions. The remaining 0.2% (excluded from this figure but reported in C6.1) refer to mobile combustion in the company fleet and to natural gas consumption in office buildings. Outside the electricity sector, EDP has only gas supply activities, with no material scope 1 emissions.

C7.9

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

Decreased

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	No material change in combined scope 1and scope 2 emissions from previous year resulting from change in renewable energy consumption.
Other emissions reduction activities	1,608,310	Decreased	10.6	Emissions reduction initiatives impacting scope 1 and 2: new renewable generation capacity (wind in several European and North America countries), grid loss reduction, power plant self-consumption reduction and distributed PV in office buildings. These initiatives amounted to emissions reduction of about 1.6 MtCO2, which represents around 11% decrease in EDP's combined S1 + S2 emissions from 2019: (1608310/15,191,977)*100 = 10.6%.

Divestment	1,473,436	Increased	9.3	As part of its asset rotation strategy, in 2020 EDP sold several wind farms in USA, Spain and Brazil, totaling 937 MW, which would have produced about 2.4 TWh. This loss of production from wind power plants corresponds to an increase of about 1.47 Mt CO2, given the thermal emission factors of those countries, i.e., a 9.3% increase in EDP's combined S1 + S2 emissions from 2019: (1,473,436/15,191,977)*100= 9.3%.
Acquisitions	0	No change	0	By the end of 2020, EDP acquired Viesgo, a Spanish company operating in power generation (wind) and distribution, increasing our renewables portfolio with 0.5 GW capacity in Iberia. The impact of this acquisition will only be materialized in 2021.
Mergers	0		0	
Change in output	5,054,985	Decreased	33.3	The combined effect of reduced generation from Coal (-5.04 TWh) and CCGT power plants (- 0.42 TWh) resulted in a significant decrease in CO2 emissions of about 5 MtCO2, i.e., - 33.3% in EDP's combined scope 1 and 2 emissions from 2019: (5,054,985/15,191,977)*100= 33.3%.
Change in methodology	0	No change	0	No change in combined scope 1 and scope 2 emissions from previous year resulting from change in methodology
Change in boundary	0	No change	0	No change in combined scope 1 and scope 2 emissions from previous year resulting from change in boundary
Change in physical operating conditions	0	No change	0	No change in combined scope 1 and scope 2 emissions from previous year resulting from change in physical operating conditions
Unidentified				No change in combined scope 1 and scope 2 emissions from previous year resulting from unidentified reasons
Other				No change in combined scope 1 and scope 2 emissions from previous year resulting from other reasons

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

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

More than 80% but less than or equal to 85%

C8.2

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

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh

Consumption of fuel (excluding feedstock)	LHV (lower heating value)	4,323	36,290,864.7	36,295,187.7
Consumption of purchased or acquired electricity		2,571,244	2,106,201.9	4,677,445.9
Consumption of self-generated non-fuel renewable energy		47,330,661		47,330,661
Total energy consumption		49,906,228.1	38,397,066.5	88,303,294.6

C8.2b

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

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	No
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

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

Fuels (excluding feedstocks)

Bituminous Coal

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

15,420,801.92

MWh fuel consumed for self-generation of electricity

15,420,801.92

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

94.6

Unit

kg CO2 per GJ

Emissions factor source

2006 IPCC Guidelines for National Greenhouse Gas Inventories

Comment

Default emission factor

Fuels (excluding feedstocks)

Natural Gas

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

18,735,266.91

MWh fuel consumed for self-generation of electricity

18,041,536.57

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-cogeneration or self-trigeneration

693,730.33

Emission factor

56.1

Unit

kg CO2 per GJ

Emissions factor source

2006 IPCC Guidelines for National Greenhouse Gas Inventories

Comment

Default emission factor

Fuels (excluding feedstocks)

Gas Oil

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

35,167.61

MWh fuel consumed for self-generation of electricity

35,167.61

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

74.1

Unit

kg CO2 per GJ

Emissions factor source

2006 IPCC Guidelines for National Greenhouse Gas Inventories

Comment

Default emission factor

Fuels (excluding feedstocks)

Other, please specify

Fuel oil

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

61,126.44

MWh fuel consumed for self-generation of electricity

61,126.44

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-cogeneration or self-trigeneration
0

Emission factor
77.4

Unit
kg CO2 per GJ

Emissions factor source
2006 IPCC Guidelines for National Greenhouse Gas Inventories

Comment
Default emission factor

Fuels (excluding feedstocks)
Blast Furnace Gas

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
1,748,881.86

MWh fuel consumed for self-generation of electricity
1,748,881.86

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-cogeneration or self-trigeneration
0

Emission factor
260

Unit
kg CO2 per GJ

Emissions factor source
2006 IPCC Guidelines for National Greenhouse Gas Inventories

Comment
Default emission factor

Fuels (excluding feedstocks)
Other, please specify

Oxygen steel furnace gas

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

208,231.17

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-cogeneration or self-trigeneration

208,231.17

Emission factor

182

Unit

kg CO2 per GJ

Emissions factor source

2006 IPCC Guidelines for National Greenhouse Gas Inventories

Comment

Default emission factor

Fuels (excluding feedstocks)

Other, please specify

Fuels for mobile combustion (Gasoline, diesel oil, alcohol, LNG)

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

85,711.81

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-cogeneration or self-trigeneration

85,711.81

Emission factor

74.1

Unit

kg CO2 per GJ

Emissions factor source

2006 IPCC Guidelines for National Greenhouse Gas Inventories

Comment

The emission factor disclosed was obtained from the weighted average of the emission factors of the fuels used for mobile combustion (gasoline, gas/diesel oil, natural gas liquids and biofuels)

C-EU8.2d

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

Coal – hard

Nameplate capacity (MW)

1,969.9

Gross electricity generation (GWh)

6,418.74

Net electricity generation (GWh)

5,821.11

Absolute scope 1 emissions (metric tons CO2e)

5,504,269

Scope 1 emissions intensity (metric tons CO2e per GWh)

945.57

Comment

Figures refer to coal power plants EDP owns in Portugal, Spain and Brazil.

Lignite

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

EDP does not own lignite-fired power plants.

Oil

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

EDP does not own oil-fired power plants.

Gas

Nameplate capacity (MW)

2,885.6

Gross electricity generation (GWh)

10,009.27

Net electricity generation (GWh)

9,759.41

Absolute scope 1 emissions (metric tons CO2e)

3,614,304

Scope 1 emissions intensity (metric tons CO2e per GWh)

370.34

Comment

Figures refer to CCGT power plants EDP owns in Portugal and Spain.

Biomass

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

EDP does not owns biomass power plants.

Waste (non-biomass)

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

EDP does not own waste power plants.

Nuclear

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

EDP, through Iberenegia, S.A.U., a subsidiary company of EDP España S.A.U., holds a 15.5% stake in the Trillo nuclear power plant. EDP is a minor shareholder and has no operational or financial control over this power plant, that's why this plant is outside our reporting boundary.

Fossil-fuel plants fitted with CCS

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

EDP does not own fossil-fuel plants fitted with CCS.

Geothermal

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

EDP does not own geothermal power plants.

Hydropower

Nameplate capacity (MW)

7,126.5

Gross electricity generation (GWh)

18,959.18

Net electricity generation (GWh)

18,792.35

Absolute scope 1 emissions (metric tons CO2e)

143

Scope 1 emissions intensity (metric tons CO2e per GWh)

0.01

Comment

Figures refer to large and mini-hydro power plants EDP owns in Portugal, Spain and Brazil. Scope 1 emissions in hydroelectric power plants are related to SF6 fugitive emissions.

Wind

Nameplate capacity (MW)

11,354.7

Gross electricity generation (GWh)

28,354.37

Net electricity generation (GWh)

28,272.15

Absolute scope 1 emissions (metric tons CO2e)

266

Scope 1 emissions intensity (metric tons CO2e per GWh)

0.01

Comment

Figures refer to wind farms EDP owns in Portugal, Spain, Brazil, North America and several European countries. Scope 1 emissions in wind farms are related to SF6 fugitive emissions.

Solar

Nameplate capacity (MW)

145.2

Gross electricity generation (GWh)

266.6

Net electricity generation (GWh)

265.33

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

No scope 1 emissions are associated with this electricity generation assets.

Marine

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Other renewable

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

EDP does not own other renewable power plants besides hydro, wind and solar.

Other non-renewable

Nameplate capacity (MW)

42.2

Gross electricity generation (GWh)

216.21

Net electricity generation (GWh)

211.29

Absolute scope 1 emissions (metric tons CO2e)

155,214

Scope 1 emissions intensity (metric tons CO2e per GWh)

202.41

Comment

Figures refer to gas-fired CHP (including LDG and coke oven gas). Denominator of scope 1 emissions intensity includes steam generation (555.55 GWh).

Total

Nameplate capacity (MW)

23,524.1

Gross electricity generation (GWh)

64,224.38

Net electricity generation (GWh)

63,121.63

Absolute scope 1 emissions (metric tons CO2e)

9,274,196

Scope 1 emissions intensity (metric tons CO2e per GWh)

145.64

Comment

Scope 1 emissions intensity includes 555.55 GWh from steam generation

C-EU8.4

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

Yes

C-EU8.4a

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

Country/Region

Brazil

Voltage level

Distribution (low voltage)

Annual load (GWh)

25,591.22

Annual energy losses (% of annual load)

9.9

Scope where emissions from energy losses are accounted for

Scope 2 (location-based)

Emissions from energy losses (metric tons CO2e)

149,679.7

Length of network (km)

93,268

Number of connections

3,524,115

Area covered (km2)

50,800

Comment

EDP, through their distribution companies EDP S. Paulo and EDP Espírito Santo, holds concession contracts for electricity distribution in the Brazilian States of S. Paulo and Espírito Santo

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Country/Region

Portugal

Voltage level

Distribution (low voltage)

Annual load (GWh)

45,666.47

Annual energy losses (% of annual load)

9.6

Scope where emissions from energy losses are accounted for

Scope 2 (location-based)

Emissions from energy losses (metric tons CO2e)

418,647.9

Length of network (km)

226,823

Number of connections

6,277,358

Area covered (km2)

89,102

Comment

EDP, through its distribution company EDP Distribuição, holds concession contracts for electricity distribution in Portugal mainland. EDP Distribuição is also the Portuguese DSO (Distribution System Operator), holding the High and Medium Voltage networks. Data disclosed includes all the networks.

Country/Region

Spain

Voltage level

Distribution (low voltage)

Annual load (GWh)

826,158

Annual energy losses (% of annual load)

3.6

Scope where emissions from energy losses are accounted for

Scope 2 (location-based)

Emissions from energy losses (metric tons CO2e)

0

Length of network (km)

20,766

Number of connections

668,494

Area covered (km2)

28,130

Comment

EDP España, through its distribution company EDP Redes España, holds concession contracts for electricity distribution in the Principality of Asturias (, Region of Cantabria, Autonomuos Community of Galicia (Lugo), Madrid Community, Castile & León (Burgos and Palencia), Valencian Community (Valence and Alicant), Aragón (Zaragoza and Huesca) and Catalonia (Barcelona and Tarragona)

C9. Additional metrics

C9.1

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

Description

Other, please specify

Renewable generation installed capacity

Metric value

0.79

Metric numerator

Renewable installed capacity in 2020: 18,626 MW

Metric denominator (intensity metric only)

Total installed capacity in 2020: 23,524 MW

% change from previous year

7.2

Direction of change

Increased

Please explain

Under the Strategic Update 2019-2022, EDP committed to increase its renewable installed capacity up to 78% of the total installed capacity by 2022. This target has already been reached in 2020. The renewable asset rotation strategy established allows for a continuous portfolio optimization and the disposal of non-strategic assets, while accelerating organic growth and the crystallization of value. In 2020, EDP added about 1.1 GW in Europe and North America and sold around 0.9 GW in USA, Spain and Brazil. On the other hand, EDP closed its largest coal-fired power plant (Sines in Portugal, 1,180 MW). The result was a 7% increase of renewables in our generation portfolio. EDP plans to be coal-free by 2025 according to the new Business Plan 2021-2025, the share of renewables exceeding 90% by then, and to have 100% renewable portfolio by 2030.

Description

Other, please specify

% of Smart meter installed in Iberia

Metric value

0.6

Metric numerator

Smart meters installed by the end 2020: 4,577,052

Metric denominator (intensity metric only)

Number of delivery points: 7,673,373

% change from previous year

28

Direction of change

Increased

Please explain

EDP continued the roll-out of smart meters in the Iberian Peninsula. The target publicly committed is to have 100% smart meters installed by 2025.

Description

Other, please specify

Induced clients' savings (accumulated in the period 2015-2020)

Metric value

3.56

Metric numerator

Accumulated clients’ savings since 2015: 3.56 TWh

Metric denominator (intensity metric only)

No metric denominator, this is an absolute target

% change from previous year

17

Direction of change

Increased

Please explain

EDP publicly committed to provide customers with ongoing energy efficiency products and services delivering more 5 TWh in accumulated savings in the period 2015-2022. These products and services include energy efficiency and distributed solar PV solutions.

Description

Other, please specify

R&D and innovation expenses in cleantech accumulated in the period 2015-2020

Metric value

409,483,489

Metric numerator

R&Di expenditure since 2015: EUR 409,483,489

Metric denominator (intensity metric only)

No metric denominator, this is an absolute target

% change from previous year

37

Direction of change

Increased

Please explain

EDP publicly committed to Invest EUR 200 million in innovative clean energy, energy efficiency and smart grids projects from 2015 to 2020. This target has already been largely exceeded.

C-EU9.5a

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

Primary power generation source	CAPEX planned for power generation from this source	Percentage of total CAPEX planned for power generation	End year of CAPEX plan	Comment
Coal – hard	74,576,801	0.4	2025	Figures refer to CAPEX planned for the Business Plan 2021-2025
Gas	61,919,826	0.3	2025	Figures refer to CAPEX planned for the Business Plan 2021-2025
Hydropower	191,927,206	1	2025	Figures refer to CAPEX planned for the Business Plan 2021-2025
Wind	10,885,156,078	56.5	2025	Figures refer to CAPEX planned for the Business Plan 2021-2025
Solar	7,729,001,183	41.8	2025	Figures refer to CAPEX planned for the Business Plan 2021-2025

C-EU9.5b

(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan
Smart grid	Investment in smart grids in Portugal, Spain and Brazil, including roll-out of smart meters in the low voltage delivery points, grid digitalization, quality, capacity and resilience. This investment impacts all economic sectors and potentially all EDP electricity customers (-8.6 million in Portugal, Spain and Brazil). Investment in smart grids has several benefits: improving the grid quality and management and increasing operational efficiency and reliability of supply., while allowing for higher integration of distributed generation from renewable sources, electric mobility and demand side management and demand response schemes.	3,200,000,000	78	2025
Other, please specify Energy end-use efficiency product and services and energy management	EDP has a diversified portfolio of energy efficiency products and services targeted at the specific needs of the different customer segments (residential, tertiary, industry, transport and public sector) in Portugal, Spain, Brazil and, more recently, in the USA, Italy and Poland. The investment in these products and services impact all EDP's electricity and gas customers (~9.3 million). Our portfolio includes: distributed generation (solar PV generation solutions), prosumer services,	900,000,000	22	2025

	home storage systems, smart appliances, heat pumps, compact smart energy management devices, integrated energy management solutions, fuel switching projects, energy audits, electric mobility solutions, education projects and awareness campaigns. For SMEs and large corporate customers in Iberia, we highlight the “Save To Compete” programme that identifies energy savings measures and funds its implementation through the induced savings. Since its launch in Portugal (2012) and Spain (2013), the programme has led to accumulated savings of around 328 GWh, corresponding to a reduction of approximately 127 thousand tonnes of CO2. For the new Business Plan 2021-2025, EDP committed to provide sustainable products and services to its customers, including energy efficiency, electric mobility and distributed generation solutions, together with the increasing supply of green electricity. We expect to induce around 15 million tons of CO2 avoided emissions accumulated in the period 2015-2025.			

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	In 2020, EDP spent about EUR 111 million in R&D and innovation projects on low-carbon products and services

C-CO9.6a/C-EU9.6a/C-OG9.6a

(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Renewable energy	Small scale commercial deployment	21-40%	25,419,000	Distributed energy resources (eg. self-consumption PV systems, development of the "Barrio Solar" concept, Yotta energy), PV floating System, Windfloat
Smart grids	Large scale commercial deployment	21-40%	17,855,000	European and Brazilian smart grid and smart meters deployment; several projects such as: Innovgrid 20-30, Integrid, Mars Network, Flash BT, DYNELEC, Interconnect and EUniversal
Digital technology	Full/commercial-scale demonstration	21-40%	37,171,000	IT innovative projects along EDP value chain (generation, distribution, supply, digital global unit and support activities); start-up investments (Amperio, Solshare, Defined Crowd, DotGis, Energyworx, Ydata, Probely, Locr, NGen, Vyntelligence)
Other, please specify Demand response, energy efficiency products and services, energy storage, electric mobility and other operational	Applied research and development	21-40%	30,486,000	Energy storage and flexibility projects (V2G, Redox, Akkurate, Yotta Energy, Smart4RES, 2nd life batteries); energy efficiency and demand response projects (efficient lighting systems, Save2Compete programme, new functionalities for the Re:dy device, building energy management systems, DOMINOES, Sharing cities,

				InterConnect, Re:dy, energy efficiency programme in Brazil); Electric mobility (development of EV apps - EV.Charge, EV.X, MiVē -, development of EV charging stations,); Operational costs to support RDi activities, New downstream and CNET (Centre for New Energy Technologies) structures

C10. Verification

C10.1

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

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

C10.1a

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

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Sustainability Report EDP 2020_1 (1).pdf

Page/ section reference

Page 254-255

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.1b

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

Scope 2 approach
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement

Sustainability Report EDP 2020_1 (1).pdf

Page/ section reference
Page 254-255

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.1c

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

Scope 3 category
Scope 3 (upstream & downstream)

Verification or assurance cycle in place
Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Sustainability Report EDP 2020_1 (1).pdf

Page/section reference

Page 254-255

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C6. Emissions data	Year on year change in emissions (Scope 1)	ISAE3000	Verification under third party independent assurance of EDP Sustainability Report 2020. Annual verification of corporate-wide data. C6.1 – Scope 1 emissions. 1
C6. Emissions data	Year on year change in emissions (Scope 2)	ISAE3000	Verification under third party independent assurance of EDP Sustainability Report 2020. Annual verification of

			corporate-wide data. C6.3 – Scope2 emissions. 1
C6. Emissions data	Year on year change in emissions (Scope 3)	ISAE3000	Verification under third party independent assurance of EDP Sustainability Report 2020. Annual verification of corporate-wide data. C6.5 – Scope 3 emissions. 1
C6. Emissions data	Year on year emissions intensity figure	ISAE3000	Verification under third party independent assurance of EDP Sustainability Report 2020. Annual verification of corporate-wide data. C6.10 – Scope 1 + Scope 2 emissions per total revenue and MWh. 1
C9. Additional metrics	Renewable energy products	ISAE3000	Verification under third party independent assurance of EDP Sustainability Report 2020. Annual verification of corporate-wide data. C9.1 – % of renewable electricity generation installed capacity 1
C4. Targets and performance	Financial or other base year data points used to set a science-based target	ISAE3000	Verification under third party independent assurance of EDP Sustainability Report 2020. Annual verification of corporate-wide data. C4.1b – Emissions and electricity generation data used in setting EDP Science-based target and

			reporting year % of achievement. 1
C4. Targets and performance	Emissions reduction activities	ISAE3000	Verification under third party independent assurance of EDP Sustainability Report 2020. Annual verification of corporate-wide data. C4.3 - GHG reduction from emissions reductions initiatives in the reporting year. 1
C8. Energy	Energy consumption	ISAE3000	Verification under third party independent assurance of EDP Sustainability Report 2020. Annual verification of corporate-wide data. C8.2a – Energy consumption totals. C8.2c – Energy consumption by fuel type. 1

[1]Sustainability Report EDP 2020_1 (1).pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

EU ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS

80

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2020

Period end date

December 31, 2020

Allowances allocated

69,674

Allowances purchased

8,697,000

Verified Scope 1 emissions in metric tons CO2e

9,310,611.8

Verified Scope 2 emissions in metric tons CO2e

594,400.8

Details of ownership

Facilities we own and operate

Comment

Includes only the facilities we own and operate in Europe (Portugal and Spain). In Brazil, there are no emissions trading systems in place so far.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

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 2020, only one CHP plant in Portugal got allowances allocated for free (~70kt).

The power plants covered by the EU ETS emitted about 7,5 Mton of CO2 in 2020, 25% less than in 2019. To comply with EU-ETS, EDP has used allocated allowances, allowances purchased and banked allowances (allowances that EDP did not use in the past years).

C11.2

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

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase

Credit purchase

Project type

Forests

Project identification

The main objective of the Agrocortex REDD+ project is to prevent illegal deforestation of about 186,219 ha in the Amazon biome. The project is located on the border between the states of Acre and Amazonas, southwest of the Amazon, within the expansion frontier of agribusiness. The company responsible for managing the credits developed a Sustainable Management Plan certified by the Forest Stewardship Council (FSC), considered an important tool for the preservation of the Forest and reduction of deforestation numbers in the project region. In addition, the project seeks to promote alternative sources of income for local communities, and thus contributing to the sustainable development of the region.

Verified to which standard

VCS (Verified Carbon Standard)

Number of credits (metric tonnes CO2e)

7,142

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

0

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price

Navigate GHG regulations
Stakeholder expectations
Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Stress test investments
Identify and seize low-carbon opportunities

GHG Scope

Scope 1

Application

A carbon price is used company-wide to assess the impact of current and future carbon regulation—namely ETS and carbon taxes—on energy prices, energy volumes, and existing assets' value, as well as to evaluate capital investments in building or acquiring new electricity generation assets across the globe. Meaningful carbon prices strongly benefit EDP's business strategy, fully align with the Paris Agreement, and contribute decisively to its commitment to be carbon neutral well before 2050.

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

27

Variance of price(s) used

Price ranges are set by the Energy Planning Department and are updated yearly. Price forecasts currently range from €10 to €50 per ton of CO2, depending on the scenario, year and geography. For the timeframe 2019 to 2030, the average price for the base scenario is in the range €25 to €30 per ton of CO2.

Type of internal carbon price

Shadow price
Implicit price

Impact & implication

EDP uses internal shadow and implicit carbon prices to assess the impact of regulation on energy prices, energy volumes and existing asset's value, as well as to evaluate capital investments.

GHG regulation considered include the EU-ETS, which applies to our thermal power generation assets in Europe (Portugal and Spain), as well as possible future ETS in the only other geography where we currently own thermal power plants (Brazil).
Use of internal carbon price in investment evaluation is applied on building or acquiring new electricity generation assets in all geographies where we currently operate, taking into account the specifics of the markets, namely in what concerns regulation.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
Yes, our customers

C12.1a

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

Type of engagement

Compliance & onboarding

Details of engagement

Climate change is integrated into supplier evaluation processes

% of suppliers by number

10

% total procurement spend (direct and indirect)

34

% of supplier-related Scope 3 emissions as reported in C6.5

70

Rationale for the coverage of your engagement

For the purpose of the sustainable management of EDP's supply chain, the number of suppliers under scope is the total number of ongoing suppliers that were procured. As for the Procurement Function, the number of suppliers is 1322 representing about 94% of total purchase spend. Every supplier under procurement, i.e. under a tender process, is invited to answer a CO2 emissions questionnaire, which is applicable for tenders with potential or real environmental impacts. Tenders for supplies of services or products that are internationally, by law or by performance identified as having environmental impacts or that are exposed to environmental risks, are classified as Environmental Critical. Therefore, the tender includes environmental threshold criteria that any bidding supplier must accomplish in order to be included in the negotiation stage. These tenders are environmentally segmented: emissions, waste, dangerous waste, dangerous chemicals,

biodiversity or any combination of these criteria. As a consequence, applicants must answer a questionnaire disclosing:
- a valid Environmental Certification (policies, systems, managers, goals, targets) and the extent of their scope
- performance in the previous 3 years (accidents, fines, emissions, consumption, improvements ...)
- Special criteria/technological devices
In 2020, about 10% of our suppliers under procurement were classified as environmental critical, representing 34% of the total procurement spend.

Impact of engagement, including measures of success

The impact of this engagement is supported by a KPI system, where some indicators are directly linked to procurement teams' annual prizes. For the reporting year (2020), KPIs include:
- % of Suppliers under Procurement exposed to Environmental risks with ISO certification: 63%
- % Environmental Critical Suppliers performance annually appraised: 100%
- % Direct coal contracts made in 2020 with Bettercoal clause: 100%

Comment

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

20

% total procurement spend (direct and indirect)

45

% of supplier-related Scope 3 emissions as reported in C6.5

70

Rationale for the coverage of your engagement

EDP collects information on any supplier exposed to Environmental Risks. International companies that are also EDP's suppliers, are key to leveraging Climate Change combat as they are supply chain integrators. When partnering with those companies, EDP promotes a higher level of commitment and Climate Change disclosure through promoting CDP Climate Change methodology as well as engagement with international organizations such as WBCSD, SEE4ALL, Bettercoal, SBTi, among others.
EDP monitors the success of this approach by evaluating the share of the total procurement spend that is directed to companies that are engaged with CDP. In 2020,

20% of our suppliers classified as environmental critical responded to CDP and represented 45% of the total procurement spend.

Impact of engagement, including measures of success

We evaluate the impact of this engagement through the share of the total procurement spend that is directed to companies that respond to CDP Climate Change questionnaire. The % of the total value spend with suppliers engaged with CDP's Climate Change annual assessment increased to 45% in 2020 vs. 35% in 2019.

Comment

C12.1b

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

Type of engagement

Collaboration & innovation

Details of engagement

Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number

100

% of customer - related Scope 3 emissions as reported in C6.5

30

Please explain the rationale for selecting this group of customers and scope of engagement

Engagement activity applies to all customers in the markets where EDP has electricity and gas supply activities (Portugal, Spain and Brazil). It covers natural gas customers, that account for 30% of our scope 3 emissions. For electricity customers, the promotion of energy efficiency measures only contributes to reducing customer’s scope 2 emissions and have no material impact on our scope 3 emissions. EDP actively promotes energy efficiency improvement, demand-side management and distributed generation by developing and offering its customers innovative products and services (P&S), including:

i) Energy efficiency improvement projects: supply of more efficient equipment and lighting (LED bulbs, street lighting, high performance engines, variable speed drives, heat pumps, water heaters, other high efficiency large appliances);

ii) Integrated energy services: e.g. the Save to Compete (S2C) programme in Portugal and Spain, the Cuota Ahorro programme in Spain and the E:ficient programme in Brazil. The S2C programme applies to the business sector in the Iberian Peninsula and consists on identifying measures to reduce energy consumption, promoting its implementation and costing through the savings generated. So far, S2C has led to an

accumulated saving of around 328 GWh, avoiding ~127 ktCO2. In line with the S2C concept, through Cuota Ahorro in Spain and E:ficient in Brazil, EDP makes a complete facilities' assessment, implements the energy efficiency projects and invests on customers' facilities.
iii) Energy audits, energy certification systems for buildings and energy management systems (e.g., Re:dy);
iv) Distributed generation projects: EDP provides solar energy solutions to all types of consumers - residential, commercial or industrial - through distributed generation and self-consumption PV schemes.
v) Electric mobility: EDP promotes electrification of transports to its customers through commercial solutions, including public and private electric vehicle charging infrastructures, awareness campaigns, simulators, app-based system for monitoring and managing electricity consumption of households and electric vehicle.
vi) Regulatory programs, either voluntary (Plan for the Promotion of Electricity Consumption Efficiency - PPEC – in Portugal), or mandatory (schemes in Spain and Brazil).
vii) EE education and awareness-raising projects in schools

Impact of engagement, including measures of success

In 2020, the product and services made available to our customers in Portugal, Spain and Brazil generated energy savings of 523 GWh and avoided 265 kt of CO2 emissions. Total accumulated savings since 2015 have now reached 3.6 TWh, avoiding 1.4 Mt of CO2 emissions. This means we are well on track to meet the target set for 2022: to provide customers with continuous access to energy efficiency products and services in order to reduce overall consumption by 5 TWh before 2022 (accumulated since 2015).
In 2020, EDP established a new emissions avoided related target: to reduce CO2 emissions in our customers, reaching 15 MtCO2 by 2030, through the promotion of energy efficiency products and services, distributed generation (PV), electric mobility and green electricity supply.
EDP also carries out regular customer awareness campaigns targeted at energy and GHG reduction on the use of its products and services. Examples of awareness campaigns are available on EDP's supply companies' websites: www.edp.pt (in Portugal, for the liberalised market); www.edpenergia.es (in Spain); and www.edp.com.br (in Brazil).
The impact of engaging with our customers is also measured by the number of customers with value-added services, which includes all the above mentioned P&S: energy efficiency, sustainable mobility or decentralized solar energy services. In 2020, 21% of EDP electricity b2c customers in the liberalized market had value-added services. The goal is
to ensure that 26% of our customers have value-added services by 2025.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers

Trade associations
Funding research organizations
Other

C12.3a

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

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Other, please specify EU Green Deal - “Fit for 55” package	Support with minor exceptions	The European Union aims to lead the worldwide emissions reduction effort, with a strong emissions reduction by 2030 and achieving carbon neutrality by 2050. The EU Green Deal includes a set of actions to support the transition to a low carbon economy while promoting economic growth. During 2020, EDP engaged with European institutions and European associations to follow the evolution of the legislative proposals within the EU Green Deal, namely, the “Fit for 55” package, that includes the revision of the EU ETS, amendment of Renewable Energy Directive (REDII) and Energy Efficiency Directive (EED) to implement the ambition of the new 2030 climate targets and the deployment of alternative fuels infrastructure (AFID), among others. At the end of 2020, the European Commission launched various public consultations within this scope.	EDP supported the revision of the EU ETS mechanism to drive emissions reduction in a cost-effective manner, but it needs to provide stable upwards long-term trend. Regarding REDII, EDP supported a more ambitious renewable target (at least 32%) and a stable framework and a proper regulation that creates a favorable investment environment. The EED needs to be fitted with a new ambition to encourage the switch to low-carbon energies and should also recognise the most efficient vectors. Regarding AFID, EDP calls for a more ambitious approach for the roll-out of charging points across the European Union, bearing in mind that infrastructure deployment (particularly across the TEN-T core and comprehensive networks and in urban areas) should be in line with the benchmarks for zero- and low-emission vehicles set by the EU for 2025 and 2030, and should consider the power classes of charging points and the charging capacities of vehicles.
Other, please specify EU Green Deal – EU Smart Sector	Support with minor exceptions	In 2020, EDP held several meetings with European and national policy makers within the scope of energy transition,	EDP strongly supports these initiatives but highlighted that the full integration of the energy system should be understood as

Integration Sector & EU Hydrogen Strategy		decarbonization and climate change and, in particular, related to the Hydrogene Strategy. The European Commission proposed a set of strategies, such as the Hydrogen Strategy, that aims to promote the use of hydrogen, particularly if produced from renewable energy, as an essential element for the decarbonization of energy uses, mainly in sectors in which electrification is not feasible or is not the most cost-effective solution.	an increase of interfaces between the different energy sectors and ensure that it complies with the environmental targets set by the European Commission for 2030 and 2050, while at the same time keeping the reliability and affordability of the energy system. For the hard-to-abate sectors, in which direct electrification is not cost-effective or technically viable, indirect electrification through the use of hydrogen produced from renewable electricity and other renewable gases has the ability to provide the necessary GHG emissions reduction compatible with the full decarbonization purpose.
Other, please specify EU Green Deal – Renovation Wave	Support with minor exceptions	In 2020, EDP held several meetings with European and national policy makers within the scope of energy transition, decarbonization and climate change and, in particular, related to the Renovation Wave initiative. In October 2020, the European Commission presented the Renovation Wave Strategy to improve the energy performance of buildings. The Commission aims to at least double renovation rates in the next ten years and make sure renovations lead to higher energy and resource efficiency.	In general terms, EDP consider that the main ideas of this strategy are adequate to address the main issues to speed up building's renovation rate such as: design of a broad funding strategy, focus on heating and cooling systems, enlarge ETS scope to include emissions from buildings, among others.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

EURELECTRIC - Union of the Electricity Industry

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Eurelectric's mission is to contribute to the development and competitiveness of the electricity industry, to provide effective representation for the industry in public affairs and to promote the role of a low-carbon electricity mix in the advancement of society. In this regard, Eurelectric's main objectives are:

• Achieving a carbon-neutral electricity mix in Europe well before mid-century

• Ensuring a cost-efficient, reliable supply through an integrated market

• Developing energy efficiency and the electrification of the demand-side to mitigate climate change.

Eurelectric's positions are available at its website www.eurelectric.org/publications/.

How have you influenced, or are you attempting to influence their position?

EDP has one representative in Eurelectric Board of Directors and participates in all the association's committees: i) Electrification & Sustainability, ii) Generation and Environment, iii) Markets and Investments, iv) Distribution & Market Facilitation and v) Customers and Retail Services. EDP regularly contributes with specific inputs to the association's common position papers and answers to consultation processes. In 2020, two landmark publications of Eurelectric was the "15 Pledges to Customers: Together for a sustainable, inclusive and smart energy future", where these pledges are supported by the electricity industry across Europe with the aim to deliver a sustainable, inclusive and smart energy future to the customers and the study "E-Quality: Shaping an inclusive energy transition", that presents the key measures that can fully offset the regressive effects of climate policies, paving the way for a successful energy transition.

Trade association

AELEC – Spanish Electricity Industry Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

AELEC (formerly UNESA) is an electric sector organization aiming to represent, promote, manage and defend the general and common interests of its members. The

entity was created in 2018 and focuses on various activities of this industry, developing studies and analyses of the various aspects of electrical activity, such as transportation or regulation, pricing and tariffs, economic and financial aspects, international and institutional relations, quality of service, research and social communication. The AELEC represents and coordinates the activities of the sector, developed by representatives of power companies in various international organizations, such as EURELECTRIC.

How have you influenced, or are you attempting to influence their position?

EDP Spain is one of the energy companies that is part of this association and member of the Board of Directors.

Trade association

ELECPOR – Portuguese Electricity Industry Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

ELECPOR represents and defends the common interests of its associates, currently the five main national companies in the sector, including EDP. As a business sectoral association, it acts as an intermediary and instrument of such companies in the development and discussion of policies, guidelines and regulation of the electricity sector to the Portuguese and international entities. ELECPOR is a member of EURELECTRIC, whose positions are described above.

How have you influenced, or are you attempting to influence their position?

EDP chairs the Board of Directors.

Trade association

AWEA: American Wind Energy Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

AWEA is a national association in the United States representing the players in the wind power industry. With hundreds of members, ranging from utilities, researchers, parts manufacturers and energy companies, AWEA promotes wind energy as a clean source of electricity for American consumers. The wind force is creating a major impact on combating climate change and reducing greenhouse gases. Through sustainable initiatives, the association hopes to change attitudes and improve the environment.

How have you influenced, or are you attempting to influence their position?

EDP's subsidiary EDP Renewables is one of the partner companies and member of the Board of Directors and the Executive Committee.

Trade association

WE - Wind Europe

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

WE, formerly European Wind Energy Association, is the voice of the wind industry, actively promoting the use of wind power in Europe and worldwide, and representing the wind sector development before the European Commission.
The association defends wind generation support. EWEA participated in the European Commission stakeholder consultation on the new renewable energy directive (REDII) for the period 2020-2030. EDP supports EWEA's position on climate change legislation.

How have you influenced, or are you attempting to influence their position?

EDP Renewables (EDP Group's subsidiary for renewable energy generation) is a member of the Board of Directors.

Trade association

WEF - Wind Solar Alliance

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Wind Solar Alliance (formally WEF - Wind Energy Foundation) is a non-profit organization whose objective is to accelerate the transition to renewable energy as a means of strengthening the U.S. economy and reducing the environmental impacts of our energy use.

How have you influenced, or are you attempting to influence their position?

EDP Renewables (EDP Group's subsidiary for renewable energy generation) is a member of the Board of Directors.

Trade association

CanWEA - Canadian Wind Energy Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

CanWEA is a Canadian wind power industry association that promotes the realization of the country's abundant wind energy potential to build a cleaner, stronger future. It engages in this mission through advocacy, education, communication, partnerships and the promotion of industry best practices. It is a nonprofit organization that is responsible for publicizing the social, economic, health and environmental benefits that this type of energy offers to the communities and companies. Founded in 1984, CanWEA represents the wind energy community - organizations and individuals who are directly involved in the development and application of wind energy technology, products and services. Its members are the wind energy leaders in Canada. Aware of the importance of its role, EDP supports the association and its positions on climate change legislation.

How have you influenced, or are you attempting to influence their position?

EDP Renewables (EDP Group's subsidiary for renewable energy generation) is a member of the Board of Directors.

Trade association

APE - Portuguese Energy Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

APE is the Portuguese Association that represents the World Energy Council. APE strongly supports cap and trade schemes, EU-ETS reform, energy efficiency, clean energy generation and adaptation and resilience. EDP supports APE's position on climate change legislation.

How have you influenced, or are you attempting to influence their position?

EDP is a member of the Board of Directors and chairs the Board.

Trade association

APREN – Portuguese Renewable Energy Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

APREN is a non-profit association, founded in October 1988, that promotes the development of renewable energy generation in Portugal. Its associates are companies holding permits to explore power plants for electricity production from renewable sources, representing more than 90% of all renewable installed capacity in Portugal. APREN develops its work together with official authorities and other similar entities, either national or international, being an important key player in the development of energy policies for Portugal. The Association privileges the coordination and permanent contact with the Portuguese Government, the ministries responsible for energy and

environmental issues and their official agencies, as well as a fruitful dialogue with the crucial national stakeholders related to the production of electricity from renewable sources and representatives from the civil society.
APREN has also a strong involvement at European level, through the participation in European projects and through its partnership with several European Associations. This enables the monitoring of European Energy Policy. EDP supports APREN's position on all subjects related to renewable energy.

How have you influenced, or are you attempting to influence their position?

EDP Renewables (EDP Group's subsidiary for renewable energy generation) is a member of the Board of Directors (deputy chairman).

Trade association

ABEEOLICA - Associação Brasileira de Energia Eólica

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Established in 2002, ABEEólica, the Brazilian Wind Energy Association, is a non-profit institution that brings together and represents the wind energy in this country. Members come from all links in the wind energy chain. Since it was created, ABEEólica has effectively contributed to the development and recognition of wind energy as a competitive, clean, renewable, low-impact source of energy, and a strategic element of this country's energy matrix.

How have you influenced, or are you attempting to influence their position?

EDP Renewables (EDP Group's subsidiary for renewable energy generation) is a member of the Board of Directors (executive president).

Trade association

SEIA - Solar Energy Industry Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

SEIA is the national trade association for the U.S. solar industry. It embodies the innovation and entrepreneurship that defines solar energy. SEIA represents all organizations that promote, manufacture, install and support the development of solar energy. SEIA works with its 1,000 member companies to build jobs and diversity, champion the use of cost-competitive solar in America, remove market barriers and educate the public on the benefits of solar energy.

How have you influenced, or are you attempting to influence their position?

EDP Renewables (EDP Group's subsidiary for renewable energy generation) is a member of the Board of Directors.

Trade association

PWEA - Polish Wind Energy Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Polish Wind Energy Association (PWEA) is a non-governmental organisation established in 1999 (previously known as "VIS VENTI Association for Supporting Wind Energy"). It is one of the most effective organisation lobbying for the establishment of a relevant legal framework allowing for the development and operation of renewable energy sources, in particular wind energy, in Poland.
PWEA is an association of the leading companies active on the wind energy market in Poland: investors, developers, turbine and component manufacturers, both from Poland and abroad.

How have you influenced, or are you attempting to influence their position?

EDP Renewables (EDP Group's subsidiary for renewable energy generation) is a member of the Board of Directors.

Trade association

RWEA - Romanian Wind Energy Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Romanian Association for Wind Energy or "RWEA" (Romanian Wind Energy Association) was founded in Bucharest in 2008 and is a professional association serving as a non-governmental organization. The association is a voluntary organisation for participants in the wind energy industry in Romania. It exists to promote the proper role of wind energy in the energy mix in Romania and, consequently, to promote clean, safe and effective energy for Romania.

How have you influenced, or are you attempting to influence their position?

EDP Renewables (EDP Group's subsidiary for renewable energy generation) is a member of the Board of Directors.

Trade association

AEE - Asociación Empresarial Eólica

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

AEE - Spanish Wind Energy Association - is the voice of the wind sector in Spain. It promotes the use of wind energy in Spain, Europe and worldwide. It represents and defends the interests of the sector. With about 200 member companies, it represents more than 90% of the sector in Spain which includes promoters, wind generator and component manufacturers, national and regional associations, organizations connected with the sector, consultants, lawyers and financial entities, among others. AEE coordinates research into the areas surrounding wind energy and provides services to its members, meeting their different needs. It contributes to the formulation of the normative framework with a view to the sector developing under the best possible conditions. It disseminates the reality of wind energy and endeavours to raise awareness in society.

How have you influenced, or are you attempting to influence their position?

EDP Renewables (EDP Group's subsidiary for renewable energy generation) is a member of the Board of Directors (chairman).

Trade association

Scottish Renewables

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Scottish Renewables (SR) is the voice of Scotland's renewable energy industry, whose vision is for a Scotland leading the world in renewable energy. It works to grow Scotland's renewable energy sector and sustain its position at the forefront of the global clean energy industry. The sectors SR represent deliver investment, jobs, social benefits and reduce the carbon emissions which cause climate change. SR members work across all renewable energy technologies, in Scotland, the UK, Europe and around the world. In representing them, SR aims to lead and inform the debate on how the growth of renewable energy can help sustainably heat and power Scotland's homes and businesses.

How have you influenced, or are you attempting to influence their position?

EDP, through Ocean Winds - joint venture with Engie for wind offshore - is a member of the Board of Directors (chairman).

Trade association

MAREC - Mid-Atlantic Renewable Energy Coalition

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Mid-Atlantic Renewable Energy Coalition (MAREC) was formed in September 2009 as a nonprofit Pennsylvania corporation. Currently MAREC's membership consists of wind developers, solar developers, wind turbine manufacturers, service companies, and nonprofit organizations dedicated to the growth of renewable energy technologies to improve our environment, diversify our electric generation portfolio, and boost economic development in the region. Its mission is to improve and enhance the opportunities for renewable energy development in the nine jurisdictions in the Mid-Atlantic region. The primary areas of focus of MAREC are to provide education and expertise on the environmental sustainability of wind and solar energy; offer technical expertise and advice to assist in understanding the operating and environmental impacts of integrating wind and solar into the electrical power system; and promote fair policies, rules and regulations to expand the region's electric transmission system to accommodate the growth of renewable energy generation.

How have you influenced, or are you attempting to influence their position?

EDP Renewables (EDP Group's subsidiary for renewable energy generation) is a member of the Board of Directors (vice-chairman).

Trade association

ANEV - Italian wind energy association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

ANEV - National Wind Energy Association - is an Environmental Protection Association established in July 2002, which brings together more than 70 companies operating in the field of wind power and over 5,000 individuals, including electricity producers and operators together with plant engineers, designers, power traders and developers. The association's scopes is to promote wind source and the related technological development.

How have you influenced, or are you attempting to influence their position?

EDP Renewables (EDP Group's subsidiary for renewable energy generation) is a member of the Board of Directors

C12.3d

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

Yes

C12.3e

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

EDP also engages in climate policy making through its membership of organizations other than trade associations. Most relevant in 2020:
- UN Global Compact: EDP is a member and is engaged in its strategy and operations with the 10 principles, concerning human rights, labour, environment and anti-corruption, as well as in taking actions to advance on the UN Sustainable Development Goals. EDP also participates in local networks such as Global Compact Network Portugal and the Global Compact Brazilian Network, namely chairing the Climate and Energy Platform (former Climate and Energy WG). As a result of our strong presence in the Iberian Peninsula, EDP joined a commitment led by the Spanish government, Peru and DESA, ILO, WHO, UN Global Compact and B-team: the Business Commitment to a fair transition and decent green jobs at the summit of the Secretary General of the United Nations signed by several companies includes the agreement to comply with ethical standards in relation to their own employees and to influence, through purchasing processes, our contractors to comply with them.
- World Business Council for Sustainable Development (WBCSD): EDP is a member of the WBCSD, actively participating in the association's programs, namely Climate and Energy and Cities and Mobility, and regularly taking part in some of its high-level initiatives. In 2020, EDP maintained its positioning in such initiatives as subscribing a letter addressed by RE-SOURCE, together with WBCSD, Wind Europe, RE100 and CDP, in response to the EU recovery plan, positioning renewables as a strategic vector for economic recovery. As part of the TCFD Preparer Forums, in collaboration with WBCSD, EDP joined a group of 6 utilities to collaboratively contribute to push for a better understanding of how these recommendations could be implemented by the power sector.
- Business Council for Sustainable Development Portugal: EDP is also a member of BCSD Portugal, part of the WBCSD network. Miguel Setas, member of EDP's Executive Board, is a member of BCSD's Direction. EDP participates in several working groups of BCSD, of which the Carbon Neutrality WG. Under this Working Group, EDP is participating in the project "Business solutions for climate neutrality in 2050".
- Transport Decarbonisation Alliance (TDA): EDP joined TDA in 2018 as founder members, reflecting its intention to move forward in transport decarbonisation and improve quality of life in cities. EDP participated in the works of several communities of interest, such as "fast track decarbonisation of transports" and "urban freight". EDP is committed to electrify 100% of the Group's light-duty vehicle fleet and 50% of its heavy-duty fleet, by 2030.
- EV100 Initiative: EDP is member of the EV100 global initiative from The Climate Group.
- Sustainable Energy for All (SEforALL): created within the UN, the SEforALL initiative is a formal International NGO with several partners, particularly engaged in advancing and accelerating the Sustainable Development Goal (SDG) #7 - Affordable and Clean Energy. EDP is a private-sector partner, working towards the achievement of SDG7, mainly in the energy transition, energy access and energy efficiency streams.
- Science Based Targets initiative (SBTi): EDP joined the *Uniting Business and Governments to Recover Better initiative*, promoted by the SBTi, with the aim of mobilizing companies to support ambitious climate action in the new COVID-19 reality. This initiative asks Governments to re-imagine recovery and a better future based on a solid and ambitious strategy to combat climate change, aiming at the decarbonisation of the economy and the energy transition to carbon neutrality.
- Corporate Leaders Group (CLG): CLG brings together business leaders committed to supporting the transformation to competitive, sustainable, inclusive economies that will deliver

net-zero carbon emissions by 2050. In 2020, EDP's subscribed the "CLG CEO Letter", addressed to all European heads of state and governments, calling for greater ambition in defining the European GHG emissions reduction target for 2030, reaching a minimum of - 55% compared to 1990.
- We Mean Business: the coalition is a group of seven nonprofit organizations with the goal of catalyze business leadership and drive policy ambition to accelerate the transition to a net-zero economy. By being integrated in several organizations as mentioned, EDP joined several initiatives such as “Business Ambition for 1.5 – Our Only Future”, committing to define ambitious strategies to achieve an emissions reduction trajectory aligned with the goal of limiting average temperature to 1.5ºC. In 2021, EDP's subscribed to the Business Letter in support of the Biden-Harris Administration, requesting the adoption of an emissions reduction target of at least 50% by 2030, which is credible, achievable and in line with the goal of achieving neutral emissions in the country by 2050.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

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, Stakeholder Relations Department - Spain: Regulation Management Department - EDP Renewables (Europe and North America): Regulations & Markets, Global Risk Strategy and Investor Relations and Sustainability Departments - Brazil: Regulatory Issues Department, Environmental Department and Sustainability Department- These structures ensure the overall alignment of EDP’s climate policy engagement activities with the corporate climate strategy. EDP’s position related to climate change strategy has been stressed in all the fora and trade associations in which the company participates, as well as with all regulatory bodies EDP interacts with.
For more than a decade, EDPs’ corporate strategies targeted mainly renewables, efficiency and innovation, combining the need for competitiveness of its business with one of the world’s leading concerns – climate change. The visibility of EDP’s climate strategy was further reinforced with: i) the company’s direct participation, at CEO level, in COP21 Climate Conference (December 2015) and subsequent COPs; ii) the announcement of five ambitious climate-related targets addressing emissions reduction, renewable electricity generation, smart grids expansion, energy services for clients and clean technologies R&D (December 2015); iii) the announcement of a GHG reduction science based target (set in 2016 and approved by the Science Based Target Initiative in early 2017 and further updated in 2019, 2020 and 2021); iv) Update Strategy 2021-2025 presented to investors in February 2021, with new more ambitious targets for 2025 and 2030:
- Organic growth with strong focus on renewables, mainly wind and solar, adding 20 GW of new capacity (EBITDA and equity) by 2025. Target is to reach at least 90% of installed capacity on renewables by 2025 and 100% by 2030;
- Achieve 5 GW of centralised solar PV installed capacity and 3.7 GW of distributed PV on customers by 2025;
- Become coal-free by 2025;

- low exposure to CO2 and other environmental risks, through low-carbon electricity generation, management of CO2 portfolio and sustainability leadership. Target is to reduce CO2/kWh levels (combined scope 1 and 2 emissions) by 70% in 2025 and by 98% in 2030 versus 2015 levels. The later is a science-based target approved by the Science Based Target initiative (SBTi);
- Accelerate the roll-out of smart meters, covering 100% of EDP's low-voltage delivery points by 2030;
-Provide customers with ongoing energy efficiency products and services, including sustainable mobility, distributed PV generation and green electricity supply, avoiding 15 million tons of CO2 emissions, accumulated from 2015 to 2025;
- Promote sustainable mobility either internally (100% of our light-duty fleet electrified by 2030) or to our customers: 180k with mobility services by 2025 and installation of 100k electric vehicles charging points.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

RC20_EDP_EN_0.pdf

Page/Section reference

pp 39-63 (Strategic Approach) and pp. 107-210 (Corporate Governance)

Content elements

Governance
Strategy
Risks & opportunities
Emission targets
Other metrics

Comment

Publication

In voluntary sustainability report

Status

Complete

Attach the document

Sustainability Report EDP 2020_1 (1).pdf

Page/Section reference

pp 23-29 (Governance of the company); pp 31-36 (Sustainability organization); pp 40-60 (Strategic approach); pp 62-199 (Performance, including Climate Change, Renewable Energies, Decarbonisation solutions, Innovation and digital transformation); pp 202-259 (Annexes, including GRI table, SASB table, TCFD table and Independent Limited Assurance Report)

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Publication

In voluntary communications

Status

Complete

Attach the document

EDP Strategic Update 21-25_WEBSITE.pdf

Page/Section reference

pp 10-18 (committments); 25-30 (innovation, digital transformation, ESG leadership, CO2 targets); 33-59 (platforms)

Content elements

Strategy
Emission targets
Other metrics

Comment

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Member of EDP Executive Board of Directors with formal responsibility over sustainability, risk and other company's crosscutting critical themes.	Director on board

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
I am submitting my response	Investors	Public

Please confirm below

I have read and accept the applicable Terms