# **CEZ - Climate Change 2020**

## **C0. Introduction**

## **C0.1**

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

Headquartered in Czechia, CEZ Group is an integrated energy conglomerate with operations in Western, Central, and Southeastern European countries. Its core business is the generation, distribution, trade, and sales of electricity and heat, trade and sales of natural gas, and coal extraction. It also provides comprehensive energy services to its customers. CEZ Group companies employ more than 31,000 people.

CEZ Group’s mission is to provide safe, reliable, and positive energy to its customers and society at large. Our vision is to bring innovations for resolving energy needs and to help improve the quality of life. CEZ Group’s strategy is based on three priorities: we are among the best in the operation of conventional power facilities and proactively respond to the challenges of the 21st century, we offer a wide range of products and services addressing our customers’ energy needs, and we reinforce CEZ Group’s position in Europe by investing in promising energy assets. The energy sector is heading towards greater decentralization and renewable energy sources, which are areas where CEZ Group is actively seeking additional opportunities and new markets. It focuses on modern technologies, which will continue to alter the shape of the energy sector and which CEZ Group wants to play a major proactive role in.

CEZ Group companies in Czechia extract and sell coal, generate and distribute electricity and heat, and trade in electricity, natural gas, and other commodities. They also offer customers electricity generation and storage facilities and provide them with energy services, especially those related to savings. Their generation portfolio consists of nuclear, coal-fired, gas-fired, hydroelectric, photovoltaic, wind, and biogas facilities. CEZ Group’s business activities abroad concern primarily electricity distribution, generation, trading, and sales, as well as natural gas trading and sales, commodity trading in wholesale markets, and active presence in energy services and renewables. Foreign countries where CEZ Group is doing business include most importantly Germany, France, Poland, Romania, Bulgaria, Slovakia, and Turkey. Companies in the Netherlands are ownership intermediaries and companies providing financing to CEZ Group.

CEZ Group’s business activities are governed by strict ethical standards that include responsible behavior toward employees, society, and the environment. In its business activities, CEZ Group embraces the principles of sustainable development, supports energy efficiency, promotes new technologies, and creates an environment for employees’ professional growth. Its corporate culture emphasizes safety, continuous growth in internal efficiency, and support for innovation in order to increase CEZ Group’s value.

## **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** | **Select the number of past reporting years you will be providing emissions data for** |
| Reporting year | January 1 2019 | December 31 2019 | Yes | 2 years |

## **C0.3**

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

Bulgaria

Czechia

Germany

Poland

Romania

## **C0.4**

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

CZK

## **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

Distribution

### **Other divisions**

Smart grids / demand response

Coal mining

## **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** |
| Other C-Suite Officer | Member of the Board of Directors and Chief Fossil/Hydro Officer |
| Other C-Suite Officer | Member of the Board of Directors Chief Administrative Officer CEZ Group Sustainability Leader |

## **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** | **Scope of board-level oversight** | **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 | <Not Applicable> | Climate-related isssues are part of CEZ Group's Corporate strategy. The energy sector is heading towards greater decentralization and renewable energy sources, which are areas where CEZ Group is actively seeking additional opportunities and new markets. It focuses on modern technologies, which will continue to alter the shape of the energy sector and which CEZ Group wants to play a major proactive role in. Board sets and evaluates the Key Performance Indicators and other internal reporting indicators. The Meetings of the Board are held regularly. Beside that Auditing committee is established. |

## **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)** | **Reporting line** | **Responsibility** | **Coverage of responsibility** | **Frequency of reporting to the board on climate-related issues** |
| Environment/ Sustainability manager | <Not Applicable> | Other, please specify (Environmental and Social Responsibility)  The leader for sustainable development in CEZ Group is Michaela Chaloupková, Chief Administrative Officer and member of the Board of Directors of ČEZ, who is responsible for individual activities and also for the presentation of CEZ Group’s Sustainability Report for approval by the Board of Directors of ČEZ. Chief Administrative Officer is responsible for implementation, evaluation and controll of the Sustainability operations, management, policies and actions. As well as the implementation into Corporate culture and values. Specific commitments in the sustainability area are included in the Key Performance Indicators. She is also responsible for defining and updating CEZ Group’s sustainability strategy. | <Not Applicable> | More frequently than quarterly |
| Other C-Suite Officer, please specify (Chief Fossil/Hydro Officer) | <Not Applicable> | Both assessing and managing climate-related risks and opportunities  Chief Fossil/Hydro Officer is responsible for the governance of emission in accordance with 5 year business plan. He is also responsible for non-eceedind total emission limits in every individual locations. Those responsibilities are also directly binded with tagreement between the CEZ Group and the Czech Ministry of Environment. Limits for every location were set and are regularly evaluated. Sucess in fulfillment of the agreement and also the business plan are part of Chief Fossil/Hydro Officer's remuneration and KPIs. | <Not Applicable> | 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).**

Our sustainability management is connected to CEZ Group’s strategy and is based on the company’s strategic values, corporate culture principles, Code of Ethics, Safety and Environmental Protection Policy, as well as other policies defined at the level of CEZ Group. Top-level decision-making in these matters is within the purview of the Board of Directors, which shares joint responsibility for sustainability matters and also oversees the area of ESG (Environment, Social, Governance). The Board of Directors of ČEZ approves CEZ Group’s Sustainability Strategy as well as CEZ Group’s Sustainability Report. The leader for sustainable development is also member of the Board of Directors of ČEZ. The leader is responsible for individual activities and also for the presentation of CEZ Group’s Sustainability Report for approval by the Board of Directors of ČEZ. At the management level, daily implementation of the sustainability targets is also ensured. Specific commitments in the sustainability area are included in the Key Performance Indicators of the management.

Climate change issues are considered in quarterly meetings of Board of Directors as part of regular evaluation of Group's strategy. Groups strategy is reflecting risks stemming from climate change by growing and investing into low-carbon business lines and by gradually phasing out and divesting carbon heavy electricity production facilities.

## **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 | Specific commitments in the sustainability area are included in the Key Performance Indicators of the management. |

## **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** |
| Corporate executive team | Monetary reward | Emissions reduction target | Several KPI targets as together with EBITDA. Among others the Availability of the Power Plants Target, Yearly Total Water Consumption Reduction Target, GHG Emissions Reduction Target, Efficiency of the Power Plants in the Power Plants Renewal Project Target, New Renewables Acquisition Target. Maximum emissions are internal part of CEZ 5 year business plan. Chief Fossil/Hydro Officer is responsible for this business target and it is also part of his remuneration KPI. |
| Corporate executive team | Monetary reward | Emissions reduction target | The long-term performance bonus is based on a three-year period commencing by the allocation of a certain amount of performance units and ending by the creation of entitlement to its payment. Its amount depends on the long-term development of the market price of the share, payments of dividend and assessment of fulfillment of criteria (indicators) decided by the Supervisory Board. Criteria (indicators) for the award of the long-term performance bonus (performance indicators) are defined by the Supervisory Board so that they reflect the long-term fulfillment of the Company’s business strategy, while protecting its interests and supporting its sustainability. |

## **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 | 1 | Short term plan is operating plan within 1 year. For example expected emission intensity for 2020 was originally 360 gCO2/kWh. But due to COVID-19 situation and lower coal generation, the plan was altered to 344gCO2/kWh. |
| Medium-term | 0 | 5 | Medium-term targets are defined in the internal Five year business plan. Latest CEZ Group Business Plan plan defines financial and operational targets and conditions between 2020 and 2024. |
| Long-term | 0 | 30 | CEZ Group made a commitment to generate carbon neutral elektricity before 2050. Together with other European energy groups, we registered our commitments to reduce greenhouse gas emissions under the Non-State Actor Zone for Climate Action (NAZCA), formed before the Paris Climate Conference in 2015. Long-term plans are connected with the generation portfolio lifetimes. |

## **C2.1b**

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

Substantive financial or strategic impact is such even or process which can either influence our operations in at least one country where we own assets or results in change of the company strategy or change in internal business plan or alter expected financial results.

## **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

### **Risk management process**

Integrated into multi-disciplinary company-wide risk management process

### **Frequency of assessment**

Annually

### **Time horizon(s) covered**

Short-term

Medium-term

### **Description of process**

The aim of the risk management system is to protect the value of CEZ Group while taking on an acceptable level of risk. Centralized risk management is based on the perception of risk as measurable uncertainty (potential deviation between actual and planned developments), expressed in Czech korunas at a chosen uniform confidence level enabling various types of risk to be compared and priorities to be set accordingly. Centralized risk management relies on tools and models for managing and quantifying risks in one-year and medium-term time frames. Together with CEZ Group’s budget, the ČEZ Board of Directors approves the Profit at Risk, an overall risk limit expressing CEZ Group’s inclination to risk for a given year. The limit is allocated to individual risks and organizational units on an ongoing basis. Rules, responsibilities, and structure of limits for managing partial risks are discussed by the Risk Committee (an advisory body to the member of the Board of Directors responsible for risk management—Chief Financial Officer), which monitors the overall impact of risks on CEZ Group. During the creation of internal 5 year business plan same process is applied and the new risks are identified and existing risks are regularly updated. CEZ's risk management process covers market risks, credit risks, operational risks, business risks and sustainability risks. There can be more risk categories where climate change risks are included. The negative effects of extreme temperatures and floods are part of the operational risks while changes in average temperatures are also part of financial risks because it affects the future market prices of power prices.

## **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 policy and regulation both at EU and national level is changing continually. CEZ follows closely policy developments because all actions that are necessary to hold back and reverse the man-induced climate change have impact on our company. CEZ understands its responsibility and will contribute to common effort. CEZ continually monitors the evolution and interpretation of legislation, keep track of its changes, and evaluate the impacts of such changes on the company, including its internal policies. For example 2021 BAT/BREF regulation impacts the investment and investment strategy. ETS - emission trading scheme impacts wirtually everything. Price of electricity, generation mix, speed of decarbonization or fuel switch. |
| Emerging regulation | Relevant, always included | Climate policy and regulation both at EU and national level is changing continually. CEZ follows closely policy developments because all actions that are necessary to hold back and reverse the man-induced climate change have impact on our company. From August 2021 new BAT/BREF regulation is binding on EU wide level. This legislation actually induced multibillion investments into our generation portfolio in order to become compliant with this legislation changes. |
| Technology | Relevant, always included | In the recent years CEZ has assessed carbon capture and storage (CCS) technology as one of the options to reach the carbon neutrality. Technology itself proved to be too expensive and if implemented CEZ would not be able to remain competitive on the market. On the other hand CEZ sees new solar technology with higher efficiencies as the most perspective even in higher latitudes and combined with battery storages and power to gas competitive energy system can be created. |
| Legal | Relevant, always included | CEZ’s potential risks related to the future energy and climate policy framework include, for example, change of fees that are paid to the government in relation with our mining activities. Like fees for extracted minerals, fees for the mining area, fee for the withdrawal of land from the agricultural land fund. CEZ has several departments responsible for monitoring legislative developments and regulation in countries where CEZ operates and in the EU. |
| Market | Relevant, always included | Changes in prices and volumes of electricity represent the largest risk and opportunity for CEZ. In the central European market, the wholesale price of electricity is determined as the balance between supply and demand. The short-term factors affecting electricity prices and volumes include on-shore and off-shore wind conditions, temperature, CO2 allowance prices, fuel prices, economic development and the import/export situation. These defines also CEZ's potential risks related to the market. Market risks are assessed as a part of CEZ 's company-wide risk assessment process. |
| Reputation | Relevant, always included | CEZ Group commenced the process of comprehensively setting up the dialog with stakeholders in 2019. The aim was to establish how they perceived the current sustainability strategy and what was their opinion on the future direction of CEZ Group and its approach towards sustainability. Stakeholders were divided into two major groups: Internal stakeholders: Top management of ČEZ and subsidiaries, members of mid-level management and members of the Supervisory Board. External stakeholders: Suppliers – raw materials, resources, contractors – services (overhead services and materials), contractors – services (facility management and transport), insurers, banks, investors, companies doing business in the energy sector, media, trade unions, professional associations, independent experts, regulators, local authorities, public bodies, customers, and educational institutions. Materiality matrix describes the importance for the company and for external stakeholders. The future priorities were set that are crucial for ensuring sustainable operation of the company (from both the internal and external viewpoint) and which are most interesting for the stakeholders. |
| Acute physical | Relevant, always included | CEZ operations are exposed to acute physical risks caused by climate change, including changes in weather patterns that could alter energy demand and, for instance, generation volumes. Higher temperatures mean that cooling system in thermal and nuclear power stations is less efficient which results in lower power output. CEZ adapts its operations to the changing climate with production planning. CEZ also takes climate change into consideration in the assessment of investment projects. Both acute and chronic physical risks are assessed as a part of CEZ's company-wide risk assessment process. |
| Chronic physical | Relevant, always included | CEZ operations are exposed to chronic physical risks caused by climate change, including changes in weather patterns that could alter energy demand and, for instance, generation volumes. Higher temperatures mean that there is risk of low supply of water to cooling towers of thermal or nuclear power stations. CEZ takes climate change into consideration in the assessment of investment projects and starts the projects for permanent reduction of water needed for cooling purposes. For exaple at Dukovany nuclear power station project was started to reduce water consumption by 10-24 million tons per year. Both acute and chronic physical risks are assessed as a part of CEZ's company-wide risk assessment process. |

## **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?**

Direct operations

### **Risk type & Primary climate-related risk driver**

|  |  |
| --- | --- |
| Current regulation | Carbon pricing mechanisms |

### **Primary potential financial impact**

Increased direct costs

### **Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

### **Company-specific description**

43% of CEZ Group's EBITDA in 2019 is coming from electricity generation from conventional power plants. Out of 65TWh of electricity produced approximately 45% is produced from lignite, coal, and gas plants and thus emit C02. All our power plants are located in EU and as such are part of EU emission trading scheme and thus CEZ Group needs to buy carbon allowances on the marke to cover its emissions. Carbon costs are therefore important driver of profitability of our generation fleet. Carbon prices are very volatile and we manage this risk by hedging our production up to 3 years ahead.

### **Time horizon**

Medium-term

### **Likelihood**

Likely

### **Magnitude of impact**

Medium-high

### **Are you able to provide a potential financial impact figure?**

Yes, an estimated range

### **Potential financial impact figure (currency)**

<Not Applicable>

### **Potential financial impact figure – minimum (currency)**

0

### **Potential financial impact figure – maximum (currency)**

13364

### **Explanation of financial impact figure**

Result of a change in carbon price by 20 EUR per ton on annual EBITDA is CZK 13,364 mil on unhedged basis (the impact in the next 3 years is lower thanks to the fact that significant part of carbon allowances have been already hedged.

### **Cost of response to risk**

### **Description of response and explanation of cost calculation**

esult of a change in carbon price by 20 EUR per ton on annual EBITDA is CZK 13,364 mil on unhedged basis (the impact in the next 3 years is lower thanks to the fact that significant part of carbon allowances have been already hedged.

### **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 | Rising mean temperatures |

### **Primary potential financial impact**

Decreased revenues due to reduced production capacity

### **Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

### **Company-specific description**

CEZ power stations have different output dependent on the temperature of the cooling water. Warmer cooling water reduces overall efficiency of the power plant. For example Dukovany nuclear power plant in the scenario of rising temperatures could have lower generation by 2%.

### **Time horizon**

Long-term

### **Likelihood**

About as likely as not

### **Magnitude of impact**

Medium-low

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

350

### **Potential financial impact figure – minimum (currency)**

<Not Applicable>

### **Potential financial impact figure – maximum (currency)**

<Not Applicable>

### **Explanation of financial impact figure**

The lost generation is 0.3TWh which means at market prices 45EUR/MWh CZK350 million per year.

### **Cost of response to risk**

0

### **Description of response and explanation of cost calculation**

Current cooling technology of the power stations does not provide any solution.

### **Comment**

Permanent solution is the global effort to stop the clime change.

## **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?**

Direct operations

### **Opportunity type**

Energy source

### **Primary climate-related opportunity driver**

Use of lower-emission sources of energy

### **Primary potential financial impact**

Increased revenues resulting from increased production capacity

### **Company-specific description**

The EU negotiated with each member state an obligatory renewable share target. The implementation of the Directive aiming at fulfilment of the targets will create interesting business opportunities while incentivizing low carbon investments.

### **Time horizon**

Medium-term

### **Likelihood**

Virtually certain

### **Magnitude of impact**

Medium-high

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

1850

### **Potential financial impact figure – minimum (currency)**

<Not Applicable>

### **Potential financial impact figure – maximum (currency)**

<Not Applicable>

### **Explanation of financial impact figure**

With scenarion where 1600MW of new solar is built in Czechia. Total yearly revenues will increase by CZK1.85 billion @ 45EUR/MWh.

### **Cost to realize opportunity**

### **Strategy to realize opportunity and explanation of cost calculation**

### **Comment**

### **Identifier**

Opp2

### **Where in the value chain does the opportunity occur?**

Direct operations

### **Opportunity type**

Energy source

### **Primary climate-related opportunity driver**

Use of lower-emission sources of energy

### **Primary potential financial impact**

Increased revenues resulting from increased production capacity

### **Company-specific description**

Higher precipitation in Czechia will bring more water into Czech water dams and rivers. And this will result in higher revenues from power generation. Also our pumping stations have bigger opportunity to increase start-stop cycles per year and thus increase the stability of the electricity network.

### **Time horizon**

Short-term

### **Likelihood**

About as likely as not

### **Magnitude of impact**

Medium-low

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

115000000

### **Potential financial impact figure – minimum (currency)**

<Not Applicable>

### **Potential financial impact figure – maximum (currency)**

<Not Applicable>

### **Explanation of financial impact figure**

Opportunity scenario is: 5% increase of water availability will result in 100GWh increase in total power generation.

### **Cost to realize opportunity**

0

### **Strategy to realize opportunity and explanation of cost calculation**

No costs related to potential higher generation volumes.

### **Comment**

### **Identifier**

Opp3

### **Where in the value chain does the opportunity occur?**

Direct operations

### **Opportunity type**

Products and services

### **Primary climate-related opportunity driver**

Ability to diversify business activities

### **Primary potential financial impact**

Increased revenues resulting from increased production capacity

### **Company-specific description**

CEZ sees increased opportunity in decentralized energy production at the customers site. Cogeneration units are located at customers site and are able to produce both electricity and heat. In winter units produce more heat while at summer units produce mostly electricity.

### **Time horizon**

Long-term

### **Likelihood**

Very 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)**

160000000

### **Potential financial impact figure – minimum (currency)**

<Not Applicable>

### **Potential financial impact figure – maximum (currency)**

<Not Applicable>

### **Explanation of financial impact figure**

Figure is based on CZK102 million savings for the customers as of August 20, 2020. Savings were accumulated from the beginning of the year. Savings are calculated against fuel costs and services provided by former solutions for the customers.

### **Cost to realize opportunity**

2000000000

### **Strategy to realize opportunity and explanation of cost calculation**

ČEZ Energo is the subsidiary which is bulding the co-generation units at customers site. Value of the 50% of the company was CZK 1bn. This waluation has been done during the acquisition of roughly 50% of the shares in this CEZ subsidiary.

### **Comment**

Co-generation units are effcient replacement of former coal boilers. And also provide complex energy solution for the customers.

## **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) Does your organization use climate-related scenario analysis to inform its strategy?**

Yes, qualitative and quantitative

## **C3.1b**

### **(C3.1b) Provide details of your organization’s use of climate-related scenario analysis.**

|  |  |
| --- | --- |
| **Climate-related scenarios and models applied** | **Details** |
| 2DS | In October 2019 CEZ Group has published decarbonization plan. The plan anticipates that installed capacity of coal and lignite power stations will gradually decrease to 0 by 2050 and carbon neutrality will be reached. Also expected emission factors in 5 years intervals were published. CEZ is cooperating with external partners from Coal Action 100+ initiative. 2degrees scenario was modelled and discussed with the partners. STBi tool has proven to be useful guide how shut-down of power stations should be scheduled. CEZ decarbonization plan in most of the time until 2050 corresponds with 2DS. Also new strategy of CEZ Group was adopted in the connection of decarbonization plan in 2019. New CEZ strategy focus itself on growth of renewables, energy services, smart grid, digitization etc. But of course, there is still uncertainty about the plan. Biggest external influence is the Czech Coal Commission. Coal commission will come with conclusions to Czech Government. Czech Government can some apply some of the outcomes of the Coal Commission into new legislation. Most likely the official Coal Exit date should be set. |

## **C3.1d**

### **(C3.1d) 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 | One of the EU climatic targets until 2030 is 32.5% of energy savings until 2030. New startegy of CEZ Group focus on energy services. Energy services and new energy solutions for industrial energy customers, public authority customers, commercial properties, businesses, and municipalities are provided by CEZ Group through ČEZ ESCO, a company delivering energy savings, decentralized sources, lighting, and other energy products. It offers solutions with emphasis on new technologies, efficient use of energy, and integrated product offers. It also develops commercial products and services for electric mobility (electricity-powered vehicles and related infrastructure) and the Smart City concept with emphasis on healthy buildings, especially schools, and smart office (combining a photovoltaic installation and battery storage). |
| Supply chain and/or value chain | Yes | CEZ' distribution network will be the crutial assets which has to undergo changes in order to enable energy transformation in Czechia and other countries where we operate toward EU's climatic targets. Distribution is going to undergo a big change—digitization. CEZ will digitize many standard routine activities. This will allow us to handle more customer requests, increase the number of projects built, or install and operate new technologies and other innovations. By digitizing, we will also get data from the network faster and reduce its error rate. This change will allow us to control most network elements remotely. CEZ is also planning big investments in the expansion of optical networks directly on power lines because the future will bring huge amounts of data. A number of small-scale producers as well as consumers connect to the network, consumers will also become producers, and all of this will have an impact on busy online communications. CEZ will offer our new, robust optical networks to mobile phone operators planning to switch to 5G. Besides distribution, digitization will also considerably influence the sales of our products. |
| Investment in R&D | Yes | ČEZ has long participated in projects supported by public funds, especially projects run by the Technology Agency of the Czech Republic (TACR). ČEZ does not usually receive financial assistance under TACR projects but rather supports them as an industrial partner and ensures the applicability of their outcomes. ČEZ participates in projects under the Theta, Epsilon, and Competence Centers programs. The eight-year CESEN (Center for Efficient and Reliable Energy) project, coordinated by VZU Plzeň, was completed in 2019. The Center covered a broad range of activities with particular focus on conventional power; ČEZ and Doosan Škoda Plzeň were its most important industrial partners. The implementation of the National Center for Energy (NCE) project started at the beginning of the year; the project is supported under the TACR National Competence Centers program. The purpose of National Competence Centers is to establish closer cooperation between research and industry in fields that have been defined as important to national economy and competitiveness. The NCE assembles 24 participants, of which nine are research organizations (including four technical universities). The total amount of funds in the NCE project exceeds CZK 250 million. Additional CEZ Group members participating in the project are ČEZ Distribuce and, on the part of research organizations, Centrum vyzkumu Řež and VZU Plzeň. Addressed topics with ČEZ’s participation include, for example, research on and testing of new diagnostic methods, development of surface treatments for conventional and nuclear plant components, preparation of composite binders for nuclear power applications, as well as matters concerning the development of remote distance measurement for wind power applications, energy storage in heat, hydrogen generation and usage, or analysis of the feasibility of using Li-ion vehicle batteries for stationary purposes. |
| Operations | Yes | CEZ Group’s major challenges in the traditional energy sector include decarbonization, phase out of coal-fired generating facilities, ensuring stable supplies when those facilities are shut down, and continued preparation of projects for new nuclear power plants. Developing renewables in Czechia and taking advantage of conditions set under Czechia’s energy and climate plan. Building an efficient structure to cover the entire value chain associated with the development of renewable energy sources in the domestic market. Achieving a major position in the generation and supply of heat from renewable energy sources. CEZ has more than 500 hectares of land available (owned or rented) for building new photovoltaic power stations. CEZ awaits the final conditions for renewables support which will be set by Ministry of Environment. CEZ ambition is to be Czech leader in renewable generation in Czechia. |

## **C3.1e**

### **(C3.1e) 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  Capital expenditures  Capital allocation  Acquisitions and divestments  Access to capital  Assets | CEZ’s business is exposed to fluctuations in prices and availability of commodities used in the production and sales of energy products. The main exposure is toward electricity prices and volumes, prices of emissions and prices and availability of fuels. CEZ hedges its exposure to commodity market and fuel risks. Changes in prices and volumes of electricity represent the largest risk and opportunity for CEZ. In the central European market, the wholesale price of electricity is determined as the balance between supply and demand. The short-term factors affecting electricity prices and volumes include on-shore and off-shore wind conditions, temperature, CO2 allowance prices, fuel prices, economic development and the import/export situation. CEZ Group despite its ambitious decarbonization program is still large producer of carbon dioxide. The situation in ETS is very volatile. Future development of the price of carbon allowances is very uncertain. Thera are several powers functioning against each other. There is a surplus supply of allowances and at the same time Market Stability Reserve introduced by the EC is decreasing surplus allowances every year. Switching from coal to gas is creating further surplus. Same effect has the decreased electricity demand due to COVID-19 situation. On the other hand, energy producers and other large emitters expect that future price of carbon allowances will be much higher, so part of the allowances stays of the market. Future price in the mid-term cold be anything from 25 EUR to 50 EUR per ton. CEZ has pipeline of renewable projects in Germany and France and Poland. Almost 500MW of renewable wind capacity could be developed The Polish project of construction of a wind PP farm at Krasin (35.2 MW) obtained a contract for support of electricity generation for 15 years in the form of the “Contract for Difference” in an auction for RES held on Dec 5, 2019. CEZ aims for at least several thousand MW of new photovoltaic capacity in Czechia. Renewables support is to be set by the Czech Government. Dec 13, 2019 - a large-scale battery system for energy storage and testing of various modes of ancillary service provision for the Czech grid (including but not limited to primary regulation of frequency) was launched. Installed capacity 4 MW, storage capacity 2.8 MWh, life expectancy minimum ten years. The growth through acquisition continues in the sector of energy saving in Germany. CEZ subsidiary, Elevion Group has acquired a 100% share in Hermos Group and a 100% share in En.plus, H & R Elektromontagen, FEA Automation, Detlef Walther, Kälteanlagenbau Schröder, GBM Gesellschaft für Büromanagement and Elektro-Technik-Pfisterer External financing into green carbon-free projects was sucessfuly acquired in 2019. CEZ Group signed a loan facility agreement with European Investment Bank amounting up to EUR 330 million to support financing of investments into reinforcement and further development of distribution grid in the Czech Republic. |

## **C3.1f**

### **(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).**

CEZ Group made a commitment to generate carbon neutral electricity before 2050. Together with other European energy groups, we registered our commitments to reduce greenhouse gas emissions under the Non-State Actor Zone for Climate Action (NAZCA), formed before the Paris Climate Conference in 2015. The United Nations Framework Convention on Climate Change (UNFCCC) anticipates that NAZCA will report on the current status of commitment fulfillment and will therefore track progress on the basis of annually updated data.

In 2015 when CEZ has made the Paris commitment the installed capacity of coal and lignite power stations was 8060MW. In 2016 capacity decreased to 7760MW. In 2017 capacity further decreased to 6871MW. In 2018 capacity decreased to 6761MW. In 2019 capacity decreased to 6541MW. As of June 30, 2020 capacity has decreased to 5622MW. In 2021 expected capacity will be 5322MW. In 2022 expected capacity will be 4754MW. In 2024 expected capacity will be 3754MW. In 2025 expected installed capacity in coal and lignite will be 3279MW.

## **C4. Targets and performance**

## **C4.1**

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

Intensity target

## **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**

2005

### **Target coverage**

Company-wide

### **Scope(s) (or Scope 3 category)**

Scope 1

### **Intensity metric**

Metric tons CO2e per megawatt hour (MWh)

### **Base year**

2001

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

0.639

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

100

### **Target year**

2020

### **Targeted reduction from base year (%)**

46

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

0.34506

### **% change anticipated in absolute Scope 1+2 emissions**

46

### **% change anticipated in absolute Scope 3 emissions**

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

0.361

### **% of target achieved [auto-calculated]**

94.5771245832483

### **Target status in reporting year**

Underway

### **Is this a science-based target?**

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science Based Targets initiative

### **Please explain (including target coverage)**

Base year 2001 emission factor was 0.639tCO2/MWh Actual year 2019 emission factor was 0.361tCO2/MWh CEZ committed to reduce emmission factor by 46% until FY2020 The initiative was announced in 2005

### **Target reference number**

Int 2

### **Year target was set**

2019

### **Target coverage**

Company-wide

### **Scope(s) (or Scope 3 category)**

Scope 1

### **Intensity metric**

Metric tons CO2e per megawatt hour (MWh)

### **Base year**

2018

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

0.38

### **% 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 (%)**

30

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

0.266

### **% change anticipated in absolute Scope 1+2 emissions**

30

### **% change anticipated in absolute Scope 3 emissions**

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

0.361

### **% of target achieved [auto-calculated]**

16.6666666666667

### **Target status in reporting year**

Underway

### **Is this a science-based target?**

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science Based Targets initiative

### **Please explain (including target coverage)**

Base year 2018 emission factor was 0.38tCO2/MWh Actual year 2019 emission factor was 0.361tCO2/MWh CEZ committed to reduce emmission factor by 30% until FY2030 The initiative was published in 2019 Sustainability Report

## **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**

2015

### **Target coverage**

Company-wide

### **Target type: absolute or intensity**

Absolute

### **Target type: energy carrier**

Electricity

### **Target type: activity**

Production

### **Target type: energy source**

Low-carbon energy source(s)

### **Metric (target numerator if reporting an intensity target)**

Percentage

### **Target denominator (intensity targets only)**

<Not Applicable>

### **Base year**

2015

### **Figure or percentage in base year**

51

### **Target year**

2050

### **Figure or percentage in target year**

100

### **Figure or percentage in reporting year**

55

### **% of target achieved [auto-calculated]**

8.16326530612245

### **Target status in reporting year**

Underway

### **Is this target part of an emissions target?**

CEZ Group made a commitment to generate carbon neutral electricity before 2050. Together with other European energy groups, we registered our commitments to reduce greenhouse gas emissions under the Non-State Actor Zone for Climate Action (NAZCA), formed before the Paris Climate Conference in 2015. The United Nations Framework Convention on Climate Change (UNFCCC) anticipates that NAZCA will report on the current status of commitment fulfillment and will therefore track progress on the basis of annually updated data.

### **Is this target part of an overarching initiative?**

Other, please specify

### **Please explain (including target coverage)**

Our carbon neutrality target by 2050 is considered science based but has not been submitted for review process by Science-based targets initiative.

## **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 |  |  |
| To be implemented\* |  |  |
| Implementation commenced\* |  |  |
| Implemented\* | 3 | 16000 |
| Not to be implemented |  |  |

## **C4.3b**

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

### **Initiative category & Initiative type**

|  |  |
| --- | --- |
| Energy efficiency in buildings | Insulation |

### **Estimated annual CO2e savings (metric tonnes CO2e)**

1305

### **Scope(s)**

Scope 1

### **Voluntary/Mandatory**

Voluntary

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

1700000

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

120000000

### **Payback period**

No payback

### **Estimated lifetime of the initiative**

>30 years

### **Comment**

The Dětmarovice power plant invested CZK 120 million in an upgrade, thus reducing its carbon footprint by more than 1,000 tons The only hard coal-fired power plant and heating plant of CEZ Group completed an investment project costing nearly CZK 120 million focusing on thermal insulation and renovation of lighting. Improvements in energy efficiency of building operation and upgrading of lighting result in financial savings. At the same time, these factors promote the long-term plan of CEZ Group to reduce the carbon footprint of individual operations. Energy savings should be around 1,533 MWh per year, which is a decrease by approx. 37% compared to the pre-renovation state. Such quantity of heat would be sufficient for heating of more than 200 low-energy family houses. The power plant thus achieves annual savings of several million CZK. At the same time, the production of CO2 decreases by no less than 1,305 tons.

### **Initiative category & Initiative type**

|  |  |
| --- | --- |
| Energy efficiency in production processes | Process optimization |

### **Estimated annual CO2e savings (metric tonnes CO2e)**

14000

### **Scope(s)**

Scope 1

### **Voluntary/Mandatory**

Voluntary

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

16000000

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

4500000

### **Payback period**

<1 year

### **Estimated lifetime of the initiative**

21-30 years

### **Comment**

The Temelín nuclear power plant increased the output of the first unit by 2 MW. The power engineers improved the drainage of the high-pressure part of the turbine during the last shutdown. They added two pipes up to 200 millimeters in diameter, 30 meters long. We are now better able to work with water energy without increasing the reactor output. We only make better use of existing equipment. Operating results for the last two months have confirmed the economic benefits for our production.

## **C4.3c**

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

|  |  |
| --- | --- |
| **Method** | **Comment** |
| Compliance with regulatory requirements/standards | CEZ has obligation set in Czech legislation to operate coal and lignite power stations in compliance with national legislation applicable to air protection. This concerns, in particular, compliance with emission limits, emission ceilings, and other technical conditions. EU ETS is strong system which is working very well at seting price to carbon emissions. At Czech national level CEZ is also required to adhere to limits for NOX,SO2 and dust particles at locations where power stations are operated. |
| Financial optimization calculations | COVID-19 created short-term situation at the markets, where electricity hedged (sold) in advance has never been generated from CEZ' coal and lignite power stations. It was still cheaper to purchase electricity back at the power markets than generate it while proce of carbon allowances was relatively high and price of electricity declined in V-curve. |
| Internal price on carbon | Price of carbon is among the key factors impacting Czech and German power markets electricity price and fully integrated into company's investment decisions. Since 2005 CEZ has had a compliance obligation in the EU's emissions trading scheme (ETS) setting a price for carbon emissions. Almost all of company's emissions are in the scope of the EU ETS. |
| Dedicated budget for low-carbon product R&D | In 2019, CEZ’s Research and Development costs totaled CZK 961 million, or 0.5% of sales. Research and Development activities help CEZ to develop a sustainable, carbon dioxide-free future. CEZ focus on development of energy savings, pursuing of growth opportunities and development of an carbon-free energy operations in the long-term. Each new development activity is assessed against the criteria of emission reduction and resource- and energy-efficiency. Sustainability is part CEZ’s strategy and the company is carefully developing new sources of renewable energy generation and savings. As the example of CEZ activity is development of decentralized CHP generation at customer sites through subsidiary company CEZ Energo. |

## **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**

CEZ started to offer new product "Electricity for charging" for electromobility. All electricity sold this way is covered from electricity produced from renewable resources. With every account the customer get a certificate conforming that the electricity is covered from the renewable resources.

### **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**

The EU Taxonomy for environmentally sustainable economic activities

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

11

### **% of total portfolio value**

<Not Applicable>

### **Asset classes/ product types**

<Not Applicable>

### **Comment**

https://www.cez.cz/webpublic/file/edee/ospol/fileexport-s/pro-investory/informacni-povinnost-emitenta/2020-03/en-tk-4q2019-presentation\_aij6.pdf page 28 Revenues CZK21.8bn in 2019 We are successfully implementing our growth strategy focusing on comprehensive energy services for customers. In addition, the growth potential of our ČEZ ESCO companies in Czechia and Elevion group in Germany is potentiated by the European Union’s long-term goals to cut energy consumption, which is an opportunity for companies offering smart energy solutions.

### **Level of aggregation**

Group of products

### **Description of product/Group of products**

The structure of CEZ business can be divided to carbon and carbon free part by using the segmentation principle. Energy services corporation (ESCO) is focused on energy savings, distribution services include only service and not power itself is also carbon free. Nuclear and renewable part of CEZ generation is also low-carbon products.

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

Low-carbon product

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

Other, please specify (Segmented structure of CEZ business portfolio)

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

78

### **% of total portfolio value**

<Not Applicable>

### **Asset classes/ product types**

<Not Applicable>

### **Comment**

In 2019 total CEZ revenues were CZK 206bn, out of that 37% are various services, 23% is resale and rest is CEZ mining, power generation and sale of electricity. Out of that almost 55% is nuclear or renewables. With this point of view approximately 78% of CEZ total sales can be defined as low-carbon.

## **C-EU4.6**

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

* CEZ doesn't own natural gas infrastructure. And natural gas fugitive sees as negligible. Natural gas in used in our CCGT power station and CHP units. Combined detectors of gas fugitives devices are installed where relevant.
* CEZ Group developed the innovative project of biogas cleaning. The cleaning works on the basis of membrane separation of component gases.

## **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 2007

### **Base year end**

December 31 2007

### **Base year emissions (metric tons CO2e)**

46853953

### **Comment**

### **Scope 2 (location-based)**

### **Base year start**

January 1 2017

### **Base year end**

December 31 2017

### **Base year emissions (metric tons CO2e)**

565939

### **Comment**

SCOPE 2 emissions Is mostly electricity purchased for grid losses in the electricity distribution network. BUL+RUM+CZE. Calculation is based on country specific emission factors.

### **Scope 2 (market-based)**

### **Base year start**

### **Base year end**

### **Base year emissions (metric tons CO2e)**

### **Comment**

calculation of market-based emissions is not possible due to lack of market mechanisms in Bulgaria, Romania where our distribution operations are located.

## **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)

## **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)**

26070966

### **Start date**

January 1 2019

### **End date**

December 31 2019

### **Comment**

### **Past year 1**

### **Gross global Scope 1 emissions (metric tons CO2e)**

26802633

### **Start date**

January 1 2018

### **End date**

December 31 2018

### **Comment**

### **Past year 2**

### **Gross global Scope 1 emissions (metric tons CO2e)**

27866642

### **Start date**

January 1 2017

### **End date**

December 31 2017

### **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 have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

### **Comment**

## **C6.3**

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

### **Reporting year**

### **Scope 2, location-based**

383096

### **Scope 2, market-based (if applicable)**

<Not Applicable>

### **Start date**

January 1 2019

### **End date**

December 31 2019

### **Comment**

### **Past year 1**

### **Scope 2, location-based**

444364

### **Scope 2, market-based (if applicable)**

<Not Applicable>

### **Start date**

January 1 2018

### **End date**

December 31 2018

### **Comment**

### **Past year 2**

### **Scope 2, location-based**

565939

### **Scope 2, market-based (if applicable)**

<Not Applicable>

### **Start date**

January 1 2017

### **End date**

December 31 2017

### **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, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Please explain**

Purchased goods and services are not relevant to CEZ business. From the materiality point of view the relevant good is fuel and it is included in SCOPE 1 emissions.

### **Capital goods**

### **Evaluation status**

Relevant, not yet calculated

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Please explain**

CEZ gathers data to calculate diverse structure of capital good that is used for maintenance and as CAPEX. Emissions which are relevant to capital goods are not yet calculated.

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

### **Evaluation status**

Relevant, not yet calculated

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Please explain**

Sales of coal to external partners is relevant source of indirect emissions, because the partners will convert this coal to energy in the process. CEZ is not sure about efficiencies of the conversion process of our partners and such emissions were not calculated yet.

### **Upstream transportation and distribution**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Please explain**

CEZ is using conveyor belts to transport coal to mines. Those conveyor belts use electricity from the power station and emissions are included in SCOPE 1 emissions category. Part of the coal is also transported by trains. Such emissions are included in business travel. Other upstream transportation and distribution are not relevant for CEZ business.

### **Waste generated in operations**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Please explain**

CEZ does not see waste generated in operations to be relevant. CEZ is using conveyor belts to transport ash and dust back to places of deposit. Those conveyor belts use electricity from the power station and emissions are included in SCOPE 1 emissions category.

### **Business travel**

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

61640

### **Emissions calculation methodology**

specific fuel consumption

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

100

### **Please explain**

Not just business travel but, all transportation is calculated in this category. Including the trains and truck transpotration of the fuel, waste and byproducts.

### **Employee commuting**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Please explain**

Most of the employees live up to 50 km from the place where they work. Employees are public transport in bigger cities or own cars. CEZ doesn't have relevant data for calculation of the emissions.

### **Upstream leased assets**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Please explain**

CEZ does not have any relevant upstream leased assets.

### **Downstream transportation and distribution**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Please explain**

CEZ estimates the emissions from downstrem transportation are insignificant.

### **Processing of sold products**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Please explain**

CEZ main products are electricity, heat plus services linked to energy business. Processing of sold products is not relevant to CEZ business.

### **Use of sold products**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Please explain**

CEZ main products are electricity, heat plus services linked to energy business. Use of sold products is not relevant to CEZ business.

### **End of life treatment of sold products**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Please explain**

CEZ main products are electricity, heat plus services linked to energy business. End of life treatment of sold products is not relevant to CEZ business.

### **Downstream leased assets**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Please explain**

CEZ is not providing leases of assets. Downstream leased assets are not relevant to CEZ business.

### **Franchises**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Please explain**

CEZ has no franchises and doesn't provide any. Franchises are not relevant to CEZ business.

### **Investments**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Please explain**

Regarding investments CEZ has direct control over most of its investments and such emissions are included in CEZ emissions data. CEZ also owns minority share in Turkey CCGT power station but doesn't control the company and do not have any emissions data.

### **Other (upstream)**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Please explain**

CEZ does not find any other upstream operations as relevant.

### **Other (downstream)**

### **Evaluation status**

Relevant, not yet calculated

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Please explain**

CEZ does not find any other downstream operations as relevant.

## **C6.7**

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

Yes

## **C6.7a**

### **(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.**

|  |  |  |
| --- | --- | --- |
|  | **CO2 emissions from biogenic carbon (metric tons CO2)** | **Comment** |
| Row 1 | 1343775 | 1,343,775 tons of carbon dioxide was generated using the biomass as fuel. |

## **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**

0.0001283

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

26454062

### **Metric denominator**

unit total revenue

### **Metric denominator: Unit total**

206192000000

### **Scope 2 figure used**

Location-based

### **% change from previous year**

13

### **Direction of change**

Decreased

### **Reason for change**

Revenue increased by 12%. At the same period emissions decreased by 3% mostly because bigger nuclear generation and partial switch from coal to natural gas.

## **C7. Emissions breakdowns**

## **C7.1**

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

No

## **C7.2**

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

|  |  |
| --- | --- |
| **Country/Region** | **Scope 1 emissions (metric tons CO2e)** |
| Czechia | 23740074 |
| Poland | 2330892 |

## **C7.3**

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

By facility

## **C7.3b**

### **(C7.3b) Break down your total gross global Scope 1 emissions by business facility.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Facility** | **Scope 1 emissions (metric tons CO2e)** | **Latitude** | **Longitude** |
| Mělník 2 Power Station | 1312931 | 50.411111 | 14.419444 |
| Mělník 3 Power Station | 1447758 | 50.411111 | 14.419444 |
| Tušimice 2 Power Station | 4281574 | 50.381111 | 13.339167 |
| Prunéřov 1 Power Station | 1906348 | 50.417778 | 13.258889 |
| Prunéřov 2 Power Station | 3222089 | 50.417778 | 13.258889 |
| Ledvice 4 Power Station | 2673299 | 50.576667 | 13.780833 |
| Počerady CCGT plant | 1292109 | 50.42901 | 13.677107 |
| Trmice Heating Plant | 449250 | 50.642946 | 13.994596 |
| Poříčí Power Station | 454050 | 50.57226 | 15.964221 |
| Dvůr Králové Heating Plant | 33482 | 50.431764 | 15.814109 |
| Hodonín Power Station | 41301 | 48.846944 | 17.12 |
| Temelín Nuclear Power Station | 3492 | 49.18 | 14.379722 |
| Dukovany Nuclear Power Station | 295 | 49.085278 | 16.15 |
| Vítkovice Heating Plant | 32262 | 49.815569 | 18.266522 |
| Dětmarovice Power Station | 518667 | 49.903056 | 18.469167 |
| Jindřichův Hradec Heating Plant | 0 | 49.14411 | 15.003025 |
| Počerady Power Station | 4717748 | 50.42901 | 13.677107 |
| Mělník 1 Power Station | 1178214 | 50.411111 | 14.419444 |
| Areál Třeboradice (Backup Heating plant) | 488 | 50.162222 | 14.523889 |
| Chorzów Power Station | 1319379 | 50.31 | 18.97 |
| Skawina Power Station | 1011513 | 49.976389 | 19.807222 |
| ČEZ Teplárenská - backup gas boiler Ledvice | 0 | 50.576667 | 13.780833 |
| Other sites (mostly CHP cogeneration units) | 174717 |  |  |

## **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, metric tons CO2e** | **Net Scope 1 emissions , metric tons CO2e** | **Comment** |
| Cement production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Chemicals production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Coal production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Electric utility activities | 26070966 | <Not Applicable> | The majority of CEZ's Scope 1 greenhouse gas emissions are generated from the use of fossil fuels in electricity and heat production. Only carbon dioxide is calculated in the SCOPE 1 emissions. Other gasses are not seen as material. |
| Metals and mining production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Oil and gas production activities (upstream) | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Oil and gas production activities (midstream) | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Oil and gas production activities (downstream) | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Steel production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Transport OEM activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Transport services activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |

## **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 | As renewable consumptions has 0 emissions. Resulting year-on-year change is also 0. |
| Other emissions reduction activities | 61268 | Decreased | 0.2 | Decreased losses in the distribution grid decreased by 61268t of CO2 between 2018 and 2019. |
| Divestment | 0 | No change | 0 | Nothing relevant for emissions. |
| Acquisitions | 0 | No change | 0 | Nothing relevant for emissions. |
| Mergers | 0 | No change | 0 | None |
| Change in output | 731667 | Decreased | 2.8 | Generation in cardon-free nuclear and renewables increased by 1000GWh and at the same time coal generation decreased by 1566GWh and decreased emissions by 1568480tons of CO2. In addition to that natural gas generation increased by 2110GWh and increased emissions by 836813tons of CO2. (All emissions were directly measured) |
| Change in methodology | 0 | No change | 0 | No. |
| Change in boundary | 0 | No change | 0 | No. |
| Change in physical operating conditions | 0 | No change | 0 | No. |
| Unidentified |  | <Not Applicable> |  |  |
| Other |  | <Not Applicable> |  |  |

## **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?**

Location-based

## **C8. Energy**

## **C8.1**

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

More than 35% but less than or equal to 40%

## **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) | No |
| 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) | <Not Applicable> | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Consumption of purchased or acquired electricity | <Not Applicable> |  |  |  |
| Consumption of purchased or acquired heat | <Not Applicable> | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Consumption of purchased or acquired steam | <Not Applicable> | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Consumption of purchased or acquired cooling | <Not Applicable> | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Consumption of self-generated non-fuel renewable energy | <Not Applicable> | 12692027 | <Not Applicable> | 12692027 |
| Total energy consumption | <Not Applicable> | 12692027 | 382261083 | 394953110 |

## **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)**

1447

### **Gross electricity generation (GWh)**

2578

### **Net electricity generation (GWh)**

### **Absolute scope 1 emissions (metric tons CO2e)**

2329950

### **Scope 1 emissions intensity (metric tons CO2e per GWh)**

904

### **Comment**

### **Lignite**

### **Nameplate capacity (MW)**

5088

### **Gross electricity generation (GWh)**

22829

### **Net electricity generation (GWh)**

### **Absolute scope 1 emissions (metric tons CO2e)**

19809288

### **Scope 1 emissions intensity (metric tons CO2e per GWh)**

868

### **Comment**

### **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**

No generation from oil.

### **Gas**

### **Nameplate capacity (MW)**

955

### **Gross electricity generation (GWh)**

4006

### **Net electricity generation (GWh)**

### **Absolute scope 1 emissions (metric tons CO2e)**

1373350

### **Scope 1 emissions intensity (metric tons CO2e per GWh)**

343

### **Comment**

CCGT and CHP cogeneration units.

### **Biomass**

### **Nameplate capacity (MW)**

0

### **Gross electricity generation (GWh)**

1028

### **Net electricity generation (GWh)**

### **Absolute scope 1 emissions (metric tons CO2e)**

0

### **Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

### **Comment**

### **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**

Not used for genration.

### **Nuclear**

### **Nameplate capacity (MW)**

4290

### **Gross electricity generation (GWh)**

30245

### **Net electricity generation (GWh)**

### **Absolute scope 1 emissions (metric tons CO2e)**

0

### **Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

### **Comment**

### **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**

CCS not relevant for CEZ.

### **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**

No such technology at CEZ.

### **Hydropower**

### **Nameplate capacity (MW)**

1984

### **Gross electricity generation (GWh)**

2315

### **Net electricity generation (GWh)**

### **Absolute scope 1 emissions (metric tons CO2e)**

0

### **Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

### **Comment**

### **Wind**

### **Nameplate capacity (MW)**

742

### **Gross electricity generation (GWh)**

1479

### **Net electricity generation (GWh)**

### **Absolute scope 1 emissions (metric tons CO2e)**

0

### **Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

### **Comment**

### **Solar**

### **Nameplate capacity (MW)**

130

### **Gross electricity generation (GWh)**

142

### **Net electricity generation (GWh)**

### **Absolute scope 1 emissions (metric tons CO2e)**

0

### **Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

### **Comment**

### **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**

Not applicable at CEZ.

### **Other renewable**

### **Nameplate capacity (MW)**

1

### **Gross electricity generation (GWh)**

2

### **Net electricity generation (GWh)**

### **Absolute scope 1 emissions (metric tons CO2e)**

0

### **Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

### **Comment**

Biogas.

### **Other non-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**

Not applicable.

### **Total**

### **Nameplate capacity (MW)**

14643

### **Gross electricity generation (GWh)**

64626

### **Net electricity generation (GWh)**

### **Absolute scope 1 emissions (metric tons CO2e)**

23513582

### **Scope 1 emissions intensity (metric tons CO2e per GWh)**

361

### **Comment**

## **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**

Bulgaria

### **Voltage level**

Distribution (low voltage)

### **Annual load (GWh)**

9426

### **Annual energy losses (% of annual load)**

8.01

### **Scope where emissions from energy losses are accounted for**

Scope 2 (location-based)

### **Emissions from energy losses (metric tons CO2e)**

383096

### **Length of network (km)**

57647

### **Number of connections**

2200000

### **Area covered (km2)**

40000

### **Comment**

### **Country/Region**

Romania

### **Voltage level**

Distribution (low voltage)

### **Annual load (GWh)**

6810

### **Annual energy losses (% of annual load)**

8.17

### **Scope where emissions from energy losses are accounted for**

Scope 2 (location-based)

### **Emissions from energy losses (metric tons CO2e)**

### **Length of network (km)**

86665

### **Number of connections**

1500000

### **Area covered (km2)**

29000

### **Comment**

Losses included in SCOPE 1 generation emissions to avoid double counting as electricity is supplied from own generation.

### **Country/Region**

Czechia

### **Voltage level**

Distribution (low voltage)

### **Annual load (GWh)**

35863

### **Annual energy losses (% of annual load)**

4.73

### **Scope where emissions from energy losses are accounted for**

Scope 1

### **Emissions from energy losses (metric tons CO2e)**

0

### **Length of network (km)**

165835

### **Number of connections**

3700000

### **Area covered (km2)**

52001

### **Comment**

Losses included in SCOPE 1 generation emissions to avoid double counting as electricity is supplied from own generation.

## **C9. Additional metrics**

## **C9.1**

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

### **Description**

Other, please specify (Water use (tons of water per MWh generated electricity)

### **Metric value**

### **Metric numerator**

647360777

### **Metric denominator (intensity metric only)**

64635000

### **% change from previous year**

16.8

### **Direction of change**

Decreased

### **Please explain**

Water use per MWh generated has decreased mainly because shut down of lignite generation capacity. The generation was replaced by increased utilization of nuclear and CCGT.

## **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** |
| Wind | 5600 | 7 | 2024 | capex for years 2020-2024 current pipeline of wind projects in France an Germany |
| Lignite | 22200 | 28 | 2024 | capex for years 2020-2024, no new capacity, solely maintenance and environmental capex |
| Nuclear | 55000 | 55 | 2024 | capex for years 2020-2024, includes investments into nuclear fuel |

## **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** |
| Other, please specify (digitization of distribution network) | Various investment related to digitization of distribution network including smart metering | 23 | 28 | 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 | Mostly nuclear research concentrated in our subsidiary UJV REZ. |

## **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** |
| Other, please specify | Applied research and development | 61-80% | 617 | Nuclear research |

## **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) | No third-party verification or assurance |
| Scope 3 | No third-party verification or assurance |

## **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**

Reasonable assurance

### **Attach the statement**

[certifikat-enms-cez-iso-50001\_cz.pdf](https://www.cdp.net/en/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/Tty3QF5iyU-abfRrpZPAzA/certifikatenmsceziso50001cz.pdf)

[CEZ Group Sustainability report 2019\_20200624\_compressed.pdf](https://www.cdp.net/en/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/RBmMgzZhgUiSKkVtIPVz5g/CEZGroupSustainabilityreport201920200624compressed.pdf)

### **Page/ section reference**

1-3

### **Relevant standard**

European Union Emissions Trading System (EU ETS)

### **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?**

No, we do not verify any other climate-related information reported in our CDP disclosure

## **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**

100

### **% of Scope 2 emissions covered by the ETS**

0

### **Period start date**

January 1 2019

### **Period end date**

December 31 2019

### **Allowances allocated**

3269032

### **Allowances purchased**

22801934

### **Verified Scope 1 emissions in metric tons CO2e**

26070966

### **Verified Scope 2 emissions in metric tons CO2e**

0

### **Details of ownership**

Facilities we own and operate

### **Comment**

SCOPE 2 emissions at CEZ are indirect emissions. CEZ takes electricity to cover losses at distribution network from the grid and purchase it at power markets.

## **C11.1d**

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

CEZ recognizes the role of the EU ETS Directive in providing relevant price signal associated with CO2 emissions. CEZ believes that the functioning “cap and trade” mechanism is the most effective way of reducing emissions. CEZ receives only limited number of carbon allowances for free and thus needs to buy majority on the market. The price of carbon allowances has been increasing since 2018 and in August 2020 traded in the 25-26 EUR per tone range. Related carbon allowances purchase costs represent an important direct costs category for the group. We have implemented the following strategies to mitigate such risks:

**1. Hedging of generation margin of our power plant portfolio**- we are selling our expected electricity production and buying needed carbon allowances using forward and futures for 1-3 years ahead. This way we have a good visibility on the future generation spreads for our power plansts.

**2. Reduction of emission**s - CEZ Group made a commitment to generate carbon neutral electricity by 2050. As interim targets in achieving this goal we are gradually reducing our installed capacity in coal. By 2025 our coal capacity will decline by 50% to 3.9 GW vs 2016.

**3. Internal pricing of carbon.**  We are using various price scenarios for carbon price while assessing different investment opportunities, to evaluate and forecasts our financial metrics as part of our annual business plan review.

## **C11.2**

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

No

## **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**

We are using carbon price in particular in following situations: - evaluating and modifying our strategy of hedging our margins in electricity generation business. - assessing different investment opportunities -evaluating and forecasts our various financial metrics as part of our annual business plan review.

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

27

### **Variance of price(s) used**

As of end of June 2020 in EUR per metric ton

### **Type of internal carbon price**

Shadow price

### **Impact & implication**

The cost of carbon is the key input for our strategic planing and in investment decisions. It determines the future level of profitability of CEZ Group and thus have a direct implication for the forecasting cash flows and leverage.

## **C12. Engagement**

## **C12.1**

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

Yes, other partners in the value chain

## **C12.1d**

### **(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.**

CEZ Group commenced the process of comprehensively setting up the dialog

with stakeholders in 2019. The aim was to establish how they perceived the

current sustainability strategy and what was their opinion on the future direction

of CEZ Group and its approach towards sustainability.

List of stakeholder groups:

Public and regulatory authorities

Local governments and local communities, the public

Customers

Employees

Trade unions

Suppliers

Shareholders and investors

Educational institutions and research facilities

Professional unions and associations

Media

Nonprofit organizations

Insurance companies, banks

Certification bodies

Stakeholder dialog took place on the basis of the international standard

AA1000 SES (Stakeholder Engagement Standard), which is designed for

companies so that an objective dialog and specific results can be assured.

Independence was guaranteed by the “Byznys pro společnost” platform which

also participated in the process.

For the questioning purposes, the following areas were established:

1. Environmental protection

2. Energy efficiency of operations

3. Attitude to emissions

4. Sustainable use of water

5. Land restoration

6. Safe operation of facilities

7. Circular economy, waste management

8. Supplier quality standards

9. Responsible employer

10. Diversity and equal opportunities

11. Transparency and ethics

12. Collaboration with local communities

13. Responsible sale

14. Energy transformation, development of clean technologies

15. Promotion of smart cities

16. Support for research and development

Stakeholders were divided into two major groups:

Internal stakeholders:

Top management of ČEZ and subsidiaries, members of mid-level

management and members of the Supervisory Board.

External stakeholders:

Suppliers – raw materials, resources, contractors – services (overhead

services and materials), contractors – services (facility management and

transport), insurers, banks, investors, companies doing business in the

energy sector, media, trade unions, professional associations, independent

experts, regulators, local authorities, public bodies, customers, and

educational institutions.

The materiality matrix showed the importance of the topics for the company and for

external stakeholders. The right upper quadrant in the matrix shows future priorities

that are crucial for ensuring sustainable operation of the company (from both the

internal and external viewpoint) and which are most interesting for the stakeholders.

The results have shown that the following areas are most interesting

for the stakeholders. Their importance will even rise in the future:

1. Environmental protection

3. Attitude to emissions

6. Safe operation of facilities

9. Responsible employer

14. Energy transformation, development of clean technologies

The results will be taken into account in the update of our sustainable

development strategy.

## **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

## **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** |
| Clean energy generation | Support | Fulll position is described here: https://www.cez.cz/en/cez-group/cez/public-affairs/strategy-and-energy-policy/electrifying-towards-climate-neutrality-cez-groups-position-on-eu-strategy-for-energy-system-integration-96766 | EU STRATEGY FOR ENERGY SYSTEM INTEGRATION |
| Please select | Please select |  |  |

## **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**

The International Emissions Trading Association (IETA)

### **Is your position on climate change consistent with theirs?**

Consistent

### **Please explain the trade association’s position**

IETA believes that emissions trading is one of the principal policy instruments available to manage greenhouse gas emissions. Emission trading encourages operational excellence and deployment of new technologies to reduce emissions. Trading also provides important price signal, which enables to achieve the required emission reduction set by policymakers at the lowest possible costs.

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

We take part in work groups and events organised by IETA.

### **Trade association**

EURELECTRIC

### **Is your position on climate change consistent with theirs?**

Consistent

### **Please explain the trade association’s position**

Leading industry association which represents the interests of the European electricity sector. Its members are the national electricity associations. The mission is to contribute to the development and enhanced competitiveness of the electricity industry and to promote the role of electricity in advancing society.

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

We are actively participating in meetings and work groups organised by Eurelectric on specific topics.

## **C12.3d**

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

Yes

## **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?**

Consistency is covered by internal audit, external audit, risk department and controlling. CEZ management regularly oversees performance of CEZ group and its ability to success in the changing environment.

## **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**

Y

[20191004\_Pocerady - diskuse s Investory a Analytiky\_Final\_EN.pdf](https://www.cdp.net/en/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/cRXeQq6l-U6zwy7r1p2YFQ/20191004PoceradydiskusesInvestoryaAnalytikyFinalEN.pdf)

### **Page/Section reference**

CEZ Group Decarbonization strategy was published on October 2019

### **Content elements**

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

### **Comment**

CEZ Group Decarbonization strategy was published on October 2019. Emission at different power plants was disclosed. Also emission tagets by 5 year periods until 2050 where decarbonization will be completed.

## **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.**

Annual Report 2019 has enivronmental section with other information (page 142-146)

[annual report 2019 CEZ Group.pdf](https://www.cdp.net/en/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/nJLG7TiJMkK6ltQPvaUH8w/annualreport2019CEZGroup.pdf)

## **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 | Head of Investor Relations | Other, please specify (Investor relations Officer) |