

Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

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

Founded in 1952 by the then governor of Minas Gerais, Juscelino Kubitschek de Oliveira, Companhia Energética de Minas Gerais (Cemig) completed 70 years of operation in 2022, providing services in the areas of generation, transmission, commercialization and distribution of electric energy, energy solutions (Cemig SIM) and natural gas distribution (Gasmig). The group comprises the holding company Companhia Energética de Minas Gerais (Cemig), the wholly-owned subsidiaries Cemig Geração e Transmissão S.A. (Cemig GT) — focused on energy generation and transmission — and Cemig Distribuição S.A. (Cemig D) — the electricity distributor, totaling 102 companies, 9 consortiums and 2 FIPs (Equipment Investment Funds), resulting in assets present in several Brazilian states and the Federal District. Since its founding, the organization has assumed the role of bringing collective well-being to the regions where it operates, in an innovative and sustainable way. With this structure, Cemig occupies the position of largest energy marketer for free customers in the country and is one of the largest generator groups. Gasmig is the exclusive distributor of piped natural gas throughout the state of Minas Gerais. In addition, Cemig GT holds a 45% stake in the total share capital of Aliança Geração de Energia S.A., Aliança Geração, and also holds a 21.7% stake in the share capital of Transmissora Aliança de Energia Elétrica S.A., Taesa, granting it control of the company.

With the mission of providing integrated clean energy solutions that are accessible to society, in an innovative, sustainable and competitive manner, Cemig is a publicly traded company, controlled by the Government of the State of Minas Gerais (51%), with its shares traded in São Paulo, at B3 S.A. (Brasil, Bolsa, Balcão), in New York, at the New York Stock Exchange (NYSE) and in Madrid, at the Mercado de Valores Latino-Americanos (Latibex). In line with sustainability guidelines, at the end of 2019, UTE Igarapé, the Company's only thermoelectric plant, was deactivated, making Cemig's power generation complex 100% renewable. In the transmission area, Cemig, through its electricity transmission subsidiaries and affiliates, operates a network of more than 5,000 km. In the area of electricity distribution, it is responsible for managing the largest electricity distribution network in Latin America, with more than 564,000 km in length, which served 9 million customers in 2022.

In the same year, Cemig joined the global initiative Movimento Ambição Net Zero, an initiative of the Global Compact of the UN Brazil that aims to support signatory companies to establish robust goals based on science, aiming to halve global emissions by 2030 and zero net emissions of greenhouse gases by 2040. In line with this new commitment, Cemig has submitted ambitious short-, medium- and long-term targets to the Science-Based Targets initiative. The Company has also been working on the second edition of its TCFD Report and the first edition of the Transition Plan, which will describe how Cemig has been planning to align itself with a world of 1.5°C.

In terms of its emissions reduction trajectory, Cemig recognizes the sector's challenges and has been incorporating initiatives that support the Company's decarbonization beyond its 100% renewable energy matrix. One of the opportunities identified was the expansion of Cemig SIM, diversifying the predominantly hydraulic source by promoting subscription solar energy. In 2022, the generation of solar energy at the SIM base avoided the emission of 8,814 tons of CO₂. Other initiatives, such as automation and contracting an electric fleet, have also been incorporated in order to contribute to the achievement of the organization's goals.

Due to its commitment to the principles of socio-environmental responsibility, its economic and financial solidity and technical excellence, the organization is internationally recognized as a reference in sustainability in its sector and is positioned as one of the main vectors of consolidation of the Brazilian electricity sector. In 2022, Cemig was selected to compose the Dow Jones Sustainability Index (DJSI World) for the 23rd consecutive year, also figuring as a Brazilian company with the best classification in the CARBON CLEAN200 and an AA rating in the MSCI. Cemig also participated, for the 18th consecutive year, in the Corporate Sustainability Index (ISE) of B3 and was selected for the 13th time to compose the Carbon Efficient Index (ICO₂), created in 2010 by B3 and BNDES. Cemig's performance has also been recognized within the scope of reporting to CDP Latin America for the quality of information disclosed to investors and the global market since 2012. The results attest to the commitment to a high level of transparency in the disclosure and ambition of information related to the climate, providing stakeholders with consistent content on climate change management.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

January 1, 2022

End date

December 31, 2022

Indicate if you are providing emissions data for past reporting years

Yes

Select the number of past reporting years you will be providing Scope 1 emissions data for

5 years

Select the number of past reporting years you will be providing Scope 2 emissions data for

5 years

Select the number of past reporting years you will be providing Scope 3 emissions data for

5 years

C0.3

(C0.3) Select the countries/areas in which you operate.

Brazil

C0.4

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

BRL

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.

Operational control

C-EU0.7

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

Row 1

Electric utilities value chain

Electricity generation

Transmission

Distribution

Other divisions

Gas storage, transmission and distribution

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

| Indicate whether you are able to provide a unique identifier for your organization | Provide your unique identifier |
|--|--------------------------------|
| Yes, a Ticker symbol | CMIG4 (BVMF) |
| Yes, a Ticker symbol | CIG (NYSE) |

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 or committee | Responsibilities for climate-related issues |
|-------------------------------------|--|
| Chief Sustainability Officer (CSO) | <p>Cemig's Senior Management comprises the Board of Directors and the Executive Board. The members of the Board of Directors, elected by the General Shareholders' Meeting, elect its Chief Executive Officer, the Deputy Director, and appoint the Executive Board. The Executive Board corresponds to the structure in which the Director of Corporate Communications and Sustainability (corresponding to the position of CSO) is located, this being the position with the highest direct responsibility for the issue of climate change at Cemig.</p> <p>The Director of Corporate Communications and Sustainability (CSO) supports the management of processes, reporting directly to Cemig's Presidency, which represents the highest level of the Executive Board and which, in turn, reports directly to the Board of Directors.</p> <p>The CSO is responsible for collaborating with the Chief Executive Officer in the exercise of his duties and replacing him in case of absence, leave, vacancy, impediment or resignation. The functional attributions of the CSO are defined and approved by the Board of Directors. Among them are the approval of technical norms and normative instructions necessary for the development of corporate sustainability, climate change and social responsibility, in line with strategic</p> |

| | |
|--|--|
| | <p>guidelines and sectoral regulation.</p> <p>The current CSO assumed the position at Cemig in June 2021. In 2022, his work was fundamental for the approval of the company's sustainability goals, submission of GHG emission reduction goals to the SBTi initiative and approval of Cemig's strategy with the other areas of the company. Of particular note is his role in planning for the preparation of Cemig's Transition Plan, in approving adherence to the Net Zero Movement in 2022 of the UN Global Compact — under which the company assumes commitments to annually publish the inventory of greenhouse gas emissions greenhouse effect (GHG) and carry out initiatives to reduce GHG emissions in line with the criteria of the Science-Based Targets (SBTi) initiative — and also in the submission of targets to this same initiative with a view to formalizing the ambitions within 12 months of the signature of the commitment to the Movement.</p> |
|--|--|

C1.1b

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

| Frequency with which climate-related issues are a scheduled agenda item | Governance mechanisms into which climate-related issues are integrated | Please explain |
|---|--|--|
| Scheduled – some meetings | Reviewing and guiding strategy Other, please specify Analysis and orientation of the main action plans | <p>Reviewing and guiding strategy: In formulating and annually reviewing its Strategic Planning, Cemig considers the efforts and lines of action contained in the 2012 document “Commitment to Climate Change”, which contains the Company's guidelines for action to the topic and is publicly available.</p> <p>Since 2019, Cemig has also had a Sustainability Plan, aligned with the Company's Strategic Planning, which is monitored using 50 indicators with performance evaluation at the end of each year. These indicators consolidate the data of the respective areas, guaranteeing the follow-up of the execution of the plan and allowing the revision and adjustment of the planning according to the achieved results.</p> <p>In 2022, Cemig's Board of Directors approved the Company's Net Zero Commitment and revised the Company's Strategic Planning, updating the document for the period between 2023-2027. In this process, which involved the areas of risk, strategy and finance, the Board's goals were also approved in line with the</p> |

| | | |
|----------------------------------|---|--|
| | | <p>company's strategy, including climate-related objectives.</p> <p>Additionally, the Corporate Sustainability Committee has the role of proposing policies, guidelines, actions, plans and projects, in addition to strategic initiatives, to promote Cemig's performance in the social, environmental, economic and corporate governance dimensions, including issues related to climate change . This Committee meets bimonthly and may request extraordinary meetings with other areas for discussion of relevant topics within the ESG Agenda. In addition, the Committee has a quarterly accountability routine.</p> <p>Analysis and orientation of the main action plans: As a result of the strategy, the actions that require approval or action by the Board of Directors are discussed in meetings, always guided by the guidelines contained in the document "Commitment to Climate Change", with a view to achieving the objectives and targets related to climate change. At the end of each year, a general assessment is carried out, gathering data on the main indicators in order to obtain an overview of performance and determine priority actions for the next cycle.</p> |
| <p>Scheduled – some meetings</p> | <p>Reviewing and guiding annual budgets</p> <p>Overseeing acquisitions, mergers, and divestitures</p> | <p>Analysis and orientation of annual budgets: The Board considers budget needs for the execution of action plans that guarantee the effective implementation of the strategy regarding climate change – objectives, targets and programs – and promotes their periodic follow-up. In 2022, the approval of the strategy was carried out jointly with the financial and risk areas in order to assess in advance, among others, possible budget restrictions and identify the best ways to respond to the challenges.</p> <p>Supervision of the main capital expenditures, acquisitions and divestments: It is incumbent upon the Board of Directors to approve the Annual Budgets and deliberate, as proposed by the Executive Board, on investment projects, disposal of assets, among others. In line with these attributions, Cemig's Strategic Plan provides for investment initiatives to expand the generation of energy from wind and solar sources, as well as investments in distributed generation through the company Cemig SIM, totaling almost R\$ 42.1 billion in the new 2023-2027 investment cycle.</p> |

| | | |
|----------------------------------|---|---|
| <p>Scheduled – some meetings</p> | <p>Overseeing and guiding employee incentives</p> <p>Overseeing the setting of corporate targets</p> <p>Monitoring progress towards corporate targets</p> | <p>Overseeing the setting of corporate targets: The Company has indicators for monitoring and evaluating the business, including the Equivalent Duration of Interruption per Consumer Unit and the Equivalent Frequency of Interruption per Consumer Unit, which provide measurable data about interruptions in the power supply. These indicators are used by Cemig D to assess the quality of the service and, in the case of Cemig G, are related to the weather, since the physical structure and the hydroelectric power generation capacity are exposed to climate risks. The performance of targets related to reducing emissions and consumption efficiency is also evaluated at Board meetings. These goals are defined together with the respective areas that will be responsible for monitoring the indicators and presenting the results in meetings.</p> <p>Monitoring progress towards corporate goals: Each area of Cemig is responsible for monitoring the relevant indicators, reporting the results in meetings with direct supervisors and committees, which consolidate the information for presentation to the Board, which evaluates performance, the ambition of the goals, and directs them in line with the company's strategic planning.</p> <p>Overseeing and guiding employee incentives: Cemig encourages the management of issues related to the climate and water resources through goals and results reflected in financial rewards linked to the variable remuneration of employees. Another indicator considered in the incentive policy is the ISUSTENT, which measures Cemig's participation in the main Sustainability Ratings in Brazil and the world, such as the ISE B3, CDP, DJSI and Carbon Efficient Index, with an impact on the PLR of the Sustainability Management (DCS/SE). The evaluation of the criteria and contribution percentages for the composition of the financial incentive are part of the Board's meeting agenda.</p> |
|----------------------------------|---|---|

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

| | Board member(s) have competence on climate-related issues | Criteria used to assess competence of board member(s) on climate-related issues |
|-------|--|---|
| Row 1 | Yes | Cemig's Board of Directors is a multidisciplinary Board, capable of discussing the themes of the ESG Agenda in a transversal way, identifying synergies between the areas and integrating opportunities. Members have diverse backgrounds, with emphasis on a specialist in renewable energies, with a post-doctoral degree in energy and sustainability and experience in hydroelectric plants and their efficiency, a theme that dialogues with climate issues both due to the potential impact on the environment and exposure to risk. drought, for example. His work focuses – in the academic and professional fields – on training and consulting activities linked to the areas of Small Hydroelectric Power Plants, Cogeneration, Energy Conservation, Transmission Lines and Energy Planning. |

C1.2

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

Position or committee

Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position

Integrating climate-related issues into the strategy
Monitoring progress against climate-related corporate targets
Assessing climate-related risks and opportunities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

The Director of Corporate Communications and Sustainability (CSO) leads the Corporate Communication and Sustainability Department and the Sustainability Management, the area responsible for managing Climate Change issues and for the Sustainability Plan within the Company. The CSO gives the guidelines and validates the actions related to this topic.

The CSO reports directly to the Company's Presidency, which is the highest level of the

Executive Board and reports directly to the Board of Directors. This provision grants the necessary autonomy to the area responsible for managing the topic in the deployment of Cemig's guidelines and in the interaction with the other areas of the company that contribute to the management of this topic.

Within the Corporate Communication and Sustainability Department, the Corporate Sustainability Department has the main responsibilities and attributions associated with climate-related issues. Examples are:

- Monitoring institutional and corporate changes related to corporate sustainability, climate change and social responsibility and, if necessary, proposing changes to the Company's guidelines, drivers, indicators, targets and strategic initiatives;
- Assisting in proposing and approving technical standards and normative instructions necessary for the development of corporate sustainability, climate change and social responsibility, in line with strategic guidelines and sectoral regulation;
- Analyzing and prospecting trends, risks and opportunities in the area of climate adaptation and mitigation, as well as carry out and make feasible studies on the assessment of climate risks in the Company's activities,
- Acting in the development and structuring of corporate policies, guidelines and procedures related to climate adaptation and mitigation in partnership with related areas and in line with the Company's guidelines, guidelines, indicators, targets and initiatives.
- Providing inputs for strategic planning in relation to climate change and propose guidelines on the subject, as well as monitor the global and local discussion of issues related to the subject, such as regulatory frameworks, formal and voluntary emissions markets, carbon pricing, taxation, etc.
- Carrying out the quantification of Cemig's GHG emissions and projects developed by the Company (energy efficiency, fuel substitution, carbon reduction projects, energy losses, etc.) to comply with legislation and corporate sustainability requirements, in addition to providing information relating to emissions from energy acquired by medium and large customers.

In 2022, the Director for Communication and Sustainability (CSO) was at the forefront of the process for submitting the emission reduction target to the SBTi and publishing the first edition of the TCFD Report.

Position or committee

Sustainability committee

Climate-related responsibilities of this position

Integrating climate-related issues into the strategy
Monitoring progress against climate-related corporate targets

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

The Corporate Sustainability Committee was formalized in 2019. The Company formalized the creation of its Corporate Sustainability Committee, with the purpose of consolidating the integration of corporate sustainability in the management process, proposing policies, guidelines, actions, plans and projects, in addition to the strategic initiatives focused on its contribution to sustainable development.

The Committee reports directly to the Board of Directors and is composed by representatives and their respective alternates from all the company's boards that monitor and anticipate market trends and practices related to corporate sustainability, as well as issues associated with climate change, proposing actions and initiatives that take advantage of opportunities or that reduce exposure risks and relevant impacts on the Company. The Committee has an advisory nature, but as it is linked to the main directorates of the Company, it has great influence on decision-making.

As it is a priority issue for the Corporate Sustainability Committee, in 2022, the topic of energy losses was on the agenda. Losses impact the safety of the population with clandestine connections, the environment with greenhouse gas emissions, the Company's results with unearned revenue and operational inefficiency, and customers with regard to the quality of energy supply. The solution has been the implementation of a technological solution for the installation of smart meters that perform remote operation in the Metropolitan Region of Belo Horizonte, thus avoiding displacements and fuel consumption, in addition to bringing other benefits such as speed of service. By December 2022, 235,426 meters had been replaced in the region. Another initiative is through the installation of the BTzero network, which aims to eliminate the risk of accidents of electrical origin, increase safety for communities, reduce electrical energy losses and act in energy efficiency actions aimed at conscious energy consumption.

Position or committee

Environment/ Sustainability manager

Climate-related responsibilities of this position

Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Reporting line

Risk - CRO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

The Sustainability Management carries out a survey and assessment of Cemig's risks and opportunities in the face of climate change, as well as their respective monitoring, always working jointly with the Corporate Wealth Management Management and other related areas (Energy Efficiency Management, Management and Control of Measurement and Commercial Distribution Losses, Energy Planning and Water Resources Management) in all stages of the process, through the integrated approach that guides Cemig's risk management. In order to ensure that risks, especially priority ones, are under proper management, monitoring is carried out at least twice a quarter depending on the criticality of the risk.

In 2022, as part of the planned actions to monitor issues of regulatory change, the Sustainability Management has also been participating in associations dedicated to dealing with this topic, such as the Global Compact and the Federation of Industries of the State of Minas Gerais, in the context of the Grupo Working Group on Climate Change and the Belo Horizonte Municipal Committee on Climate Change and Eco-Efficiency.

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 | <p>Cemig encourages the management of issues related to climate and water resources through targets and results reflected in financial rewards, linked to employees' variable compensation. Since 2021, this compensation includes corporate indicators (25%) and area-specific indicators (75%). It also includes nergy supply quality indicators: the Equivalent Duration of Interruption per Consumer Unit. Another indicator is the amount of Energy Impacted by the Physical Guarantee Reduction Mechanism (often not generated due to variations in the climate regime in the hydrographic basins).</p> <p>Another indicator considered in the incentive policy is the ISUSTENT, which measures Cemig's participation in the main Sustainability Ratings in Brazil and the world, such as the ISE B3, CDP, DJSI and Carbon Efficient Index, with an impact on the PLR of the Sustainability Management (DCS/SE).</p> |

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

Chief Sustainability Officer (CSO)

Type of incentive

Monetary reward

Incentive(s)

Profit share

Performance indicator(s)

Energy efficiency improvement

Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

The Director of Corporate Communications and Sustainability (CSO), as well as the Sustainability Management (DCS/SE), have as one of their main attributions the continuity of participation in the main market indices, sustaining a good performance over the years. In order to encourage and reward the search for better performance, Cemig defined performance in the indices as a factor in the Company's profit sharing.

In addition, like the rest of the company, the CSO and Sustainability Management also participate in incentives associated with improving energy efficiency.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Cemig has assumed a series of environmental commitments that are complementary and that help to strengthen and guide its goals in terms of climate, water resources and biodiversity. Participation in the main market indices is one of these strategies that contributes to the transparency of continuity and due monitoring of the indicators that attest not only to the company's financial health but also to the concern with the ESG agenda.

By giving visibility to its results through the various reports and evaluations on a consistent and periodic basis, Cemig seeks to ensure the maintenance and evolution of best practices. The same happens in terms of energy efficiency, the core of the Company's services, which results in customer satisfaction and improved use of resources.

Therefore, the incentives linked to the aforementioned indicators function as a reward for the success achieved in the initiatives established in the Company's planning and as an incentive for the short, medium and long-term goals to continue to be achieved.

Entitled to incentive

All employees

Type of incentive

Monetary reward

Incentive(s)

Profit share

Performance indicator(s)

Energy efficiency improvement

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

The entire company shares goals associated with improving energy efficiency, the achievement of which contributes to profit sharing.

The goals concern the Quality of Energy Supply and implementation of the PDD (Distribution Development Plan) to improve Quality, aiming at reducing the following indicators: Equivalent Duration of Continuity (DEC); and Equivalent Frequency of Continuity (FEC).

The PDD is a plan that provides for investments in various macro-projects, which include environmental and operation and maintenance projects, which directly or indirectly address issues of mitigation or adaptation to climate change.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The issue of the quality of electricity supply is a core issue for the Company, as it results in customer satisfaction and improved resource management. In addition, it encourages innovation in the sector. Therefore, the monetary incentives linked to the aforementioned indicators work as a reward for the success achieved in the initiatives established in the Company's planning and stimulate that the short, medium and long-term goals continue to be achieved.

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 | As established in Cemig's Bylaws, the Annual Budget is reflected in all plans, projections, activities, strategies, investments and expenses of the Company and its wholly-owned subsidiaries, controlled companies, affiliates and consortia in which it participates, directly or indirectly. With a view to improving the Company, annually the managers and members of the committees undergo individual and collective performance assessment, observing the following minimum requirements: a) exposure of the management acts performed, regarding the legality and effectiveness of the administrative action; b) contribution to the income for the year; and, c) achievement of the objectives established in the Multi-Year Business Plan and compliance with the Long-Term Strategy and Annual Budget. |
| Medium-term | 1 | 5 | According to Cemig's Bylaws, the Company's Multi-Year Business Plan must reflect the assumptions of the long-term strategy and contain the goals of 5 (five) years. The Multi-Year Business Plan is reflected in all plans, projections, activities, strategies, investments and expenses of the Company and its wholly-owned subsidiaries, controlled companies, affiliates and consortiums in which it participates, directly or indirectly. The Plan addresses in detail, among others: (i) the Company's strategies; (ii) new investments and business opportunities; (iii) the amounts to be invested; and (iv) the rates of return and profits to be obtained or generated by the Company. |
| Long-term | 5 | 10 | In line with Cemig's Bylaws, the Long-Term Strategy contains fundamentals, goals, objectives and results to be pursued and achieved in the long term by the Company. The Long-Term Strategy is reflected in all plans, projections, activities, strategies, investments and expenses of the Company and its wholly-owned subsidiaries, controlled companies, affiliates and consortiums in which it participates, directly or indirectly. The Long-Term Strategy contains the |

| | | | |
|--|--|--|---|
| | | | Company's strategic foundations (Mission, Vision and Values) as well as the long-term strategic guidelines. |
|--|--|--|---|

C2.1b

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

Cemig defines a substantial financial or strategic impact within its risk management process in terms of the 6x6 risk matrix, which is the result of crossing the probability of risk materialization (which varies between 'Unlikely' – up to 1.5% – and 'Almost Certain' – above 75%) and the impact in financial terms (which ranges from 'Very Low' – up to R\$15 million – to 'Catastrophic' – above R\$1 billion). This methodology is in line with ISO 31000:2009 - Risk Management and the Committee of Sponsoring Organizations of the Treadway Commission – COSO standard, the main references being cited in Cemig's Corporate Risk Management Policy, instituted in December 2019 and updated in December of 2021.

While the financial impact is measured quantitatively, the probability is assessed qualitatively by each area responsible for the identified risk. An impact is considered substantial, therefore, whenever its effect in financial terms is 'Catastrophic' (regardless of probability), and will also be classified in the same way respecting a proportionality between probability versus financial impact; therefore, an 'Almost Certain' event associated with a 'Low' impact (around R\$50 million) is also understood as substantial for the Company. This classification applies to all of Cemig, including risks associated with climate change, and at all stages of the value chain. In practice, the substantial impact can result, for example, from an event that interrupts the distribution of energy in a certain region, which can have implications such as demand for local operations, fines, among other financial and even non-financial consequences. For this reason, Cemig's governance structure also provides that its Committees – such as the Corporate Risk Monitoring Committee (CMRC) – and the Board of Directors also assess risks from the perspectives of environmental and reputational impact, factors that will influence the risk response strategy.

C2.2

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

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

Cemig has structured governance to support decision-making related to risk management, subsidized by the competent levels, whether they are business areas, the Corporate Risk Monitoring Committee (CMRC), the Risk Committee of the Board of Directors, or the Executive Board Executive and Board of Directors.

The implementation of corporate risk management took place in 2003 and has been continuously improved by Cemig. This management is based on processes and is in line with the Master Plan and the Company's strategic planning, having as its main guiding element the Corporate Risk Management and Internal Controls Policy.

Cemig's current Corporate Risk Management and Internal Control Policy was updated in 2021 and its approval is the responsibility of the Board of Directors, as provided for in Cemig's Bylaws. The Board of Directors is also responsible for validating the Company's risk matrix, which is updated annually. This involvement of the Company's highest governance body with risk management demonstrates not only the relevance of the topic, but also Cemig's alignment with good Risk Management and Corporate Governance practices.

Aiming at providing senior management with information for making decisions regarding the most relevant risks and opportunities, Cemig structured a risk management process based on the guidelines established in the Risk Management and Internal Controls Policy, enabling the mapping and assessment of both strategic risks and those arising from operational activities. This process is coordinated by the Risk Management and Internal Controls Department, which provides technical support to the different areas of the Company and is structured as follows:

1. Identification:

In the risk identification activity, the area responsible for the centralized management of risks and internal controls consults the managers of the areas correlated to the identified themes, including those areas that interact with external interested parties, such as investor relations, strategic planning, sustainability and general secretariat .

Each sector, therefore, maps and reviews the risks associated with its activity, indicating the causes and classifying them according to the potential impact should the risk materialize and the probability of occurrence.

2. Rating:

After consultation with the leaders, a risk matrix proposal is presented to the CMRC, which is composed of members from different areas and which brings considerations for

improvements. Subsequently, the matrix is forwarded to the Executive Board for deliberation, which improves the product, forwarding it to the Risk Committee of the Board of Directors and to the Board of Directors. Additionally, the proposed matrix can be presented to the Board of Directors' support bodies, such as the Audit Committee and Fiscal Council.

The 6x6 risk matrix is the result of the product between the probability of the risk materializing (which varies between 'Improbable' – up to 1.5% – and 'Almost Certain' – above 75%) and the impact in financial terms (which varies between 'Very Low' – up to R\$15 million – and 'Catastrophic' – above R\$1 billion) for each of the risks considered.

As a result of this process, Cemig builds the Top Risks Matrix, covering priority risks within its strategic pillars, such as Generation, Transmission, Distribution, Commercialization, Information Technology, Institutional Regulatory and/or eventual adjustments to adapt to the current Strategic Planning.

This Top Risks classification takes place annually and, in 2022, involved all 14 Cemig Directors. A total of 40 risks were mapped, of which 30 were Top Risks (while the other 10 were categorized as compliance risks).

3. Answer:

For the risks already mapped by the Company, a response proposal is already in progress, with a status update and a review of actions in order to bring improvements or reassess the priority given to that risk. In the case of new mapped risks, a survey is made of all actions and controls to mitigate the respective risk, in a process that involves the participation of the Board of Directors, the CMRC, and the respective Boards, including the Finance Board and the Strategy Board, which play an important role in ensuring the alignment of actions and the budget.

Once the actions have been defined, they are forwarded by the respective Directors to each of the areas, which will be responsible for implementing and monitoring the actions, reporting progress periodically.

Among the risks mapped, one can highlight the Change in the Rainfall Pattern, whose process occurred as follows:

SITUATION: Cemig identified a great dependence on water resources for its operation, a resource that has been affected by climate change. The company understands that this dependence can generate substantial impacts whenever there is water scarcity. This risk was presented to the Board of Directors, in line with the process described above.

TASK: Given the importance of the topic, Cemig carried out a study to describe the risk, verify the units most exposed to it, and define mitigation measures.

ACTION: Based on the study's recommendations, Cemig identified not only actions for efficient management of the reservoir, but also the opportunity to diversify the energy matrix, expanding the generation of energy from wind and solar sources. Therefore,

Cemig determined in its strategic planning the goal of investing R\$3.2 billion in projects for Distributed Generation operation in solar parks by 2027, in addition to centralized generation projects totaling R\$18 billion in investments in solar plants and R\$6.5 billion in wind power plants by 2027.

RESULT: In 2022, as part of the matrix's diversification strategy, Cemig SIM acquired 100% of the stake in special purpose companies that owned three photovoltaic solar power plants, while Cemig GT announced the implementation of the Boa Esperança and Jusante.

Therefore, as per the example above, when it comes to opportunities, Cemig encourages the mapping process by each Board to take place in parallel with the risk identification, assessment and response process. In general, it is the ESG guidelines present in the Company's strategic planning that guide the process of identifying, evaluating and executing opportunities.

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 | <p>Considered a Top Risk for Cemig, the issue of regulatory changes is monitored annually by the Company. This risk stems from the fact that, through the National Policy on Climate Change, the Brazilian government made its contribution to the Paris agreement official, assuming a voluntary commitment through its Nationally Determined Contribution (NDC): to reduce greenhouse gas emissions greenhouse effect (GHG) emissions by 37% below 2005 levels by 2025, with a subsequent indicative contribution of reducing GHG emissions by 43% below 2005 levels by 2030.</p> <p>Currently, 100% of Cemig's installed capacity comes from renewable sources, predominantly hydroelectric. However, the strong dependence on the country's hydrological regime associated with water crises may lead to the need to carry out investments in thermoelectric plants in the medium term to supply the contracted electricity demand. If this occurs, the risk of non-compliance with legal requirements could materialize.</p> <p>Cemig seeks to implement mitigation measures related to this potential regulatory impact through the diversification of its generating matrix. The Company has medium and long-term guidelines (until 2040) to expand solar and wind generation capacity. Another way to mitigate risk is through participation in initiatives such as the Climate Action Platform of the UN Global Compact Brazil Network, which aims to align company strategies and operations with the principles of corporate</p> |

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| | | <p>social responsibility and sustainability.</p> <p>Other identified regulatory risks: In order to propose measures to encourage energy efficiency in the country, the Ministry of Mines and Energy published the National Energy Efficiency Plan (PNEf). The PNEf adopts a 10% reduction target in electricity consumption for the year 2030, referring to the consumption scenario, based on 2004. The Company considers that the reduction in demand and supply of electricity by Cemig to its consumers can influence the Company's results. One of the ways to mitigate this risk is through participation in associations such as ABRADÉE, ABRATE, AGRATE, and Cigré, of which Cemig is a member and which enables more adequate planning, since it is possible to anticipate events.</p> |
| Emerging regulation | Relevant, always included | <p>Considered a Top Risk for Cemig, the issue of carbon taxation is also monitored annually by the Company and is also motivated by the government's commitment through its NDC. The Company considers that the creation of a national carbon pricing instrument could lead to an increase in operating costs, the main potential impact of this risk.</p> <p>Currently, Cemig's electricity generation matrix is 100% renewable. However, the implementation of a carbon pricing instrument is configured as a potential risk if Cemig needs to expand electricity generation through thermal plants powered by fossil fuels, in a context of meeting demand in the midst of water scarcity.</p> <p>In quantitative terms, if only Cemig's scope 1 emissions in 2022 are considered (83,356.59 tCO₂e) and an internal carbon price of US\$20.00/tCO₂e, with the dollar exchange rate at R\$5.16, any taxation on emissions would represent an expense of R\$ 8,602,400.09 per year.</p> <p>Cemig seeks to implement measures to mitigate this potential risk by defining emission reduction targets and establishing evaluation criteria for new acquisitions considering the carbon risk in due diligence operations, immediately minimizing the probability and magnitude of the risk.</p> <p>Cemig also seeks information with a view to adapting to this risk by participating in the Working Group on Climate Change and Air Quality, which forms part of the FIEMG Business Council for the Environment (CEMA), where discussions are held on possible changes in legislation resulting from the implementation of the National Policy on Climate Change.</p> |
| Technology | Relevant, always included | <p>The accelerated technological advance is one of the risks included in Cemig's Top Risks, which considers the loss of market, customers and, consequently, reduction of income as the main potential impacts of its</p> |

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| | | <p>materialization; this if Cemig does not adequately invest in research and development, strategic partnerships, or does not keep pace with advances in terms of new technologies capable of increasing its efficiency in the provision of services.</p> <p>Cemig avoids the materialization of risk by investing in research, development and innovation, always aiming to continuously improve its processes, and consequently reduce its greenhouse gas emissions and adapt to the effects of climate change – considering the diversification of the energy matrix and the pursuit of energy efficiency.</p> <p>As part of its medium to long-term strategic planning, the Company defined the initiative to explore new technologies and opportunities, such as the smartgrid, hybrid generation, energy storage, "electric stations", digitalization, among others, with the aim of mitigating this risk and leverage the opportunities. As a way to make this strategic initiative viable, Cemig annually launches R&D notices focused on mapped opportunities.</p> |
| Legal | Not relevant, included | <p>Despite not being considered relevant to Cemig's business within the time horizons covered by the Company, the legal risks related to climate change were included in the scope of the corporate assessment of risks related to climate change, that is, the methodology developed by the Risk Management and Internal Controls maps together with other management any potential legal implications related to the Company's areas.</p> <p>Although legal issues do not represent a material topic for Cemig, it is important to highlight that the Company presents principles in its Environmental, Water and Biodiversity Policies that guide good practices in order to avoid any implications. Examples are the emphasis on complying with current environmental legislation, encouraging the participation of society and affected or interested communities in all stages of the project, and implementing programs to improve the surroundings, where communities and vulnerable areas are located.</p> |
| Market | Relevant, always included | <p>Market risks are also considered Top Risks for Cemig. The main risk identified in this context is the issue of cap-and-trade schemes. This is because the establishment of a cap-and-trade market for the trading of GHG emissions in Brazil may entail the need for greater planning on the part of Cemig with regard to meeting the specific requirements of the market, especially in relation to monitoring and emissions verification. To mitigate this risk, Cemig seeks to identify projects that generate carbon credits and long-term contracts with verifying and certifying companies, thus reducing the probability of this risk materializing for the Company.</p> |

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| | | <p>Another highlight concerns the acquisition of projects that use fossil fuels. In order to mitigate this risk, Cemig carries out internal analyzes regarding the carbon risk and its financial impact for the Company, that is, the financial risk of the undertaking in a possible future scenario of pricing of GHG emissions in Brazil.</p> <p>As a strategy to pay attention to market movements, the Company participates in the CDP Benchmark Club Program, which makes it possible to improve its internal practices and review its GHG emission reduction targets. Cemig also participates in the Working Group on Climate Change and Air Quality, which is part of FIEMG's Council of Entrepreneurs for the Environment (CEMA), where discussions are promoted on possible changes in legislation resulting from the implementation of the National Policy on Climate Change, such as the creation of a carbon pricing instrument.</p> |
| <p>Reputation</p> | <p>Relevant, always included</p> | <p>Cemig evaluates the impact of image and reputation for all its strategic risks prioritized by the Board of Directors, the so-called Top Risks. Specifically regarding the image and reputation dimension, the impact of risks can be classified into six levels, ranging from Very Low – consisting of possible exposure among sector employees, but reversible through actions to be taken by the process manager – to Critical level – characterized by compromising the image at an international level, before regulatory bodies, financial institutions, customers, society, opinion makers, market and media.</p> <p>In this scenario, Cemig may need to expand its energy supply through thermal power plants powered by fossil fuel, in case its supply of renewable energy does not meet demand. The resumption of a non-renewable source of energy would be harmful to the Company's image, which would impact the value of the brand. The materialization of this risk could result in a worsening of Cemig's sustainability indicators, reflected in the reduction of the company's score in questionnaires such as the ISE (B3's Corporate Sustainability Index) and the DJSI (Dow Jones Sustainability Index). In an extreme case, this risk could lead to Cemig not being included in the portfolios of these sustainability indices in a given year, resulting in a drop in market value and deterioration of the company's reputation among investors.</p> <p>In order to avoid this risk, Cemig invests in repowering its hydroelectric plants and seeks to implement mitigation measures related to the energy matrix by diversifying renewable energy sources. The Company has medium and long-term guidelines (until 2040) to expand solar and wind generation capacity.</p> |

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| <p>Acute physical</p> | <p>Relevant, always included</p> | <p>Damage to infrastructure is considered a priority risk given that the occurrence of heavy rains in a short period of time, accompanied by windstorms and lightning, can cause physical damage to the facilities that transport and distribute energy, leading to service interruption. In addition to being an issue that affects Cemig's relationship with its consumers, these interruptions in the supply of energy also result in an increase in Cemig's costs, as reimbursement is foreseen for consumers in these cases. With the increase in the frequency of severe weather events associated with the effects of an unfavorable microclimate typical of large urban centers, physical risks represent a material issue for Cemig and are, therefore, managed as Top Risk for the Company.</p> <p>The management methods seek to reduce, in the medium term, the magnitude of this risk through preventive adaptation measures, such as the management of urban trees (through pruning), the operation of climatological stations and meteorological radar, which predicts with greater precision the occurrence and intensity of storms, and the emergency plan with the allocation of maintenance teams to quickly restore power supply.</p> <p>Cemig also works on its distribution system (expansion, reinforcement, renovation and renovation of assets such as substations and distribution lines) in order to reduce the occurrence of physical risks. For the five-year cycle of investments, which covered the period from 2018 to 2022 in accordance with the sector's regulations, investments in excess of R\$ 6.4 billion were made, distributed among the different macroprojects. In 2022, the Company invested approximately R\$1.48 billion.</p> |
| <p>Chronic physical</p> | <p>Relevant, always included</p> | <p>Chronic physical risks are also a relevant topic included in Cemig's Top Risks. Among the weather phenomena that fall into this class, two stand out for the Company:</p> <p>Water scarcity: climate change can cause extreme rainfall and drought events, in addition to changes in the geographic distribution of these phenomena. In addition, there may be changes in the average precipitation values, modifying the amount of water that reaches the reservoirs of the plants. As Cemig's electricity production is mostly hydraulic, these changes may lead to a reduction in generation capacity. The actions taken to mitigate this risk are linked to the expansion of Cemig's operations in other regions of the country, and investments in diversifying the generation matrix, seeking solutions in other energy sources, such as solar and wind.</p> <p>Fires: the increase in average temperatures and changes in rainfall and droughts may increase some risks to the Power Transmission System,</p> |

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| | | <p>as prolonged drought conditions maximize the risk of fires. Within the right-of-way or in their vicinity, fires can cause occurrences of unavailability of transmission lines. To mitigate this risk, Cemig continuously inspects and cleans the lanes. In addition, a new system for monitoring, forecasting and warning of fires was implemented, in order to subsidize the various areas of Cemig to minimize the risks of shutdown. Another way to mitigate this risk is through investments in the Research and Development area, in projects such as the Distribution Operation Center (COD) of the future, which is a platform that facilitates the understanding of the operating scenario and the decision and the System Operation Center (COS) which aims to train and mobilize teams for interventions in extreme weather events. Another form of action to mitigate this risk was through the project Apaga o Fogo ("Put out the fire", in English), which with up to 15 minutes of detection, makes it possible to quell the beginning of the fire. In this project, supervision takes place entirely in a WEB environment, with more agility and precision. Sites with remote and autonomous cameras drastically reduce the cost of human surveillance, and in some cases even eliminate it.</p> |
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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

Acute physical

Flood (coastal, fluvial, pluvial, groundwater)

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

The occurrence of intense rains in a short period, accompanied by windstorms and lightning, can cause physical damage to the installations that transport and distribute energy, leading to unavailability and an increase in Cemig's costs as a result of reimbursement to consumers due to interruptions in the supply of energy.

These phenomena are increasingly associated with the effects of an unfavorable microclimate, typical of large urban centers. This type of event can take the indicators that measure the quality of energy supply to critical levels. Exceeding the limits of the indicators DEC (Equivalent Duration of Interruption per Consumer Unit) and FEC (Equivalent Frequency of Interruption per Consumer Unit) generates a risk for the Company. Non-compliance with the regulatory targets for quality indicators for 2 consecutive years or in the fifth year in history may lead to the opening of an expiry process for the concession by the Brazilian Electricity Regulatory Agency (ANEEL), implying the risk of loss of the concession.

To assess the effectiveness of actions and initiatives carried out in relation to energy quality, Cemig uses the DEC and FEC indicators as parameters. In 2022, approximately R\$ 62 million were paid in compensation to the customers of Cemig D (distributor) for violation of individual indicators of continuity of electricity supply (DIC, FIC, DMIC and DICRI), according to ANEEL data from February 2023.

Time horizon

Medium-term

Likelihood

Virtually certain

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)

62,669,824.24

Explanation of financial impact figure

The amount of R\$ 62,669,824.24 corresponds to technical penalty costs by the Brazilian Electricity Regulatory Agency (ANEEL) on the occasion of interruptions in the energy supply. The costs are calculated based on the violation of the system continuity indicators by the DIC (Individual interruption time per consumer unit), FIC (Individual interruption frequency per consumer unit), DMIC (maximum duration of continuous interruption per consumer unit or point of connection) and DICRI (duration of individual interruption occurred on a critical day per consumer unit or connection point). In this case, the amount of BRL 62,669,824.24 = DIC, FIC and DMIC remuneration (monthly: BRL 61,121,588.11 + quarterly: BRL 0.00 + annual: BRL 0.00) + DICRI remuneration (monthly: BRL 1,548,236.13). These values are based on the year 2022.

Cost of response to risk

1,220,000,000

Description of response and explanation of cost calculation

The response to this physical risk is carried out through actions aimed at mitigation and adaptation. The process to arrive at this configuration was as follows:

SITUATION: Cemig verified that events such as storms, with the potential to damage installations and consequently interrupt service provision, may occur more frequently and with greater intensity in certain regions of the country, according to studies of scenario analysis. This risk was understood as a priority, with the definition of the Distributor's Development Plan (PDD).

TASK: At first, actions were listed that could impact the improvement of service delivery by mitigating potential damage from intense weather events. Based on this identification, a budget projection was made for the 2018-2022 cycles, and subsequently for the 2023-2027 cycle, outlining the respective action plans.

ACTION: For the 2018-2022 cycle, Cemig invested BRL 7.8 billion in the expansion of substations, implementation of new substations, reclosers, smart meters, among other actions that allow Cemig to offer a better quality service with fewer interruptions and with a reduced response time should they occur. For the next cycle, in addition to investments on these fronts, investments are also planned in the underground network, conversion from a single-phase to a three-phase system, and in a low-voltage network, among others.

RESULT: In 2022, BRL 1.480 million were invested in PDD. Of this total investment, R\$ 1.22 million is considered related to risk mitigation, which are stratified as follows: investments in high voltage expansion and reinforcement (R\$ 906 million), renovation of the high voltage system (R\$ \$32 million), reinforcement of medium and low voltage networks (R\$126 million) and medium and low voltage network renovation (R\$159 million).

Comment

Cemig D defines, through the Distribution Development Plan – “PDD”, the prioritization of investments to be made by the Distributor, referring to the BRR – Regulatory Remuneration Base, and the respective prudent management of resources in the current tariff cycle. The goal is to increase the availability of electricity on a continuous basis, with quality, safety and in the quantity required by customers, promoting social and economic development in the concession area of Cemig D.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Emerging regulation
Carbon pricing mechanisms

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

One of the main emerging regulations related to climate change in Brazil covers carbon pricing. Cemig actively participated in the Consultative Committee of the PMR Brasil Project, which ended in December 2020 and aimed to discuss the convenience and opportunity of including the pricing of GHG emissions in the package of instruments aimed at implementing the National Policy on Changing the Climate (PNMC) in the post-2020 period. One of the sectors that have been analyzed in this context is fuel. A carbon price applied in the fuel sector would imply an increase in fossil fuel prices.

In the base year of 2022, Cemig had a total of 5,587.64 tCO₂e of biogenic emissions, considering scopes 1 and 3. In scope 1, total biogenic emissions were 1,000 tCO₂e, of which 14 tCO₂e came from oil consumption diesel in generators and natural gas in stationary sources (because it contains a percentage of biodiesel in its composition) and 986 tCO₂e due to the use of fuels by the company's fleet, given the percentage of biodiesel added to diesel, ethanol added to the mixture of gasoline, and when using pure ethanol. In Scope 3, biogenic emissions in 2022 amounted to 4,588 tCO₂e, resulting from waste generated in operations (76 tCO₂e), employee commuting (19.6 tCO₂e) and upstream transport and distribution (4,492 tCO₂e).

A tax on emissions in the fuel sector would increase the company's operating costs.

Time horizon

Medium-term

Likelihood

Likely

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)

2,769,015.36

Explanation of financial impact figure

The value of the potential impact refers to the cost of the volume of fuel added to the taxation on this fuel, considering Cemig's own fleet for the calculations.

To estimate it, 4 parameters were considered: (i) Emissions of greenhouse gases from each type of fuel (according to Cemig's 2022 inventory), where: Diesel = 986 tCO₂e (in liters: 384,101L); e Gasoline = 13.61 tCO₂e (in liters: 6.152L); (ii) Average diesel price, in 2022, of BRL 6.77/L for Diesel; and BRL 4.96/L for Gasoline (according to the annual average of the ANP); (iii) Internal carbon price (US\$ 20.00/tCO₂). (iv) Dollar quotation in 2022: R\$5.16/US\$.

Therefore, the cost of fuel alone corresponds to $R\$ 2,665,855.61 = (384,101L \times R\$ 6.77/L) + (13,204L \times R\$ 4.96)$. The cost of taxation alone would be: $R\$ 103,159.75 = (986 \text{ tCO}_2\text{e} \times US\$ 20.00/\text{tCO}_2\text{e} \times R\$ 5.16/\text{US\$}) + (13.61 \text{ tCO}_2\text{e} \times US\$ 20.00/\text{tCO}_2\text{e} \times R\$ 5.16/\text{US\$})$. In total, BRL 2,769,015.36.

As the purchase of fuel is an operating expense, it is more sensitive for the company, as its increase cannot be passed on to the product / consumer due to regulatory definitions.

Cost of response to risk

425,616

Description of response and explanation of cost calculation

SITUATION: Given the use of vehicles powered by fossil fuels, Cemig identifies a potential risk associated with the establishment of a carbon price in the country. Based on this scenario and in line with its goal of reducing greenhouse gas emissions, the Company has been adopting measures to mitigate risks and achieve its targets.

TASK: Cemig decided to evaluate its fleet of vehicles to look for viable alternatives with reduced consumption of fossil fuels.

ACTION: The Company follows a guideline that establishes that the average manufacturing date of vehicles in its fleet is less than 05 (five) years, the legal depreciation period set by the granting authority. Therefore, a periodic renewal of its fleet of vehicles was established, which guarantees a level of efficiency in fuel consumption. As part of the risk management strategy related to emissions, Cemig replaced, in 2022, vehicles in Cemig's fleet by contracting the lease of 10 Renault Zoe model electric vehicles, with a projected cost of R\$ 2,128,080.00 during the contractual period (5 years), also contributing to the reduction of emissions. The annual investment for this replacement is estimated at: $(BRL 2,128,080.00 / 5) = BRL 425,616.00$.

RESULT: Despite still representing a high cost, switching to electric vehicles makes the company less vulnerable to carbon pricing, among other advantages that a newer fleet can bring. Emissions from diesel and gasoline consumption by Cemig D and Cemig GT increased from 7,032 tCO₂e, in 2021, to 5,587 tCO₂e, in 2022, resulting in a reduction of more than 20%, according to data from Cemig's GHG Inventory.

Comment

Cemig's response mechanism to this risk focuses on reducing fossil fuel consumption.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Drought

Primary potential financial impact

Decreased revenues due to reduced production capacity

Company-specific description

Climate change can cause changes in seasonal rainfall patterns, with extreme rainfall and drought events, changes in geographic distribution and in average precipitation values, impacting the amount of water that reaches the reservoirs of the plants. As Cemig's electricity production is mostly hydraulic, these changes may lead to a reduction in generation capacity.

Historically, the Company has been experiencing the impacts of these risks over the past five years due to water scarcity in the basins where it has a hydroelectric generation project.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

1,723,100,000

Explanation of financial impact figure

A considerable risk for Cemig would correspond to 0.05% of its revenue. In this way, a significant impact of water scarcity would be relevant reaching this level, which, considering the net operating revenue, in 2022, would be equal to 0.05% * BRL 34,462,000,000 = BRL 1,723,100,000.00

Cost of response to risk

928,128,000

Description of response and explanation of cost calculation

SITUATION: Cemig identifies a great dependence on water resources for its operation, a resource that has been affected by climate change. The Company understands that this dependency can generate substantial impacts whenever there is water scarcity. This risk was presented to the Board of Directors, in line with the process described above.

TASK: Given the importance of the topic, Cemig carried out a study to describe the risk, verify the units most exposed to it, and define mitigation measures.

ACTION: Based on the study's recommendations, the Company seeks to avoid financial loss due to the reduction in the physical guarantee of PCHS and the decrease in water availability with impacts on sales. But Cemig identified not only actions for efficient management of the reservoir, but also the opportunity to diversify the energy matrix, expanding the generation of energy from wind and solar sources. Therefore, Companhia Energética de Minas Gerais (Cemig), through its subsidiary Cemig Geração e Transmissão (Cemig GT), signed a supply contract with CET Brazil, a subsidiary of the State Grid Corporation of China (State Grid), for the implementation of Boa Esperança and Downstream solar photovoltaic plants, both in Minas Gerais. The projects are budgeted at R\$ 824 million. Cemig SIM also acquired 100% of the interest in special purpose companies that own three photovoltaic solar energy plants for R\$ 100 million. In addition, Cemig has a specific organizational structure, fully dedicated to managing the purchase and sale of energy and the operational management area of the plants: the Energy Risk Management Committee – CGRE has an associated cost of R\$ 4,128,000, 00, which is calculated based on the company's costs with the tariff team and the operative management of the plants, considering eight employees in the tariff team and ten employees in the energy planning management.

RESULT: Based on these actions, Cemig has been reducing its dependence on water and exploring the wind and solar potential available in the country, investing in new technologies and generation and distribution strategies. The shares have been gaining traction in the market and giving the Company notoriety, which contributes to the reputation, financial progress, better management of water risks, and the guarantee of a sustainable energy supply, in line with the Company's objectives.

Comment

Cemig's response to this risk of water scarcity focuses mainly on the diversification of its energy matrix, in addition to continuous improvements in the management of water resources and immediate measures such as the adoption of differentiated tariff flags aimed at offsetting financial losses and also stimulating savings for consumers.

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

Participation in carbon market

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Compliance with regulatory requirements and the emergence of new international agreements can create opportunities for Cemig, since the Company, having a predominantly renewable energy matrix with low carbon emissions, shows that it is prepared in a scenario of selling credits for carbon. In 2022, the Company had 76 Hydroelectric Plants (UHEs), Small Hydroelectric Plants (PCHs) and Hydroelectric Generating Centers (CGHs), 1 photovoltaic plant and 6 wind complexes, in addition to 19 Cemig SIM solar farms. The total installed capacity was 5.78 GW.

The establishment of a cap-and-trade emission trading market in Brazil or in the world, along the lines of the CDM, for example, could position Cemig as an important supplier of emission reduction certificates. This opportunity could lead to an increase in revenue at Cemig.

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)

1,493,465.96

Explanation of financial impact figure

Cemig has the potential to generate credits under the CDM for the Guanhães Energia, SHP Cachoeirão, HPP Santo Antônio and SHP Paracambi plants. However, in all cases, Cemig does not have operational control and, therefore, credit management is not exclusive to the company, requiring alignment with the partners. Per year, at Guanhães Energia, the potential for generating credits is 44,488, 49% of which are from Cemig; at SHP Cachoeirão, totaling 34,059 credits, 49% of which belong to Cemig; at HPP Santo Antônio totals 4,015,196, 8% of which belong to Cemig; and at HPP Paracambi, it totals 38,161 credits, 49% of which belong to Cemig. In 2022, these projects were monitored, corresponding to 361,519 Cemig credits.

The financial impact was calculated based on the possibility of these credits being traded at US\$ 0.80 per credit, with the dollar quoted at R\$ 5.16. Therefore, BRL 1,493,465.96 = [(44,488 credits x 49%) + (34,059 credits x 49%) + (4,015,196 credits x 8%) + (38,161 credits x 49%)] * \$0.80 / credit * BRL 5.16 / US\$.

Cost to realize opportunity

1,200,000

Strategy to realize opportunity and explanation of cost calculation

SITUATION: Cemig, due to its core business and its ability to diversify its energy matrix, identified an opportunity to sell certificates for reducing emissions. The Company intends to implement and expand this opportunity, generating new projects and guaranteeing the certification of 100% of its clients.

TASK: Through its trained professionals, Cemig identified projects that generate carbon credits and started long-term contracts with verifying and certifying companies, thus increasing the possibility of taking advantage of this opportunity. Cemig already has pro-CDM emission reductions registered with the UNFCCC.

ACTION: In 2022, these projects were monitored (361,519 carbon credits, from Cemig). The associated costs are those related to the monitoring (R\$ 200,000.00/project) and verification (R\$ 100,000.00/project) necessary for the validation and commercialization of the credits generated by the four projects: Guanhães Energia, SHP Cachoeirão, HPP Santo Antônio and SHP Paracambi, totaling R\$1,200,000.00.

RESULT: As demonstrated, Cemig has a high potential for generating credit, which exceeds monitoring and auditing costs. With the voluntary carbon credits market already in operation in Brazil, Cemig is deepening the discussions and internal procedures to carry out the commercialization.

Comment

It is important to note that project costs are not annual and occur when audits are carried out.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Shift toward decentralized energy generation

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

In a scenario of greater corporate investments in energy efficiency aimed at reducing energy consumption and, consequently, GHG emissions, the subsidiary Cemig SIM – focused on solar energy – will possibly see an increase in demand for its services, including the implementation of projects for the use of lighting with LED technology, cogeneration, distributed generation and other energy solution services. In this context, Cemig SIM may also experience an increase in demand for consulting services for the implementation of an Energy Management System based on ISO 50001.

Through its projects, Cemig SIM makes it possible to expand the market for new Distributed Generation customers, as well as to reduce the need to inject energy into the electrical system through the sale of electrical energy. The energy generated by Cemig SIM's plants, as well as its energy efficiency projects, in addition to effective energy savings, provide a reduction in the need to inject energy into the electrical system. Demand. With the creation of the company, Cemig Sim now has more than 4,000 customers in the sector.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

14,991,680.11

Explanation of financial impact figure

In the 4th quarter of 2022, Cemig SIM represented a net profit of R\$3,499,000.00 for Cemig, which presented – as a whole – an increase of 4.6% in the volume of energy

sold when compared to the same period in 2021. Assuming that this growth continues from year to year and is reflected in Cemig SIM's potential, it would be possible to expect a total profit of R\$14,991,680.11 by 2025, this without even considering the planned expansion in Cemig SIM's projects. With the completion of the project and the maintenance of services, Cemig will achieve a long-term return on investment and will be able to rely on a more diversified energy matrix.

Cost to realize opportunity

1,000,000,000

Strategy to realize opportunity and explanation of cost calculation

SITUATION: Cemig identified an opportunity to expand its operations with solar energy in order to operate in a market with growing interest in not only reducing costs but also reducing environmental impact. By putting this opportunity into practice, Cemig also finds a way to reduce its dependence on water, diversifying its energy matrix.

TASK: Cemig SIM was created in October 2019, resulting from the merger of the operations of the companies Efficientia and Cemig GD, to operate in the distributed generation, energy efficiency and energy solutions market. In addition to the branding and marketing strategy focused on retail and the digital transformation of the electricity sector, SIM's organizational culture, with a strong innovative and technological character, is being built so that customers are always at the center of decisions.

ACTION: Cemig SIM began its expansion of solar farms, reaching a total of 18 in 2022, and plans to invest, in the period between 2023 and 2027, the equivalent of R\$ 3.2 billion in the Distributed Generation segment, with the objective of reach 50 solar farms.

RESULT: In 2022, a total investment of BRL 82 million was made in Cemig SIM, in line with the company's strategic plan, reaching 7,000 consumer units in the same year.

Comment

Cemig SIM depends on a high initial investment to complete the implementation and expansion project. However, in the long term there will be results not only in financial terms but also in terms of reducing emissions and reducing dependence on the hydraulic matrix by Cemig as a whole.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of more efficient production and distribution processes

Primary potential financial impact

Increased revenues resulting from increased production capacity

Company-specific description

Cemig invests in technological solutions with the aim of increasing its efficiency and reducing its environmental impact. In this context, Cemig is installing smart meters capable of remote operations in the Belo Horizonte Metropolitan Region. These meters allow for an increase of 17.26 kWh/month per replaced meter, and also generate billing recovery from regularization processes. Due to the possibility of remote access to meter information, it is possible to automatically perform power cut/reconnection tasks, in addition to remote collection of readings for billing, which also represents a reduction in the number of vehicle operations, reducing associated GHG emissions.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

9,100,000

Explanation of financial impact figure

The meters enable an increase of 17.26 kWh/month per meter replaced, generating R\$ 9.1 million in revenue. They generate a turnover recovery of BRL 8.8 million by correcting irregularities. There are also savings related to the reduction of vehicle operations, which reduces administrative and fuel costs.

Cost to realize opportunity

127,811,028

Strategy to realize opportunity and explanation of cost calculation

SITUATION: Cemig identified an opportunity to modernize its equipment, bringing greater efficiency in terms of measuring corrections, carrying out remote operations and, consequently, reducing staff travel.

TASK: In 2021, Cemig began replacing some meters and included the action in its medium-term plan.

ACTION: Cemig plans to invest BRL 511,244,114.25 between 2022 and 2025 in this process of implementing smart meters. On average, this investment will be BRL 127,811,028 per year. Although, at first, this value is higher than the return, in the long term the recovery of revenue and the recovery of billing compensate the investment.

RESULT: In 2022, Cemig replaced 235,426 thousand meters in the Metropolitan Region of Belo Horizonte. There was generation of R\$ 9.1 million in revenue and recovery of revenue of R\$ 8.8 million with irregularities processes.

Comment

In addition to the financial impact, through this measure the Company also avoided the emission of around 1,700 tCO₂e by carrying out operations remotely.

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a climate transition plan within two years

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future

In 2023, Cemig begins to prepare its Transition Plan together with a consultancy specializing in the topic of climate change. This plan should be in line with CDP recommendations and Transition Plan Taskforce (TPT) guidelines. The moment is opportune given that Cemig and its subsidiaries are mature enough to commit to more ambitious goals and coordinate a decarbonization process that encompasses all of the Company's scope and areas of activity.

As part of its climate trajectory, Cemig participated in the ACT-DDP project, which aims to raise the level of ambition for decarbonizing critical economic sectors, including the electricity sector. The alliance between the innovative methodologies ACT (Assessing Low Carbon Transition) and DDP (Deep Decarbonization Pathways) makes it possible to evaluate the company's decarbonization strategies in relation to national and sectoral routes consistent with the objectives of the Paris Agreement. Through the methodology, Cemig obtained a score higher than the industry average, considering the evaluated companies, which demonstrates its commitment to advancing the climate agenda.

Previously, in 2021, Cemig elaborated its Climate Change Adaptation Plan, using scenario analysis to identify the potential implications for the company's businesses and operations with the objective of mapping the main physical and transitional risks, as well as their impacts, proposing measures mitigation and adaptation.

In 2022, Cemig launched its first edition of the TCFD Report, guided by the Task Force's

recommendations in order to provide greater transparency to key information and engage the Financial Board in climate discussions, in order to ensure greater integration of the climate strategy on all fronts of the Company.

The preparation of the Transition Plan, therefore, consolidates several initiatives and lessons learned by Cemig as a starting point for a more integrated and robust set of good practices and climate targets capable of providing greater clarity to the path that the organization has already been successfully tracing.

C3.2

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

| Use of climate-related scenario analysis to inform strategy | |
|---|-----------------------------------|
| Row 1 | Yes, qualitative and quantitative |

C3.2a

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

| Climate-related scenario | Scenario analysis coverage | Temperature alignment of scenario | Parameters, assumptions, analytical choices |
|-----------------------------|----------------------------|-----------------------------------|---|
| Transition scenarios DDP | Company-wide | | The Deep Decarbonization Pathways (DDP) study centered on Brazil simulates two scenarios of GHG emissions in the country up to 2050. It provides a framework for an analysis of economic and sectoral indicators of a decarbonization trajectory aligned with the overall objective of the Paris Agreement (net zero GHG emissions by 2050). Regarding the energy sector, in the Deep Decarbonization Scenarios (DDS), Brazilian energy generation reaches almost zero net emissions by 2050. In both scenarios, hydroelectric, wind and photovoltaic are the main sources to expand its energy generation. Carbon pricing and rapid technological development in renewable energy (mainly batteries, solar and wind) are the main international enablers of the DDS. Through the ACT, it was possible to evaluate CEMIG's decarbonization curve against the DDP scenario, verifying that emissions are far below the programmed paths until 2050, with some residual emissions remaining. |
| Physical climate | Company-wide | | For the identification of physical risks, the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC) was used as a basis, |

| | | | |
|---|---------------------|--|--|
| <p>scenarios RCP 2.6</p> | | | <p>which presents four representative concentration “paths” (RCPs, in English) that point to possible futures related to the emission of greenhouse gases.</p> <p>RCP2.6 is the most optimistic among the scenarios, where the radioactive forcing reaches an apex of 2.6 W.m². It predicts a peak in CO₂ concentration of approximately 490 ppm and a decline from this value by the end of the 21st century. In this context, the increase in terrestrial temperature would be between 0.3 °C and 1.7 °C from 2010 to 2100, and the rise in sea level would be between 26 and 55 cm. However, for this scenario to happen, it would be necessary for GHG concentrations to stabilize over the next 10 years and then remove them from the atmosphere.</p> |
| <p>Physical climate scenarios RCP 4.5</p> | <p>Company-wide</p> | | <p>The RCP4.5 scenario has been one of the most used scenarios and predicts an additional 4.5 W.m² of energy to be stored and GHG emissions stabilized before 2100. In this case, the increase in Earth's temperature would be between 1.1°C and 2.6°C and sea level between 32 and 63 cm.</p> <p>In the analyzes for all scenarios, two horizons were used, for each project, namely:</p> <ul style="list-style-type: none"> - HOR_01 where projections related to the concession period of generation plants are considered - HOR_02 which considers renewal for another 30 years |
| <p>Physical climate scenarios RCP 8.5</p> | <p>Company-wide</p> | | <p>RCP8.5 is a pessimistic scenario, characterized by an accelerated pace of emissions, with no forecast of stabilization. This scenario foresees an additional energy storage of 8.5 W.m². Thus, the Earth's surface could warm between 2.6°C and 4.8°C over the century, and sea level could rise by 45 to 82 cm.</p> <p>Cemig analyzed the scenarios for the variables precipitation, temperature, humidity, wind speed and longwave radiation for five models:</p> <ol style="list-style-type: none"> a) CAMS - Chinese Academy of Meteorological Sciences – China. b) CNRM - Center National de Recherches Meteorologiques – France. c) HadGEM3 - Met Office Hadley Center – United Kingdom. d) NOAA-GFDL - National Oceanic and Atmospheric |

| | | | |
|--|--|--|---|
| | | | <p>Administration, Geophysical Fluid Dynamics Laboratory – United States of America. e) INM - Institute for Numerical Mathematics, Russian Academy of Science – Russia.</p> <p>The use of a multi-model methodology ensures the reduction of uncertainties in the responses produced, generating more accurate information for defining business strategies</p> |
|--|--|--|---|

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

Cemig, in 2021, carried out a first study considering scenario analysis to compose its Climate Change Adaptation Plan, which guided the identification of priority issues and actions that should be included in the Company's Strategic Planning, in the context of climate. In 2022, this analysis of climate scenarios was updated and disclosed in the 2022 TCFD Report, publicly available on Cemig's website.

The focal questions raised by the Company in this study have as a starting point, mainly, the recognition of its dependence on water and its performance in a sector that is responsible for a large part of the emission of greenhouse gases in the world. Therefore, the analysis of scenarios was carried out with the aim of reducing the Company's impact on the climate and identifying, within the Brazilian context, a strategy for diversifying the energy matrix.

In terms of physical risks, the main questions investigated in the study are:

- Changes in rainfall patterns and the impact on the company's hydroelectric plants;
- The impacts of heavy rains and fires on energy transmission and distribution;

With regard to transition risks, Cemig sought to investigate mainly:

- The implementation of an Emissions Trading System;
- The ambitions of the Brazilian NDC and the impact on the energy sector.

Results of the climate-related scenario analysis with respect to the focal questions

Changes in rainfall patterns and the impact on the company's hydroelectric plants: As Cemig's electricity production is mostly hydraulic, changes that tend to water scarcity can cause a reduction in generation capacity. Historically, the Company has already been experiencing the impacts of these risks in the last 05 years due to water scarcity in

the basins where it has a hydroelectric generation project. This risk is mitigated through the diversification of the electrical matrix and the implementation of improvements in the management of water resources.

Occurrence of storms and fires: Intense rains and winds cause physical damage to the installations that transport and distribute energy, leading to their unavailability. In October 2022, a strong wind hit the region known as Triangulo Mineiro and caused the collapse of eight towers on two transmission lines, interrupting the supply of energy to customers in thirteen municipalities. In addition to the winds, fires within the right-of-way or in their vicinity can also cause occurrences of unavailability of transmission lines. Consequently, Cemig must reinforce the management of preventive adaptation measures, such as the management of urban trees, operation of weather stations and meteorological radar, and preparation of fire prevention manuals.

The implementation of an Emissions Trading System: The establishment of a cap-and-trade GHG emissions trading market in Brazil may entail the need for greater planning on the part of Cemig with regard to compliance with specific regulations of the market, especially in relation to the monitoring and verification of emissions.

The ambitions of the Brazilian NDC and the impact on the energy sector: Through the National Policy on Climate Change, the Brazilian government made its contribution to the Paris agreement official, assuming a voluntary commitment through its Nationally Determined Contribution (NDC) to reduce, by 2025, greenhouse gas (GHG) emissions by 37% below 2005 levels. Subsequently, this commitment was revised considering the period up to 2030, establishing a reduction of GHG emissions by 43% below 2005. As part of the alignment with this objective, Cemig's electricity generation matrix is 100% renewable. However, the existence of a carbon pricing instrument constitutes a potential risk, in case Cemig needs to expand the generation of electricity through thermal plants powered by fossil fuels. To mitigate this risk, Cemig has been diversifying its energy matrix and identifying opportunities to reduce emissions in its value chain.

C3.3

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

| | Have climate-related risks and opportunities influenced your strategy in this area? | Description of influence |
|-----------------------|---|--|
| Products and services | Yes | Since its production of electricity is basically hydraulic, Cemig recognizes that the risks inherent to climate change can cause a reduction in generation capacity and a significant impact on energy supply. In this way, Cemig, among other risks, acts preventively, monitoring: |

| | | |
|---------------------------------|-----|---|
| | | <p>- Change in the precipitation pattern: Cemig has a specific organizational structure that supports risk management and decision-making, both in the sale and operation of assets. Cemig also participates in the Energy Reallocation Mechanism (MRE), whose purpose is to share the hydrological risks of plants in situations of high inflows and generations, which transfer energy to plants in situations of low inflows and generations.</p> <p>- Trees falling during storms: Cemig continuously inspects and cleans the easement strips of its transmission lines to maximize the safety and availability of transmission and distribution functions (always limited to the minimum removal of vegetation, avoiding cutting in places where there is no interference with transmission and distribution lines).</p> <p>- Changes in the extremes of precipitation and droughts: The management methods seek to reduce, in the medium term, the magnitude of this risk through preventive adaptation measures, such as the adequate management of urban trees through pruning, the operation of climatological stations and the meteorological radar, which more accurately predicts the occurrence and intensity of storms, and the emergency plan with the allocation of maintenance teams to quickly restore the power supply.</p> <p>- Change in consumer behavior: This risk is managed by carrying out a diagnosis of the electrical system for the need for expansion works; monitoring of operating conditions; and the reprioritization of works.</p> <p>In addition to monitoring, Cemig has also invested in diversifying its energy matrix, expanding the use of wind and solar sources in order to reduce dependence on hydroelectric plants.</p> |
| Supply chain and/or value chain | Yes | Possible losses resulting from increased intensity of winds, floods, droughts may indirectly affect the operation of Cemig's energy business, when they cause impacts on the supply chain, especially those directly involved in the implementation / maintenance of infrastructure (transmission and distribution). Cemig estimates that this impact on the value chain could occur in the medium term, and that the magnitude of the impact will be low, as the company has a supplier classification system based on social and |

| | | |
|-------------------|-----|---|
| | | <p>environmental criteria.</p> <p>Cemig constantly monitors its supply chain, maintaining a high degree of demand and care based on mapping potential risks and probabilities of occurrence, and tangible and intangible impacts, calculated in financial values, and of a strategic nature for the company .</p> <p>In addition, Cemig seeks to align suppliers and contractors with its vision of sustainability, its commitments and corporate values. Among these business values, Cemig includes the Commitment to Climate Change in its Procurement Policy.</p> <p>A strategic decision by Cemig influenced by the climate issue is the application of a socio-environmental questionnaire to suppliers (started in 2019). The questionnaire, called Industrial Technical Assessment, must be answered by both new suppliers and those already contracted by Cemig, as a form of periodic assessment. The content contains several questions, including some related to the environment (monitoring of GHG emissions and GHG reduction targets). In addition, a climate change booklet was made available on the supplier portal in 2021.</p> |
| Investment in R&D | Yes | <p>Cemig seeks to implement mitigation and adaptation measures by investing in research, development and innovation, always seeking to continuously improve its processes, reduce its greenhouse gas emissions and prepare for the effects of climate change – considering energy alternatives and energy efficiency.</p> <p>The company defined the medium and long-term strategic initiative to explore new technologies and opportunities such as smartgrid, hybrid generation, energy storage, "power stations", digitalization, among others, with the aim of mitigating this risk and leveraging opportunities. As a way to make this strategic initiative viable, Cemig annually launches R&D notices focused on mapped opportunities.</p> |
| Operations | Yes | <p>Cemig promotes a series of initiatives that enable the accurate management of possible impacts related to climate change on its operations, among which the following stand out:</p> <ul style="list-style-type: none"> - Hydrometeorological Monitoring: Preventively, it invests in practices that position it in a situation of greater security in the face of the various possible scenarios, using modern |

| | | |
|--|--|--|
| | | <p>techniques and equipment, such as the Storm Location System, Telemetry and Hydrometeorological Monitoring System, mathematical models for hydrological simulation and weather and climate forecast.</p> <p>- Dam Safety: The process aimed at guaranteeing the safety of dams operated and maintained by Cemig uses, in all its stages, a methodology supported by the best national and international practices, also complying with Federal Law 12.334/2010, which establishes the National Dam Safety Policy, and its associated regulation (Normative Resolution No. 696/2015 of the Brazilian National Electric Energy Agency – ANEEL). In this context, field inspection procedures, collection and analysis of instrumentation data, preparation and updating of dam safety plans, planning and monitoring of maintenance services, analysis of results and classification of civil structures are covered. Based on the classification of structures, the frequency of safety inspections and the monitoring routine are established. The vulnerability of each dam is automatically calculated on a continuous basis and monitored by the Dam Safety Specialist System (Inspector).</p> <p>- Distribution Development Plan: The PDD consists of carrying out undertakings linked to the electric power system, associated with the expansion, reinforcement, and renovation of Cemig D's assets, such as substations and distribution lines.</p> |
|--|--|--|

C3.4

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

| | Financial planning elements that have been influenced | Description of influence |
|-------|---|--|
| Row 1 | Revenues Indirect costs Capital expenditures Acquisitions and divestments Access to capital | REVENUES: Risks: Electricity generation by Cemig is predominantly hydraulic. In 2022, the Company had 76 Hydroelectric Plants (UHEs), Small Hydroelectric Plants (PCHs) and Hydroelectric Generating Centers (CGHs). Therefore, a reduction in rainfall, which can be caused by climate change, affects the volume of water stored in reservoirs, leading to a reduction in energy generation capacity. That is, the risks inherent to climate change can increase the exposure of generators in the short- |

| | |
|-------------------------------|---|
| <p>Assets Liabilities</p> | <p>term market, due to a significant reduction in energy supply, with an impact of high magnitude.</p> <p>This situation may directly affect the Company's billing, and even give rise to the possibility of legal actions for any damages caused. Accidental interruption of transmission lines, due to extreme weather conditions, can cause a reduction in energy availability, with a direct impact on billing, as well as on distribution lines, causing interruption in energy supply.</p> <p>Opportunity: the increase in average temperatures may lead to an increase in the use of electrical air conditioning and refrigeration equipment, with an impact on energy demand and increased revenue.</p> <p>INDIRECT COSTS:</p> <p>Risks: Any reduction in the volume of average rainfall resulting from climate change could affect the volume of water stored in the reservoirs and, consequently, reduce the capacity for generating energy by hydroelectric plants. With this, the National Electric System increases energy generation by thermoelectric plants, whose operating cost is higher, leading the System to operate with higher prices.</p> <p>In addition, extreme weather conditions can cause breakdowns in transmission lines and substations, causing additional equipment maintenance/rebuild costs.</p> <p>Regulatory changes may increase costs if they determine an increase in taxation on energy generation, transmission and/or distribution activities.</p> <p>Opportunity: encouraging wind and/or photovoltaic generation can lead to an increase in energy generation capacity from clean sources that do not depend on the hydraulic component, reducing the need for energy dispatch by means of thermoelectric plants by the National Electric System Operator (ONS) and, therefore, reducing costs. operational costs.</p> <p>The company was impacted in years of low rainfall, as occurred in 2014 and 2017. As a countermeasure, the Energy Reallocation Mechanism ("MRE") mitigated part of the impact of the variability in the generation of hydroelectric plants. When all the plants generate below the required value, the mechanism reduces the available energy of the plants causing a negative exposure in the short-term market and, consequently, the need to purchase energy at the Price of Settlement of Differences - PLD. In years of very critical hydrology, the available energy reduction factor can compromise more than 20% of the available energy of the hydroelectric plants, being, therefore, of high magnitude.</p> <p>CAPITAL EXPENDITURE</p> <p>Risk: Climate changes determine the need for the Company to make</p> |
|-------------------------------|---|

| | |
|--|--|
| | <p>additional investments in maintaining and improving the distribution network. The Distribution Development Program (PDD) contributes to the mitigation of this risk, in addition to providing service to the increased demand resulting from the vegetative growth of the population. The company considers the magnitude of this impact to be medium.</p> <p>Opportunity: The investment in improving the distribution network involves the implementation of new, more efficient technologies that also contribute to reducing greenhouse gas emissions indirectly, by reducing technical losses and the number of trips to local interventions. Therefore, the PDD also supports the achievement of the Company's climate targets. Another strategic guideline of the Company is to diversify its generating park, the current CAPEX plan (2023-2027) foresees an investment of BRL 13.4 billion in new projects, with BRL 3.25 billion to be invested, until 2027, in wind energy generation and BRL 1, 26 billion in solar energy, in addition to an investment of R\$ 3.2 billion in Cemig SIM, a Cemig Group company focused on innovation, energy efficiency and energy solutions. These investments support matrix diversification, an opportunity to reduce water dependence and impact on the environment.</p> <p>ACQUISITIONS AND DIVESTMENTS</p> <p>Opportunity: The uncertainty regarding the level of rainfall and, consequently, the reduction in the capacity to guarantee generation by Cemig's hydroelectric plants, give rise to the need to diversify the Company's generating complex.</p> <p>The company considers the magnitude of this impact to be low, due to the renegotiation of the hydrological risk, in addition, in 2018 the company approved the multi-annual business plan the initiative of studies of investments in wind and solar aiming at the diversification of its generating park.</p> <p>ACCESS TO CAPITAL</p> <p>Risk: In case of expansion of generation by non-renewable sources, due to periods of water scarcity, there may be an increase in the Company's GHG emissions. As a result, Cemig's performance in the sustainability indices of which it is a part could be negatively influenced.</p> <p>Opportunity: Cemig participates in several sustainability indexes and rankings, which helps to communicate the Company's sustainability practices to the market, including its actions to mitigate the effects of climate change, and thus facilitate access to capital for investors and the market financial.</p> <p>ASSETS</p> <p>Risk: Extreme weather events can result in overloading of Cemig's water reservoirs and even damage to the generating units. Cemig seeks to</p> |
|--|--|

| | | |
|--|--|--|
| | | <p>mitigate this risk with investments in dam safety (prevention) and also with the installation of a meteorological radar (disaster prevention). The magnitude of this impact is low, due to the maintenance services of its plants.</p> <p>The occurrence of extreme weather events, such as torrential rains and high-velocity winds, can also lead to falling trees and causing breakdowns in transmission and distribution lines. This risk is mitigated by pruning trees located in critical areas of the lines and strengthening transmission lines.</p> <p>Opportunity: in order to reduce the impact of climate change, Cemig's strategic guideline is the search for diversification of its energy matrix; as a result, the Company has developed expertise in renewable energy generation (mainly wind and photovoltaic), in addition to constantly evaluating new technologies through its Research and Development program.</p> <p>LIABILITIES Risk: Cemig's activities are capital-intensive. Naturally, the incorporation of generation assets to minimize the impact of climate change may cause the Company to become indebted. The magnitude of this impact is high, due to the company's high level of indebtedness.</p> |
|--|--|--|

C3.5

(C3.5) In your organization’s financial accounting, do you identify spending/revenue that is aligned with your organization’s climate transition?

| | Identification of spending/revenue that is aligned with your organization’s climate transition | Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy |
|-------|--|---|
| Row 1 | Yes, we identify alignment with a sustainable finance taxonomy | At the company level only |

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization’s climate transition.

Financial Metric

CAPEX

Type of alignment being reported for this financial metric

Alignment with a sustainable finance taxonomy

Taxonomy under which information is being reported

Other, please specify
Green Bond Standard

Objective under which alignment is being reported

Total across all objectives

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

42,100,000,000

Percentage share of selected financial metric aligned in the reporting year (%)

2.29

Percentage share of selected financial metric planned to align in 2025 (%)

17.63

Percentage share of selected financial metric planned to align in 2030 (%)

35.97

Describe the methodology used to identify spending/revenue that is aligned

Cemig's current Strategic Plan covers the period from 2023 to 2027. The calculations made consider the estimated CAPEX for the new cycle. To calculate the percentage, all of Cemig's climate-related initiatives were grouped together, such as the expansion of renewable energy, including investments in Cemig SIM; investments in education and reforestation activities; LED replacement; among other relevant ones.

In its new strategic planning, Cemig established high investments in sustainable activities, guaranteeing the expansion of the percentage share in the short term.

C3.5c

(C3.5c) Provide any additional contextual and/or verification/assurance information relevant to your organization's taxonomy alignment.

Cemig considers that activities and projects related to sustainable taxonomy - with a focus on climate change - are those that meet criteria for expanding the renewable energy matrix and reducing greenhouse gas emissions. Therefore, projects that reduce the volume of the fleet of diesel and gasoline vehicles, as well as projects to diversify wind and solar energy sources, for example, are considered in the composition of the company's green investments.

C4. Targets and performance

C4.1

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

Absolute target
Intensity target

C4.1a

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

Target reference number

Abs 1

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2023

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

Base year

2021

Base year Scope 1 emissions covered by target (metric tons CO₂e)

12,847.64

Base year Scope 2 emissions covered by target (metric tons CO₂e)

861,233.04

Total base year emissions covered by target in all selected Scopes (metric tons CO₂e)

874,080.68

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

69.4

Total emissions in target year covered by target in all selected Scopes (metric tons CO₂e) [auto-calculated]

267,468.68808

Scope 1 emissions in reporting year covered by target (metric tons CO₂e)

83,356.59

Scope 2 emissions in reporting year covered by target (metric tons CO₂e)

291,766.24

Total emissions in reporting year covered by target in all selected scopes (metric tons CO₂e)

375,122.83

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

82.253212374

Target status in reporting year

New

Please explain target coverage and identify any exclusions

Cemig is committed to reducing scope 1 and 2 GHG emissions by 69.4%, with 2021 as the base year and 2030 as the target year. Includes all Cemig issues, without exclusions.

Plan for achieving target, and progress made to the end of the reporting year

Cemig invests in the diversification of its energy matrix and in the adoption of intelligent technologies capable of supporting the reduction of direct emissions. CEMIG's current roadmap considers a series of levers for reducing emissions. Possible reduction initiatives include:

Levers - 2022 to 2027:

- Energy Efficiency Projects;
- New substation standards;

- Expansion of renewable energy sources;
- Advanced measurement infrastructure (AMI);
- Implementation of ADMS;
- Digitization and Modernization of substations;
- BT Zero;
- Automation of reclosers.

Target reference number

Abs 2

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2023

Target coverage

Company-wide

Scope(s)

Scope 3

Scope 3 category(ies)

- Category 1: Purchased goods and services
- Category 4: Upstream transportation and distribution
- Category 5: Waste generated in operations
- Category 6: Business travel
- Category 7: Employee commuting
- Category 10: Processing of sold products
- Category 11: Use of sold products

Base year

2021

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO₂e)

244.06

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO₂e)

2,726.37

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO₂e)

558.17

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

96.52

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

533.58

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

46,488.96

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

9,276,221.56

Base year total Scope 3 emissions covered by target (metric tons CO2e)

9,326,869.22

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

9,326,869.22

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

100

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

100

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

100

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

100

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

100

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

100

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

100

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

42

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

5,409,584.1476

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

3.17

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

33,012.14

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

582.98

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

328.91

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

141.09

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

0

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

4,887,785.8

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

4,921,854.09

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

4,921,854.09

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

112.4507164678

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

The goal foresees the reduction of scope 3 GHG emissions by 42%, with 2021 as the base year and 2030 as the target year. It includes all of Cemig's emissions, covering all Scope 3 categories that present emissions.

Plan for achieving target, and progress made to the end of the reporting year

CEMIG's current roadmap considers a series of levers for reducing emissions. Possible reduction initiatives include:

- Customer awareness initiatives;
- Engagement with suppliers;
- Expansion of renewable energy sources;
- Advanced measurement infrastructure (AMI);
- Digitization and Modernization of substations;
- Automation of reclosers, etc.

C4.1b

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

Target reference number

Int 1

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2022

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 3

Scope 2 accounting method

Location-based

Scope 3 category(ies)

Category 1: Purchased goods and services

Category 5: Waste generated in operations

Category 6: Business travel

Category 7: Employee commuting

Category 9: Downstream transportation and distribution

Category 11: Use of sold products

Intensity metric

Metric tons CO₂e per megawatt hour (MWh)

Base year

2021

Intensity figure in base year for Scope 1 (metric tons CO₂e per unit of activity)

0.001

Intensity figure in base year for Scope 2 (metric tons CO₂e per unit of activity)

0.056

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO₂e per unit of activity)

0.000016

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO₂e per unit of activity)

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

0.000036

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

0.000006

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

0.000034

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

0.00017

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

0.598

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)

0.599

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

0.7

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

100

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

100

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

100

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure

100

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure

100

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

100

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

69

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

69

% of total base year emissions in all selected Scopes covered by this intensity figure

72

Target year

2030

Targeted reduction from base year (%)

75.8

Intensity figure in target year for all selected Scopes (metric tons CO₂e per unit of activity) [auto-calculated]

0.1694

% change anticipated in absolute Scope 1+2 emissions

75.8

% change anticipated in absolute Scope 3 emissions

75.8

Intensity figure in reporting year for Scope 1 (metric tons CO₂e per unit of activity)

0.0046

Intensity figure in reporting year for Scope 2 (metric tons CO₂e per unit of activity)

0.016

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO₂e per unit of activity)

0.0000002

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO₂e per unit of activity)

0.000032

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO₂e per unit of activity)

0.000018

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO₂e per unit of activity)

0.0000077

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO₂e per unit of activity)

0.0018

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO₂e per unit of activity)

0.27

Intensity figure in reporting year for total Scope 3 (metric tons CO₂e per unit of activity)

0.27

Intensity figure in reporting year for all selected Scopes (metric tons CO₂e per unit of activity)

0.27

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

81.0403317

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

Scope 3 emissions are indirect and result from activities that are not directly controlled by Cemig. In the GHG Emissions Inventory, the following categories were accounted for: 'Purchased Goods and Services', 'Transport and Distribution (Upstream)', 'Waste Generated in Operations', 'Business Travel', 'Employee Commuting (Home-Work)' and 'Use of Goods and Services Sold'. Cemig presented 4,921,854 tCO₂e which represents 86% of total emissions. Gasmig is not included in this target and, for this reason, only 69% of emissions from the category 'Use of goods and products sold' in the base year are considered.

Plan for achieving target, and progress made to the end of the reporting year

CEMIG's current roadmap considers a series of levers for reducing emissions. Possible reduction initiatives include:

Levers - 2022 to 2027:

- Energy Efficiency Projects:
- New substation standards:
- Expansion of renewable energy sources:
- Advanced measurement infrastructure (AMI):
- Implementation of ADMS:
- Digitization and Modernization of substations;
- BT Zero;
- Automation of reclosers.

C4.2

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

Net-zero target(s)

Other climate-related target(s)

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number

Oth 1

Year target was set

2018

Target coverage

Company-wide

Target type: absolute or intensity

Intensity

Target type: category & Metric (target numerator if reporting an intensity target)

Other, please specify

Other, please specify

Total SF6 emitted (tCO2e)

Target denominator (intensity targets only)

Other, please specify

Total installed SF6 capacity (kg)

Base year

2019

Figure or percentage in base year

1

Target year

2027

Figure or percentage in target year

0.35

Figure or percentage in reporting year

0.5

% of target achieved relative to base year [auto-calculated]

76.9230769231

Target status in reporting year

Underway

Is this target part of an emissions target?

Yes, it is part of a comprehensive operational efficiency initiative.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

The 'Fugitive Emissions' category comprises emissions from the escape of SF6 refrigerant gases or natural gas during Cemig's operations. In 2022, total emissions were 6,314 tCO₂e, representing 8% of scope 1 emissions. Cemig D was responsible for most of the fugitive emissions, with 4,144 tCO₂e or 65% of this category. Cemig GT and SPEs (Special Purpose Entity) had the second highest share of emissions, 1,433 tCO₂e, which represents 22% of emissions in this category. Gasmig presented 738 tCO₂e of emissions, totaling 12% of Cemig's fugitive emissions, which had natural gas losses in distribution as a precursor.

Plan for achieving target, and progress made to the end of the reporting year

In 2022, there was a 50% reduction in the intensity (percentage of actual SF6 loss/total installed mass of SF6) of sulfur hexafluoride (SF6) losses, with 2019 as the base year and 2027 as the target year. In 2022, the intensity of SF6 emissions was 0.23% for a target of 0.47%. In Cemig's operations, SF6 is generated in the maintenance of energy transmission and distribution equipment, which use this gas as an insulator or to extinguish electrical arcs. In these maintenance actions, the gas that was lost due to fugitive emissions is replaced. Cemig develops practices to mitigate SF6 losses either by eliminating leaks or by eliminating losses in the maintenance process and investments in more efficient equipment.

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs1

Target year for achieving net zero

2040

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Please explain target coverage and identify any exclusions

Cemig is working to establish a net zero target. The objective is to formalize an absolute target and the commitment is to carbon neutral scopes 1, 2 and 3 in MWh by 2040, considering 2021 as the base year.

The SBTi methodology used to define this target was the Absolute Contraction method and the target does not consider Gasmig's emissions (gas distribution).

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

No

Planned actions to mitigate emissions beyond your value chain (optional)

In line with the emission reduction levers and through the development of ongoing Research and Development (R&D) solutions, Cemig is running projects such as an Agrovoltaic energy source, Hydrogen, battery storage, Fleet electrification, E -fuel, battery life cycle, photovoltaic panel life cycle. In addition, the Company has approximately 12 projects for new renewable energy generation plants (solar, wind, hydroelectric), which together with existing plants can issue Renewable Energy Certification (I-REC and Cemig-REC), to obtain emissions compensation. However, due to the SBTi criteria, emissions offsets are only valid for residual emissions, which correspond to those that cannot be reduced.

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 | 1 | 299 |
| To be implemented* | 2 | 5,106 |
| Implementation commenced* | 39 | 8,165 |
| Implemented* | 4 | 2,307.49 |
| Not to be implemented | 1 | 48 |

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
Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

200

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

Voluntary/Mandatory

Voluntary

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

0

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

103,000,000

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

The amount invested corresponds to initiatives related to Cemig's Energy Efficiency Program.

The actions of Cemig's Energy Efficiency Program that resulted in the reduction of the company's Scope 3 emissions were:

- Movimentos no Campo;
- Centro de Desenvolvimento da Tecnologia Nuclear - CDTN;
- CESAMA de Juiz de Fora;
- Instituto de São Vicente de Paulo de Cássia

Initiative category & Initiative type

Energy efficiency in production processes
Machine/equipment replacement

Estimated annual CO2e savings (metric tonnes CO2e)

59.92

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

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

0

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

1,333,501,111

Payback period

No payback

Estimated lifetime of the initiative

6-10 years

Comment

Compact, simpler, reliable and automated substations, using high-tech equipment.

Initiative category & Initiative type

Energy efficiency in production processes
Automation

Estimated annual CO2e savings (metric tonnes CO2e)

1,769

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

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

0

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

823,785,767

Payback period

No payback

Estimated lifetime of the initiative

6-10 years

Comment

Cemig is implementing a technological solution for the installation of smart meters that perform remote operations in the Metropolitan Region of Belo Horizonte, avoiding the displacement of vehicles and increasing the speed of service. 235,426 meters were replaced in the region until Dec/22.

Initiative category & Initiative type

Energy efficiency in production processes
Smart control system

Estimated annual CO2e savings (metric tonnes CO2e)

278.57

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

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

0

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

119,226,300

Payback period

No payback

Estimated lifetime of the initiative

3-5 years

Comment

The initiative consists of integrated control, operation and management system for high, medium and low voltage networks. It is the system responsible for controlling Cemig D's entire electrical system. Advanced features such as load forecasting, self-healing, distributed generation functions including generation forecasting and others are functions available in the ADMS solution. Reduces emissions by reducing no. travel with diesel-powered vehicles.

C4.3c

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

| Method | Comment |
|---|--|
| Compliance with regulatory requirements/standards | Federal Law No. 9,991/2000: establishes that 1% of the organization's net operating revenue must be allocated to financing R&D and energy efficiency programs. Thus, Cemig created Intelligent Energy, a program focused on energy efficiency, made up of several multi-annual and socio-environmental projects, which develop energy efficiency actions in low-income communities (in compliance with article 1, item V, of Law nº 9.991/2000, included by Law nº 12.212/2010) and in non-profit and philanthropic institutions. |
| Internal finance mechanisms | The replacement of the vehicle fleet uses resources from the Company's Investment Programs. Cemig has, as a guideline, that the average manufacturing date of vehicles in its fleet is less than 05 (five) years, the legal depreciation period set by the granting authority. Therefore, the Company annually renews its fleet of vehicles. |
| Dedicated budget for low-carbon product R&D | <p>Cemig's Research and Development (R&D) Program aims to encourage the constant search for innovations and to face the technological challenges of the electricity sector. In this context, Law 9,991/2000 establishes that concessionaires and permission holders for the distribution, generation and transmission of electric energy apply, annually, part of their net operating revenue in the Program for Research and Development of the Electric Energy Sector, regulated by Aneel.</p> <p>To ensure the application of this resource, Cemig periodically publishes notices to attract projects in different lines of action. The lines of climate change-related projects include: Alternative sources, distributed and decentralized generation; Basin management and</p> |

| | |
|---|---|
| | energy planning; Measurement, billing and commercial losses; and Environment. |
| Dedicated budget for other emissions reduction activities | Within the Distribution Development Program (PDD), there is a budget dedicated to reducing Cemig's electrical losses in the system and initiatives to reduce emissions by Cemig and the national electrical system. |
| Internal price on carbon | <p>Cemig assesses the risk of increased carbon emissions in its energy matrix and the financial impact of this increase by carrying out environmental due diligence and sensitivity analysis, regarding the acquisition of new ventures for decision-making regarding the expansion of its business .</p> <p>The method used to define the price of carbon is the comparison with national peers and participation in relevant GTs that deal with the subject, the potential regulation of the market and the related risks.</p> |
| Other Geração distribuída | <p>In 2012, ANEEL Normative Resolution No. 482/2012 came into effect, which establishes the general conditions for access by microgeneration and distributed minigeneration to electricity distribution systems through the means of electricity compensation. As a result, Brazilian consumers are now able to generate their own electricity from renewable sources and supply the surplus to their local power grid. These are innovations that combine financial savings, socio-environmental awareness and self-sustainability.</p> <p>In general, the presence of small generators close to the loads can provide several benefits for the electrical system and utilities, among which the following stand out:</p> <ol style="list-style-type: none"> 1. the postponement of investments in expansion of the distribution and transmission systems; 2. low environmental impact; 3. improvement of the grid voltage level during the period of heavy load; 4. increasing the source's energy efficiency by reducing electricity production and transmission losses; 5. diversification of the energy matrix; It is 6. favoring the creation of new business models applicable to the electricity sector. <p>Cemig, which is a forerunner in the distributed generation process and aligned with the development of technology, connected the first electricity microgeneration unit in Brazil in September 2012, the same year that ANEEL created the Electricity Compensation System. Since then, Cemig has been leading the market for distributed generation connections in the country.</p> |

| | |
|-----------------------|---|
| <p>Other RECs</p> | <p>Cemig has been working with Renewable Energy Certificates (RECs), having included the RECs issued in the year in the 2020 GHG inventory. The RECs aim to prove that the energy comes from renewable sources (hydroelectric, wind, photovoltaic, biomass) and allow the accounting and tracking of energy ballast.</p> <p>As a form of control, a REC that has been sold once cannot be sold again. All certificates receive unique numbers for identification and also include various information such as: the renewable source, place of generation, date of generation, quantity sold, property to which it was assigned. Each REC is equivalent to 1 MWh.</p> <p>In addition to the I-REC, Cemig developed its own renewable energy certificate, the Cemig REC. It complies with international standards, such as the GHP Protocol and CDP, and ensures that the Company's energy is renewable, which is done through its own controls and a methodology proposed by a specialized consultancy. With this certificate, companies can guarantee that the energy they consume comes from renewable sources.</p> <p>CEMIG REC started in 2020 as a pilot project, free of charge, and is currently expanding. In line with its strategic guidelines, Cemig has been expanding the commercialization of Cemig RECs and I-RECs. In 2022, 1,423,007 I-RECs and 1,795,939 Cemig RECs were sold, from the Emborcação, Nova Ponte and Três Marias HPPs.</p> |
|-----------------------|---|

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

The IEA Energy Technology Perspectives Clean Energy Technology Guide

Type of product(s) or service(s)

Power

Other, please specify

Energy production from renewable sources: wind, solar and hydro

Description of product(s) or service(s)

Cemig has 100% of its installed capacity for generating energy from renewable sources: wind, solar and hydroelectric. By generating renewable energy, Cemig replaces the generation of energy that would occur from fossil sources.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

Own methodology

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Not applicable

Functional unit used

Not applicable.

Reference product/service or baseline scenario used

The baseline scenario used would be energy production from non-renewable sources. The calculation of avoided emissions considers the emission factor of the interconnected system as a combination of the operating margin emission factor, which reflects the intensity of CO₂ emissions from energy dispatched at the margin, with the build margin emission factor, which reflects the intensity of CO₂ emissions from the last plants built.

Life cycle stage(s) covered for the reference product/service or baseline scenario

Not applicable

Estimated avoided emissions (metric tons CO₂e per functional unit) compared to reference product/service or baseline scenario

778,523.48

Explain your calculation of avoided emissions, including any assumptions

Energy generation from renewable sources:

1- The initiative allows for the reduction of Scope 2 for consumers who purchase energy directly from Cemig through the Free Energy Market;

2- By injecting renewable energy into the national electrical system, Cemig promotes the reduction of the emission factor of this system, benefiting all energy consumers connected to the grid. In 2022, 18,275,199.00 MWh of energy were generated from renewable sources (hydraulics + wind + solar), considering only the plants that Cemig has operational control;

3- It is estimated that the generation of renewable energy, in 2022, avoided the emission of 778,523.48 tCO₂ (18,275,199.00MWh*0.0426tCO₂/MWh). For the calculation, it is considered that the generation of renewable energy by Cemig avoided the generation of energy by thermal source in the grid of the National Interconnected System. Therefore, the average emission factor of the National Electric System (SIN) was used for the year 2022 (0,0426tCO₂/MWh, ref. May/23), calculated for GHG inventories by the MCTIC (Ministry of Science, Technology, Innovations and Communications).

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

87.5

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Power

Other, please specify

Distributed generation services

Description of product(s) or service(s)

Cemig SIM was launched in 2019 to operate in the shared energy market, through distributed generation based on a new model of partnerships, aimed at participating in new photovoltaic solar generation projects. In 2022, Cemig SIM ended the year selling 12,554 MWh/month from 17 photovoltaic generation plants located in the municipalities of Bonfinópolis, Brasilândia, Corinto, Janaúba, Lagoa Grande, Lontra, Manga, Mato Verde, Mirabela, Porteirinha, Prudente de Moraes e Lavras, in Minas Gerais, totaling 10,935 MWh/month since its inauguration in 2019. With investments in innovation and efficiency, the company reached 7,000 residential and commercial customers in the last year.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

Metodologia própria

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Not applicable

Functional unit used

Not applicable

Reference product/service or baseline scenario used

The baseline scenario used would be energy production from non-renewable sources. The calculation of avoided emissions considers the emission factor of the interconnected system as a combination of the operating margin emission factor, which reflects the intensity of CO₂ emissions from energy dispatched at the margin, with the build margin emission factor, which reflects the intensity of CO₂ emissions from the last plants built.

Life cycle stage(s) covered for the reference product/service or baseline scenario

Not applicable

Estimated avoided emissions (metric tons CO₂e per functional unit) compared to reference product/service or baseline scenario

5,491.14

Explain your calculation of avoided emissions, including any assumptions

Cemig Intelligent Energy Solutions – Cemig SIM:

1- This initiative allows the reduction of Scope 2 of third parties, since it reduces the electricity consumption of the national electrical system of its customers;

2 - This type of generation allows consumers to generate their own energy and, when they contract Cemig SIM, they begin to obtain energy credits from the Company's solar farms;

3 – The energy generated and compensated for Cemig SIM customers in 2022 reached an amount of 128,900MWh. Considering the average annual factor of the SIN (0.0426 MWh/CO₂), avoided emissions correspond to 5491.14tCO₂e.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

17.4

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Power

Other, please specify

Natural gas

Description of product(s) or service(s)

Gasmig, a subsidiary of Cemig, is the exclusive distributor of natural gas throughout the entire territory of Minas Gerais.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify
Own methodology

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Not applicable

Functional unit used

Not applicable

Reference product/service or baseline scenario used

Not applicable

Life cycle stage(s) covered for the reference product/service or baseline scenario

Not applicable

Estimated avoided emissions (metric tons CO₂e per functional unit) compared to reference product/service or baseline scenario

3,314,239,139.48

Explain your calculation of avoided emissions, including any assumptions

Natural gas - Gasmig:

1- This initiative allows third parties to reduce Scope 1, as it allows their customers to consume fossil fuel with a lower GHG emission factor;

2- Gasmig's investment, in 2022, was around R\$ 55.5 million in assets, mainly in the expansion of its Natural Gas Distribution Networks in the State of Minas Gerais;

3 - Gasmig monitors the amount of natural gas supplied to the sectors it serves (residential, commercial, industrial and vehicular), with the Company increasing the number of customers by 16% in 2022, reaching 82,582 consumers;

4 - In 2022, Gasmig sold 1,105,483,000.00 m³ of natural gas. Applying the corresponding emission factor, approximately 2,209,860.52tCO₂e are emitted. Considering the same volume of fuel oil, emissions would be equivalent to 3,316,449,000 tCO₂e. On these bases, avoided emissions correspond to 3,314,239,139.48 tCO₂e.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

13.1

C-EU4.6

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

Cemig's total CH₄ emissions in 2022 were equivalent to 765.44 tCO₂e (Scope 1), which represented 4.11% of total Scope 1 emissions.

Cemig manages the potential risk of leakage in its natural gas distribution operations and, therefore, the emission of methane, the main component of gas. To identify possible natural gas leaks and reduce the volume of fugitive gas, which is considered a technical loss in the distribution operation, Gasmig monitors the network pressure remotely using data loggers. Additionally, natural gas is artificially odorized to facilitate the identification of leaks by the local population and the Fire Department. Gasmig has a 24-hour telephone call center so that leak detections can be reported.

Gasmig has a cathodic protection system associated with an external polyethylene coating structure, which offers mechanical and anti-corrosive protection to the pipeline. By preserving the integrity of its gas pipelines, the Company is making efforts to reduce methane emissions from its activities.

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

| Change(s) in methodology, boundary, and/or reporting year definition? | |
|---|----|
| Row 1 | No |

C5.2

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

Scope 1

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

12,847.64

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. In 2021, total Scope 1 emissions amounted to 12,847.64 tCO₂e.

Scope 2 (location-based)

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

861,233.04

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. In 2021, total Scope 2 emissions amounted to 861,233.04 tCO₂e.

Scope 2 (market-based)

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

0

Comment

The market-based approach is not applied to the Company.

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

244.06

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. In 2021, total Scope 3: Purchased goods and services emissions amounted to 244.06 tCO₂e.

Scope 3 category 2: Capital goods

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

0

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. Since the beginning of the elaboration of the inventories, Scope 3: Capital goods category do not apply to the context of Cemig's emissions, totaling zero emissions.

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

0

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. Since the beginning of the elaboration of the inventories, SScope 3: Fuel-and-energy-related activities (not included in Scope 1 or 2) do not apply to Cemig's emissions context, totaling zero emissions.

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

547.54

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. In 2021, Scope 3: Upstream transportation and distribution emissions amounted to 547.54 tCO2e.

Scope 3 category 5: Waste generated in operations

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

558.17

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. In 2021, Scope 3: Waste generated in operations emissions totaled 558.17 tCO2e.

Scope 3 category 6: Business travel

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

846

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. In 2021, Scope 3: Business travel emissions totaled 846.00 tCO₂e.

Scope 3 category 7: Employee commuting

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

590.71

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. In 2021, Scope 3: Employee commuting emissions totaled 590.71 tCO₂e.

Scope 3 category 8: Upstream leased assets

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

0

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. Since the beginning of the elaboration of the inventories, Scope 3: Upstream leased assets do not apply to Cemig's businesses, totaling zero emissions.

Scope 3 category 9: Downstream transportation and distribution

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

13,241

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. In 2021, Scope 3: Downstream transportation and distribution emissions amounted to 13,241.00 tCO₂e.

Scope 3 category 10: Processing of sold products

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

0

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. Since the beginning of the elaboration of the inventories, Scope 3: Processing of sold products do not apply to Cemig's businesses, totaling zero emissions.

Scope 3 category 11: Use of sold products

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

9,276,221.56

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. In 2021, Scope 3: Use of sold products emissions amounted to 9,276,221.56 tCO₂e.

Scope 3 category 12: End of life treatment of sold products

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

0

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. Since the beginning of the preparation of inventories, Scope 3: End of life treatment of sold products emissions do not apply to Cemig's businesses, totaling zero emissions.

Scope 3 category 13: Downstream leased assets

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

0

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. Since the beginning of the elaboration of the inventories, Scope 3: Downstream leased assets emissions do not apply to Cemig's businesses, totaling zero emissions.

Scope 3 category 14: Franchises

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

0

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. Since the beginning of the elaboration of the inventories, Scope 3: Franchises emissions do not apply to Cemig's businesses, totaling zero emissions.

Scope 3 category 15: Investments

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

0

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. Since the beginning of the elaboration of the inventories, Scope 3: Investments emissions do not apply to Cemig's businesses, totaling zero emissions.

Scope 3: Other (upstream)

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

0

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. Since the beginning of the preparation of inventories, other upstream emissions have not been applied to Cemig's businesses, totaling zero emissions.

Scope 3: Other (downstream)

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO₂e)

0

Comment

The base year was established considering the Company's new targets, which mostly use 2021 as a reference. In addition, all scopes and categories were included in the calculations this year. Since the beginning of the preparation of inventories, other downstream emissions do not apply to Cemig's businesses, totaling zero emissions.

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Brazil GHG Protocol Programme
IPCC Guidelines for National Greenhouse Gas Inventories, 2006
ISO 14064-1
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)

83,356.59

Start date

January 1, 2022

End date

December 31, 2022

Comment

Scope 1 aggregated direct emissions from the categories 'Stationary Combustion', 'Mobile Combustion', 'Fugitive Emissions' and 'Agricultural Activities and Change in Land Use'. In the year 2022, Cemig's emissions from this scope represented 83.356,59 tCO₂e or 2% of total emissions.

Past year 1

Gross global Scope 1 emissions (metric tons CO₂e)

12,847.64

Start date

January 1, 2021

End date

December 31, 2021

Comment

In 2021, the Mobile Combustion source had the highest emissions with 8,956.83 tCO₂e, compared to the other categories in Scope 1, followed by Fugitive Emissions with a value of 3,688.06 tCO₂e, Stationary Combustion with 114.27 tCO₂e, agricultural activities with 46.98 tCO₂e and change and land use representing emissions of 41.5 tCO₂e.

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)

11,419.36

Start date

January 1, 2020

End date

December 31, 2020

Comment

The Mobile Combustion source had the highest contribution compared to the other Scope 1 categories with an emission of 7,927.83 tCO₂e, with a reduction of 12.57% compared to 2019. Within this category, diesel consumption in the own fleet is responsible for 6,649.73 tCO₂e. The Stationary Combustion category presented an emission of 198.43 tCO₂e, which corresponds to a reduction of approximately 37 thousand tCO₂e compared to 2019 due to the decommissioning of UTE Igarapé, which was previously the main responsible for Cemig's Scope 1 emissions.

Fugitive category emissions correspond to 3,262.22 tCO₂e, mainly derived from SF₆ exhaust (2,953.51 tCO₂e), with a reduction of 40.44% compared to 2019 due to good practices and also to the contribution of the corporate management procedure of SF₆ emissions prepared in 2020. Land use change emissions are the least representative of Scope 1, with only 30.88 tCO₂e.

Past year 3

Gross global Scope 1 emissions (metric tons CO2e)

51,938.63

Start date

January 1, 2019

End date

December 31, 2019

Comment

Stationary Combustion emissions made the main contribution compared to the other Scope 1 categories with emissions of 37,582.05 tCO₂e. Within this category, fuel oil consumption at TPP Igarapé was responsible for 37,210.91 tCO₂e. Compared to 2018, this category showed a 75% increase in emissions. This happened to consume all the fuel oil in stock at the Plant, since it ended its operations in 2019. Emissions from Mobile Combustion totaled 9,068.00 tCO₂e, mainly associated with diesel consumption in the fleet (8,026 tCO₂e). Fugitive emissions category correspond to 5,239.42 tCO₂e, mainly derived from SF₆ exhaust (4,958 tCO₂e). On the other hand, emissions from land use change have the lowest representativeness of Scope 1, with only 49.16 tCO₂e.

Past year 4

Gross global Scope 1 emissions (metric tons CO2e)

35,568.42

Start date

January 1, 2018

End date

December 31, 2018

Comment

In 2018, stationary combustion emissions were mainly associated with oil consumption at the Igarapé TPP, with an emission of 21,220.24 tCO₂e (representing 99.0% of emissions in this category).

Despite being the main source in 2018, fuel oil emissions decreased by 35% compared to the previous year. Emissions from stationary combustion made the biggest contribution compared to the other categories, with a representativeness of 60.3% within Scope 1, but they reduced by 36.8% compared to 2017.

Emissions from Mobile Combustion accounted for 25.1% of Scope 1 emissions, being mainly associated with the consumption of Diesel in the own fleet (7,186 tCO₂e). Emissions in the Fugitive category were mainly derived from SF₆ exhaust in the transmission and distribution systems, with this precursor having a share of 96.7% in the total emissions of this category.

Agricultural emissions showed low representativeness, as fertilizer emissions are associated with secondary activities in energy generation (below 0.2% of Scope 1 emissions).

Past year 5

Gross global Scope 1 emissions (metric tons CO₂e)

48,849

Start date

January 1, 2017

End date

December 31, 2017

Comment

Scope 1 emissions in 2017 were: 10,048 tCO₂e from the fleet of vehicles, boats and aircraft; 4,781 tCO₂e, from fugitive emissions of SF₆ gas, present in electrical equipment; 33,846 tCO₂e from the Igarapé Thermal Power Plant; 25 tCO₂e from the use of emergency generators; 70 tCO₂e from the use of forklifts and autoclaves; 78 tCO₂e from the use of fertilizers; and 1 tCO₂e, from the use of soda ash (Na₂CO₃) for water treatment at Igarapé TPP.

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

For companies in the electricity sector that have generation and distribution businesses like Cemig, it is not possible to buy energy from other suppliers, therefore, it is not possible to account for emissions based on the market.

C6.3

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

Reporting year

Scope 2, location-based

291,766.24

Start date

January 1, 2022

End date

December 31, 2022

Comment

Scope 2 aggregates indirect emissions related to 'Electric Energy Consumption' and 'Losses in Generation, Transmission and Distribution Systems'. In 2022, emissions related to scope 2 were 291,766.24 tCO₂e, representing 5.1% of total emissions.

Past year 1

Scope 2, location-based

861,233.04

Start date

January 1, 2021

End date

December 31, 2021

Comment

The Transmission and Distribution Losses category represented 856,525.09 tCO₂e and was responsible for 99.45% of Scope 2 GHG emissions.

Past year 2

Scope 2, location-based

448,083.44

Start date

January 1, 2020

End date

December 31, 2020

Comment

In 2020, the category Transmission and distribution losses, accounted for 99.47% of emissions in scope 2. The remaining emissions are due to own consumption of electricity.

Past year 3

Scope 2, location-based

598,518.28

Start date

January 1, 2019

End date

December 31, 2019

Comment

CEMIG's Scope 2 emissions in 2019 totaled 598,518.28 tCO₂e, representing an increase of 15.50% compared to the previous year (in 2018, 518,212 tCO₂e). In terms of Transmission and Distribution Losses (which corresponds to 99.47% of Scope 2 emissions), there was an increase of approximately 15.56% in 2019 compared to the previous year, mainly due to the refinement of data with greater monthly accuracy . There was also a 1.35% increase in the average grid emission factor compared to the previous year (0.0740 tCO₂e/MWh in 2018 vs 0.0750 tCO₂e/MWh in 2019).

Past year 4

Scope 2, location-based

518,279.63

Start date

January 1, 2018

End date

December 31, 2018

Comment

Cemig's scope 2 emissions in 2018 totaled 518,212.79 tCO₂e, representing a reduction of 22.0% compared to the previous year (in 2017, 664,413 tCO₂e) and a reduction of 39.6% compared to the base year (in 2014, 858,014 tCO₂e). In terms of Transmission and Distribution Losses (which represents 99.4% of Scope 2 emissions), there was a reduction of approximately 2.2% in 2018 compared to the previous year. In addition, in 2018 there was also a 20% reduction in the average grid emission factor compared to the previous year (0.0927 tCO₂e/MWh in 2017 vs 0.0742 tCO₂e/MWh in 2018). These two factors justify the 22% reduction in GHG emissions in Scope 2 (comparing 2018 with 2017).

Past year 5

Scope 2, location-based

664,413

Start date

January 1, 2017

End date

December 31, 2017

Comment

Of the total Scope 2 emissions in 2017, 0.6%, equivalent to 4,059 tCO₂e, resulted from energy consumption, and 99.4%, equivalent to 660,354 tCO₂e, resulted from total losses.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 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

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

3.17

Emissions calculation methodology

Spend-based method

Site-specific method

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

0

Please explain

The 'Purchased Goods and Services' emission category refers to indirect emissions related to products and services that the company purchases from third parties. The category had a total emission of 3.17 tCO₂e in 2022, with only the Cemig D operating unit contributing to this result. In relation to the scope 3 total, emissions in this category represent a relatively small portion, corresponding to approximately 0.00006% of the company's total emissions in 2022.

Capital goods

Evaluation status

Not relevant, explanation provided

Please explain

In 2017, in order to restore the Company's financial balance, Cemig started a divestment program. The objective of the program is to establish an asset sale process following the following priority criteria:

- a) assets with greater liquidity;
- b) assets that do not bring short-term returns; It is
- c) non-strategic assets and/or with minor stakes.

In this context of divestments, issues linked to the acquisition of capital goods have not been relevant for Cemig since then.

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

Evaluation status

Not relevant, explanation provided

Please explain

Emissions due to losses in the transmission and distribution systems of electricity produced by Cemig were accounted for in Scope 2. As UTE Igarapé was decommissioned at the end of 2019, there were no activities related to fuel and energy to account for.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

33,012.14

Emissions calculation methodology

Fuel-based method

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

0

Please explain

The Scope 3 'Upstream Transport and Distribution' emission category comprises indirect emissions arising from the transport and distribution of products purchased or acquired by the inventorying organization in vehicles and facilities that it does not own or operate.

The category's total emissions in 2022 were 33,012 tCO₂e, which represents 0.67% of scope 3 emissions. Cemig D had the highest category emissions, totaling 32,930 tCO₂e or 99% of the category's emissions. Next, Cemig GT was responsible for 82 tCO₂e, contributing to less than 1% of the total.

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

582.98

Emissions calculation methodology

Waste-type-specific method

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

0

Please explain

The Scope 3 emission category 'Waste generated in operation' refers to indirect emissions resulting from the management of waste generated during the organization's activities. Waste generated in the operation totaled 582 tCO₂e or 0.01% of scope 3 emissions. Cemig GT being the largest emitter in the category contributing with 310 tCO₂e, which represents 53% of emissions in the category. Cemig D was responsible for the rest of the emissions related to the waste generated in the operation, totaling 260 tCO₂e or 45% of the category's emissions.

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

328.91

Emissions calculation methodology

Fuel-based method

Distance-based method

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

0

Please explain

The 'Business Travel' emission category comprises GHG emissions from travel undertaken by employees of the organization for business purposes. Travel emissions were 329 tCO₂e, which represents a very small share of total Scope 3 emissions: only 0.01%.

Cemig D was responsible for the highest emissions in the category totaling 145 tCO₂e, which represents 45% of emissions related to business travel, followed by Cemig H which was responsible for 110 tCO₂e or 34% of emissions for the category. Cemig GT and SPEs was responsible for 62 tCO₂e, adding up to 19% of business travel emissions, being the third largest emitter for the category in question. Gasmig presented 10 tCO₂e of emissions from business trips, which represents 3% of the category's emissions.

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

141.09

Emissions calculation methodology

Fuel-based method

Distance-based method

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

0

Please explain

The emission category of 'Employee Commuting' includes GHG emissions associated with the daily commuting of the organization's employees between their homes and workplaces.

In 2022, total emissions from commuting by employees was 141 tCO₂e, which represents a very low percentage of Scope 3, amounting to 0.002%. Among the operating units, Cemig GT and SPEs accounted for 59% of the category's emissions, totaling 84 tCO₂e. Next, Cemig D was responsible for 57 tCO₂e or 41% of emissions in the category, making it the second largest emitter of business travel.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Cemig has no leased assets. Therefore, this source does not apply to Cemig.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

Related to fuel consumption by contractors and outsourced services, this type of emission did not occur in 2022; therefore, the category Downstream transportation and distribution was not relevant.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

The product sold by Cemig (electricity) is not processed as an intermediate product for the production of a final consumer good; electricity is an input in production processes, not an intermediary good. Therefore, this source of emissions does not apply to Cemig.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

4,887,785.8

Emissions calculation methodology

Average product method

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

0

Please explain

The GHG Scope 3 'Use of sold products' category refers to indirect emissions generated by the end use of goods and services sold by the organization. At Cemig, the goods and services sold consist of the sale of electricity and natural gas.

In 2022, Cemig had a total of 4,887,786 tCO₂e emissions in the category, which represents a significant percentage of the company's scope 3, amounting to 99%. Emissions related to the sale of electricity amounted to 2,795,583 tCO₂e, representing the majority of emissions in this category, 57%. Emissions related to the sale of natural

gas were 2,092,203 tCO₂e, corresponding to 43% of emissions from the use of goods and services sold.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

The product sold by Cemig (electricity) is not processed as an intermediate product for the production of a final consumer good; electricity is an input in production processes, not an intermediary good. Therefore, this source of emissions does not apply to Cemig.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Cemig does not lease assets. Therefore, this source of emissions is not applicable to the Company.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Cemig does not work with franchises. Therefore, this source of emissions is not applicable to the Company.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

The investments made by Cemig do not imply an increase in emissions. Thus, this source of emissions is not applicable to the Company.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

No other relevant upstream emissions source has been identified.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

No other relevant downstream emission sources have been identified.

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date

January 1, 2021

End date

December 31, 2021

Scope 3: Purchased goods and services (metric tons CO2e)

244.06

Scope 3: Capital goods (metric tons CO2e)

0

**Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
(metric tons CO2e)**

0

Scope 3: Upstream transportation and distribution (metric tons CO2e)

2,726.37

Scope 3: Waste generated in operations (metric tons CO2e)

558.17

Scope 3: Business travel (metric tons CO2e)

96.52

Scope 3: Employee commuting (metric tons CO2e)

533.58

Scope 3: Upstream leased assets (metric tons CO2e)

0

Scope 3: Downstream transportation and distribution (metric tons CO2e)

0

Scope 3: Processing of sold products (metric tons CO2e)

0

Scope 3: Use of sold products (metric tons CO2e)

9,276,221.56

Scope 3: End of life treatment of sold products (metric tons CO2e)

0

Scope 3: Downstream leased assets (metric tons CO2e)

0

Scope 3: Franchises (metric tons CO2e)

0

Scope 3: Investments (metric tons CO2e)

0

Scope 3: Other (upstream) (metric tons CO2e)

0

Scope 3: Other (downstream) (metric tons CO2e)

0

Comment

In 2021, emissions from the category Use of sold products, represented almost all emissions (9,276,221.56 tCO2e) when compared to other categories in Scope 3, this emission comes from the sale of natural gas and electricity without a certificate of renewable energy. Then there is Upstream Transport and Distribution with a total of 2,726.37 tCO2e, Waste emitted 558.17 tCO2e, Commuting corresponded to 533.58 tCO2e, Purchased Goods and Services totaled emissions of 244.06 tCO2e, and Business Travel amounted to 96.52 tCO2e.

Past year 2

Start date

January 1, 2020

End date

December 31, 2020

Scope 3: Purchased goods and services (metric tons CO2e)

43.45

Scope 3: Capital goods (metric tons CO2e)

0

**Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
(metric tons CO2e)**

0

Scope 3: Upstream transportation and distribution (metric tons CO2e)

808.04

Scope 3: Waste generated in operations (metric tons CO2e)

1,004.05

Scope 3: Business travel (metric tons CO2e)

98.83

Scope 3: Employee commuting (metric tons CO2e)

173.95

Scope 3: Upstream leased assets (metric tons CO2e)

0

Scope 3: Downstream transportation and distribution (metric tons CO2e)

20,989.83

Scope 3: Processing of sold products (metric tons CO2e)

0

Scope 3: Use of sold products (metric tons CO2e)

5,223,549.59

Scope 3: End of life treatment of sold products (metric tons CO2e)

0

Scope 3: Downstream leased assets (metric tons CO2e)

0

Scope 3: Franchises (metric tons CO2e)

0

Scope 3: Investments (metric tons CO2e)

0

Scope 3: Other (upstream) (metric tons CO2e)

0

Scope 3: Other (downstream) (metric tons CO2e)

0

Comment

The participation of the Cemig D, Cemig GT and Gasmig units in Scope 3 was similar, being 29.21%, 34.71% and 36.08%, respectively. Scope 3 emissions are mainly associated with the sale of energy and natural gas.

Past year 3

Start date

January 1, 2019

End date

December 31, 2019

Scope 3: Purchased goods and services (metric tons CO2e)

63.29

Scope 3: Capital goods (metric tons CO2e)

0

**Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
(metric tons CO2e)**

0

Scope 3: Upstream transportation and distribution (metric tons CO2e)

790.63

Scope 3: Waste generated in operations (metric tons CO2e)

615.7

Scope 3: Business travel (metric tons CO2e)

428.07

Scope 3: Employee commuting (metric tons CO2e)

215.47

Scope 3: Upstream leased assets (metric tons CO2e)

0

Scope 3: Downstream transportation and distribution (metric tons CO2e)

22,699.24

Scope 3: Processing of sold products (metric tons CO2e)

0

Scope 3: Use of sold products (metric tons CO2e)

6,426,649.39

Scope 3: End of life treatment of sold products (metric tons CO2e)

0

Scope 3: Downstream leased assets (metric tons CO2e)

0

Scope 3: Franchises (metric tons CO2e)

0

Scope 3: Investments (metric tons CO2e)

0

Scope 3: Other (upstream) (metric tons CO2e)

0

Scope 3: Other (downstream) (metric tons CO2e)

0

Comment

Scope 3 emissions totaled 6,451,461.79tCO₂e, in which the Use of sold products category represented 99.62% of all GHG emissions. Scope 3 in 2019 was reduced by 15.60% compared to the previous year (in 2018, 7,644,131tCO₂e).

Past year 4

Start date

January 1, 2018

End date

December 31, 2018

Scope 3: Purchased goods and services (metric tons CO₂e)

71.19

Scope 3: Capital goods (metric tons CO₂e)

0

**Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
(metric tons CO₂e)**

0

Scope 3: Upstream transportation and distribution (metric tons CO₂e)

673.44

Scope 3: Waste generated in operations (metric tons CO₂e)

337.61

Scope 3: Business travel (metric tons CO₂e)

689.02

Scope 3: Employee commuting (metric tons CO₂e)

111.64

Scope 3: Upstream leased assets (metric tons CO₂e)

0

Scope 3: Downstream transportation and distribution (metric tons CO₂e)

13,699.89

Scope 3: Processing of sold products (metric tons CO₂e)

0

Scope 3: Use of sold products (metric tons CO₂e)

7,628,547.8

Scope 3: End of life treatment of sold products (metric tons CO₂e)

0

Scope 3: Downstream leased assets (metric tons CO₂e)

0

Scope 3: Franchises (metric tons CO2e)

0

Scope 3: Investments (metric tons CO2e)

0

Scope 3: Other (upstream) (metric tons CO2e)

0

Scope 3: Other (downstream) (metric tons CO2e)

0

Comment

Scope 3 emissions are mainly associated with the sale of energy and natural gas, categorized as Use of sold products. Emissions associated with this category make up almost all Scope 3 emissions, representing 99.8% of the total. As this energy is distributed by Cemig D and Cemig GT, the emissions of these units together represent 70.4% of Scope 3 emissions. The sale of natural gas gives Gasmig a representativeness of 28.8% of Scope 3 emissions.

Past year 5

Start date

January 1, 2017

End date

December 31, 2017

Scope 3: Purchased goods and services (metric tons CO2e)

0

Scope 3: Capital goods (metric tons CO2e)

0

**Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
(metric tons CO2e)**

0

Scope 3: Upstream transportation and distribution (metric tons CO2e)

575

Scope 3: Waste generated in operations (metric tons CO2e)

0

Scope 3: Business travel (metric tons CO2e)

822

Scope 3: Employee commuting (metric tons CO2e)

494

Scope 3: Upstream leased assets (metric tons CO2e)

0

Scope 3: Downstream transportation and distribution (metric tons CO2e)

19,871

Scope 3: Processing of sold products (metric tons CO2e)

0

Scope 3: Use of sold products (metric tons CO2e)

6,985,687

Scope 3: End of life treatment of sold products (metric tons CO2e)

0

Scope 3: Downstream leased assets (metric tons CO2e)

0

Scope 3: Franchises (metric tons CO2e)

0

Scope 3: Investments (metric tons CO2e)

0

Scope 3: Other (upstream) (metric tons CO2e)

0

Scope 3: Other (downstream) (metric tons CO2e)

0

Comment

The main source of Scope 3 emissions is electricity consumption by final consumers. In 2017, Cemig recorded a 1.8% increase in total sales compared to the previous year, which generated a 15.5% increase in indirect emissions, the trend was also intensified by the increase in the SIN emission factor, from 0.0817 tCO2e/MWh in 2016 to 0.0927 tCO2e/MWh in 2017.

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 | Comment |
|-----------------------------|---------|
|-----------------------------|---------|

| | carbon (metric tons CO2) | |
|-------|--------------------------|---|
| Row 1 | 5,587.64 | <p>In the base year of 2022, Cemig had a total of 5,587.64 tCO2e of biogenic emissions, considering scopes 1 and 3. In scope 1, total biogenic emissions were 1,000 tCO2e, of which 14 tCO2e came from oil consumption diesel in generators and natural gas in stationary sources (because it contains a percentage of biodiesel in its composition) and 986 tCO2e due to the use of fuels by the company's fleet, given the percentage of biodiesel added to diesel, ethanol added to the mixture of gasoline and when using pure ethanol.</p> <p>In Scope 3, biogenic emissions in 2022 amounted to a total of 4,588 tCO2e, amount coming from waste generated in operations (76 tCO2e), commuting employees (19.6 tCO2e) and upstream transport and distribution (4,492 tCO2e) .</p> |

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

0.000011

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

375,122.83

Metric denominator

unit total revenue

Metric denominator: Unit total

34,462,808,000

Scope 2 figure used

Location-based

% change from previous year

39

Direction of change

Decreased

Reason(s) for change

Change in revenue

Please explain

The increase in revenue impacted the final result of the intensity metric, which totaled 0.000011 compared to 0.000018 reported in the previous year. The increase in revenue was due to Cemig's expansion projects, resulting in greater customer acquisition, as well as due to the reduction in bad debt through a series of actions promoted by the Company.

Furthermore, in 2022, Scope 1 emissions grew, reaching 83,357 tCO₂e, an increase of 549%. The increase in emissions between 2021 and 2022 is explained by the increase in the suppression of the vegetable company due to works to expand the energy distribution network. Despite this increase, in Scope 2 there was a more significant reduction, mainly caused by the reduction in losses in the transmission and distribution systems. In 2021, emissions grew 92% due to the change in the electricity emission factor and in 2022 this value reduces by 66%, again due to the change in the emission factor. Therefore, the sum of scopes 1 and 2 reduced considerably compared to the previous year.

For the reasons presented, the intensity of emissions in 2022 was significantly reduced for the business.

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

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

| Greenhouse gas | Scope 1 emissions (metric tons of CO ₂ e) | GWP Reference |
|------------------|--|---|
| CO ₂ | 72,766.2 | IPCC Fifth Assessment Report (AR5 – 100 year) |
| CH ₄ | 765.41 | IPCC Fifth Assessment Report (AR5 – 100 year) |
| N ₂ O | 4,256.96 | IPCC Fifth Assessment Report (AR5 – 100 year) |
| HFCs | 598.06 | IPCC Fifth Assessment Report (AR5 – 100 year) |

| | | |
|--------------------------------------|-------|---|
| PFCs | 0 | IPCC Fifth Assessment Report (AR5 – 100 year) |
| SF6 | 4,042 | IPCC Fifth Assessment Report (AR5 – 100 year) |
| NF3 | 0 | IPCC Fifth Assessment Report (AR5 – 100 year) |
| Other, please specify HCFC-2(R22) | 927.8 | IPCC Fifth Assessment Report (AR5 – 100 year) |

C-EU7.1b

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

| | Gross Scope 1 CO2 emissions (metric tons CO2) | Gross Scope 1 methane emissions (metric tons CH4) | Gross Scope 1 SF6 emissions (metric tons SF6) | Total gross Scope 1 emissions (metric tons CO2e) | Comment |
|---------------------------------|---|---|---|--|--|
| Fugitives | 0 | 26.36 | 0.17 | 6,314.44 | The 'Fugitive Emissions' category comprises emissions from the escape of refrigerant gases or natural gas during Cemig's operations, including gases such as SF6, CH4 and HCFC-2(R22). In 2022, total emissions were 6,314.44 tCO2e, representing 8% of scope 1 emissions. |
| Combustion (Electric utilities) | 140.76 | 0 | 0 | 140.76 | In Cemig's generation activity, diesel oil is consumed, which represents 140.76 tCO2e emitted. |
| Combustion (Gas utilities) | 0 | 0 | 0 | 0 | With regard to emissions from activities of the gas concessionaire, there is no associated combustion. |
| Combustion (Other) | 7,307.81 | 0 | 0 | 7,307.81 | These emissions correspond to those linked to the consumption of gasoline, diesel and aviation |

| | | | | | |
|------------------------------------|----------|---|---|-----------|--|
| | | | | | kerosene, resulting in the release of CO2 in the process. |
| Emissions not elsewhere classified | 63,836.5 | 0 | 0 | 69,593.58 | <p>Emissions that do not fit into the previous categories correspond to:</p> <p>The 'Agricultural Activities' category comprises emissions from the use of fertilizers, either from the consumption of nitrogen in fertilizers or from the use of limestone, emitting N2O. In 2022, total emissions related to agricultural activities represented 5,852 tCO2e, 7% of total scope 1 emissions.</p> <p>Also, emissions related to 'Land Use Change' come from vegetation suppression. In 2022, emissions related to land use change represented 63,836 CO2, 77% of the total scope 1.</p> |

C7.2

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

| Country/area/region | Scope 1 emissions (metric tons CO2e) |
|---------------------|--------------------------------------|
| Brazil | 83,356.59 |

C7.3

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

By business division

By activity

C7.3a

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

| Business division | Scope 1 emissions (metric ton CO2e) |
|-------------------|-------------------------------------|
|-------------------|-------------------------------------|

| | |
|-----------------------|-----------|
| Cemig GT | 2,610.46 |
| Cemig D | 70,294.03 |
| GASMIG | 842.13 |
| CEMIG SIM | 0.03 |
| Camargos | 10.6 |
| CEMIG PCH | 0.03 |
| Horizontes | 96.44 |
| Itutinga | 12.05 |
| Leste | 150.51 |
| Oeste | 25.24 |
| Parajuru - Eólica | 135.22 |
| Rosal | 3,242.54 |
| Sá Carvalho | 4.72 |
| Salto Grande | 8.51 |
| Sul | 962.55 |
| Três Marias | 11.26 |
| Volta do Rio - Eólica | 11.26 |
| CENTROESTE | 3,676 |

C7.3c

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

| Activity | Scope 1 emissions (metric tons CO2e) |
|---|--------------------------------------|
| Stationary combustion | 140.79 |
| Mobile combustion | 7,307.85 |
| Fugitive emissions | 6,314.44 |
| Agricultural activity and land use change | 69,593.51 |

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 | Comment |
|--|---|---------|
| | | |

| | | |
|-----------------------------|-----------|--|
| Electric utility activities | 83,356.59 | <p>Scope 1 aggregated direct emissions from the categories 'Stationary Combustion', 'Mobile Combustion', 'Fugitive Emissions' and 'Agricultural Activities and Change in Land Use'. In the year 2022, Cemig's emissions from this scope represented 83,356.59 tCO₂e or 2% of total emissions.</p> <p>Among scope 1 emissions, emissions related to 'Agricultural Activities and Land Use Change' accounted for the largest scope emissions, with 69,593.51 tCO₂e representing 1% of total emissions. Next, the 'Mobile Combustion' category was responsible for the largest share of emissions, totaling 7,307.85 tCO₂e, or 0.13% of total scope 1 emissions. 'Fugitive Emissions' were responsible for the third largest volume of scope emissions 1, in the amount of 6,314.44 tCO₂e or 0.11% of scope 1 emissions.</p> <p>The increase in emissions between 2021 and 2022 is explained by the increase in the suppression of the vegetable company due to works to expand the energy distribution network that grew 14,811% from 323.99 ha to 48,311.24 ha.</p> |
|-----------------------------|-----------|--|

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

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 CO ₂ e) | Direction of change in emissions | Emissions value (percentage) | Please explain calculation |
|--|---|----------------------------------|------------------------------|--|
| Change in renewable energy consumption | 0 | No change | 0 | The energy produced by Cemig comes 100% from renewable sources due to the decommissioning of the TTP Igarapé that took place at the end of |

| | | | | |
|--------------------------------------|-----------|-----------|----|--|
| | | | | 2019. As the energy consumed by Cemig comes from the grid, it cannot be accounted for as a purchase of renewable energy. |
| Other emissions reduction activities | 918.56 | Decreased | 18 | Cemig has been implementing initiatives to reduce the use of fuel in its own fleet by renting electric vehicles. Through this initiative, it has enabled the reduction of diesel and gasoline consumption. The difference in emissions between 2022 and 2021 in terms of these fuels totaled 918.56 tCO ₂ e in avoided emissions. |
| Divestment | 0 | No change | 0 | Cemig did not carry out divestments in 2022 that had impacts in terms of emissions. |
| Acquisitions | 0 | No change | 0 | Cemig's acquisitions in 2022 avoided emissions but no impacts were recorded in terms of reducing emissions. |
| Mergers | 0 | No change | 0 | Cemig did not undergo merger processes in 2022, so no impacts were recorded in terms of emissions in this context. |
| Change in output | 0 | No change | 0 | Cemig has not undergone changes of this type in 2022 that have registered impacts in terms of emissions. |
| Change in methodology | 4,903,973 | Decreased | 43 | <p>Between 2019 and 2020 there was a significant drop in emissions. In 2019, emissions were 7,101,919 tCO₂e, falling in 2020 to 5,706,171 tCO₂e, that is, a 20% drop. Between 2020 and 2021, Cemig grew its emissions by around 79%, jumping from 5,706,171 tCO₂e in 2020 to 10,200,950 tCO₂e in 2021. This growth is mainly related to the increase in the network emission, which increased by 104% year-on-year.</p> <p>The variation between the emission factors is related to the change in the rainfall regime, since in years with less rainfall (total precipitation volume) the hydroelectric plants lose their capacity</p> |

| | | | | |
|---|--------|-----------|-----|--|
| | | | | to produce electricity and the National Electric System Operator (ONS) needs to “activate” the thermoelectric plants, which generate higher emissions due to the use of fossil sources. Finally, between 2021 and 2022, there was a reduction in total emissions by 43%, from 10,200,950 tCO ₂ e (2021) to 5,296,977 tCO ₂ e (2022), mainly caused by the reduction in the emission factor (0.1264 tCO ₂ e/MWh in 2021 and 0.0426 tCO ₂ e/MWh in 2022). |
| Change in boundary | 0 | No change | 0 | Cemig did not change the limits of its inventory in 2022. Therefore, no impacts were recorded in terms of emissions for this reason. |
| Change in physical operating conditions | 0 | No change | 0 | Cemig did not experience changes in operating conditions in 2022. Therefore, no impacts were recorded in terms of emissions for this reason. |
| Unidentified | 0 | No change | 0 | Cemig achieved a considerable reduction in terms of Scope 1 and 2 emissions in 2022. Although Scope 1 emissions were much higher due to vegetation suppression, Scope 2 emissions were much lower, especially due to the emission factor. Therefore, the issues were identified. |
| Other | 63,795 | Increased | 153 | Between 2019 and 2020, there was a drop in scope 1 emissions, in the amount of approximately 40,000 tCO ₂ e, mainly due to the decommissioning of the Igarapé thermoelectric plant. Between 2020 and 2021, there was an increase in emissions of 12% or 1,500 tCO ₂ e. In 2022, Scope 1 emissions increased again, reaching 501,200 tCO ₂ e, an increase of 3,801%. The increase in emissions between 2021 and 2022 is explained by the increase in the suppression of the vegetable company due to expansion works on the energy distribution network, which |

| | | | | |
|--|--|--|--|--|
| | | | | grew by 14,811%, from 323.99 ha to 48,311.24 ha. |
|--|--|--|--|--|

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 55% but less than or equal to 60%

C8.2

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

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

C8.2a

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

| | Heating value | MWh from renewable sources | MWh from non-renewable sources | Total (renewable and non-renewable) MWh |
|---|---------------------------|----------------------------|--------------------------------|---|
| Consumption of fuel (excluding feedstock) | LHV (lower heating value) | 403.18 | 33,495.96 | 33,899.14 |
| Consumption of purchased or acquired electricity | | 35,263.01 | 0 | 35,263.01 |
| Consumption of self-generated non-fuel renewable energy | | 0 | | 0 |
| Total energy consumption | | 35,666.19 | 33,495.96 | 69,162.15 |

C8.2b

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

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

C8.2c

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

Sustainable biomass

Heating value

LHV

Total fuel MWh consumed by the organization

26,157.33

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

26,157.33

Comment

The value refers to fuel consumption for own fleet (diesel and ethanol). As a measure to reduce energy consumption within the Company, Cemig requires, as a guideline, that the average manufacturing date of vehicles in its fleet be less than five years, the legal depreciation period set by the granting authority. Therefore, the Company annually renews its fleet of vehicles, which makes it possible to reduce fuel consumption. The other initiatives are external, with the Energy Efficiency Program.

Other biomass

Heating value

LHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Not applicable to Cemig's operations.

Other renewable fuels (e.g. renewable hydrogen)

Heating value

LHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Not applicable to Cemig's operations.

Coal

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Not applicable to Cemig's operations.

Oil

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Not applicable to Cemig's operations.

Gas

Heating value

LHV

Total fuel MWh consumed by the organization

4,118.58

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

4,118.58

Comment

The value represents the sum of Liquefied Petroleum Gas (LPG), Natural Gas and Vehicular Natural Gas (CNG) fuels.

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

LHV

Total fuel MWh consumed by the organization

6,386.59

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

6,386.59

Comment

The value represents the total consumption of aviation kerosene (493.43 MWh) and gasoline (5,893.16 MWh).

Total fuel

Heating value

LHV

Total fuel MWh consumed by the organization

36,662.5

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

36,662.5

Comment

The value represents the total fuel (renewable and non-renewable) in addition to Cemig's electricity consumption.

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)

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

This energy source does not apply to Cemig's operations, whose matrix is 100% renewable.

Lignite

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO₂e)

0

Scope 1 emissions intensity (metric tons CO₂e per GWh)

0

Comment

This energy source does not apply to Cemig's operations, whose matrix is 100% renewable.

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

This energy source does not apply to Cemig's operations, whose matrix is 100% renewable.

Gas

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

This energy source does not apply to Cemig's operations, whose matrix is 100% renewable.

Sustainable 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

This energy source does not apply to Cemig's operations, whose matrix is 100% renewable.

Other 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

This energy source does not apply to Cemig's operations, whose matrix is 100% renewable.

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

This energy source does not apply to Cemig's operations, whose matrix is 100% renewable.

Nuclear

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

This energy source does not apply to Cemig's operations, whose matrix is 100% renewable.

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

This energy source does not apply to Cemig's operations, whose matrix is 100% renewable.

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

This energy source does not apply to Cemig's operations, whose matrix is 100% renewable.

Hydropower

Nameplate capacity (MW)

5,368.4

Gross electricity generation (GWh)

18,185.01

Net electricity generation (GWh)

17,757.16

Absolute scope 1 emissions (metric tons CO₂e)

2,610.46

Scope 1 emissions intensity (metric tons CO₂e per GWh)

0.15

Comment

Net and gross energy generation refers only to plants over which Cemig has operational control. The intensity of emissions was calculated by dividing Cemig GT's Scope 1 emissions, only from hydroelectric generators. The intensity metric was lower than reported in the previous year. As generation was higher, it is evident that emissions were reduced, which can be justified, for example, by modernization/repowering measures of hydroelectric plants.

Wind

Nameplate capacity (MW)

147.3

Gross electricity generation (GWh)

392.68

Net electricity generation (GWh)

383.43

Absolute scope 1 emissions (metric tons CO₂e)

171.16

Scope 1 emissions intensity (metric tons CO₂e per GWh)

0.45

Comment

The intensity of emissions was calculated considering only the emissions from wind farms. A reduction in the indicator is also observed, evidencing greater efficiency, which in this case is due to the greater generation of net energy.

Solar

Nameplate capacity (MW)

91.92

Gross electricity generation (GWh)

135.47

Net electricity generation (GWh)

135.32

Absolute scope 1 emissions (metric tons CO₂e)

0

Scope 1 emissions intensity (metric tons CO₂e per GWh)

0

Comment

Emissions related to the operation of Cemig's solar plants are practically non-existent. Therefore, the intensity remains zero. Nameplate capacity and gross and net electricity generation consider Cemig Geração and Cemig SIM information together.

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

This source does not apply to Cemig's operations, whose matrix is 100% renewable.

Other renewable

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO₂e)

0

Scope 1 emissions intensity (metric tons CO₂e per GWh)

0

Comment

Cemig's renewable energy sources are solar, hydroelectric and wind. There are no other sources to report currently.

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

This source does not apply to Cemig's operations, whose matrix is 100% renewable.

Total

Nameplate capacity (MW)

5,607.62

Gross electricity generation (GWh)

18,713.16

Net electricity generation (GWh)

18,275.91

Absolute scope 1 emissions (metric tons CO2e)

2,781.62

Scope 1 emissions intensity (metric tons CO2e per GWh)

0.14

Comment

Emissions intensity was calculated by dividing Cemig GT's total Scope 1 emissions by total net generation. Net generation was considered only for plants over which Cemig has operational control. Again, the intensity metric was lower than the previous year. Although emissions were higher in absolute terms, energy generation was much higher, which made the result more efficient.

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area

Brazil

Consumption of purchased electricity (MWh)

35,263.01

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

35,263.01

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/area/region

Brazil

Voltage level

Transmission (high voltage)

Annual load (GWh)

0

Annual energy losses (% of annual load)

0

Scope where emissions from energy losses are accounted for

Scope 2 (location-based)

Emissions from energy losses (metric tons CO₂e)

6,506.04

Length of network (km)

5,016.1

Number of connections

40

Area covered (km2)

567,478

Comment

The scope 2 emissions presented consider the "Transmission Losses" category for Cemig GT. The connections represent the 40 existing substations. In 2022, emissions due to technical losses were reduced in line with Cemig's strategy of adopting more efficient systems.

Country/area/region

Brazil

Voltage level

Distribution (low voltage)

Annual load (GWh)

3,041

Annual energy losses (% of annual load)

11.11

Scope where emissions from energy losses are accounted for

Scope 2 (location-based)

Emissions from energy losses (metric tons CO2e)

283,525

Length of network (km)

574,844

Number of connections

8,885,000

Area covered (km2)

567,478

Comment

The annual load, or system load, is the electricity annually injected into the distribution network at border points and by generation units. The scope 2 emissions presented consider the category of "Distribution Losses" for Cemig D. The number of connections is given by the number of consumers served by Cemig D. In 2022, losses were reduced, which is due to combat measures losses, with emphasis on carrying out 401,000 inspections, replacing 612,000 obsolete meters, replacing 235,000 conventional meters with smart meters and regularizing 4,300 illegal connections.

C9. Additional metrics

C9.1

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

Description

Other, please specify

Intensidade de emissões de Escopo 1 por MWh produzido (CO₂e/MWh)

Metric value

0

Metric numerator

CO₂ emissions (Scope 1, in tCO₂e): 83,356.6.

Metric denominator (intensity metric only)

Energy generation (MWh): 18,275,919.00

% change from previous year

400

Direction of change

Increased

Please explain

There was a considerable increase in this indicator, mainly due to the increase in emissions in the category 'Agricultural Activities and Land Use Change'. Cemig will use this record as a basis for developing mitigation actions, keeping track of the metric for control purposes.

C-EU9.5a

(C-EU9.5a) Break down, by source, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.

Coal – hard

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Cemig does not generate energy from this type of source and has no plans to invest in this type of generation in the coming years.

Lignite

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Cemig does not generate energy from this type of source and has no plans to invest in this type of generation in the coming years.

Oil

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Cemig does not generate energy from this type of source and has no plans to invest in this type of generation in the coming years.

Gas

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Cemig does not generate energy from this type of source and has no plans to invest in this type of generation in the coming years.

Sustainable biomass

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Cemig does not generate energy from this type of source and has no plans to invest in this type of generation in the coming years.

Other biomass

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Cemig does not generate energy from this type of source and has no plans to invest in this type of generation in the coming years.

Waste (non-biomass)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Cemig does not generate energy from this type of source and has no plans to invest in this type of generation in the coming years.

Nuclear

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Cemig does not generate energy from this type of source and has no plans to invest in this type of generation in the coming years.

Geothermal

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Cemig does not generate energy from this type of source and has no plans to invest in this type of generation in the coming years.

Hydropower

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

1,950,000,000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

99.85

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

48.06

Most recent year in which a new power plant using this source was approved for development

2006

Explain your CAPEX calculations, including any assumptions

CAPEX data are mainly related to investments in repowering and modernization of hydroelectric plants. Cemig has internal control with annual investment estimates aligned with the company's strategic plan. The total CAPEX considered for the calculation includes energy generation from wind, hydroelectric and solar sources by Cemig G.

Wind

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

14.28

Most recent year in which a new power plant using this source was approved for development

2010

Explain your CAPEX calculations, including any assumptions

CAPEX data are mainly related to investments in expansion of the wind matrix. Cemig has internal control with annual investment estimates aligned with the company's

strategic plan. The total CAPEX considered for the calculation includes energy generation from wind, hydroelectric and solar sources by Cemig G.

Solar

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

87,000,000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

4

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

44

Most recent year in which a new power plant using this source was approved for development

2021

Explain your CAPEX calculations, including any assumptions

CAPEX data are mainly related to investments in expansion of the solar array. Cemig has internal control with annual investment estimates aligned with the company's strategic plan. The total CAPEX considered for the calculation includes energy generation from wind, hydroelectric, and solar sources by Cemig G and Cemig SIM together.

Marine

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Cemig does not generate energy from this type of source and has no plans to invest in this type of generation in the coming years.

Fossil-fuel plants fitted with CCS

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Cemig does not generate energy from this type of source and has no plans to invest in this type of generation in the coming years.

Other renewable (e.g. renewable hydrogen)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Cemig does not generate energy from this type of source and has no plans to invest in this type of generation in the coming years.

Other non-renewable (e.g. non-renewable hydrogen)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Explain your CAPEX calculations, including any assumptions

Cemig does not generate energy from this type of source and has no plans to invest in this type of generation in the coming years.

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 |
|--|--|-----------------------------------|---|------------------------|
| Distributed generation | <p>Expansion of the subsidiary Cemig SIM, which offers integrated energy efficiency solutions, supporting the reduction of costs and total emissions for customers.</p> <p>The calculation considers the total CAPEX forecast for Cemig GT and Cemig D and Cemig SIM in line with the new ongoing cycle until 2032.</p> | 3,225,000,000 | 3.3 | 2032 |
| Smart grid | <p>Cemig has been investing in technologies to improve measurement. Consumers receive smart meters that interact with Cemig in real time, allowing them to follow closely, or via the Internet, how energy is used at home. The smart meters project has investments planned until 2027.</p> <p>The calculation considers the total CAPEX forecast for Cemig GT and Cemig D and Cemig SIM in line with the new ongoing cycle until 2032.</p> | 823,785,767.74 | 0.8 | 2027 |
| Other, please specify Expansion of wind energy services | <p>Cemig is diversifying its energy matrix and, to that end, has planned investments in wind farms.</p> <p>The calculation considers the total CAPEX forecast for Cemig GT and Cemig D and Cemig SIM in line with the new ongoing cycle until 2032.</p> | 6,535,000,000 | 6.7 | 2032 |

| | | | | |
|--|---|----------------|------|------|
| Other, please specify Expansion of solar energy services (by Cemig G) | Cemig is diversifying its energy matrix and, to that end, has planned investments in solar energy also in the context of Cemig G. The calculation considers the total CAPEX forecast for Cemig GT and Cemig D and Cemig SIM in line with the new ongoing cycle until 2032. | 18,183,000,000 | 18.6 | 2032 |
|--|---|----------------|------|------|

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

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

| | Investment in low-carbon R&D | Comment |
|-------|------------------------------|--|
| Row 1 | Yes | In 2022, Cemig invested R\$38.6 million in resources for the environment. Investments had a significant increase compared to the previous year, due to the Company's development project, as decided by the Executive Board. Among the three investment fronts, it is worth mentioning: <ul style="list-style-type: none"> • BRL 483 thousand for waste management; • BRL 6 million to Research and Development projects; • BRL 15 million related to compliance with obligations and environmental improvements. <p>To meet the environmental condition, Cemig recovers and conserves riparian forests. Through R&D Programs, the Company has sought to study and propose innovations in the face of the technological challenges of the electricity sector.</p> |

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 (unit currency as selected in C0.4) (optional) | Average % of total R&D investment planned over the next 5 years | Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan |
|-----------------|--|---|--|---|---|
|-----------------|--|---|--|---|---|

| | | | | | |
|---|--|------|--------------|-------|---|
| Unable to disaggregate by technology area | | 16.3 | 6,281,033.87 | 35.19 | To meet environmental requirements, Cemig recovers and conserves riparian forests. Through R&D Programs, the Company has sought to study and propose innovations in the face of the technological challenges of the electricity sector. |
|---|--|------|--------------|-------|---|

C10. Verification

C10.1

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

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

C10.1a

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

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

 2023-CEMIG-2022-Verification Statement_raesonable_Inmetro_14064-20062023.pdf

Page/ section reference

Page 1 (Standard: ABNT NBR ISO 14064-3:2007; Período: inventory from January 1 to December 31, 2022)

Page 2 (Total GHG emission in tonnes of CO2 equivalent (tCO2e))

Relevant standard

ABNT NBR ISO 14064-3:2007 (Associação Brasileira de Normas Técnicas)

Proportion of reported emissions verified (%)

100

C10.1b

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

Scope 2 approach

Scope 2 location-based

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

 2023-CEMIG-2022-Verification Statement_raesonable_Inmetro_14064-20062023.pdf

Page/ section reference

Page 1 (Standard: ABNT NBR ISO 14064-3:2007; Período: inventory from January 1 to December 31, 2022)

Page 2 (Total GHG emission in tonnes of CO2 equivalent (tCO2e))

Relevant standard

ABNT NBR ISO 14064-3:2007 (Associação Brasileira de Normas Técnicas)

Proportion of reported emissions verified (%)

100

C10.1c

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

Scope 3 category

- Scope 3: Purchased goods and services
- Scope 3: Upstream transportation and distribution
- Scope 3: Waste generated in operations
- Scope 3: Business travel
- Scope 3: Employee commuting
- Scope 3: Use of sold products

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

 2023-CEMIG-2022-Verification Statement_raesonable_Inmetro_14064-20062023.pdf

Page/section reference

Page 1 (Standard: ABNT NBR ISO 14064-3:2007; Período: inventory from January 1 to December 31, 2022)
Page 2 (Total GHG emission in tonnes of CO2 equivalent (tCO2e))

Relevant standard

ABNT NBR ISO 14064-3:2007 (Associação Brasileira de Normas Técnicas)

Proportion of reported emissions verified (%)

100

C10.2

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

Yes

C10.2a

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

 2022_CEMIG_Report.pdf

| Disclosure module verification relates to | Data verified | Verification standard | Please explain |
|---|---|--------------------------|---|
| C0. Introduction | Other, please specify General description of the company, reporting year, reporting consolidation methodologies, organizational activities | ISAE3000 e GRI Standards | Annually, Cemig submits its Sustainability Report to independent verification to ensure the legitimacy of its content. The audit process comprised (i) reviewing the information and data present in the preliminary version of the sustainability report (ii) interviews with strategic employees, both to understand the report data and to understand the management processes involved with the material topics and (iii) review of additional documentation sent by Cemig. General company data and the approach to preparing the report are presented in Cemig's sustainability report and are, therefore, subject to verification. |
| C2. Risks and opportunities | Other, please specify Risk assessment process, financial impact and time horizons | ISAE3000 e GRI Standards | The annual independent verification of the Sustainability Report includes verification of information on risks, including data on the frequency of assessment, estimated total costs and materialization horizons. |
| C3. Business strategy | Renewable energy products | ISAE3000 e GRI Standards | In the Sustainability Report, Cemig presents strategic decisions taken in 2022, which were influenced by climate opportunities and risks. As part of the annual verification process, reported financial data (CAPEX and investments) are also analyzed, as well as the expectations for resource allocation and the Company's growth. |
| C4. Targets and performance | Progress against emissions reduction target | ISO 14064-3. | Annually, Cemig submits its Corporate GHG Inventory to independent verification. The objective of the third-party verification of the inventory is to obtain an independent statement on the |

| | | | |
|---------------------------|--|-------------|---|
| | | | <p>quality of the inventory and the consistency of the information contained therein, in order to assure its users of an accurate assessment of the emissions standard of the organization's value chain.</p> <p>Progress in relation to emission reduction targets and performance justification are reported in Cemig's Inventory, ensuring transparency of information for stakeholders.</p> |
| C5. Emissions performance | Year on year emissions intensity figure | ISO 14064-3 | <p>Annually, Cemig submits its Corporate GHG Inventory to independent verification. The objective of third-party verification of the inventory is to obtain an independent statement on the quality of the inventory and the consistency of the information contained therein, in order to assure its users of an accurate assessment of the emissions standard of the organization's value chain. .</p> <p>The references and methodology used to prepare the inventory are presented in the report and are, therefore, subject to verification.</p> |
| C7. Emissions breakdown | Year on year change in emissions (Scope 1 and 2) | ISO 14064-3 | <p>Annually, Cemig submits its Corporate GHG Inventory to independent verification. The objective of third-party verification of the inventory is to obtain an independent statement on the quality of the inventory and the consistency of the information contained therein, in order to assure its users of an accurate assessment of the emissions standard of the organization's value chain.</p> <p>The references and methodology used to prepare the inventory are presented in the report and are, therefore, subject to verification.</p> |
| C8. Energy | Energy consumption | ISO 14064-3 | <p>Annually, Cemig submits its Corporate GHG Inventory to independent verification. The objective of third-party verification of the inventory is to obtain an</p> |

| | | | |
|--|--|--|---|
| | | | <p>independent statement on the quality of the inventory and the consistency of the information contained therein, in order to assure its users of an accurate assessment of the emissions standard of the organization's value chain. .</p> <p>Energy consumption data is used in the calculation of Cemig's GHG emissions and is, therefore, subject to verification.</p> |
|--|--|--|---|

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)?

No, but we anticipate being regulated in the next three years

C11.1d

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

In Brazil, there is still no mandatory pricing instrument for greenhouse gas emissions. However, the subject has been discussed by the competent institutions and the federal government has already approved measures that foresee the implementation, in the electric sector, of mechanisms for the consideration of the environmental benefits related to the low emission of gases that cause the greenhouse effect, setting a precedent for the adoption the practice of carbon pricing in the sector. Carbon pricing is relevant to help comply with the Nationally Determined Contributions (NDCs), which set emission targets for 2030. Aware that several national and regional governments are pricing carbon and that Brazil has set emission reduction targets for greenhouse gases through the NDC instrument, Cemig believes that market regulation is close to occurring (before 2030).

For this reason, Cemig has been preparing to act in accordance with the implementation of a possible instrument by monitoring discussions on the subject, including changes in regulations, through participation in the Working Group on Climate Change and Air Quality , which is part of FIEMG's Council of Entrepreneurs for the Environment (CEMA). Cemig actively participated in the Consultative Committee of the PMR Brasil Project, which ended in December 2020 and aimed to discuss the convenience and opportunity of including the pricing of GHG emissions in the package of instruments aimed at implementing the National Policy on Changing the Climate (PNMC) in the post-2020 period. The company also uses the internal carbon price in the feasibility analysis stages of new electricity generation projects since 2019. Currently, the stipulated price is US\$20.00/ton CO₂ or R\$102/ton CO₂.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

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.

Type of internal carbon price

Shadow price

How the price is determined

Benchmarking against peers

Objective(s) for implementing this internal carbon price

Drive low-carbon investment
Identify and seize low-carbon opportunities
Navigate GHG regulations

Scope(s) covered

Scope 1

Pricing approach used – spatial variance

Uniform

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

Over time, the price of carbon is expected to grow with increased regulatory requirements in most countries.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO₂e)

102

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO₂e)

102

Business decision-making processes this internal carbon price is applied to

Capital expenditure
Risk management

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for all decision-making processes

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

Cemig, through Service Instruction IS-56 ("Carbon risk assessment in due diligence operations"), established procedures for analyzing the carbon risk in carrying out due diligences conducted by the Company, related to the acquisition, merger and implementation of new assets that use fossil fuels to generate energy.

The goal is to assess the impact of Greenhouse Gas (GHG) emissions on Cemig's businesses arising from the purchase of assets in operation or in the design or construction phase, in addition to the risks and opportunities with regard to climate change and the needs to mitigate its effects on the company. When evaluating the acquisition, merger or implementation of ventures that use fossil fuels, Cemig carries out internal analyzes regarding the carbon risk and its financial impact on the Company.

Applying this evaluation criterion to Igarapé TPP, for example, it was observed that the decommissioning of the plant carried out at the end of 2019 brought Cemig the benefit of reducing the carbon cost of the company's operations.

Cemig has medium and long term guidelines (until 2040) to expand solar, wind and natural gas thermal generation capacity. At the moment, the company is evaluating opportunities for these investments and, as a criterion for analyzing the feasibility of the business, the carbon risk assessment defined in the Service Instruction (IS-56) "Carbon risk assessment in Due Diligence operations" will be used.

C12. Engagement

C12.1

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

Yes, our suppliers
Yes, our customers/clients
Yes, other partners in the value chain

C12.1a

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

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect GHG emissions data at least annually from suppliers

% of suppliers by number

7

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

31.7

Rationale for the coverage of your engagement

Cemig recognizes that the Transport and distribution (upstream) category of the GHG Inventory contributes significantly to total emissions given the consumption of fuel (alcohol, gasoline, diesel and CNG) used by contractors working for Cemig D.

In the 2022 Inventory, there were existing Cemig D contracts that voluntarily contributed to the transparency of these data, totaling 7% of the supplier base.

For this type of engagement, there is no cost for Cemig (once a voluntary report request is made). The company believes that it is a valid effort to include climate issues with suppliers.

Impact of engagement, including measures of success

Cemig currently monitors both the data reported by contractors (fuel consumption) and the number of contractors engaged in collaborating with data for the GHG Inventory.

Today, the Company's goal for success is to reach 10% of suppliers. As the program matures, Cemig intends to expand this number.

Comment

Cemig's initial objective is to provide more transparency to this data and engage with its suppliers in order to make them aware of emissions and encourage the adoption of targets. Based on this emissions scenario, Cemig then plans to create incentive actions (reward mechanisms) for suppliers who carry out their inventories, sign commitments and reach targets each year.

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Climate change performance is featured in supplier awards scheme

% of suppliers by number

2.3

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

17.3

Rationale for the coverage of your engagement

In order to encourage the good practices of its suppliers, Cemig innovated in 2022 by creating the Sustainability Award within the Best Suppliers Program with two categories: Social Category and Environmental Category. The following environmental themes are evaluated:

- a) Good environmental management practices;
- b) Water consumption (reduction, reuse, optimization, minimum waste);
- c) Management of solid waste and effluents (reduced production, proper disposal, recycling, reuse, treatment, safe transport and storage);
- d) Environmental education aimed at internal employees and/or external public;
- e) Energy management;
- f) Management of greenhouse gas (GHG) emissions considering direct and indirect sources;
- g) Management of atmospheric emissions from fixed or mobile sources;
- h) Sustainable construction;
- i) Climate change (mitigation, adaptation and identification of opportunities);
- j) Biodiversity (fauna and flora conservation/recovery);
- k) Recovery of degraded areas / Forest conservation / Sustainable management of forests;
- l) Sustainable solutions and ecotechnologies;
- m) Circular economy.

Impact of engagement, including measures of success

Cemig has 1096 suppliers with contracts in force. 25 projects were received in the Environmental category, representing a percentage of 2.3%. The Sustainability Award aims to recognize the best socio-environmental practices of suppliers and engage them in the pursuit of continuous improvement, efficiency gains, technological innovation aimed at improving the Environmental performance of their processes. The measure of success is linked to the number of suppliers that are registered and that meet the requirements established in the Award Announcement. The engagement target is to have 5% of suppliers engaged.

Comment

The goal of the sustainability category of Cemig's supplier awards is to encourage and recognize the actions of partner suppliers in relation to Sustainability Projects in the environmental and social areas, which contribute to the harmonious development of organizations in order to positively impact society. The initiative seeks continuous improvement of results and a generation of sustainable attitudes.

C12.1b

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

Type of engagement & Details of engagement

Education/information sharing

Run an engagement campaign to education customers about your climate change performance and strategy

% of customers by number

3.2

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

Cemig develops several actions to raise awareness of the use of energy with the aim of combating waste through the Energy Efficiency Program.

Together with its residential, service and commercial customers, the Company promotes several awareness campaigns on the efficient use of electricity. These campaigns are broadcast in various media – television, radio, newspapers, internet, social networks, and also on energy bills sent to customers.

Projects are selected through a Call for Proposals process held annually with resources segregated by typology (residential, industrial, commerce and services, government, public service and public lighting). Approved proposals are financed with Program resources.

The residual proceeds from the process are used to finance projects prepared directly by Cemig. These projects are developed in order to serve isonomically and seeking the best results in avoided energy, directly impacting sustainability indices.

The value of 3.2% corresponds to the number of Cemig customers that were directly impacted (received direct actions) by the Program, considering the total number of consumers equal to 8,950,000.00,

In 2022, 286,748 consumers were engaged through campaigns. The goal corresponded to 300,000 consumers. Therefore, Cemig achieved approximately 95% of this value.

Impact of engagement, including measures of success

The impact of this engagement strategy is the increase in the rational use of energy by the Company's customers. The measurement of results is carried out through the positive feedback received from customers, reporting the savings obtained with the information received on the rational use and environmental benefits of this initiative.

The implementation of this strategy is measured through the energy savings of Cemig's Energy Efficiency Program customers. In 2023, approximately 100 million were invested in projects throughout Cemig D's concession area, and 50 million were made available for the new Call for Proposals for the composition of the project portfolio for 2023.

Energy efficiency actions include low-income families, hospitals, non-profit entities, rural residents, educational institutions and public bodies, achieving savings of 24,222 MWh in 2022.

In this initiative, it is considered that an engagement percentage above 90% corresponds to a successful action. In 2022, therefore, this objective was achieved.

Type of engagement & Details of engagement

Collaboration & innovation

Other, please specify

Engagement with customers through Cemig SIM

% of customers by number

100

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

0

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

Cemig SIM, a Cemig Group company, was created in 2019 to operate with a focus on shared generation, energy efficiency and other innovative solutions in the energy sector. Sustainability is one of the company's purposes, which reiterates this position through energy efficiency and consequent reduction of greenhouse gas emissions, since its object is solar generation – a 100% clean and renewable source. Therefore, all Cemig SIM customers are committed to this sustainable conduct.

For commercial customers (Corporate Tax Code), Cemig SIM offers the 100% Clean and Renewable Energy Certificate, the Cemig SIM REC. Through the traceability of energy generated and consumed in the last 12 months, it is possible to certify the companies in the SIM base, which can prove their sustainable engagement to the market. For all commercial customers, the Cemig SIM Renewable Energy Seal is also available, which can be applied to packaging, product labels and all institutional communication from customers.

Within Cemig SIM's business format, there are several partnerships with private companies and entities in the productive sector, fostering an extensive sustainable chain in the segment of solar energy generation – clean and renewable. This cooperation involves economic development agents such as the Federation of Industries of the State of Minas Gerais (Fiemg), the Federation of Trade in Goods, Services and Tourism of Minas Gerais (Fecomércio MG); Chamber of Shopkeepers of Belo Horizonte (CDL-BH) and 19 other CDL units in the interior of the state; Minas Gerais Association of Supermarkets (AMIS); Union of Retail Trade of Petroleum Derivatives of the State of Minas Gerais (Minaspetro); among others.

Partnerships pave the way for the productive sector to have an efficient energy option, offering the possibility of joining Cemig SIM – an economical, clean and renewable option for generating and consuming energy.

Impact of engagement, including measures of success

Sustainable engagement through Cemig SIM's operations results in a reduction in energy costs for the population and the Minas Gerais productive sector, without the need for investments by individual or corporate customers. Impacts are measured by the number of contracts entered into with Cemig SIM, which in three years of operations reached the mark of 7,000 consumer units in the state of Minas Gerais. The company's operations prevented more than 25,000 tons of CO₂ from being emitted into the atmosphere.

Type of engagement & Details of engagement

Collaboration & innovation

Other, please specify

Engagement with customers through Cemig REC

% of customers by number

8.73

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

CEMIG has been working with Renewable Energy Certificates (RECs), having included the RECs issued this year in the 2020 GHG inventory.

The RECs aim to prove that the energy comes from renewable sources (hydroelectric, wind, photovoltaic, biomass, etc.) and allow the accounting and tracking of energy ballast. As a form of control, a REC that has been sold once cannot be sold again. All certificates receive unique numbers for identification and also include various information such as: the renewable source, place of generation, date of generation, quantity sold, property to which it was assigned, etc. In general, each REC is equivalent to 1 MWh.

In 2020, Cemig created its own certificate, the Cemig REC, which meets international standards and guarantees that customers purchase energy from a renewable source.

The amount of 8.73% corresponds to the 454 Cemig REC clients, in 2022, in relation to the 5200 clients in the wholesale energy market.

Impact of engagement, including measures of success

Through this engagement, Cemig aims to be a reference in the sale of certified renewable energy and hopes to serve customers seeking to implement measures to reduce GHG emissions. The measurement of impacts is based on the number of Cemig REC certificates issued. In this initiative, it is considered that an engagement percentage above 10% corresponds to a successful action. In 2022, therefore, this

objective was not achieved, making it necessary to implement improvements in the engagement strategy in the coming years.

C12.1d

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

SITUATION: Cemig understands that sustainable actions should not be one-off and corporate only, but that everyone should share a culture aligned with the Company's mission, vision and values, in order to accelerate results, stimulate innovation and overflow the theme of sustainability beyond the corporate context. Thus, Cemig develops actions and programs aimed at educating and making individuals aware of relevant topics, such as the rational use of energy and water.

TASK: Having identified the importance of addressing sustainability issues with its public, the Company seeks ways to promote the engagement of its employees (own and outsourced) and the external public through courses, campaigns, and various activities.

ACTION: Cemig conducts distance courses on the safe and efficient use of energy and internal campaigns on the rational use of energy within the Company's facilities, correlating energy efficiency with the reduction of GHG emissions, in the same line of approach adopted with its customers. Internal campaigns are also carried out through the exhibition of banners and posters at Cemig's headquarters and offices throughout the State and digital media on existing communication channels, such as the login screen, Intranet, Cemig OnLine and on Energia da Gente (digital newspaper of the Cemig, aimed at the internal public).

The R&D project DO593 entitled "Plataforma Instrucional Digital da UniverCemig - PLAID", conducted by a team of researchers from UFMG, develops methodologies and digital technologies of virtual immersion for the qualification and training of personnel, in the area of equipment operation of the Cemig's energy distribution. PLAID consists of a "Virtual Immersion Laboratory - LIVI" with equipment, devices and applications for immersion in Virtual Reality and Augmented Reality, an environment for collaborative work via the web and an itinerant laboratory, the Mobile Lab, also equipped for activities of AR and VR. These facilities were implemented at UniverCemig, with renovations of existing spaces in 2022.

Cemig carries out, in addition to projects that aim to directly reduce the consumption of electricity, other projects of an exclusively educational nature that seek to engage society and, mainly, the school public in sustainability issues through courses, writing contests and the rational use of electricity in schools, hospitals and charities, in addition to the use of photovoltaic energy in these environments.

For internal and external audiences, Cemig recently revised and launched several distance learning courses with the objective of disseminating the best practices and knowledge involving the safe and efficient use of electricity, waste management, the objectives of sustainable development and the importance of vegetation and its protection. Additionally, training courses, lectures, educational activities are carried out with residents living around the projects in order

to raise awareness about care for springs, the importance of reforestation, adoption of agricultural practices that are less aggressive to the soil, reduction of pollution and contamination of soil and water, reduction of waste and proper disposal, including sanitary effluents.

Cemig also develops the "Proximity" Program, which includes relationship actions with leaders representing the communities surrounding the reservoirs (upstream and downstream regions, above and below the dam): riverside residents, fishermen, municipal public authorities, users of water, regulatory bodies, among others, by holding informative meetings, preferably in the environment of the plants themselves. The Program brings to the attention of the participating public, through its own application, reports on operating procedures, operational and structural (civil) safety adopted in the company's hydroelectric plants, meteorological conditions and impacts on the hydrological situation of the watersheds and on aspects related to Licensing Environmental of the enterprises.

RESULTS: Cemig has been making engagement actions with its internal and external public more frequent. In 2022, the Proximity Program registered more than 187 million accesses to the more than 300 publications made in the program's application.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, suppliers have to meet climate-related requirements, but they are not included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement

Climate-related disclosure through a non-public platform

Description of this climate related requirement

Cemig recognizes that the Transport and distribution (upstream) category of the GHG Inventory contributes significantly to total emissions given the consumption of fuel (alcohol, gasoline, diesel and CNG) used by contractors working for Cemig D.

In the 2022 Inventory, there were existing Cemig D contracts that voluntarily contributed to the transparency of these data, totaling 7% of the supplier base.

For this type of engagement, there is no cost for Cemig (once a voluntary report request

is made). The company believes that it is a valid effort to include climate issues with suppliers.

% suppliers by procurement spend that have to comply with this climate-related requirement

7

% suppliers by procurement spend in compliance with this climate-related requirement

100

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment

Response to supplier non-compliance with this climate-related requirement

Retain and engage

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Yes, we fund organizations or individuals whose activities could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

No, but we plan to have one in the next two years

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

Cemig operates in discussion forums, participating in the formulation of regulations and laws through participation in Municipal Committees that deal with the climate issue.

Among them, the River Basin Committees stand out, in which criteria for use, regulations, water availability, among other topics related to climate issues are defined and voted on.

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Carbon pricing policies and construction of systems for measuring, verifying and reporting emissions in the country.

Category of policy, law, or regulation that may impact the climate

Carbon pricing, taxes, and subsidies

Focus area of policy, law, or regulation that may impact the climate

Carbon taxes

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

Brazil

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

The company has been monitoring, through Fiemg's CEMA Working Group on Climate Change and Air Quality and the Global Compact's Climate Action Platform, the procedures for implementing the regulated carbon market in Brazil. The company's activities support carbon pricing policies and the construction of systems for measuring, verifying and reporting emissions in the country.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify

FIEMG Council of Entrepreneurs for the Environment

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

The Working Group on Climate Change and Air Quality, which is part of FIEMG's Council of Entrepreneurs for the Environment (CEMA), promotes discussions on possible changes in legislation resulting from the implementation of the National Policy on Climate Change, such as the creation of a carbon pricing instrument. Cemig's participation in CEMA takes place through the engagement of the Sustainability Management. In 2022, there were four meetings per year, in which regulatory issues were addressed, such as the legislation of Minas Gerais - Decree No. the theme, Local Climate Action Plan of Minas Gerais (PLAC-MG) – PLAC-MG. Cemig's contribution to participation in this Group is not foreseen.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

0

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

UN Global Compact (Climate Action Platform)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

The Global Compact aims to align companies' strategies and operations with the principles of corporate social responsibility and sustainability. Currently, the Global

Compact is one of the largest corporate sustainability initiatives in the world, comprising more than 80 networks covering more than 159 countries, in addition to Brazil.

The principles of the Global Compact guide all relationships established as a result of the Company's activities and are described in Cemig's Social Responsibility Booklet. In 2009, Cemig signed a letter of Adhesion to the Global Compact, publicly reinforcing its commitment. In December 2021, Cemig joined the Ambition for the SDGs Program, which is coordinated by the Global Compact, with an expected duration of 6 months.

In 2022, Cemig participated in 5 meetings, presenting projects in the area in specific panels. The Journey encompassed themes and activities such as Climate Accelerator, Consultative Committee and CEO Roundtable, Benchmark Meetings, and productions oriented to Communication and Visibility.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

52,070

Describe the aim of your organization's funding

Financing is a strategy to promote the agenda focused on the Global Compact Principles throughout the national territory, also encouraging Cemig's participation in periodic meetings.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations or individuals in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization or individual

Non-Governmental Organization (NGO) or charitable organization

State the organization or individual to which you provided funding

Global Compact Climate Action Platform

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)

52,070

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

Through the Global Compact Climate Action Platform, Cemig encourages the incorporation of the Climate Agenda into organizational strategies, contributing to the construction of a resilient and carbon neutral economy in a transparent, socially fair and inclusive manner.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

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 voluntary sustainability report

Status

Complete

Attach the document

 2022_CEMIG_Report.pdf

Page/Section reference

Pages 143-153.

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Cemig annually publishes its Annual and Sustainability Report, showing progress in terms of emissions and targets, also reporting updates on its strategy, identified risks and opportunities, governance structure and highlights relevant to the context of climate change at the organizational level.

Publication

In mainstream reports, incorporating the TCFD recommendations

Status

Complete

Attach the document

 TCFD REPORT CEMIG 2023_EN.pdf

Page/Section reference

The document in its entirety.

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

In order to meet the recommendations of the Financial Disclosures Related to the Climate, the report was prepared based on the criteria of the TCFD - Task Force on Climate-related Financial Disclosures - which describes the structure of Governance, Strategy, Risk Management and Metrics and targets.

Publication

In mainstream reports

Status

Complete

Attach the document

 2022_CEMIG_20F.pdf

Page/Section reference

Pages 10, 16, 17, 18, 26, 30, 63.

Content elements

Strategy
Risks & opportunities

Comment

Cemig annually publishes the 20F report, including in its considerations the risks and opportunities related to the climate with the potential to impact the company in financial and strategic terms.

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

| | Environmental collaborative framework, initiative and/or commitment | Describe your organization's role within each framework, initiative and/or commitment |
|-------|---|--|
| Row 1 | UN Global Compact Other, please specify Carbon Efficient Index ICO2 (B3) | <p>The Global Compact Climate Action Platform aims to mobilize its members to integrate the Climate Agenda into their organizational strategies, contributing to the construction of a resilient and carbon neutral economy in a transparent, socially fair and inclusive manner. Cemig, as part of this initiative, undertakes to include the issue of climate change in its strategy and provide transparency to its actions.</p> <p>The Carbon Efficient Index (ICO2) was developed in partnership between B3 and the National Bank for Economic and Social Development (BNDES). It comprises shares of companies participating in the IBrX50 index that have adopted transparent practices regarding their greenhouse gas emissions. Cemig, which adheres to the index, expresses its commitment to being transparent in its emissions, anticipating the vision of preparing for a low-carbon economy.</p> |

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

| | Board-level oversight and/or executive management-level responsibility for biodiversity-related issues | Description of oversight and objectives relating to biodiversity |
|-------|---|--|
| Row 1 | Yes, board-level oversight | Cemig, aware of the impacts caused by its activities on the environment, created a series of principles to guide the Company's actions. These principles are contained in the Environmental Policy, the Water Resources Policy and the Biodiversity Policy. The Environmental Policy, created in 1992 and more comprehensive, recognizes the Company's |

| | | |
|--|--|---|
| | | <p>responsibility and establishes a commitment to the adoption and dissemination of good environmental practices. The 2016 Water Resources Policy provides for the safe management of reservoirs, with climate monitoring, promotion of conservation and preservation actions, among other essential principles for ecological balance. The Biodiversity Policy had the participation of various segments of society involved with the theme in the process of its elaboration in 2010. To this end, the Company carried out consultation workshops with the participation of different publics, and received suggestions from the participants. The Policy was proposed by Cemig's Environmental Management Management and approved by the Sustainability Committee. After revisions, it was approved by the company's Management and Superintendence, followed by the Board of Directors and Board of Directors.</p> <p>The Biodiversity Policy aims to formalize the principles that govern the Company's actions aimed at biodiversity conservation. These principles are:</p> <ul style="list-style-type: none"> Principle 1 – Strategy Principle 2 – Planning Principle 3 – Compliance with legislation Principle 4 – Programs Principle 5 – Vulnerable areas and endangered species Principle 6 – Engagement with stakeholders Principle 7 – Research, development and innovation Principle 8 – Communication and Environmental Education <p>In addition to following and being a spokesman for the Company's principles, the Board of Directors is also committed to making decisions and assessing the risks and opportunities presented from an environmental perspective, covering aspects of climate, water resources and biodiversity.</p> |
|--|--|---|

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

| | Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity | Biodiversity-related public commitments | Initiatives endorsed |
|-------|---|---|----------------------|
| Row 1 | Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity | Adoption of the mitigation hierarchy approach | SDG |

| | | | |
|--|--|--|--|
| | | <p>Commitment to not explore or develop in legally designated protected areas</p> <p>Commitment to avoidance of negative impacts on threatened and protected species</p> | |
|--|--|--|--|

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations

Tools and methods to assess impacts and/or dependencies on biodiversity

Other, please specify

Cemig uses the risk methodology, disseminated by the Risk Management and Internal Controls Department.

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

Based on the guidelines established in the Risk Management and Internal Controls Policy, Cemig structured a process for risk management, which allows the mapping and assessment of both strategic risks and those arising from operational activities. This process is coordinated by the Risk Management and Internal Controls Department, which provides technical support to the different areas of the Company. The purpose is to provide Senior Management with information to make decisions regarding the most relevant risks and opportunities.

For Cemig, risk management consists of planning, identifying, analyzing, treating and monitoring mapped risks. In the risk identification activity, the area responsible for the centralized management of risks and internal controls consults the managers of the areas correlated to the identified themes, including those areas that interact with external interested parties, such as investor relations, strategic planning, sustainability and general secretariat .

The risk identification process involves producing the risk matrix of the respective management, identifying the type of risk, where it would occur, probability of occurrence, and estimation of the financial impact. Once the risks have been raised, they are approved by the Board of Directors and then forwarded to the Risk Committee of the Board of Directors and the Board of Directors, which also carry out considerations on

the environmental and reputational impact of priority risks.

Among the Top Risks identified by Cemig, the risk of dam rupture and extreme hydrological events stands out, which, among other consequences, could cause damage to flora, fauna, watercourses, and contamination. In view of this risk, Cemig presented the Investment Plan for improvements in operational vulnerabilities – electromechanics as a mitigation measure.

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations

Tools and methods to assess impacts and/or dependencies on biodiversity

Other, please specify

Cemig uses the area's risk methodology and indicators to monitor essential information.

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

Cemig has a water dependency of over 90% in its headquarters. As a way of dealing with this dependency, the Company has built reservoirs to accumulate water for the generation of electricity and which help regulate water availability in the hydrographic basin. They provide higher flows during periods of drought or water crisis and minimize flooding during the rainy season.

Weather forecasting and constant monitoring of rainfall and the water level in reservoirs and rivers are fundamental for managing the storage volume of hydroelectric developments. To help this process, Cemig has a wide network of automatic measuring stations, which send data in real time so that the planning of operation of the gates and energy generation is optimized.

In addition to the advantages of regularization, the water stored in the reservoir can also be used for other purposes, such as:

- Human and industrial supply;
- Irrigation;
- Navigation;
- Fishing and Aquaculture (raising fish in net tanks);
- Tourism and leisure, providing benefits for the watershed.

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity-sensitive areas in the reporting year?

Yes

C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area

Other biodiversity sensitive area, please specify
Private Natural Heritage Reserve (RPPN)

Country/area

Brazil

Name of the biodiversity-sensitive area

Private Natural Heritage Reserve (RPPN) located between the municipalities of Muriaé and Rosário da Limeira, where SHP Coronel Domitiano is located.

Proximity

Overlap

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Cemig presents some hydroelectric power plants in protected areas in the state of Minas Gerais, or in areas assessed as relevant to the conservation of biodiversity. In this sense, the Company has three RPPN: one in Fartura in the Municipality of Capelinha-MG, with 1455 hectares of conservation, another is located in Perdizes-MG, with 2,695 hectares of conservation, and the third located between the municipalities of Muriaé and Rosário da Limeira, where SHP Coronel Domitiano is located. The latter, with an extension of 263.56 hectares, was established by Cemig itself, after the implementation of the project.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Restoration
Biodiversity offsets

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

In some cases, the protected zone was defined after the existence of Cemig's structures. Most of the Company's hydroelectric plants date back to the 1980s and 1990s, a period in which there was little representation of protected areas in the state of Minas Gerais or even areas considered relevant to biodiversity conservation. For

example, there was the first systematic study of priority areas for conservation only in 2005, by the Biodiversitas Foundation.

Effects related to biodiversity directly impact Cemig's operations and financial results. For the Company, all risks related to legal compliance are relevant, since non-compliance (whether with deadlines, obtaining a license or inadequate compliance with environmental conditions and not validated by environmental agencies) may lead to loss of environmental licenses, penalties/fines, shutdown of units and loss of income. In this context, species are monitored as part of environmental programs to comply with licensing conditions. Additionally, the Company has research projects and specific programs for ichthyofauna, terrestrial fauna, reforestation, among others.

Based on this work, there is a legal commitment to recover, protect and conserve the forests, rivers and fauna surrounding the developments. Thus, the Company is also contributing to the fulfillment of UN SDG 15: "Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss."

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

| | Have you taken any actions in the reporting period to progress your biodiversity-related commitments? | Type of action taken to progress biodiversity-related commitments |
|-------|---|---|
| Row 1 | Yes, we are taking actions to progress our biodiversity-related commitments | Land/water protection Land/water management Species management Education & awareness Law & policy |


C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

| | Does your organization use indicators to monitor biodiversity performance? | Indicators used to monitor biodiversity performance |
|-------|--|---|
| Row 1 | Yes, we use indicators | State and benefit indicators Pressure indicators |

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

| Report type | Content elements | Attach the document and indicate where in the document the relevant biodiversity information is located |
|--|---|---|
| In voluntary sustainability report or other voluntary communications | Content of biodiversity-related policies or commitments Governance Impacts on biodiversity Biodiversity strategy | Pages 138-143  1 |

 12022_CEMIG_Report.pdf

C16. 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.

Cemig released the letters of commitment to the Science Based Targets initiative and the Net Zero Ambition Movement, as of May 2022.

 002__SBT_Commitment_Letter_assinada.pdf

 001_Carta_Compromisso_Ambicao_Net_Zero_assinada.pdf

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

| | Job title | Corresponding job category |
|-------|---|------------------------------------|
| Row 1 | Director of Corporate Communications and Sustainability (CSO) | Chief Sustainability Officer (CSO) |