



COMPANHIA ENERGÉTICA
DE MINAS GERAIS

Climate-Related Financial Disclosures Report

Base Year 2024

2025 REPORT

Aligned with the TCFD Recommendations and IFRS S2 Standard

Summary

1. ABOUT CEMIG	5
2. JOURNEY FOR THE CLIMATE	8
3. EXECUTIVE SUMMARY	11
4. CLIMATE-RELATED DISCLOSURES	13
4.1 GOVERNANCE	13
4.1.1 Board of Directors	15
4.1.2 Strategy, Sustainability, and Innovation Department	16
4.1.3 Committees	16
4.1.4 Compensation policies	17
4.2 STRATEGY	18
4.2.1 Climate-related risks and opportunities	25
7.1.2 Impact of climate-related risks and opportunities	33
7.1.3 Opportunities identified by the company	41
7.1.4 Scenario analysis	42
7.1.5 Adaptation and Resilience Actions	50
7.1.6 Resilient Strategy: Climate Action Plan	57
7.2 RISK MANAGEMENT	60
7.2.1 Risk identification and assessment process	60
7.2.2 Risk management process	62
7.2.3 <i>Top Risks</i> identified by the company	64
7.3 METRICS AND GOALS	70
7.3.1 Company metrics	70
7.3.2 Emissions history	71
7.3.3 2024 Emissions	73
7.3.4 Power Consumption	75
7.3.5 Company goals	76
5. FINAL CONSIDERATIONS	79
6. REFERENCES	80
7. TCFD/IFRS S2 SCOREBOARD	81
8. ANNEX I: COMPARATIVE TCFD X IFRS S2	86

FIGURE INDEX

Figure 1. Geographic distribution of Cemig Group generation assets.....	5
Figure 2. Cemig's trajectory in the climate agenda.....	10
Figure 3. Cemig corporate governance structure.....	14
Figure 4. Composition of executive compensation.....	17
Figure 5. Investments made by Cemig Distribuição in 2024.....	21
Figure 6. Cemig's ESG commitments in accordance with the Strategic Plan.....	22
Figure 7. Guidelines of Cemig's Climate Strategy.....	23
Figure 8. Examples of physical risks applicable to the energy sector.....	26
Figure 9. Examples of transition risks applicable to the energy sector.....	26
Figure 10. Total compensation of Cemig D between 2021 and 2025 (partial).....	29
Figure 11. Structure of the Brazilian Greenhouse Gas Emissions Trading System (SBCE).....	30
Figure 12. Global emissions trajectories.....	43
Figure 13. SSPs mapped to the challenges in mitigation vs. adaptation.....	43
Figure 14. Example of the monthly average precipitation (mm) from 2022 to 2051, for scenarios SSP126, SSP245, SSP370 and SSP585, of the AW1-CM11-1-MR model, with emphasis on the Três Marias region. Source: Cemig, 2024.....	46
Figure 15. Example of the monthly average precipitation (mm) from 2022 to 2051, for scenarios SSP126, SSP245, SSP370 and SSP585, of the CESM2 model, with emphasis on the Três Marias region.....	46
Figure 16. Macro-regions of analysis.....	47
Figure 17. Historical and predicted scenarios for cloudiness (%) until 2050 for the northern region of Minas Gerais.....	47
Figure 18. Location of the wind farms of Parajurú and Volta do Rio.....	48
Figure 19. Historical and predicted scenarios for the maximum surface temperature (°C) by 2050.....	49
Figure 20. Historical and predicted scenarios for the relative humidity of the surface air (%) until 2050.....	49
Figure 21. Anomalies (%) for scenarios SSP1 (b), SSP2 (c), and SSP5 (d). Source: CNRM/FR.....	50
Figure 22. Three Lines Model.....	61
Figure 23. Cemig's risk matrix.....	63
Figure 24. Historical series of total emissions by scope.....	72

TABLE INDEX

Table 1. Net generation by power generation source (MWh, %).	6
Table 2. Energy sales by consumer class in 2024 (MWh).	6
Table 3. Highlights of the report.	11
Table 4. Climate Change Events 2024/2025.	24
Table 5. Time horizons for risk assessment.	25
Table 6. Evolution of DEC and FEC indicators.	29
Table 7. Cemig D's expansion plan.	34
Table 8. Models used in the studies of climate change scenarios.	44
Table 9. Summary of actions to adapt to physical risk.	50
Table 10. Cemig's voluntary classification regarding the alignment and eligibility of Revenue, OPEX and CAPEX for 2024 according to the European Green Taxonomy.	58
Table 11. Historical series of Cemig's issuances by scope.	71
Table 12. Summary of emissions by emission category in 2024.	73
Table 13. Summary of Cemig's goals and advances. Source: Cemig, 2024.	76

1. ABOUT CEMIG

Companhia Energética de Minas Gerais (Cemig) operates in the areas of generation, transmission, commercialization, distribution of electricity, distributed generation (Cemig SIM), and distribution of natural gas (Gasmig). The group is constituted of the holding company Companhia Energética de Minas Gerais (Cemig), the wholly-owned subsidiaries Cemig Geração e Transmissão S.A. (Cemig GT) and Cemig Distribuição S.A. (Cemig D), totaling 87 companies, 44 consortia, as well as assets and businesses in 26 Brazilian states and the Federal District.

Cemig is a publicly-held mixed capital company, controlled by the Government of the State of Minas Gerais (51%), with shares traded in São Paulo, on B3 S.A. (Brasil, Bolsa, Balcão), and in New York, on the New York Stock Exchange (NYSE). In 2024, the company had a net profit of R\$7.1 billion, which represented a growth of 23.45% compared to 2023. In the same year, it reached a record investment of R\$5.7 billion.

Figure 1 presents the distribution of the company's activities throughout the national territory.



Figure 1. Geographic distribution of Cemig Group generation assets.

Source: Company data.

An overview of the company's activities is presented below:

Power Generation

In line with its commitment to sustainability, Cemig's generation matrix is fully based on clean and renewable sources, with assets in hydropower, wind, and solar energy.

At the end of 2024, considering its subsidiaries and subsidiaries jointly, the company had a stake in 48 plants, 36 hydroelectric, 10 solar and 2 wind, with a total installed capacity of 4,885.78 MW, of which 95.09% refer to hydraulic generation, 3.40% to wind generation, 1.51% to solar generation and

4.24% to distributed Generation.¹ Cemig's generation in 2024 corresponded to 15,197.29 GWh, considering all energy sources, including distributed generation. Table 1 presents the company's net generation by source.

Table 1. Net generation by power generation source (MWh, %).

Source	MWh	%
Hydraulics	14,331,470	94.30
Wind	366,960	2.41
Solar	107,940	0.71
Distributed generation (DG)	390,920	2.57
Total	15,197.290	100

Source: Annual Sustainability Report, Cemig (2025).

Power Transmission

Through its subsidiaries and electricity transmission affiliates, the company operates and maintains 42 substations and a transmission network totaling 5,061.20 km. This system is responsible for transporting energy from the large generating centers to the consumer centers, making it possible to serve the subtransmission and distribution systems through the transmission substations spread throughout the various regions of the concession area. In 2024, the company had contracts in force to provide operation and maintenance services for transmission assets with 9 other companies, in 12 substations and 95 km of transmission lines.

Power Distribution

Cemig is the largest electricity distributor in Brazil in network extension, totaling 3,196,812 km, and serving 774 municipalities in Minas Gerais. Its concession area covers 567,478 km², equivalent to approximately 97% of the state, serving a market of 9,407,939 customers in 2024.

At the end of 2024, the company occupied the 3rd position in the ranking of customers benefiting from the social tariff in Brazil, serving an average of 1,320,000 consumers in this profile, representing approximately 17% of the total consumers billed in the residential class.

Energy Trading

In 2024, Cemig remained the leading provider in Brazil's free energy market, achieving 14% market share and consolidating its client base nationwide, with key concentrations in Minas Gerais, São Paulo, and Rio Grande do Sul. In addition to electricity supply, Cemig sells the Cemig REC and I-REC renewable energy certificates, contributing to both the economic and environmental sustainability of its customers.

In the incentivized energy segment, in 2024, Cemig reached the average amount of 1,746 MW of energy sold, representing almost 15% of this segment, according to data released by the Electric Energy Trading Chamber (CCEE). This is an unprecedented brand for the market, especially for the company, which has been increasing its sales to this segment since 2010.

Table 2 presents the sale of energy by class of consumers in 2024.

Table 2. Energy sales by consumer class in 2024 (MWh).

Class	Number of customers	MWh
Residential	7,960,300	12,715,486
Industrial	27,029	17,577,157

¹ According to the Annual Sustainability Report (Cemig, 2025).

Commerce, Services, and others	920,937	9,676,081
Rural	406,087	3,101,845
Public Power	72,689	993,200
Streetlight	7,209	970,801
Civil service	13,688	762,369
Own Consumption	789	30,356
Supply to other utilities	789	12,916,268

Source: Annual and Sustainability Report, Cemig (2025).

Natural Gas Distribution

Cemig also operates in the natural gas distribution and commercialization segment through its subsidiary Gasmig, the exclusive distributor of piped natural gas throughout Minas Gerais.

In 2024, Gasmig sold 867.2 million m³ of natural gas in the captive market, equivalent to 2,370 thousand m³ daily. Including the consumption of free market customers, the volume is 1,033 million cubic meters of natural gas, equivalent to 2,822,000 cubic meters per day. When thermoelectric plants are included, the total volume sold was 925.2 million m³.

Throughout the year, Gasmig began construction of the Midwest Gas Pipeline, the company's largest expansion project since 2010. The project has the potential to generate more than 15 thousand direct and indirect jobs and strengthen the competitiveness of strategic sectors of the Minas Gerais economy, such as metallurgy, steel, and foundry. In addition to ensuring access to a cleaner and more efficient energy matrix, the pipeline will enable the expansion of the supply of natural gas to the Triângulo Mineiro, consolidating Gasmig's role in the sustainable development of the state.

2. JOURNEY FOR THE CLIMATE

Cemig has historically positioned itself with commitment and timeliness in the face of sustainability issues. This consistent alignment with the main socio-environmental challenges contributes to consolidating the company's image, nationally and internationally, as a reference in corporate responsibility. **Cemig's sustainability indexes and results reflect its strategic and integrated performance**, which constantly seeks to align business performance with society's expectations and global commitments, including with regard to climate change.

For the 25th consecutive year, Cemig is part of the Dow Jones Sustainability Index (DJSI World), consolidating its position as one of the most sustainable companies in the world, remaining the **only company in the electricity sector outside Europe to be part of the DJSI World** since its creation in 1999. It is also part of important market indexes, such as B3's Corporate Sustainability Index (ISE), and the Carbon Efficient Index (IC02), created in 2010 by B3 and BNDES. In addition, Cemig was included in the prestigious "A-List" of the Carbon Disclosure Project (CDP) Climate Change 2024, obtaining the maximum score in 10 of the 16 criteria evaluated.

Cemig has been advancing year after year on its path towards a low-carbon future, assuming increasingly **ambitious climate commitments**. Since 2007, the company has published its inventory of greenhouse gas emissions verified by third parties, identifying the main sources of emissions and guiding mitigation strategies, such as the deactivation of UTE Igarapé in 2019, leading to a 100% renewable generation complex since then.

In addition to mitigation initiatives, the company recognizes the urgent need for prevention and adaptation in operations, intending to **increase the resilience of assets and ensure security in energy use** in the face of chronic climate change and the intensification of extreme events. With this focus, Cemig conducts internal studies based on climate scenarios annually and has invested in the efficiency and safety of its assets and surrounding areas through projects related to dams and the fight against fires in the regions where it operates.

In recent years, as part of the climate strategy, the company established the Energy Innovation and Transition Committee (CITE) and dedicated itself to **the diversification of the energy matrix**. As a result, in 2023, Cemig SIM acquired a 100% stake in special-purpose companies that own three photovoltaic solar power plants. In the same year, Cemig GT announced the implementation of the Boa Esperança and Downstream photovoltaic solar plants, which started operations in 2024.

The year 2024 also marked the release of the **Climate Action Plan**, aligned with the main recommendations of frameworks and initiatives such as CDP (formerly known as the *Carbon Disclosure Project*), *Transition Plan Taskforce* (TPT), and *Assessing Low-Carbon Transition* (ACT). Expected to be reviewed every three years, the Plan establishes several decarbonization levers, that is, a series of actions with a fixed deadline, describing the strategy that the organization will adopt to guide its existing assets, operations, and the entire business model towards a trajectory aligned with the most recent and ambitious recommendations of climate science. The aim is to align Cemig with the objectives of the Paris Agreement, contributing to the global effort to limit warming to 1.5°C.

In accordance with the guidance of the Science Based Targets initiative (SBTi), the company considers offsetting limited to residual emissions, i.e., allowing it to offset up to 10% of the total emissions of the base year (2021) by 2040. In line with this guideline, **Cemig already offsets scope 1 emissions**, understanding that this is not the company's main mitigation strategy, but that it is part of the efforts necessary to achieve the Net Zero commitment.

The preparation of the Climate Action Plan involved a broad collaborative effort, with emphasis on the participation and engagement of all the company's stakeholders, ranging from the president and directors, through the superintendents and management, to the operational areas. More than 30 meetings were held with different Cemig actors, including members of the **Advisory Committee of the Board of Directors (Innovation and Energy Transition Committee)**, to discuss decarbonization actions, business strategy, climate governance, risk management, forms of engagement, data collection processes for improving and expanding the inventory, among other issues. In addition, more than 10 meetings were held with Cemig's strategic sectors, which are fundamental for defining decarbonization trajectories.

In 2025, the company also counts on the revised **Sustainability Plan**, covering the period 2025–2029. The Plan presents clear public commitments in areas such as decarbonization, circular economy, energy efficiency, diversity, inclusion and responsible governance. Goals were established, such as offsetting 100% of scope 1 emissions by 2026 and achieving climate neutrality by 2040, reaffirming the leadership in the Brazilian energy transition. In the same year, the company achieves CDP's A-List and approves its science-based targets through the Science Based Targets initiative (SBTi).

In order to give visibility to these and other actions that have been developed by the company in line with its values of integrity, commitment, sustainability and social responsibility, Cemig publishes, for the third consecutive year, the **Report on Climate-related Financial Disclosures**, in line with the recommendations of the TCFD and the guidelines of the IFRS S2 standard. By ensuring the transparency of efforts to mitigate and adapt to climate change, the company reinforces its commitment to the climate agenda.

The following are the main milestones of Cemig's journey in the face of climate issues.

Climate Journey Highlights – Cemig (2025)



Figure 2. Cemig's trajectory in the climate agenda.

Source: Prepared by the authors.

3. EXECUTIVE SUMMARY

Table 3 presents the highlights of this edition of the Climate-related Financial Disclosures Report, evidencing the progress and transparency within the four thematic areas that represent the core elements in organizations: Governance; Strategy; Risk Management; Metrics and Goals.

Table 3. Highlights of the report.

<i>Governance</i>	Established in 2023, the Innovation and Energy Transition Committee has been playing a key role in advising the Board of Directors on issues related to innovation and the energy transition, with a special focus on decarbonization. In 2024, its role in the approval of the Climate Action Plan , a milestone in the company's climate governance, stands out. Also in 2024, 100% of the company's leadership – including the CEO – had the fulfillment of the Net Zero goal as one of the indicators of its variable compensation, referring to the year's performance.
<i>Strategy</i>	<p>Cemig's Climate Action Plan outlines a series of concrete measures and comprehensive strategies that the company will adopt to achieve the ambitious goal of becoming Net Zero by 2040.</p> <p>The new strategic planning cycle 2025-2029 is fully aligned with the objectives of enabling the energy transition in Minas Gerais and Brazil, through investments in renewable generation, especially in grid infrastructure.</p>
<i>Risk Management</i>	<p>Cemig's various governance forums led to the review and approval of the Top Risk Matrix. The matrix represents a key tool for identifying, assessing, and prioritizing the most relevant risks for the company, allowing for a proactive approach in managing potential threats and opportunities, including those related to climate.</p> <p>In the Top Risk matrix, the risk of non-adaptation <i>to physical and transition risks related to climate change was highlighted</i>.</p>
<i>Metrics and Goals</i>	<p>Based on its commitment to the SBTi initiative, Cemig approved its science-based short- and long-term goals in 2025.</p> <p>The approval of the targets by the SBTi reinforced the integration of climate targets into the company's strategic planning and compensation system. Cemig achieved the Gold Seal of the Brazilian GHG Protocol Program, which corresponds to the highest level of qualification of the program, granted to companies that have</p>

demonstrated compliance with all the criteria of completeness and transparency in the publication of their GHG inventory.

Since Cemig assumed the ambition to become Net Zero by 2040, its emissions are 41% lower than the base year.

Based on the Strategic Planning, the **2025-2029 Sustainability Plan** aims to integrate sustainable practices into its operations and strengthen corporate governance, with emphasis on the following axes and public commitments that will be fulfilled through strategic initiatives and monitored by corporate indicators and goals:

- Energy transition;
- Offsetting 100% of scope 1 emissions by 2026;
- Net Zero by 2040 and a 70% reduction in total greenhouse gas emissions by 2030;
- Guarantee of 100% renewable and certified generation, in addition to the commercialization of certificates.

Source: Prepared by the authors.

4. CLIMATE-RELATED DISCLOSURES

4.1 GOVERNANCE

OBJECTIVE
Disclose the company's governance structures that oversee risks and opportunities related to climate change.
GUIDELINES
<ul style="list-style-type: none">• Describe the Board's role in overseeing climate-related risks and opportunities, including:<ul style="list-style-type: none">○ How these responsibilities are documented.○ Which committees or members are responsible, and how they monitor these issues.• Describe the role of management in assessing and managing climate risks and opportunities:<ul style="list-style-type: none">○ Which hierarchical levels are involved, and how they integrate into risk management and strategy processes.○ Frequency and format of reporting to senior management and the Board.

Cemig's corporate governance is based on transparency, equity, and accountability. The main characteristic of Cemig's governance model is the clear definition of the roles and responsibilities of the Board of Directors and the Executive Board in formulating, approving, and implementing policies and guidelines related to the management of the company's business. All members are subject to the company's **Bylaws**² and relevant legislation.

Under the Internal Regulations of the Boards of Directors³, the members of the Board are appointed by the General Shareholders' Meeting, which elects its Chairman and appoints the members of Cemig's Executive Board. The structure and composition of the Board of Directors and the Executive Board are reflected in the wholly-owned subsidiaries Cemig D and Cemig GT, with possible exceptions subject to approval by the Board of Directors.

The company's organizational chart in Figure 3 identifies the Councils, Committees, and Directors, as well as the Committees and Audits, highlighting their functions and composition.

² Cemig Bylaws, as well as Cemig GT and Cemig D Bylaws, can be consulted on the page <https://www.cemig.com.br/estatutos-e-regimentos/estatuto-social-cemig/>

³ The Internal Regulations of the Boards of Directors are on the page <https://ri.cemig.com.br/docs/cemig-2019-09-13-bNnBtfdG.pdf>

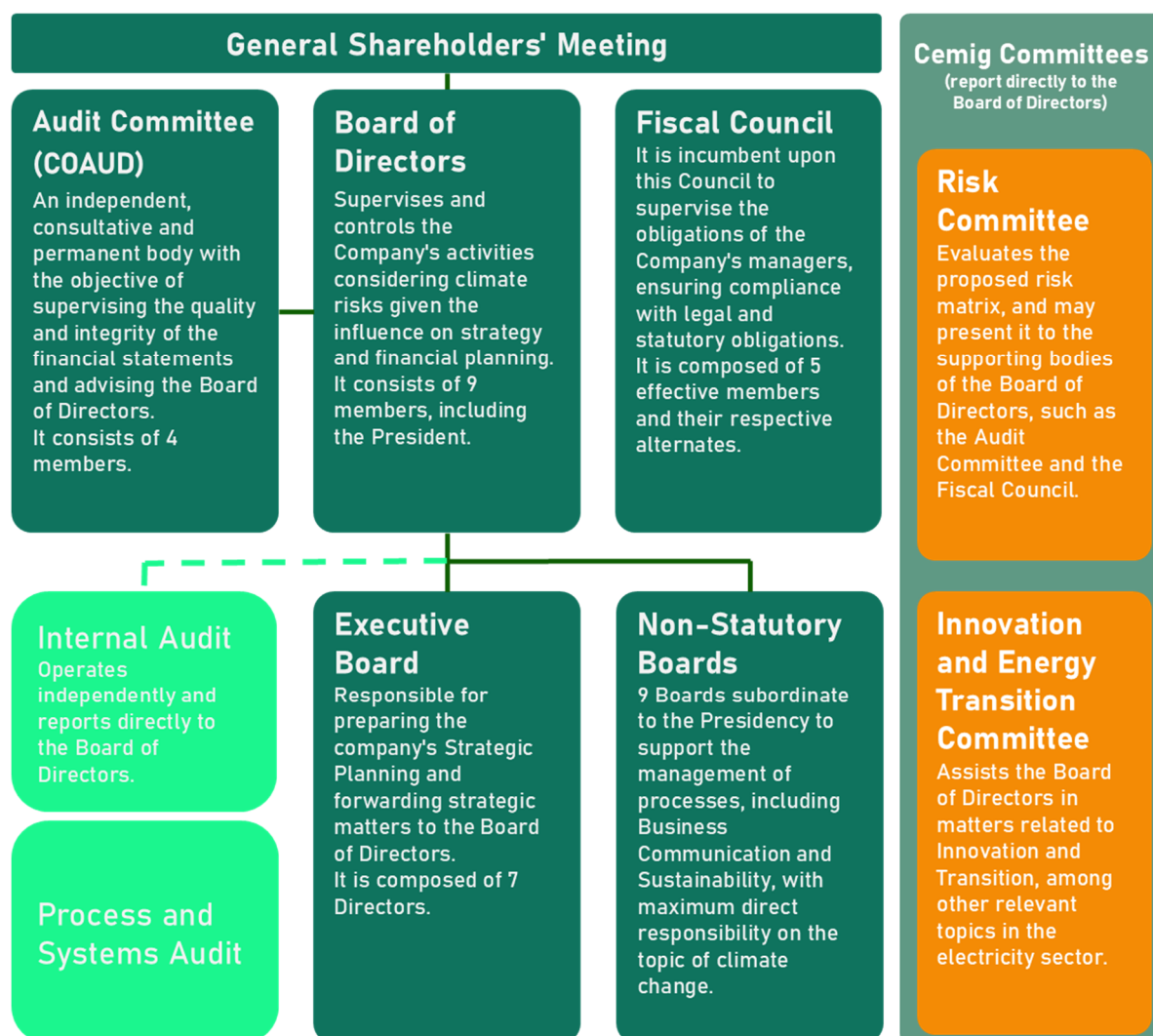


Figure 3. Cemig corporate governance structure.
Source: Sustainability Report (Cemig, 2025).

The emphasis of the company's governance has been on the balance between the economic, financial, environmental, and social aspects of Cemig, with the continuous objective of contributing to sustainable development and strengthening its relationship with shareholders, customers, employees, society and other stakeholders. To sustain a well-defined corporate governance model, Cemig adheres to the basic principles of the Brazilian Institute of Corporate Governance (IBGC)⁴, which are:

1. Integrity
2. Transparency
3. Equity
4. Accountability
5. Sustainability

Following these principles, Cemig monitors ESG actions on a quarterly basis, including matters related to climate change.

⁴ More details are available at: [IBGC | Conheça os cinco princípios da governança corporativa.](#)

The functions of the Board of Directors, the Sustainability and Innovation Department, and Cemig's Risk Committee and Innovation and Energy Transition Committee are presented in more detail, given their relevance in addressing climate issues.

4.1.1 Board of Directors

According to the Internal Regulations, **the role of the Board of Directors is to supervise and control the company's activities**, exercising concrete responsibilities concerning the strategy and direction of the business, and entrusting the ordinary management of the business to the executive bodies. The management of climate issues falls within these functions to the extent that the climate-related risks and opportunities mapped by the company influence the strategy and financial planning, especially when Cemig mobilizes as a whole to establish and achieve decarbonization goals in the short, medium, and long term.

Composed of the President and eight other members, the Board of Directors is responsible for **approving technical standards and normative instructions necessary for the development of corporate sustainability**, climate change, and social responsibility, in line with strategic drivers and sectoral regulation. To fulfill these duties, the Board meets, ordinarily, following its Internal Regulations, at least once a month, to analyze the indicators and results of the company and its wholly-owned, controlled and affiliated subsidiaries, in addition to deliberating on the other matters included in the agenda and, extraordinarily, by call of its Chairman, or one third of its members or when requested by the Executive Board.

Responsibilities of the Board of Directors

- Establish general guidelines and promote the integration of risk management practices and internal controls into the decision-making process;
- Evaluate and approve the *Top Risks Risk Matrix*, as well as the general guidelines for establishing the company's acceptable limits of exposure to risks (risk appetite);
- Evaluate and approve the Risk Management and Internal Controls Policy;
- Ensure and supervise the risk management systems and internal controls established for the prevention and mitigation of the main risks to which the Company is exposed, including those related to the integrity of accounting and financial information and the occurrence of corruption and fraud;
- Monitor the results of risk management processes and internal controls through executive reports.

In 2024, the Board of Directors held 21 meetings dedicated to strategic planning, project analysis, acquisition of new assets, various investments, and other relevant agendas. **Indicators on climate-related risks and opportunities were addressed**, focusing on issues related to the construction of renewable plants and loss reduction plan (associated with scope 2 emissions), as well as Cemig's adherence to UNEZA - [Utilities for Net Zero Alliance](#). In April 2024, the Net Zero target progress was presented.

Whenever it is necessary to approve a deliberative topic, an evaluation is made by the Executive Board and forwarded to the level of the Board of Directors, as in the following cases: definition of the growth strategy in generation focused on renewable sources; adherence to commitments such as the Net Zero Ambition Movement of the United Nations (UN) Global Compact; and the construction of photovoltaic plants.

In order to ensure that these issues are properly addressed, Cemig understands the importance of a well-equipped and informed Board of Directors, and, therefore, has members specialized in the electricity sector, in regulatory issues of relevance to the company, and academically and professionally experienced in the subject of Corporate Governance. These capabilities are also observed in the positions of the Board of Directors and the Committees.

4.1.2 Strategy, Sustainability, and Innovation Department

According to the company's structure, the **position with the highest direct responsibility for the topic of climate change** at Cemig is the position of Director of Strategy, Sustainability and Innovation, supporting the management of processes by reporting directly to Cemig's Presidency, who represents the highest level of the Executive Board, and who, in turn, reports directly to the Board of Directors. Every month, the Director of Strategy, Sustainability, and Innovation presents to the President and the Board of Directors the progress of the main ESG actions.

The responsibilities of this Board include developing and proposing the company's strategy, establishing assumptions and leading innovation projects, as well as implementing actions related to corporate sustainability, climate change, and social responsibility, all in alignment with strategic guidelines and sectoral regulations.

4.1.3 Committees

At Cemig, the Advisory Committees of the Board of Directors do not have executive authority or direct decision-making power, and their purpose is to **ensure objectivity, consistency, and quality in the decision-making process**. They are dedicated to thoroughly analyzing matters within their competence and providing recommendations for decisions or actions, as well as opinions to the Board of Directors.

Within the company's governance structure, two committees play key roles in addressing and managing risks and opportunities related to climate change, as well as in promoting innovation and energy transition. They are:

a. Risk Committee:

The Risk Committee is an **essential advisory body that provides a critical and expert view on climate change impacts** on the company's business. Its analysis and recommendations contribute to informed and proactive decision-making regarding the threats and opportunities arising from the ever-evolving climate landscape.

Responsibilities of the Risk Committee

- Monitor the risk management and internal controls process, bringing the most relevant points to the attention of the Board of Directors;
- Evaluate, advising the Board of Directors, the definition of the *Top Risks* Risk Matrix, as well as the general guidelines for establishing acceptable limits for the company's exposure to risks (risk appetite);
- Analyze all material submitted to the Board of Directors on the company's risk management and internal controls, giving a prior opinion on it.

In addition to a direct relationship with the Board of Directors, its role includes presentation of the risk matrix to the supporting bodies of the Board, such as the Audit Committee and the Fiscal Council.

b. Innovation and Energy Transition Committee:

Given the growing relevance of the climate agenda, the Board of Directors decided, in 2023, to establish the Committee on Innovation and Energy Transition (CITE), which holds regular monthly meetings and may also convene extraordinary sessions as needed.

Composed of four independent directors, the committee is **constituted of experienced members in both climate issues and innovation**. It has a strategic role, given that decarbonization is one of the company's main objectives. The committee guides Cemig's innovation strategy, ensuring that electrification initiatives, one of the main vectors of decarbonization, are properly integrated and boosted in all areas. Its expertise contributes to identifying innovation opportunities that not only reduce the company's carbon footprint but also promote long-term competitiveness and sustainability.

CITE's Responsibilities

- Assist the Board of Directors in matters related to the company's Innovation and Energy Transition topics nationally and internationally in the energy sector;
- To give an opinion on the establishment of short, medium, and long-term strategies related to technological innovation and energy transition;
- Support the promotion of initiatives and debates on Energy Transition and Innovation in the electricity sector;
- Advise the Board of Directors on technical and institutional developments related to climate change and the associated best mitigation, compensation, and adequacy practices;
- To keep up with market trends related to technological innovation and the energy transition.

These committees, with their respective competencies and focuses, ensure that the risks and opportunities related to climate change are properly assessed and incorporated into the corporate strategy, while driving innovation and the transition to a more sustainable energy future.

4.1.4 Compensation policies

In addition to establishing the essential positions and committees in the organizational structure to ensure that the company's environmental and climate agendas have the proper space and are adequately addressed by specialists dedicated to the subject, Cemig also uses incentives linked to these pillars to reinforce the relevance and consolidate the strategy of prioritizing the goals.

Following its [Directors' Compensation Policy](#) and in line with its strategic planning, annual budget, and multi-year business plan, Cemig defines the compensation of executives. The overall amount of remuneration is fixed at the General Meeting, under the applicable laws, and is composed of:



Figure 4. Composition of executive compensation.

Source: Directors' Compensation Policy (Cemig, 2023).

In this variable compensation model, the goals are directly related to the result indicators, including the incorporation of ESG objectives, such as: the reduction of greenhouse gas emissions (Net Zero

goal); the improvement of the score in the DJSI index and in the implementation index of the code of conduct; and compliance with internal controls and the Action Plan on non-conformities pointed out by the Internal Audit.

Cemig establishes variable compensation indicators for the payment of bonuses for the entire Company.

Specifically, the Chief Executive Officer (CEO) and all leadership have a set of indicators, including the indicator aligned with the achievement of our goal aligned with our netzero 2040 commitment.

Cemig has committed to becoming netzero by 2040. To monitor progress in fulfilling this commitment, there are annual targets. Thus, the KPI for measuring the target is related to Cemig's total CO2e emissions (scopes 1, 2 and 3) in 2024, compared with the value expected for the year 2024, aligned with the netzero commitment.

All of the company's own employees have variable compensation linked to the performance of the energy distribution loss indicator (IPTD). Distribution losses are responsible for 99% of the company's Scope 2 emissions. Total Distribution Losses: Measures the percentage relationship between energy losses and the total energy injected into the distribution system. The better performance of this indicator contributes to the reduction of emissions related to distribution losses, the main source of scope 2 greenhouse gas emissions.

Additionally, in 2025, a leadership project was structured **focused on promoting defossilization and decarbonization**, with actions planned both internally and externally to the organization. Performance and engagement in this initiative are directly related to the increase in Profit Sharing as a way of encouraging strategic action in the face of the energy transition.

Based on this governance and compensation structure, Cemig engages all areas of the company in achieving its objectives and creates the necessary conditions for the results to be achieved as provided for in the company's strategy, which will be detailed in the next section.

4.2 STRATEGY

OBJECTIVE
Disclose the actual and potential impacts of climate risks and opportunities on the company's business, strategy, and financial planning.
GUIDELINES
<ul style="list-style-type: none"> Identify climate-related risks and opportunities in the short, medium, and long term: <ul style="list-style-type: none"> Inform where risks and opportunities are concentrated in the value chain and business model. Describe the impacts of risks and opportunities on financial strategy and planning: <ul style="list-style-type: none"> How the company has responded or intends to respond (including transition plans). How the impacts affect financial position, performance, and cash flow. Inform qualitatively or quantitatively about the impacts, as applicable. Describe the resilience of the strategy considering different climate scenarios: <ul style="list-style-type: none"> Include at least one scenario aligned with the Paris Agreement. Present assumptions, methodologies, and time horizon.

According to the expected annual frequency, Cemig's strategic planning was reviewed in December 2024, and its content covers the period between 2025 and 2029.

In its planning, **the company recognizes that electrification plays a crucial role in decarbonizing the economy by replacing fossil fuel-based energy sources with cleaner and more sustainable alternatives.** According to the New Energy Outlook: Brazil report, released by BloombergNEF, it is estimated that electrification can contribute to up to 55% of carbon emission reductions by 2050. Therefore, there is a great opportunity for efficiency and sustainability with the direct electrification of production processes, accelerating the transition to a low-carbon economy.

However, for electrification to occur, **the real challenge is the expansion and modernization of transmission and distribution networks** to efficiently and intelligently connect generating units to consumption centers, adding reliability and resilience attributes to the energy supply. To scale this challenge globally, the International Renewable Energy Agency estimates that to triple renewable energy generation by 2030, annual investments of about US\$1.52 trillion in renewable capacity and US\$717 billion in transmission networks will be needed.

Without a robust and modern infrastructure, energy generated by renewable sources cannot be efficiently transmitted and distributed to consumers. Therefore, **investing in transmission and distribution networks is a key step** to achieve a more sustainable and resilient energy matrix.

Thus, **the strategy's main objective is to enable the energy transition in Minas Gerais and Brazil.** To this end, and aiming to increase the resilience of its network, Cemig is executing the largest investment plan in the company's history, totaling R\$59 billion by 2029. Investments in physical infrastructure are remarkable; the company will have built 200 new substations by 2028, 50% more than what has been built over its more than 70 years.

Generation Strategy 2025-2029

- Centralized: Renew concessions and invest in the addition of ~1.2 GW of centralized generation renewables, moving forward to return to capacity levels of ~6.0 GW, before the loss of concessions.
- Distributed: Preserve the leadership in Minas Gerais in the Mini DG market, with investments to reach an installed capacity of 600 MWp by 2029

Transmission Strategy 2025-2029

- Invest R\$4.3 billion (2025-2029) in reinforcements and improvements to the transmission network, bringing the total installed capacity to 22,252 MVA (9.5% increase in installed capacity).

These strategic operational priorities are driven by the following six key corporate drivers:

1. Customer Excellence: Becoming a benchmark in customer satisfaction by transforming the Cemig customer experience.

- Cemig is firmly committed to becoming the leading company in customer delight. The goal remains to **reach the excellence zone in the Net Promoter Score (NPS) by 2029**, ensuring that every interaction is marked by quality and efficiency. To achieve this, Cemig is working to establish a system of continuous improvement across the customer journey, aiming for excellence in service in line with NPS standards.

2. Value Creation: Capturing process efficiency through modernization, digitalization, and simplification.

- Value creation is also a strategic pillar of the company. Cemig is modernizing and digitalizing its processes to enhance operational efficiency, while exploring new technologies and reducing risks. With planned **investments of R\$39.2 billion** across the company in this new cycle, Cemig is committed to delivering a Total Shareholder Return (TSR) above 20%, redefining how it generates value for shareholders and communities.

3. Innovation: Strengthening a culture of innovation to transform existing businesses and explore new technologies, driving the energy transition.

- The pursuit of efficiency in current operations and the development of new growth opportunities are rooted in a strong innovation culture. With **R\$3.3 billion allocated to innovation and digital transformation**, Cemig is actively shaping the future of energy through emerging technologies.

4. Performance Culture: Strengthening the organizational culture by creating a safe, meritocratic, diverse, and inclusive environment.

- Building a results-driven culture that values safety, meritocracy, diversity, and inclusion is another key pillar for Cemig. The company is committed to fostering **transparent and responsible management**, where performance is recognized and celebrated, driving collective progress toward excellence.

5. ESG Principles: Becoming the top-performing ESG company in Brazil's electric sector.

- Cemig is adopting practices that reflect its commitment to sustainable development and the creation of shared value. The company is dedicated to **achieving carbon neutrality by 2040**, reducing emissions by 60% by 2028, and reaching leadership positions in two of the world's main ESG ratings by the same year.

6. Safety: Becoming a benchmark in Safe Behavior, with safety as a fundamental and non-negotiable value.

- A culture of safety permeates every aspect of Cemig's operations, ensuring that the protection of employees, customers, and communities remains a top priority. The company is continually enhancing its practices and raising the bar for **safety excellence** across Brazil's electric sector.

These strategic drivers have been mobilizing actions that promote significant results for the company. The following milestones of the last strategic cycle stand out:

STRATEGY EXECUTION HIGHLIGHTS
2024-2028 CYCLE

- **Highest annual EBITDA and Net Income** in Cemig's history.
- **Compliance with the SAIDI and SAIFI quality regulatory indicators**, with a 2.5-hour reduction in the perceived SAIDI.
- **Record investments** in the business: R\$5.7 billion.
- Investments made and the efficiency in the construction of assets resulted in a **positive effect of R\$1.5 billion**.
- **Best rating** in history: AAA by Fitch Ratings.
- Inclusion for the **25th consecutive year in the Dow Jones Sustainability Index**.
- Selection to compose the **CDP Climate Change 2024 A-list**.
- Membership of the **Utilities for Net Zero Alliance (UNEZA)**.
- **Approval of science-based targets** by the Science Based Targets Initiative.

Throughout 2024, Cemig made R\$5.7 billion in investments, an **increase of 18.3% compared to 2023**, with emphasis on the R\$4.40 billion invested in Cemig Distribuição. Other highlights of the year were the connection of more than 190,000 new customers, the expansion of the network with 4,000 km of medium voltage and 1,000 km of high voltage, the expansion of 155 MW (188 MWp) in centralized photovoltaic generation, and the construction of 211 km of gas pipelines.

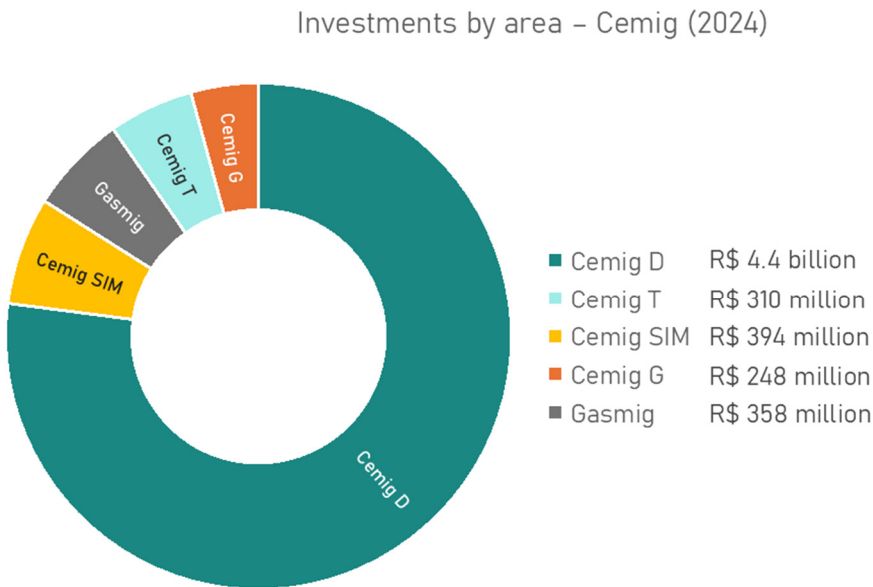


Figure 5. Investments made by Cemig Distribuição in 2024.

Source: [Q4 Earnings Release \(Cemig, 2024\)](#).

The implementation of the largest investment program in Cemig's history reinforces the modernization and reliability of the electrical system, in line with the company's strategic planning, which prioritizes Minas Gerais and its essential businesses, in addition to seeking excellent service for customers. **Between 2025 and 2029, investments of R\$ 39.20 billion are planned, of which R\$ 6.35 billion will be invested in 2025.**

In terms of the ESG agenda, Cemig continues to develop environmental practices in line with the Sustainable Development Goals (SDGs). In line with the commitments made, the company has established 5 pillars to strengthen its position as a leader in sustainability. Figure 6 below presents Cemig's strategic commitments in accordance with its strategic planning.

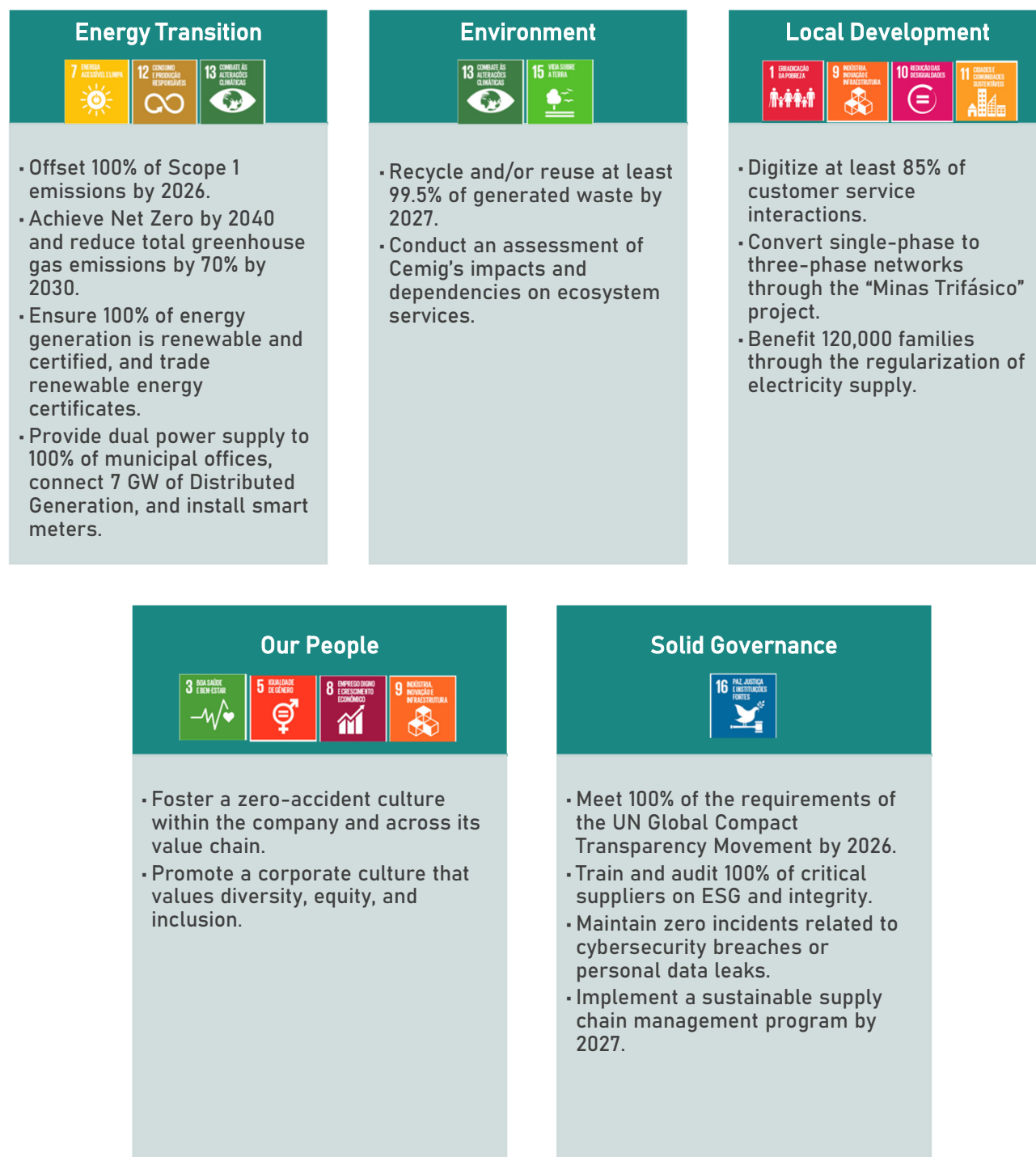


Figure 6. Cemig's ESG commitments in accordance with the Strategic Plan.
Source: New Cemig Strategic Planning 2025-2029.

Cemig's Climate Strategy Guidelines

Cemig has structured its Climate Strategy based on four fundamental pillars, aligning its actions with the risks and opportunities arising from climate change, in accordance with TCFD guidelines. Each pillar includes specific initiatives that contribute to resilience, mitigation and the transition to a low-carbon economy. The Figure 7 It summarizes the guidelines adopted by the company and which are detailed below.

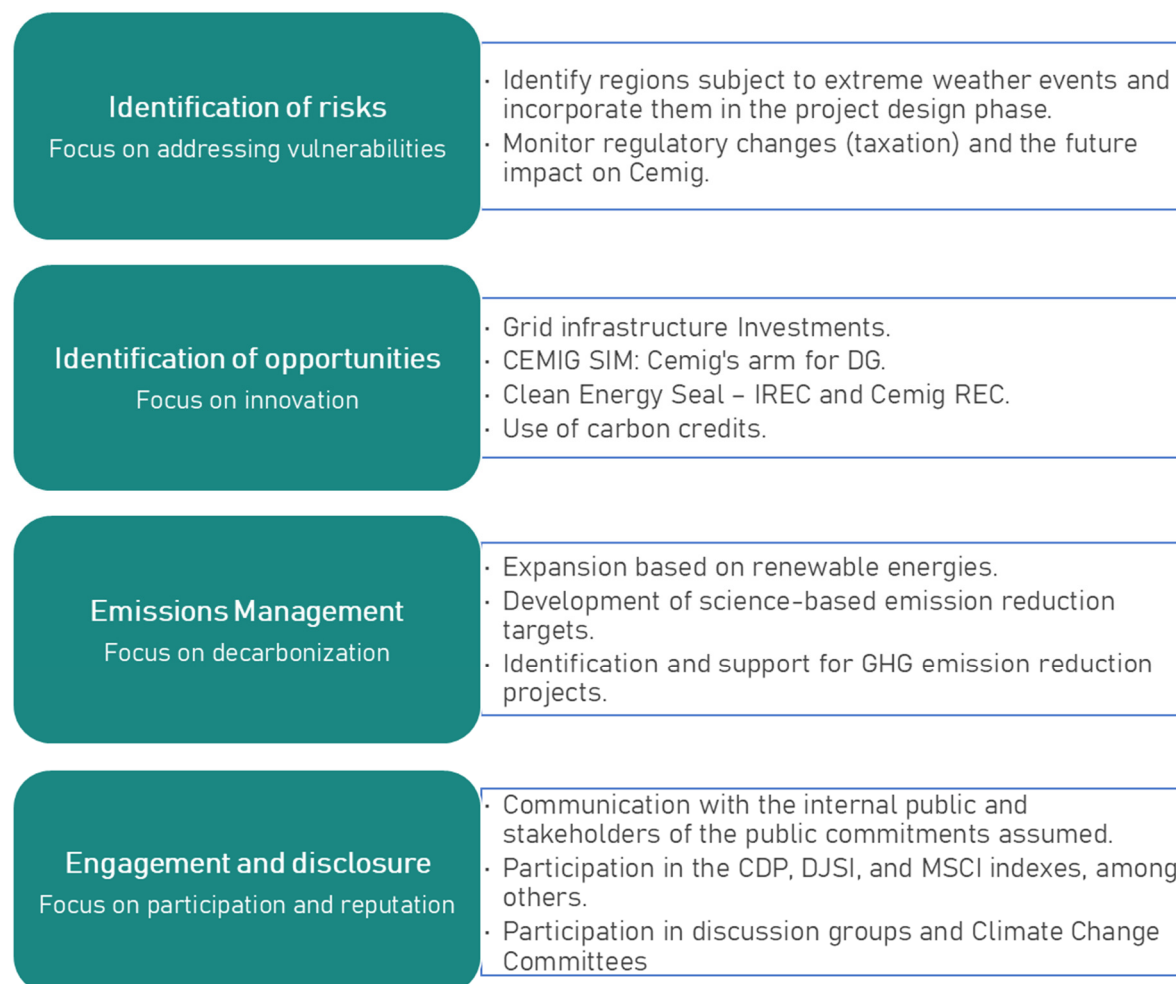


Figure 7. Guidelines of Cemig's Climate Strategy.

Source: Management Report and Financial Statements (Cemig, 2024).

Risk Identification

The company conducts a systematic analysis of climate vulnerabilities, focusing on identifying regions most susceptible to extreme events and considering these factors already in the design phase of the projects. In addition, it continuously monitors changes in the regulatory landscape, especially in relation to emissions taxation, assessing the possible future impacts on its operations.

Identification of Opportunities

Cemig seeks to explore opportunities associated with the energy transition, and among the initiatives are Cemig SIM – the company's distributed generation arm –, the IREC and Cemig REC clean energy seals, and the use of carbon credits. Investments in the grid are Cemig's main contribution to the energy transition. Innovation is a cross-cutting axis, focusing on the development of new technologies and sustainable services.

Emissions Management

Committed to reducing its carbon footprint, Cemig adopts a science-based approach to setting greenhouse gas (GHG) emission reduction targets, which culminates in the approval of its SBTi targets in 2025. The strategy includes the expansion of its renewable matrix, in addition to identifying and supporting projects that promote the mitigation of emissions.

Engagement and Outreach

The company invests in transparent communication with internal and external audiences about its climate commitments. It actively participates in sustainability indexes, such as CDP and Dow Jones (DJSI), in addition to being part of relevant forums and committees, such as the Global Compact, Acende Brasil, FIEMG and municipal climate change councils.

The agenda of events held by the company – involving both internal and external audiences – in relation to the topic of climate change highlights Cemig's mobilization around the theme.

Table 4. Climate Change Events 2024/2025.

Event	Audience Involved	Theme	Event Date
Extreme Weather Events Location: Cemig Auditorium Organization: SAMP Communication 2024	Internal and external	Cases: • Prevention and mitigation of the impacts of climate events. • Communication Governance in climate crises in the electricity sector.	April 24 th to 26 th , 2024
Sustainability Capacity Building Training – ESG in Supplier Management	100 suppliers	Key concepts related to climate change and GHG emissions inventory	10/25/2024
Supplier Forum 2024	Working Group with 7 suppliers	Climate Change and Greenhouse Gases	Meetings on 10/24/2024, 11/07/2024
Environmental Education Program 2024 – Energy Generation and Energy Matrix Transition Theme	Internal	Power Generation and Energy Matrix Transition	11/08/2024
Podcast: Climate Change and Energy	Internal and external	Climate change and energy: solutions and actions for risk management	11/19/2024
Sustainability Webinar: Step by Step for Executing a GHG Emission Inventory	Suppliers	GHG Emissions Inventory	03/26/2025
EPC Adapta Training Cycle Organization: FGV	5 employees	Methodology for the development of adaptation strategies	6 lessons from August to December 2024
I Symposium on Integrated Reservoir Management Location: Cemig Auditorium	Internal and external	Panel "Water: Sustainability and Management in Times of Climate Change".	03/31/2025

Source: Cemig, 2025.

The achievement of Cemig's strategic pillars – which range from energy transition and care for the environment to local development, valuing people and solid governance – depends directly on the

company's ability to map, manage and respond proactively and in a timely manner to the risks and opportunities associated with its operations. Mitigating emissions, expanding renewable generation, reusing waste, digitizing services, ensuring the safety of operations, and strengthening integrity in the value chain are goals that require integrated management, capable of anticipating challenges and aligning strategic decisions with the sustainability of the business. By adopting a robust approach to assessing risks and opportunities, Cemig ensures the consistent progress of its goals and reinforces its commitment to a fairer, safer and more resilient energy future.

4.2.1 Climate-related risks and opportunities

Risk management is a fundamental pillar for Cemig in creating and preserving value with its shareholders, customers, employees, suppliers, society and other stakeholders. By adopting an integrated approach, the company seeks to anticipate, mitigate and respond to risks that may impact its operations or compromise the achievement of its strategic objectives. A detailed description of the risk management process adopted by Cemig will be presented in the section **RISK MANAGEMENT** of this report. The following content highlights the main risks and opportunities identified, highlighting their financial and non-financial implications and the way the company has been responding to challenges, in line with its corporate strategy.

In 2024, Cemig internally mapped a **total of 26 priority risks (the so-called *Top Risks*)**, of which **04 are related to the environment**. For an efficient management of these risks, involving the prioritization of mitigation and adaptation actions, the company evaluates the potential impacts and materialization horizons according to the company's internal definitions, as shown in Table 5.

Table 5. Time horizons for risk assessment.

Short Term	Up to 1 year	The annual review of the Budget by the Executive Board is planned. Such revision is reflected in all plans, projections, activities, strategies, investments and expenses of the company and its wholly-owned subsidiaries, subsidiaries, affiliates and consortiums in which it participates, directly or indirectly.
Medium Term	Between 1 and 5 years	The company's Multi-year Business Plan must reflect the premises of the Long-Term Strategy and contain the goals of 5 (five) years, including the Annual Budget. The Multi-year Business Plan is reflected in all the guidelines and plans of the company and its wholly-owned subsidiaries, subsidiaries, 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

Between 5 and 10 years

The Long-Term Strategy contains foundations, 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, subsidiaries, affiliates and consortiums in which it participates, directly or indirectly. The Long-Term Strategy contains the company's strategic fundamentals (Mission, Vision and Values) as well as the long-term strategic guidelines.

Source: Cemig data, 2025.

To assess the impacts of climate change on the value chain, in order to quantify these impacts and define strategies for prioritizing responses, Cemig mapped climate-related risks and opportunities considering the horizons detailed above. This process is carried out annually and allows the identified risks and opportunities to be associated with the categories listed by the Task, involving the actors identified in the section

GOVERNANCE and following the routine described in the **RISK MANAGEMENT**, resulting in measures such as the goals listed in the section **METRICS AND GOALS**, which direct the company's activities.

According to the TCFD, **The categories of climate-related risks correspond to: (1) physical risks and (2) transition risks.** Physical risks are subdivided into: (a) acute, which are triggered by extreme weather events (such as storms); and (b) chronic, related to impacts resulting from progressive changes in the climate (such as the increase in droughts due to changes in rainfall regimes). Figure 8 shows examples of physical risks in each of these subcategories, with a focus on the energy sector.

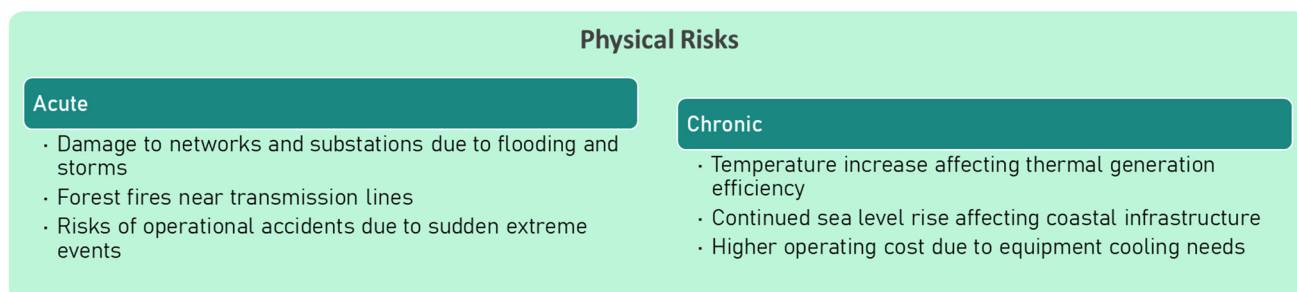


Figure 8. Examples of physical risks applicable to the energy sector.
Source: adapted from TCFD.

Transition risks, on the other hand, are subdivided into: (a) political and legal; (b) market; (c) technological; (d) reputational. Figure 9 shows examples of transition risks in each of these subcategories, with a focus on the energy sector.

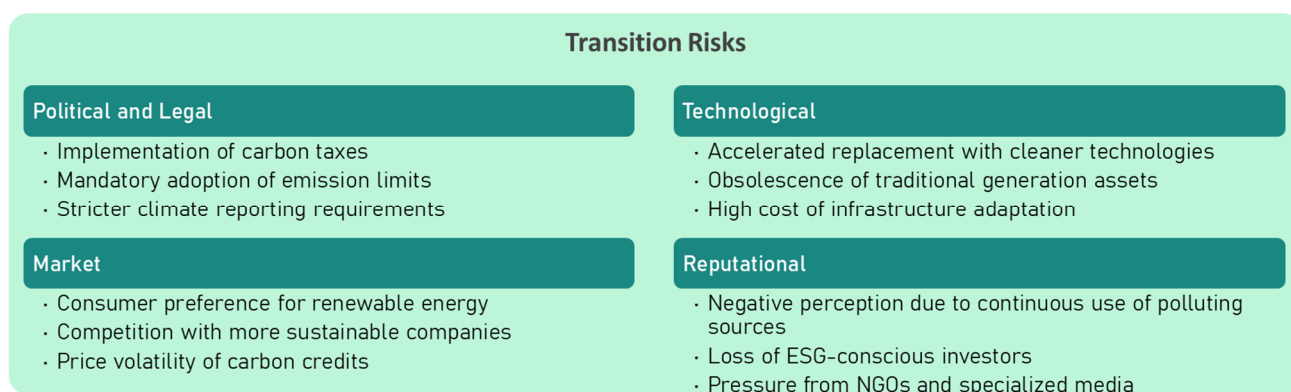


Figure 9. Examples of transition risks applicable to the energy sector.

Source: adapted from TCFD.

Based on these notions brought by the TCFD and maintained in the IFRS S2 standard, the risks identified by the company in each category and subcategory are presented below.

7.1.1.1 *Physical risks identified by Cemig*

The detection of climate-related physical hazards is connected to noticeable or expected changes in the frequency and intensity of weather events over different time horizons. **For the assessment of physical risks, Cemig has been using the scenarios made available in the sixth phase of the *Coupled Model Intercomparison Project (CMIP6)*, a collaborative structure designed to improve knowledge about climate change and organized since 1995 by the *Working Group on Coupled Modelling (WGCM)* of the *World Climate Research Programme (WCRP)*.**

These scenarios are used to evaluate the relevant climate indicators for the company, which include **precipitation, temperature, moisture, Wind speed and Cloudiness**. Cemig opts for the use of a multi-model approach, which gives greater credibility to the results, as it allows reducing the uncertainties that the use of only one model would bring. Later in the topic **Scenario analysis**, details about the models will be described.

The analysis carried out by Cemig's internal team makes it possible to identify the climate risk for each of the company's plants and for others in which the company may be interested. Considering the scenarios described above, **the identification of physical risks is carried out, whenever possible, combining the quantitative and qualitative perspectives of the impacts on operations and business**. The results of these analyses, for acute and chronic physical risks, are presented below.

Chronic risk

Among the climatic phenomena that fall into this class, two stand out for the company:

- **Water scarcity**

Occurrence in the value chain: Direct operations.

Description: Climate change can cause changes in the frequency, intensity, and geographic distribution of rainfall (or drought). Changes in the average precipitation values can modify the amount of water that reaches the reservoirs of the plants, impacting the water availability locally. Although today there are variations in the levels of the reservoirs, Cemig has mechanisms to mitigate the impact of these variations and ensure the provision of services. It is important to note that critical situations of scarcity are not foreseen for the short and medium term, including because the company does not operate in water-stressed river basins. More details on this topic are available on the [TCFD/IFRS S2 SCOREBOARD](#).

Time horizon: Long term.

Impact: As Cemig's electricity production is mostly hydraulic, changes in rainfall patterns may cause a reduction in generation capacity and, consequently, a reduction in revenue. Given the lower energy supply, the tariff could also become more expensive, impacting customers. In 2024, the assessment of this risk in the Minas Gerais region has already detected anomalies in the short term; In the North and East of the state, there was above-average rainfall, while in the Center-South sector, rainfall was below.

Response: The actions taken are aimed at adapting to risk and are associated with: (1) expansion of tools, equipment and staff for weather forecasting and optimization of operations, aiming to anticipate potential situations of scarcity and develop the necessary response strategies; (2) Cemig's participation in the MRE, the mechanism for sharing risks and stabilizing hydroelectric generation, cushioning the impacts of water scarcity and offering greater energy and financial security in the face of climate variability; and (3)

investments in diversification of the generation matrix, seeking solutions in other energy sources, such as solar and wind.

Response costs: In terms of the analyses developed, there is the cost associated with hydrological studies (R\$1,400,711.72), meteorology (R\$1,175,521.88) and a dedicated team consisting of 5 meteorologists and 2 technicians (R\$2,714,136.06), totaling, in 2024, an investment of R\$5,290,369.66.

As for investments in renewable and decentralized generation, in 2024, the total Capex allocated to electricity production was R\$ 628.93 million, of which 63% was allocated to Cemig SIM (R\$ 393.6 million) and 5% to solar energy (R\$ 31.99 million). Investment in hydroelectric and wind energy, in turn, was essentially maintenance, representing 28% (R\$178.36 million) and 4% (R\$24.98 million) of the total Capex for the year, respectively, with no forecast of new contributions in the next five years.

The prioritization of solar sources and Cemig SIM is also reflected in the medium-term planning: 70% of the Capex forecast until 2029 will be directed to Cemig SIM, totaling R\$ 2.6 billion, while solar energy should receive R\$ 1.1 billion (30%) in the same period.

- **Fires**

Occurrence in the value chain: Direct operations (right-of-way).

Description: The increase in average temperatures and changes in rainfall and drought regimes may potentiate some risks to the Power Transmission System, as prolonged drought conditions maximize the risk of fires.

Time horizon: Short term, with occurrences already recorded.

Impact: Within or near a right-of-way, fires can cause transmission lines to be unavailable, compromising power supply.

Response: To mitigate this risk, Cemig continuously conducts inspections and cleaning of the lanes to maximize the safety of the distribution and transmission lines. A new system for monitoring, forecasting and warning of fires was also implemented, in order to subsidize the various areas of Cemig to minimize the risks of interruption. The company also developed, through the collaboration of a network of institutions, the Apaga o Fogo (AoF) Project. It is a system that provides, in real time, images that are processed through artificial intelligence algorithms that, autonomously or with the help of Internet users, can assist in the early identification and validation of smoke sources in the evolution of the fire. 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 decision-making, and the System Operation Center (COS) that aims to train and mobilize teams for interventions in extreme weather events.

Response costs: In 2024, the costs of Strip Cleaning at Cemig D were R\$113.8 million in Medium Voltage and R\$18.9 million in High Voltage. The management cost related to the cleaning of the easement along Cemig GT's structures and transmission lines (LT's) was R\$14.51 million. Considering the transmission and distribution businesses, the amount of R\$165.21 million was disbursed in cleaning the lanes of the lines.

Acute risk

- **Extreme weather events**

Occurrence in the value chain: Direct operations (energy transmission and distribution facilities).

Description: Damage to infrastructure is considered a priority risk since the occurrence of heavy rains in a short period, accompanied by windstorms and lightning, can cause physical damage to the facilities that transport and distribute energy, leading to service interruption. These phenomena are increasingly attributed to the effects of an unfavorable microclimate, especially noticeable in large urban centers.

Time horizon: Short term, with occurrences already recorded.

Impact: The impacts are significant, including severe damage to energy transmission and distribution facilities, which can lead to disruption of supply to consumers, affecting the SAIDI (equivalent duration of interruption per consumer unit) and SAIFI (equivalent frequency of interruption per consumer unit) indicators. There are substantial costs associated with repairing damaged structures and compensating customers. Compensations (DIC/FIC/DMIC) refer to the amounts that distributors must automatically pay to consumers when these quality limits are not met. **Figure 10. Total compensation of Cemig D between 2021 and 2025 (partial).** presents the evolution of this indicator between 2021 and 2025 (partial).⁵ It should be noted that, in this amount, the compensations are not restricted to those due to lack of energy, but also to those caused by delays in works.

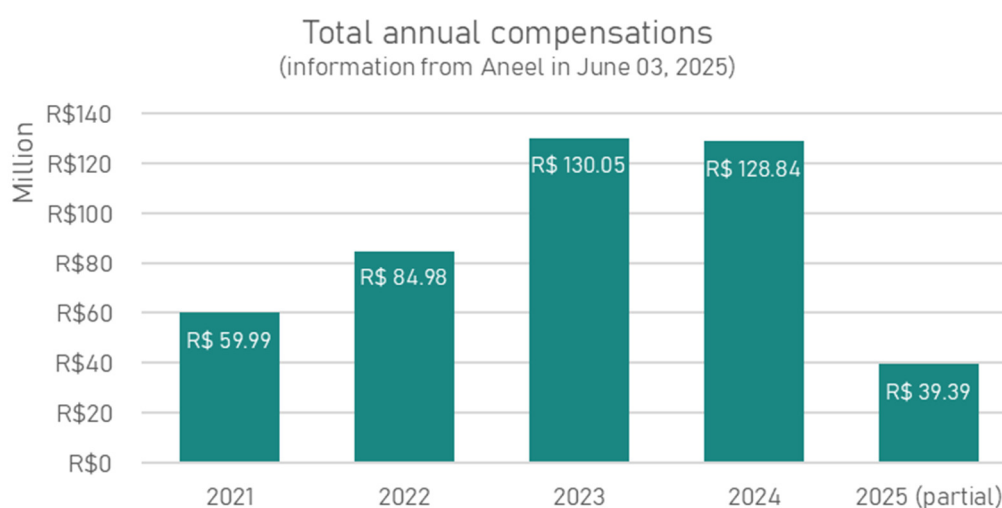


Figure 10. Total compensation of Cemig D between 2021 and 2025 (partial).

Source: Aneel (2025).

Response: 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 afforestation (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 for the rapid restoration of the energy supply. Cemig also promotes works in 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. In 2024, SAIDI presented a percentage of 1.86% below the regulatory target and a reduction compared to 2023. Cemig D performed 9.46 hours against the limit of 9.64 hours. SAIFI showed an increase compared to the previous year and obtained a result below the regulatory limit. In 2024, the value calculated was 5.06 (interruptions) compared to the regulatory limit of 5.97 (interruptions).

Table 6. Evolution of DEC and FEC indicators.

Parameter	2022	2023	2024
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⁵ Information extracted from

<https://portalrelatorios.aneel.gov.br/indicadoresDistribuicao/compensacoesViolacaoIndicadoresIndividuaisContinuidade> (data for 2025 are partial as updated on June 3, 2025).

SAIDI (minutes)	568.8	582.6	567.6
SAIFI (number of outages)	4.58	4.86	5.06
SAIDI/SAIFI (average duration of outages)	124.19	119.89	112.15

Source: Annual and Sustainability Report 2025 (Cemig).

Response costs: The total amount invested in Cemig Distribuição reached, in 2024, R\$4.4 billion, aimed at modernizing its operations and increasing resilience in the face of climate and operational challenges. As a result, it was observed that the regulatory limits of losses and the SAIDI and SAIFI quality indicators were met, with a reduction of about 2.5 hours in the perceived SAIDI.

7.1.1.2 Transition risks identified by Cemig

Transition risks are related to the evolution of economic or market, political and legal, technological and reputational elements in a time frame. From the analysis of climate and economic scenarios in different horizons, it is possible to evaluate the possibilities of evolution of each of these elements for the Brazilian energy sector, identifying the associated risks and opportunities and the financial impact they would bring to the company.

Cemig uses the scenarios **IEA NZE 2050**, **IRENA** and **IEA STEPS** to make considerations on the challenges in terms of transition risks. The analysis – mostly qualitative – from these scenarios offers distinct perspectives on the energy future, each with unique implications for long-term strategies and investments. More information if are available in the topic [Scenario analysis](#).

The main risks mapped by Cemig for each transition risk category are highlighted below, according to the material topics for the sector and for the company itself.

Political and legal risk

In 2024, Bill No. 412/2022 was approved and transformed into Law No. 15,042, of December 11, 2024, which establishes the Brazilian Emissions Trading System (SBCE), whose dynamics are represented in Figure 11. With this, the country enters a new phase, centered on the regulation of the law and the definition of sectoral criteria for the allocation of quotas and reduction targets.

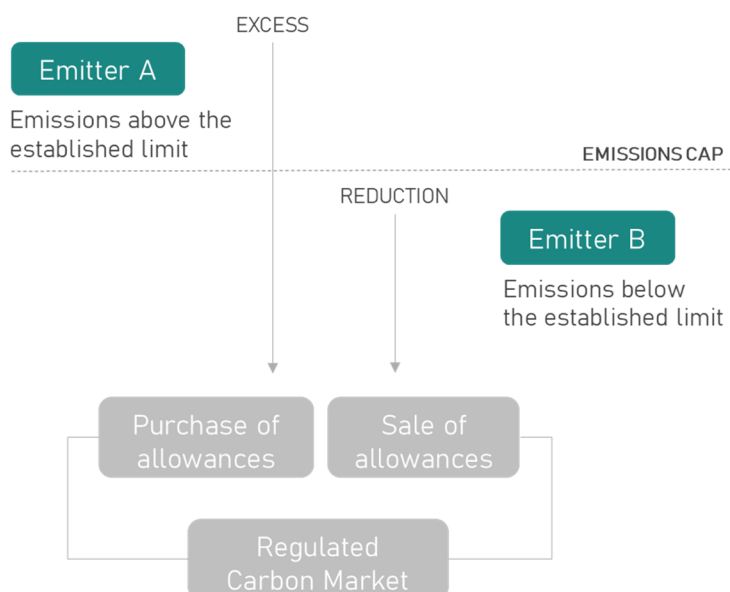


Figure 11. Structure of the Brazilian Greenhouse Gas Emissions Trading System (SBCE).

Source: Law No. 15,042/2024: CARBON MARKET ([Mattos Filho, 2024](#)).

The SBCE requires companies that emit more than 10,000 tons of CO₂ equivalent (tCO₂e) per year to monitor and report their emissions. **Companies that exceed the limit of 25 thousand tCO₂e must also prove compliance with emission reduction obligations**, encouraging the purchase and sale of emission permits within a *cap-and-trade* system. This means that companies will have a decreasing amount of emission allowances over time, which can represent an increasing cost for those that fail to reduce their emissions.

Cemig acknowledges the potential financial impact of this regulation, considering emissions of 4,173.32 tCO₂e from Cemig GT and 34,542.09 tCO₂e from Cemig D in 2024 (see **2024 Emissions**). If the Brazilian market also includes Scope 2 emissions, Cemig may be more significantly impacted, as its Scope 2 emissions totaled 376,174.25 tCO₂e in 2024, even though its energy losses remained within the regulatory target.

Cemig monitors regulatory changes and has joined technical groups and strategic forums that discuss the next steps of the regulation, aiming to anticipate risks and align its processes with the new *cap-and-trade* system. Additionally, the company's Climate Action Plan includes decarbonization measures and carbon management mechanisms, strengthening its resilience in the face of future pricing of direct emissions.

Technology risk

The constant technological evolution and the fast pace of innovations bring challenges and opportunities to the electricity sector. In this context, **one of Cemig's strategic drivers is Innovation**, with a focus on reinforcing a culture of innovation to transform existing businesses and explore new technologies, promoting the energy transition. The company recognizes that the lack of technological updating, or the late adoption of disruptive innovations, can compromise its competitiveness, operational efficiency, and ability to meet the demands of the energy transition.

To mitigate this risk, Cemig has developed an **innovation strategy aimed at promoting the energy transition**, exploring and developing new technologies and new businesses, promoting a culture of innovation, with a focus on digitalization, efficiency, clean energy generation, electrification, resilience and storage. This strategy is structured around two main goals: to strengthen existing innovation programs, with a focus on the development and application of technologies; and to develop new instruments of innovation at an advanced stage.

As a concrete example of this commitment to innovation, Cemig signed, in 2025, a **technological cooperation agreement** with Huawei, a global leader in Information and Communication Technologies⁶. The partnership, signed during SENDI 2025, aims to jointly develop innovative solutions aimed at the digitalization of the electricity system and the energy transition, reinforcing the company's role as a protagonist in the sector.

In addition, six priority technological fronts of strategic interest to Cemig were mapped:

1. **Future Grids** – development of sensors, intelligence and automation for a utility of the future;
2. **Batteries and Storage** – platforms for energy resilience and system flexibility;
3. **Sustainable Generation** – solutions for the prosumer and expansion of technologies such as solar everywhere;
4. **Green Hydrogen and Decarbonization** – alternatives to green fertilizers and decarbonization of industrial processes and transport;
5. **Electromobility** – expansion of the infrastructure for charging and electrification of fleets;

⁶ News available at: nova.cemig.com.br/noticias/cemig-e-huawei-firmam-termo-de-cooperacao-com-foco-na-transicao-energetica/

6. **Artificial Intelligence** – use of algorithms, data collection, and autonomous agents to maximize the efficiency of the operation.

These initiatives are strongly aligned with the company's strategy in the face of the challenges of climate change and the urgency of transitioning to a low-carbon economy. **The electrification of industrial processes and energy efficiency emerge as central paths**, especially in Minas Gerais, where the electricity matrix is mostly renewable (87% clean generation) and where Cemig operates as an inducing agent of sustainable development. The combination of energy efficiency and electrification, especially in energy-intensive industrial sectors, is considered the most effective strategy to mitigate long-term technological and climate risks.

The adoption of these technologies requires planning, adaptation of production processes, and integration with complex industrial chains. Therefore, **technological risk management at Cemig involves continuous investments** in research, development and innovation, strategic partnerships, and the monitoring of trends and emerging technologies to anticipate scenarios and maintain the sustainability and resilience of its operations in a competitive market.

Market risk

Cemig has demonstrated **resilience and adaptability** in the face of transformations in the electricity sector and the growing pressure for a low-carbon economy. The record Ebitda of R\$11.3 billion in 2024 — a growth of 32.3% — shows the solidity of operating cash generation, even in an environment of accelerated energy transition. The investment of R\$5.7 billion focused on customer service excellence reinforces the Company's commitment to the quality of services provided in an increasingly competitive scenario.

In the distribution segment, Cemig D presented significant gains in operational efficiency, meeting the regulatory limits of losses and significantly improving the indicators of continuity of supply, with a reduction of approximately 2.5 hours in the perceived SAIDI.

In the free market, Cemig remains the national leader, with a 14% market share and consolidated operations in all states, with emphasis on Minas Gerais, São Paulo and Rio Grande do Sul. **The commercialization of renewable energy certificates (Cemig REC and I-REC) also strengthens its position as a facilitating agent for the decarbonization of large consumers**, contributing to the economic and environmental sustainability of its customers and consolidating its strategic relevance in a market that is increasingly sensitive to ESG requirements.

In addition, Cemig is involved in the development of a Technological-Strategic Roadmap for the state of Minas Gerais, with a focus on green hydrogen. The project aims to structure methodologies to **disseminate H₂V in production chains and support renewable energy ventures, which could position the company as a protagonist in an emerging market with high potential**. The integration of climate and technological strategies into long-term planning mitigates market risks and increases Cemig's competitiveness in the transition to a low-carbon economy.

Cemig's market performance in 2024 shows a **timely and strategic response to the sectoral dynamics and ongoing socio-environmental transformations**. The financial robustness achieved, combined with the expansion in the free market and investments in technological innovation and renewable energy, positions the Company competitively in a scenario of energy transition. The integration between operational efficiency, adaptation to climate change and long-term vision, as exemplified by the development of the Green Hydrogen Roadmap in Minas Gerais, reinforces the company's credibility with investors, customers and regulatory bodies. Such positions not only mitigate market risks, but are also fundamental for building a solid reputation, consistent with current expectations of corporate responsibility and commitment to sustainability.

Reputational risk

Cemig's reputation is directly linked to its social and environmental performance, the transparency of its practices and the coherence between discourse and action in relation to the energy transition. **In 2024, the company reaffirmed its leading role in the sector by winning important international recognitions:** it was included for the 25th consecutive time in the Dow Jones Sustainability Index (IDJS), being the only company in the electricity sector in the Americas present since the creation of the index, with an evolution of six points compared to the previous year. It was also listed in S&P Global's "The Sustainability Yearbook 2024" and achieved CDP Climate's prestigious "A-list", with a maximum score in 10 of the 16 criteria evaluated, as a result of concrete actions towards its commitment to become Net Zero by 2040. To reinforce this positioning, **Cemig joined the Utilities for Net Zero Alliance (Uneza)**, being the first company in the electricity sector with Brazilian origin to join the initiative. In addition, the issuance of 4.8 million renewable energy certificates reinforces the company's reliability with customers and investors concerned with ESG criteria.

Among the main factors that can affect Cemig's reputation are the **impacts of extreme weather events** on the continuity and quality of electricity supply. The intensification of these events, associated with greater public visibility and the growing demand for agile and effective responses, can amplify the company's exposure to criticism and dissatisfaction from customers and other stakeholders. For this reason, Cemig maintains continuous efforts to improve the resilience of its infrastructure, communication with the public and preventive risk management.

Cemig's reputation is built through consistent actions that connect **sustainability, innovation and responsible governance**. Adherence to international commitments, the recognitions received and investments in renewable energy and production chain management demonstrate that the company not only recognizes the reputational risks it faces, but also acts proactively to prevent them. In a scenario in which investors and consumers increasingly value companies aligned with ESG principles, reputation becomes a strategic asset and essential competitive advantage for maintaining Cemig's trust and institutional legitimacy.

7.1.2 Impact of climate-related risks and opportunities

Cemig considers the influence of climate issues in the strategic and financial spheres on all its business fronts, which enables the anticipation of relevant issues and an adequate response time, as well as encourages the identification of opportunities. Next, the business fronts and the perceived or expected impacts in each case are highlighted in relation to strategic planning and, subsequently, in relation to financial planning.

7.1.2.1 Impact on strategic planning

Products and services

The guidelines of the Strategic Plan guide investments to enable the energy transition, in innovative solutions aimed at the integration of renewable sources, reduction of energy losses, meeting the new demands for connectivity and services for customers and greater resilience of the system. To achieve these objectives, investments are planned in smart grids, batteries and storage, artificial intelligence, intelligent data analysis, artificial intelligence platforms for automated inspection and monitoring, digital management systems aimed at substations and energy distribution, expansion of distribution networks.

In the segment of innovation and expansion of energy distribution, between 2025 and 2029, Cemig plans to invest R\$23.2 billion. It is relevant to highlight the **Cemig D's expansion plan** whose indicators, projected until 2028, are listed in the Table 7 below.

Table 7. Cemig D's expansion plan.

		2018	2024	2028
Substations (total)		404	479	615
High voltage lines (km)		19,156	19,248	21,950
Distribution network (km)		551,086	547,150	577,582
Transformation capacity (MVA)		10,586	12,579	16,000
Three-phase network (km)		130,815	132,345	165,048
Municipalities with dual voltage supply (total)		667	695	774
Smart meters (units)		0	370,044	1,785,445
Distributed generation: Connections	Mini-DG (units)	152	2,012	2,878
	Micro-DG (units)	10,745	301,666	377,787

Source: Annual and Sustainability Report, Cemig (2025).

In the power generation segment, Cemig has been promoting a gradual transition in its portfolio, expanding the share of complementary renewable sources. In 2024, the company's generation matrix was composed of 95.1% hydroelectric, 3.4% wind power plants, and 1.5% photovoltaic solar plants⁷. The trend is for continuous growth of solar and wind sources and storage technologies, both due to technological evolution and the need for diversification and complementarity of sources.

Also in 2024, Cemig took a significant step in expanding its non-hydraulic renewable generation capacity with the start-up of the Advogado Eduardo Soares photovoltaic solar plants, in Montes Claros (85 MW), and UFV Jusante, in São Gonçalo do Abaeté (70 MW). These two projects, located in Minas Gerais, reflect the company's commitment to the interiorization of solar generation and energy decentralization as ways to expand the supply of clean and affordable energy.

These movements occur in the midst of a sector environment of rapid transformation, given that the Brazilian electricity sector is being reconfigured by structural factors such as:

- i) the growing decentralization of generation systems, with a leading role for distributed generation;
- ii) the advancement of energy storage technologies, which allow greater management of the intermittency of renewable sources;
- iii) the proliferation of digital technologies, which enable the intelligent management of energy generation, transmission and consumption;
- iv) the increase in the penetration of intermittent sources (such as solar and wind) in the electrical system; and
- v) the global and national trend of decarbonization of the energy matrix, driven by climate commitments to mitigate greenhouse gas emissions.

Value chain

⁷ Data available at: [Cemig 2025 Investor Deck](#).

Cemig's value chain is deeply influenced by climate change and the energy transition, requiring a **systemic and collaborative approach beyond direct operations**. To deal with climate risks throughout the complete cycle of its activities – from supply to final delivery of energy and services – the company adopts a strategy that integrates sustainability, innovation and safety in its upstream (suppliers and service providers) and downstream (customers, communities and end users) relationships.

Upstream: Suppliers and strategic partners

Cemig recognizes that its ability to generate, transmit and distribute energy safely and sustainably depends on the integrity and resilience of its supply chain. Therefore, the company adopts a **supplier management model based on ethical, environmental and social principles**. The relationship with business partners is guided by guidelines such as the "ESG Requirements for the Supply Chain", the Declaration of Ethical Principles, the Code of Professional Conduct and the anti-corruption legislation, which since 2015 has been mandatory for all contracts with third parties.

Contractual and registration requirements are modulated according to the degree of risk involved in terms of environmental, health, safety and social impact. The company conducts Industrial Technical Assessments (ATI) on strategic suppliers, based on ESG criteria and ISO standards, and requires Technical Assessment on Contractors (ATE) for distribution service providers. In 2024, several initiatives aimed at improving supplier management were implemented, with emphasis on the **ESG Program** focused on supplier development, addressing a wide range of essential topics for the advancement of socio-environmental and governance practices. Another prominent initiative promoted by the company in 2024 to its suppliers was the **training for the execution of the GHG Emission Inventory**. Through the training, Cemig promoted technical support to improve ESG performance in its Supply Chain. In the same year, Cemig also promoted the third edition of the **Best Suppliers Award**, recognizing partners aligned with its innovation and sustainability agenda.

In addition, the **Supplier Forum was held**, an annual event that brings together about 30 strategic suppliers to exchange good practices. The initiative aims to improve the **criteria for selection, qualification and monitoring of business partners**. The selection of participants takes into account the relevance of the object of the contract and the value of the contract, and enables the registration of interested suppliers. The Supplier Forum will continue with new meetings until May 2025, when concrete actions will be defined to improve governance and sustainability in Cemig's supply chain.

Downstream: Customers, communities, and users

At the other end of the chain, Cemig acts proactively to expand the positive impacts of its operations on society, mainly through the **Energy Efficiency Program (EEP)**, regulated by Aneel. For more than two decades, this program has promoted the reduction of energy consumption and demand at peak hours, education for the rational use of electricity and the fight against waste.

In 2024, the program reached 320 municipalities in Minas Gerais and benefited more than 2 million people, investing R\$65 million in its own projects and making an additional R\$50 million available via public call, of which R\$19 million has already been raised for execution as of 2025. Among the audiences served are public and philanthropic hospitals, schools, low-income communities, rural areas and assistance entities. The actions range from the replacement of obsolete equipment with more efficient models to the installation of photovoltaic plants in places with vulnerable energy infrastructure. **By 2027, Cemig plans to invest R\$500 million in the EEP portfolio**, doubling the amount invested in the last 25 years and reflecting the company's alignment with the goals of fair energy transition and social inclusion.

Another critical point in Cemig's value chain is the **management of dam safety, which is essential in a context of intensifying extreme weather events**. In 2024, the company carried out actions with the Integration Committees of the Emergency Action Plans (EAPs) of the 18 dams required by law and

promoted the **Proximity Program**, which held public meetings with more than 120 participants, including civil defenses and local communities. On these occasions, in addition to debating risks and response measures, resources such as the PROX application were presented, which allows real-time access to alerts and emergency plans. Cemig was a pioneer, as early as 2003, in the development of EAPs for dam failures, and maintains a continuous system of automatic monitoring of the vulnerability of each structure.

Strategic integration of the value chain

Cemig's upstream and downstream performance demonstrates that its climate strategy is not limited to direct emissions or its own assets. **By positively influencing suppliers, technical partners, customers and communities, the company contributes to strengthening a more resilient, innovative and sustainable energy ecosystem.** This integrated approach to the value chain reinforces Cemig's ability to address systemic climate risks and maximize opportunities in the low-carbon economy, promoting concrete benefits for both the environment and society.

Investment in Innovation

Innovation is one of the central pillars of Cemig's corporate strategy, being understood as an essential element to ensure operational efficiency, information security, regulatory compliance and, above all, to position the company at the forefront of the energy transition in Brazil. With a structured governance to drive impactful technological solutions, the company continuously works to improve its technological management, **focusing on creating sustainable value, strengthening the Brazilian Electric System and responding to the challenges of climate change.**

The electricity sector is experiencing a moment of profound transformation, driven by internationally recognized megatrends – such as the 4Ds (Decarbonization, Digitalization, Decentralization, and Democratization). In line with this context, **Cemig has developed its Research, Development and Innovation (PDI) program based on guidelines from Aneel and the Strategic Program for Quality and Innovation (PEQUI)**, structuring public calls aimed at the development of technological solutions that address real problems in the electricity sector and expand the value delivered to society.

In 2024, Cemig invested R\$56.8 million in R&D projects, of which R\$40.7 million for Cemig D and R\$16.1 million for Cemig GT, totaling 15 projects in the strategic areas of Intelligent Products and Services, Electrical Systems of the Future, Electrification and Electromobility, and Sustainable Generation. These macro themes express the convergence between innovation and sustainability in the company's operations.

Among the highlights of this cycle are disruptive initiatives that address everything from operational safety to energy efficiency and alternative energies:

- **Mobile BESS Project:** development of a mobile battery device to ensure continuity of energy supply in emergency situations and at critical points in the grid, increasing operational resilience in adverse contexts such as extreme weather events.
- **EnergyGPT Project:** creation of a generative AI platform specialized in the Brazilian electricity sector, capable of generating predictive analytics for grid optimization, load forecasting, operation simulations, and regulatory and commercial decision-making support.
- **Biogas H2 Project:** development of a prototype plant for the production of green hydrogen from methane generated in landfills, promoting the energy recovery of urban waste and contributing to the circular economy.

- **Intelligent PPE Project:** creation of personal protective equipment with embedded sensors, capable of detecting environmental risks, the presence of toxic gases and falls, strengthening the safety of electricians in the field.

These projects are developed in **partnership with research centers, startups and universities, through the Inova Cemig Lab and Inova Cemig Tec channels**, which operate as open innovation hubs. The model makes it possible to identify emerging technologies and promote their scalability, connecting Cemig to a national and international innovative ecosystem.

Cemig's performance on the R&D front is not limited to conceptual research; the projects aim at concrete results, with economic and technical viability, aimed at practical application in the electricity sector. The company's commitment is clear: to be a **catalytic agent for the transformation of the sector towards a cleaner, smarter and more inclusive model**.

Adopting a structured approach with a focus on innovation, Cemig reinforces its role as an agent of the energy transition in Brazil, exploring **solutions that ensure not only the continuity of supply and the stability of the system, but also decarbonization and adaptation to climate change**, central challenges of the energy agenda of the 21st century.

Operations

Cemig's operational strategy has been shaped by the risks and opportunities associated with climate change, requiring adaptations on all fronts: generation, transmission, distribution, commercialization and supply of natural gas. The increased frequency of extreme events, hydrological instability, rising average temperatures, and increasingly stringent environmental requirements are transforming not only how the company operates, but also how it plans its **long-term resilience**.

Cemig's operations reflect the complexity of a sector that needs to deal simultaneously with the effects of climate change and the demands of a new energy economy. From generation to distribution, through commercialization and natural gas solutions, each front requires adaptation and long-term vision. The company's operational decisions – such as the diversification of the headquarters, the modernization of the network and the internalization of environmental criteria – are guided not only by technical imperatives, but also by climate risks and opportunities that inevitably impact capital allocation, financial planning and the long-term sustainability of the business.

Generation

Given the predominantly hydroelectric matrix, Cemig faces a challenge to remain resilient in the face of changes in rainfall patterns. In 2024, the registered Affluent Natural Energy (ENA) was 76% of the long-term average in the National Interconnected System (SIN). In this context, it is essential to make efforts to optimally operate existing reservoirs, to resume discussions on the attributes and benefits of reservoirs for the system and to continue on the insertion of new reservoirs in the system, even if it is in the reversible modality or pumped storage. **Additionally, the company has been investing in solar and wind projects**, expanding and diversifying its portfolio in a changing climate and sectoral scenario.

Transmission

The transmission infrastructure is also strongly adapted to climate change, which requires more robust systems prepared to withstand extreme events, such as intense winds and storms. **The**

investment in new transmission lines responds both to the need to modernize the system and to adapt to climate variability and the growing expansion of intermittent renewable sources.

Distribution

In distribution, the climate effects manifest themselves more tangibly for consumers, especially with the increase in the frequency and duration of interruptions due to atmospheric causes. In 2024, the increase in above-average temperatures was one of the factors influencing the growth of residential consumption by 8.41%, reflecting greater use of air conditioning systems, expanding the demand for energy. Given this scenario, Cemig has reinforced its investments in digitalization, automation and modernization of the grid, including intelligent load management and infrastructure systems, with the aim of **ensuring the resilience of the grid and the continuity of supply** even under adverse weather conditions.

At the same time, the growth in the number of environmental authorizations for the construction of lines and substations practically doubled between 2023 and 2024 (from 49 to 97 releases), evidencing Cemig's commitment to the sustainable expansion of its electrical infrastructure. To mitigate the impacts of these interventions, the company implements environmental compensation and reforestation actions, having planted more than 1 million seedlings of native species between 2019 and 2024.

Marketing

Cemig's trading arm has been positioning itself as a facilitating agent of the energy transition for large consumers, offering energy from renewable sources, in addition to **I-REC and Cemig REC** certificates, allowing customers to report reduced emissions. In 2024, more than 35.2 million MWh were sold in the free market. The growing demand for clean energy represents a clear opportunity for the expansion of products and services associated with climate mitigation and the fulfillment of ESG goals by contracting companies.

Gasmig

Cemig's subsidiary dedicated to the distribution of natural gas plays an important role in the decarbonization of customers because it is a "**transition fuel**". In parallel with the supply of natural gas, Gasmig has sought to explore low-carbon alternatives, such as the injection of biomethane and green hydrogen into the grid. Pilot projects in partnership with institutions such as Unifei and CIT Senai are already underway, and a technological roadmap is being developed to support this transition in the context of Minas Gerais.

7.1.2.2 *Impact on financial planning*

Operating costs and revenues

Climatic instability influences Cemig's operating costs. In 2024, it is noteworthy that the company purchased the equivalent of 41,469.20 MWh of electricity. The cost of electricity purchased for resale increased 18.67%, from R\$9,589 million in 2023 to R\$11,379 million in 2024. This increase is related to climatic factors, especially the low hydrology verified in the National Interconnected System (SIN), a scenario that compromises hydro generation and increases the **costs associated with hydrological risk** (GSF).

On the other hand, Cemig has responded to these pressures with actions that are also reflected in operating revenues. In 2024, **revenues from construction, reinforcement and improvement of electrical infrastructure reached R\$398 million**, compared to R\$227 million in 2023. This growth is a

consequence of the increase in investments in works aimed at the resilience and reliability of the electrical system, with a focus on substations, transmission lines and capacity expansion. Such actions aim to reduce vulnerability to extreme events — such as storms and heat waves — that affect the quality of supply and the SAIDI and SAIFI indicators.

Investments and capital allocation

Climate change and the energy transition process have been playing a decisive role in prioritizing Cemig's investments, with a **growing focus on matrix diversification, infrastructure resilience, decentralization of generation and expansion of clean energy supply**. In 2024, this strategic orientation translated into a robust, multi-sector capital allocation involving distribution, generation, transmission, natural gas, and distributed solar.

Distribution

In distribution, the company carried out a cycle of structuring investments through the **Distribution Development Plan (PDD), which defines the priorities for the application of resources**. In its fifth cycle (2023–2027), the approved PDD totals R\$21.9 billion: three times higher than the previous cycle, signaling the urgency of modernization in the face of extreme weather events and growing demand. In 2024 alone, around the following were invested:

- R\$290 million in the extension of 74 km of new urban networks, connecting 314,323 consumer units;
- R\$361 million in rural infrastructure, with the extension of 1,767 km of medium and low voltage networks;
- R\$667 million by Cemig and R\$540 million by applicants in customer connection projects, enabling 11,463 new connections;
- R\$682 million in the Minas Three-Phase Program, which will transform by 2027 about 30 thousand km of single-phase rural networks into three-phase, promoting energy security, operational stability and climate resilience of the rural electricity system.

Generation

In generation, Cemig took a strategic step by concluding, in 2024, the implementation of the Advogado Eduardo Soares (85 MW) and Jusante (70 MW) photovoltaic solar plants, with investments estimated at R\$850 million.

Distributed Generation

Cemig SIM, a group company specializing in distributed solar generation, has also grown rapidly. In 2024, R\$342 million were invested in new solar assets, with the company reaching 33 thousand solar energy consumer units per subscription. For the 2025–2026 biennium, another R\$442 million in investments are planned, highlighting SIM's role as a strategic pillar of the decentralization and electrification of the economy.

Transmission

In 2024, Cemig carried out several interventions in its transmission network. There were 88 energized works in 14 locations, covering different equipment and systems, which resulted in **the increase of the transformation capacity** by 30 MVA and the addition of 540 Mvar in reactive compensation through reactor banks. These efforts represented investments of more than R\$ 250 million only in reinforcements and improvements, maintaining the trend of expanding investments observed in recent years.

In the generation expansion axis, there was also a highlight for the start of works linked to the auction of new assets. In this context, Cemig GT, through its subsidiary Centroeste, continued the implementation of the LT 230 kV Governador Valadares 6 – Verona transmission line, whose total investment is estimated at R\$ 220 million. In 2024, R\$ 37 million were invested in the project, which advances in fundamental stages such as environmental licensing and land regularization, both in line with climate and territorial guidelines.

Gasmig

In the natural gas segment, Gasmig — a subsidiary 99.57% controlled by Cemig — invested R\$358 million in 2024 (up from R\$301.8 million in 2023), mostly in expansion of its distribution network in Minas Gerais. The growth in the customer base (from 95,887 to 103,885) reinforces the importance of Gasmig in the context of replacing more carbon-intensive fuels.

These investments reflect a systemic and integrated vision of Cemig, which recognizes **physical risks and climate transition as central conditions of efficiency, safety and long-term competitiveness**. The company has sought not only to expand its installed capacity and improve the quality of supply, but also to ensure that these assets are prepared to face a more demanding operating environment technically, regulatorily and environmentally.

Acquisitions or divestments

Cemig's acquisition and divestment policy has directly reflected the company's commitments to sustainability, the decarbonization of the energy matrix and the mitigation of risks associated with climate change. The company has adopted an **active stance in restructuring its portfolio**, demobilizing less strategic or underperforming assets and prioritizing projects aligned with the energy transition.

Since 2019, when it deactivated its last thermoelectric plant, Cemig has consolidated its commitment to no longer invest in fossil sources, reinforcing the **direction towards a 100% renewable matrix**. This strategic decision aligns both with the company's climate policy and with the sector's perception that thermal generation tends to become increasingly costly and risky in future scenarios with carbon pricing and stricter regulation.

Cemig SIM, a subsidiary dedicated to innovation and distributed generation, has consolidated itself as the company's strategic arm in expanding the supply of clean energy. In 2024, R\$342 million were invested in the acquisition and development of photovoltaic solar plants in Minas Gerais, with a forecast of another R\$442 million by 2026. **Cemig SIM's performance reflects the company's ability to convert climate risks into business opportunities**, fostering sustainable solutions with high scalability potential, such as the "solar energy by subscription" model, which already serves more than 33 thousand consumer units in the state.

Access to capital

In 2024, Cemig D carried out the 11th issuance of sustainable debentures, in the amount of R\$2.5 billion, making it the **largest fundraising in the company's history in this format and one of the largest in the country in the segment**. The operation was largely successful, with demand 53% higher than the amount initially offered, resulting in the issuance of an additional lot. The resource was intended both for the reimbursement of expenses with the PDD and for the implementation of new initiatives aligned with the company's Sustainable Finance Framework, validated by a technical opinion from Bureau Veritas.

In all, the company has already reached R\$6.8 billion in sustainable debentures in the local market, consolidating a **financial structure aligned with the UN Sustainable Development Goals (SDGs), especially SDG 7 (Affordable and Clean Energy) and SDG 9 (Industry, Innovation and Infrastructure)**. In addition, Cemig GT obtained a cash reinforcement of R\$2.7 billion with the sale of its 45% stake in Aliança Energia, providing liquidity for new strategic investments, especially in renewable sources.

The easy and competitive access to capital demonstrates that Cemig has been able to align its climate strategy with the requirements of a **financial market that is increasingly sensitive to environmental risks and responsible corporate practices**. The growing use of sustainable bonds as a financing instrument not only reduces the cost of capital and broadens the investor base, but also translates, in practice, the company's commitment to a fair and resilient energy transition.

7.1.3 Opportunities identified by the company

Cemig encourages the process of mapping opportunities by each Board of Directors to take place in parallel with the process of identifying, evaluating and responding to risks. In general, it is the ESG guidelines present in the company's strategic planning that guide the process of identifying, evaluating and executing opportunities in response to global transformations driven by climate change and the energy transition.

The company has mapped and explored several business opportunities that align innovation, efficiency and sustainability. The ongoing initiatives reveal a strategic positioning aimed at reducing emissions and strengthening operational resilience. The following are the main fronts with potential for positive climate impact, according to the classification of opportunities by the TCFD.

Power Supply

- **Distributed Generation and Renewable Energy:** Through Cemig SIM, the company has expanded its operations in photovoltaic generation. In 2024, 497.92 GWh were generated from solar sources, with an installed capacity of 240 MWp. Between 2025 and 2026, the company plans to invest R\$442 million in the distributed generation segment, contributing to the decentralization of energy generation and the reduction of greenhouse gas (GHG) emissions. In 2024, Cemig SIM recorded a net profit of R\$27.974 million, representing a 189.20% increase compared to the R\$14.768 million profit in 2023.⁸

Resilience

- **Energy Storage (BESS):** Cemig leads pilot projects in battery storage, including the operation of a plant at UFMG. Such systems are essential to deal with the variability of renewable sources and ensure grid stability, favoring the integration of clean energy and resilience in the face of extreme weather events.
- **Microgrids and Advanced Grid Operation:** The operation of the Cemig/UFMG Micro Grid, via the DERMS system, is a pioneer in Brazil and represents an advance in the construction of an adaptable, autonomous and resilient electrical system – central characteristics in the face of the increase in physical risks associated with climate change.

Market | Products and Services

- **Electromobility:** Through Inova Cemig Lab, challenges were launched for the development of electric vehicle charging infrastructure in Minas Gerais, boosting a strategic sector for the decarbonization of urban mobility.

Resource Efficiency

⁸ More information available at: <https://ri.cemig.com.br/docs/Demonstracoes-Financeiras-Anuais-Completas-Cemig-Solucoes-Inteligentes-em-Energia-Cemig-Sim-2024-12-31-GFFdnbdN.pdf>

- **Energy Efficiency and Demand Management:** The company promotes continuous energy efficiency programs in schools, hospitals and communities, with emphasis on the replacement of lighting systems and appliances. In 2024, these actions generated an estimated saving of 337,403 MWh/year, contributing to a reduction in emissions equivalent to 18,389 tCO₂e and the rational use of resources.
- **Smart Grids and Advanced Metering:** With more than 360 thousand smart meters installed, Cemig invests in the digitalization of the electrical system, allowing greater control of consumption, reduction of losses and modernization of energy management.

These initiatives demonstrate Cemig's commitment to a low-carbon, resilient and innovation-driven energy model, positioning the company as a relevant agent in the transition to a more sustainable economy.

7.1.4 Scenario analysis

In 2021, Cemig 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. The study considered the *Deep Decarbonization Pathways* (DDP) as a transition scenario, centered in Brazil, simulating two scenarios of GHG emissions in the country until 2050. The focal questions raised by Cemig in this study had as their starting point, mainly, the **recognition of water dependence and performance in a sector that is responsible for a large part of the world's greenhouse gas emissions**.

In the years that follow, Cemig has been updating the study with the aim of reassessing the impacts of climate change on its operations by 2050. In this process, the scenarios used are being expanded and the analyses are being deepened according to the availability of data and the development of the tools.

For an effective scenario analysis, the clear definition of objectives is key, considering the specific challenges and opportunities that the company faces in the context of climate change and energy transition. The analysis addresses how key variables behave in different future scenarios, impacting Cemig's operations, infrastructure and growth strategy in the coming years. For the company, the main focus has been established on three critical axes: **operational resilience, diversification of the energy matrix and compliance with decarbonization goals**.

The results of the analysis of physical and transition scenarios are presented below, taking into account the sectoral and regional context for the considerations.

1.2.1.1 Physical scenarios

The projections made by the company consider the **2050 time horizon and the Representative Concentration Paths** (RCP), presented in the Sixth Assessment Report produced by the Intergovernmental Panel on Climate Change (IPCC)⁹. Figure 11. Global emissions trajectories. presents some of the scenarios mapped by the organization, which reflect the annual perspective – until 2100 – of the evolution of emissions (in GtCO₂/year) considering fossil fuels and cement production, which contribute more significantly to the concentration of GHG in the atmosphere.

⁹ Available at: [AR6 Climate Change 2022: Impacts, Adaptation and Vulnerability – IPCC](#).

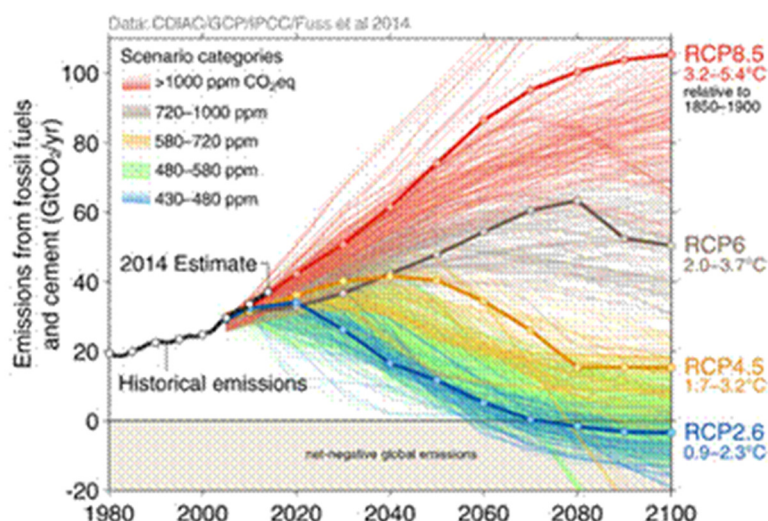


Figure 11. Global emissions trajectories.

Source: Fuss et al., 2014.

Aiming at a more realistic and integrated analysis of the different development trajectories, Cemig does not limit itself to using the Representative Concentration Paths (RCPs), adopting the **current version of models (CMIP6) used in conjunction with Shared Socioeconomic Pathways (SSPs)**. SSPs are intended to function as reference scenarios for various analyses related to climate change challenges and broader sustainability issues. They complement RCPs by integrating underlying socio-economic narratives (qualitative aspect) and emissions levels (quantitative aspect), aligned with mitigation and adaptation challenges. Figure 12 presents the distribution of SSPs and the main characteristic associated with each of them.

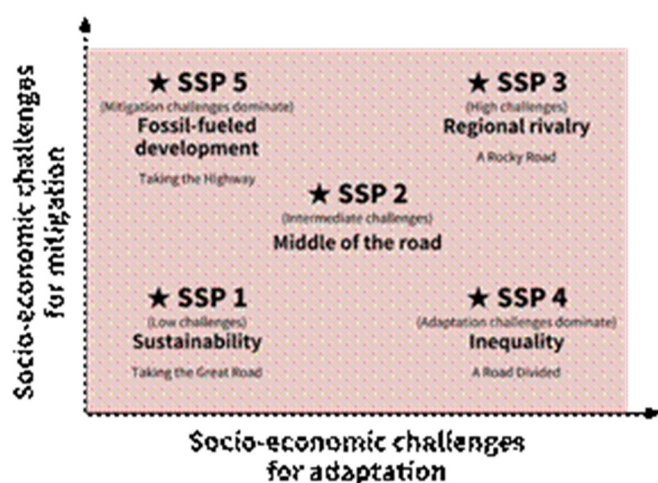


Figure 12. SSPs mapped to the challenges in mitigation vs. adaptation.

Source: O'Neill, B.C., Kriegler, E., Riahi, K. et al. A new scenario framework for climate change research: the concept of shared socioeconomic pathways. *Climatic Change* 122, 387–400 (2014). <https://doi.org/10.1007/s10584-013-0905-2>

Cemig considers the following scenarios in order to identify the points of attention in the short, medium and long term in different conditions that may more or less restrict its operations, the quality and security of the energy supply. The company employs

Shared Socioeconomic Pathways (SSPs) and Representative Concentration Pathways (RCPs) | Scenarios adopted by Cemig to assess physical risks

- **SSP1-2.6 (SSP1 + RCP2.6)** – Represents a scenario in which the increase in the global average temperature would be below 2°C, being extremely strict in relation to greenhouse gas

emissions. It considers, therefore, that the world acts in a coordinated way for sustainability, being useful to explore opportunities for innovation, low physical and transition risks, especially in sectors such as energy, mobility and infrastructure. This scenario is unlikely in the short term.¹⁰

- **SSP4-3.4 (SSP4 + RCP3.4)** – Represents an intermediate emissions scenario between 2.6 and 4.5, but still includes a considerable removal of greenhouse gases from the atmosphere. This scenario is still unlikely, but more likely than 2.6. It is ideal for investigating risk and adaptation asymmetries, especially in vulnerable sectors or regions, enabling research on deepening inequalities.

- **SSP2-4.5 (SSP2 + RCP4.5)** – Represents an increase in concentrations, with an estimated peak around 2040 and then a decline until it reaches a value of approximately half of that recorded around 2050, by 2100. This is a scenario that considers that current conditions are maintained over time, being characterized by moderate transition risks and increasing physical risks. It is useful for defining strategies for gradual adaptation and integration of sustainable and economically viable solutions. This is the most likely scenario among all RCPs.¹¹

- **SSP3-7.0 (SSP3 + RCP7.0)** – Represents the stabilization of the radioactive forcing at 6 W/m². It is a less likely scenario than the previous one, presenting high chronic and acute physical risks, difficulty in international coordination, and low capacity to adapt in developing countries. In it, extreme physical risks for exposed sectors (such as energy infrastructure, transport and sanitation).

- **SSP5-8.5 (SSP5 + RCP8.5)** – Represents a scenario of high greenhouse gas emissions, very useful for mid-century analyses, but highly unlikely beyond that if climate policies are implemented by countries. In it, the physical and transition risks are high. Despite economic growth, there are severe threats to supply chains and physical assets. It is useful for stress testing and systemic risk analysis in long-term investments.

It is relevant to highlight that, based on the objective of evaluating the behavior of the main meteorological variables that impact the company's activities, the **Climate Monitor** was created, a tool that focuses on monitoring the state of Minas Gerais and other areas of strategic interest to the company. This initiative differs from the company's usual monitoring because it focuses on analyses related to possible signs of climate change, that is, anomalous values.

Cemig analyzed the scenarios for the variables precipitation, temperature, humidity, wind speed and cloudiness using the following models:

Table 8. Models used in the studies of climate change scenarios.

Model	Source	Country or Region	Resolution (Lon x Lat)
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¹⁰ RCP2.6 is the most optimistic among the scenarios used by the company (RCP1.9 also exists, but it is not used in the analysis because it is highly unlikely), with radioactive forcing reaching a peak of 2.6 W.m2. This scenario predicts a peak in CO2 concentration of approximately 490 ppm and a decline in this value by the end of the 21st century. In this context, the increase in the earth's temperature would be between 0.3 °C and 1.7 °C from 2010 to 2100, and the increase in sea level would be between 26 and 55 cm. However, for this scenario to happen, it would be necessary to stabilize GHG concentrations in the next 10 years and then remove them from the atmosphere (MMA, 2016).

¹¹ The RCP4.5 scenario has been one of the most widely used scenarios and it provides for an additional 4.5 W.m2 of energy storage and stabilization of GHG emissions before 2100. In this case, the increase in the earth's temperature would be between 1.1 °C and 2.6 °C and the sea level between 32 and 63 cm (MMA, 2016).

AWI-CM-1-1-MR	Alfred Wegener Institute	Germany	0,94	0,9
CAMS-CSM1-0	Chinese Academy of Meteorological Sciences	China	1,13	1,1
CESM2	National Center for Atmospheric Research	USA	1,25	0,9
CNRM-CM6-1-HR	Centre National de Recherches Météorologiques	France	0,5	0,5
EC-Earth3	EC-Earth-Consortium	Europe	0,7	0,7
EC-Earth3-CC	EC-Earth-Consortium	Europe	0,7	0,7
HadGEM3-GC31- MM	Met Office Hadley Centre	United Kingdom	0,8	0,6

Source: Cemig data, 2024.

The analysis carried out made it possible to identify the climate risk for each of the company's plants and for others in which Cemig has an interest. Considering the analysis of the scenarios described above, with the identification of physical risks, a quantitative and qualitative analysis of their impacts on the company's operations was carried out, as well as their impact on the business.

In terms of physical risks, the data used to carry out the studies and analyses were applied to the company's business areas and interests, especially Power Generation and Power Transmission and Distribution. Based on the results, actions to monitor and adapt to climate change were identified.

These studies and the respective analyses will be updated with the release of the CMIP7 data, which is related to the IPCC AR7 schedule and the progress of the experiments defined for the CMIP7 Assessment Fast Track. Although there is no specific date set for the release of the data, it is expected to occur between the years 2026 and 2027, being made publicly available.

Power generation

A. Hydraulic source

In the scope of the hydraulic energy source, which corresponds to the largest percentage of the company's generation, Cemig evaluated 22 different precipitation scenarios, comprising the models, SSPs and different periods.

The analyses were carried out for 77 hydroelectric plants, including Cemig plants and other companies, evaluating the possible changes in the rainfall regime of these projects, with identification of physical risks, and a quantitative and qualitative analysis of their impacts on the company's operations, as well as their impact on the business.

Below are some examples of information regarding precipitation collected for the Três Marias plant. For this plant, the differences between the results of the models used in the analysis were minimal, which is not necessarily observed for other regions, such as Maranhão and southern Brazil. Therefore, for each hydroelectric plant, this similarity between the observational data and the history of each model was analyzed to define the relevance of the model in relation to the region.

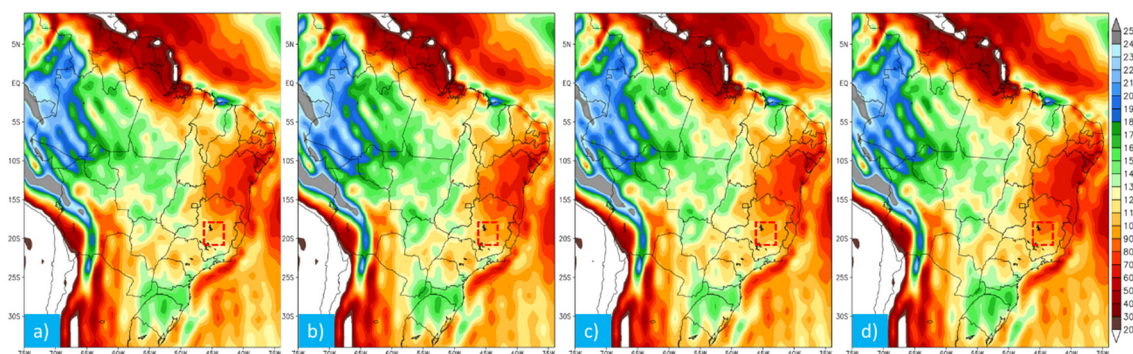


Figure 13. Example of the monthly average precipitation (mm) from 2022 to 2051, for scenarios SSP126, SSP245, SSP370 and SSP585, of the AW1-CM11-1-MR model, with emphasis on the Três Marias region. Source: Cemig, 2024.

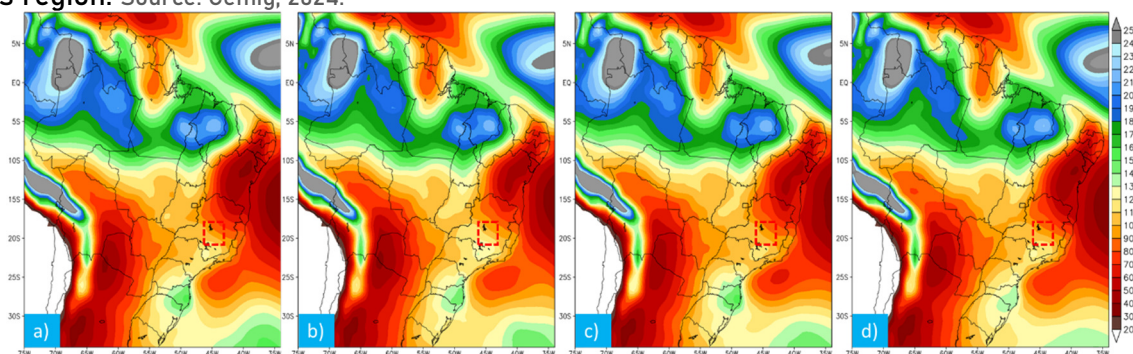


Figure 14. Example of the monthly average precipitation (mm) from 2022 to 2051, for scenarios SSP126, SSP245, SSP370 and SSP585, of the CESM2 model, with emphasis on the Três Marias region

Source: Cemig data, 2024.

In the case of the Três Marias plant, 80% of the scenarios pointed to a reduction in rainfall in the basin until approximately the year 2030. Only one of the models showed an increase, the HadGEM3, but it is also one of the ones with the greatest historical difference. Regarding the scenarios, even the most optimistic ones show a drop or stability in the next 10 years, but followed by recovery. With the most pessimistic (SSPs 3, 4 and 5), there are sharp drops and, in some cases, no recovery.

The remaining plants, the vast majority of them present in the Southeast and Midwest, followed the above pattern, with some specific differences, which may indicate a risk of a sharp drop in precipitation for the coming years, with strong pressure on the operation of the National Interconnected System.

Based on this risk, Cemig has been improving and creating systems related to increasing efficiency in the operation of its reservoirs and environmental alerts.

B. Solar source

The solar farms that Cemig currently owns and that it intends to install, have the state of Minas Gerais as a priority. Therefore, the solarimetric potential of the state and the possible changes in the variables that directly impact the generation by this source were evaluated in greater detail, such as cloudiness, temperature and air humidity. Of these, cloudiness definitely has the greatest impact on production, as it directly affects the radiation incident on the solar panels, while very high temperature and humidity levels negatively affect the efficiency of these panels.

The state of Minas Gerais presents a significant climatic heterogeneity in its territory, so it became necessary to divide the state into some macro-regions to assess the impact of climate change on the aforementioned atmospheric variables, thus creating the divisions presented in Figure 15Figure 15, which highlights the macro-regions of analysis.

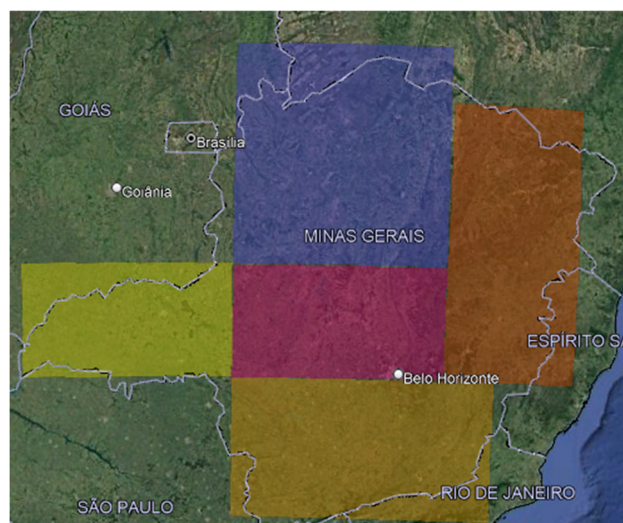


Figure 15. Macro-regions of analysis.

Source: Cemig data, 2024.

In Figure 16, the vast majority of scenarios point to a reduction in cloudiness in the North region of Minas Gerais in the next 30 years, which contributes positively to an increase in energy production by solar source in the coming years, regardless of the SSP analyzed.

A similar analysis was carried out for the other regions, indicating a similar drop in the Triangle, Center and East, but showing stability in the South of Minas. However, the loss or gain in energy production by solar source, given the low magnitude of the changes in Cloudiness, should be accompanied by analyses related to temperature and relative humidity of the air, which will be explored over the next year.

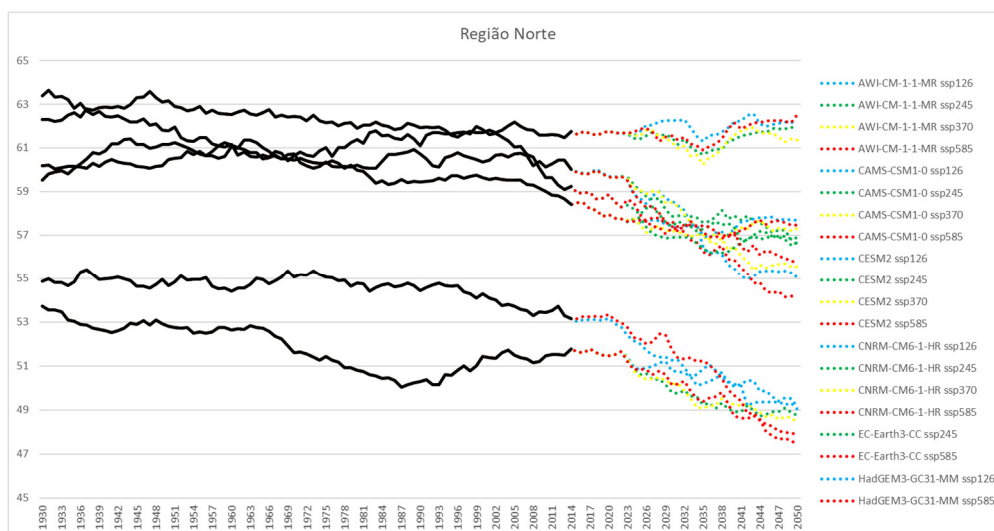


Figure 16. Historical and predicted scenarios for cloudiness (%) until 2050 for the northern region of Minas Gerais.

Source: Cemig data, 2024.

C. Wind source

In the analysis of climate change in wind sources, the regions present in the macro-region of analysis (Figure 15) and the wind farms of Volta do Rio and Parajurú, owned by Cemig (Figure 17).



Figure 17. Location of the wind farms of Parajurú and Volta do Rio.

Source: Cemig data, 2024.

In the case of wind farms present in Ceará, the variation is almost imperceptible, but with a slight downward trend in the most pessimistic scenarios. As the winds in Ceará are dominated by the southeast trade winds, which arise due to the difference in the equator-pole warming. Therefore, this warming difference will continue to occur, regardless of climate change scenarios. For the regions of Minas Gerais, there were significant differences between the North and East, which showed stability in all scenarios, while the South and Triangle showed increases in SSPs 245 and 370, while in the Central region there was a very high variability.

Power transmission and distribution

Power transmission and distribution represent two core businesses of the company and are directly affected by the prevailing weather conditions. During the rainy season they are hit hard by storms, while in the dry season fires punish the lines leading to a high number of annual shutdowns.

One of the ongoing studies evaluates changes in the frequency of fires near power transmission and distribution lines. These fires affect both the duration and frequency of unscheduled consumer shutdowns, two aspects that, in one, have a direct correlation with indicators related to the performance of the concession of these services.

In this context, two variables that directly affect the occurrence of fires are air temperature and humidity, variables that were evaluated within the models and scenarios studied.

In all scenarios evaluated for air temperature, there is an increase in air temperature for all regions of Minas Gerais. In some scenarios, such as those represented for the North region (Figure 18), SPS585, this increase may exceed 4°C in the next 30 years.

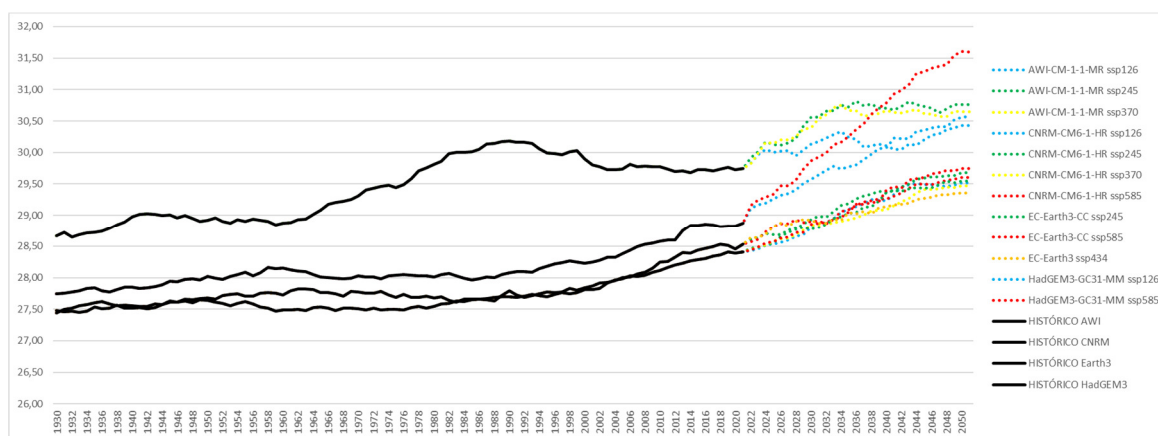


Figure 18. Historical and predicted scenarios for the maximum surface temperature (°C) by 2050.
Source: Cemig data, 2024.

In the case of relative humidity, the scenario is the opposite, with a drop in humidity in all regions of the state, such as in the northern region (Figure 19). The combination of rising temperatures, falling humidity and precipitation can lead to a future with an extreme increase in the frequency and extent of fires in the state of Minas Gerais, which is why Cemig has created its own system for monitoring, analyzing and warning fires, which will be described later.

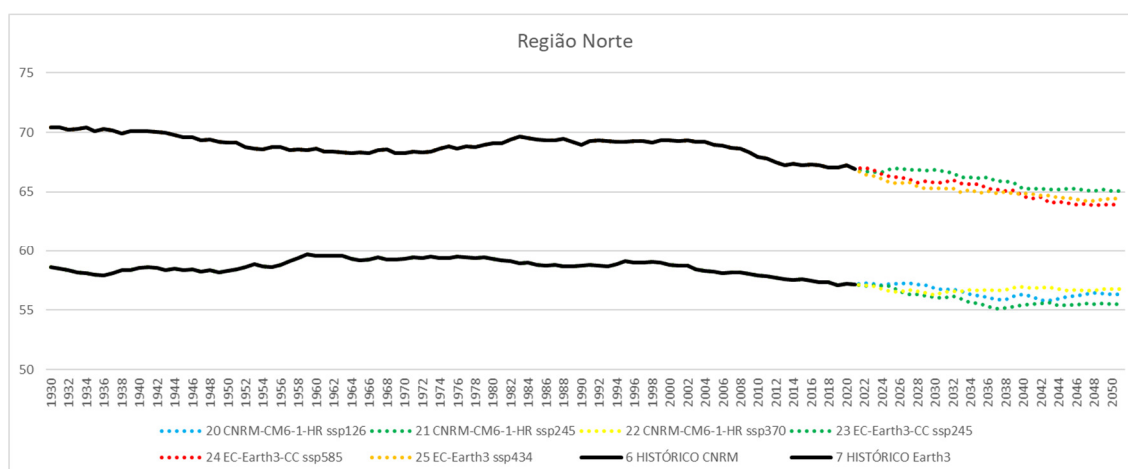


Figure 19. Historical and predicted scenarios for the relative humidity of the surface air (%) until 2050.
Source: Cemig data, 2024.

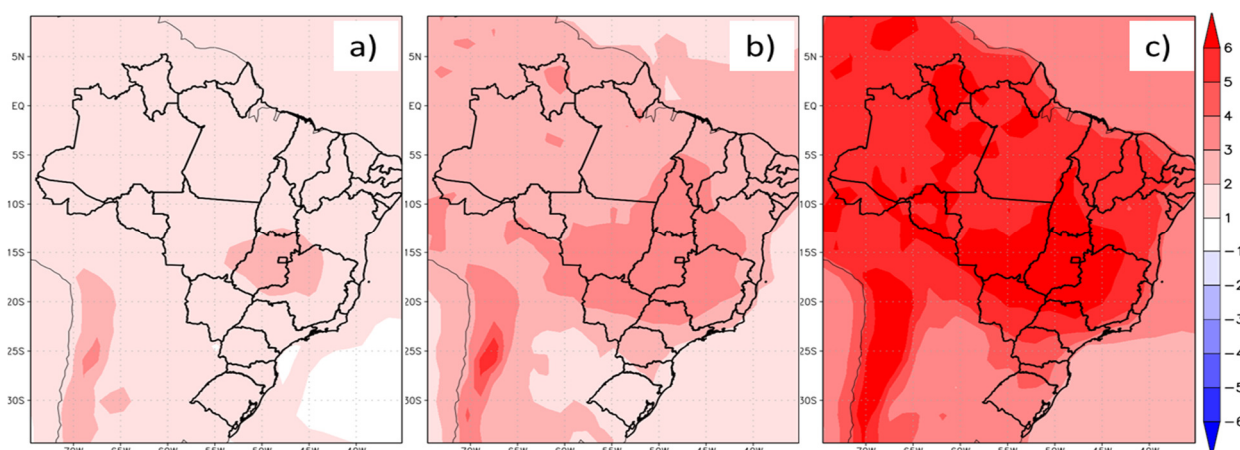


Figure 20. Anomalies (%) for scenarios SSP1 (b), SSP2 (c), and SSP5 (d). Source: CNRM/FR.
Source: Cemig data, 2024.

In 2024, the transition from the El Niño phenomenon to climate neutrality was one of the main factors that influenced the improvement in atmospheric conditions in Brazil, resulting in a lower occurrence of temperature anomalies and storms. However, the period was also marked by extreme events, such as the intense rains that hit Rio Grande do Sul between April and May, causing one of the greatest climatic tragedies in the history of the state. In Minas Gerais, there was a reduction in the frequency of extreme events such as heat waves and windstorms, although there was an increase in the occurrences of fires and heavy rains. This set of climate contrasts – combined with the climate projections mapped by the company – highlights the need for structured and continuous adaptation and resilience actions, which allow the company to anticipate risks, respond to extreme events and strengthen its capacity to face the impacts of climate change.

7.1.5 Adaptation and Resilience Actions

Climate change adaptation actions are detailed in the [Climate Change Adaptation Plan 2025](#), available on the company's website. Table 9. Summary of actions to adapt to physical risk. below highlights some of the physical risk adaptation measures applicable to the next five years (2025–2029). Ongoing adaptation actions and those planned for the future are detailed, highlighting the affected business activities, potential impacts on the business, and the initiatives implemented and planned to address the challenges.

Table 9. Summary of actions to adapt to physical risk.

Physical Risk	Business Activity	Potential impact on the business	Actions Implemented by 2024	Actions planned for the next 5 years
Temperature increase	Transmission/Distribution	Increased stress on equipment, leading to damage and reduced service life, such as transformers.	Temperature monitoring at local and large-scale level. Identification of areas with high observed risk.	Improvements to the weather forecasting system with the use of AI. Creation of a methodology to calculate the impact of high

Physical Risk	Business Activity	Potential impact on the business	Actions Implemented by 2024	Actions planned for the next 5 years
		Reduction of air humidity and increased likelihood of fires.	Pilot Project in the Betim 6 system, 345 kV on the dynamic capacity of Transmission Lines through Digital Twins. Creation of the Heat Wave Alert System.	temperatures on the useful life of equipment Renewal of assets, aiming at improving the supply of electricity
Increased wind speed	Transmission/ Distribution	Damage to transmission networks	Monitoring of extreme weather events and use of weather alerts as a way to prepare the operation team. Training of Contingency Plans for teams with adjustments and improvements from the last review carried out in the contingency plans. Automation of the electricity distribution system, aiming to reduce the recovery time of the system. Expansion and management of the workforce on critical days Asset maintenance plan. Management Plan and Coexistence between trees and the network. Acquisition by transmission of a 500kV modular tower.	Installation of 25 thousand reclosers by 2028. Installation of 1.7 million automated meters by 2028. Constant technical training with O&M teams for the reconstruction of the Lines, investment in the acquisition of emergency structures and optimization of service logistics for all transmission teams. Digitalization of Airline assets in a geospatial environment, modernization of equipment and Line inspection tools. Aneel R&D projects to measure the impact of climate change on airline assets.

Physical Risk	Business Activity	Potential impact on the business	Actions Implemented by 2024	Actions planned for the next 5 years
			Expansion of the company's lightning detection network.	<p>Explore new engineering solutions in the electrical sector market, national and international.</p> <p>Holding new technical meetings on new technologies applicable in contingency plans in the energy transmission sector.</p> <p>Identify wind maps from recent years to identify the places with the highest incidence of critical winds of the airline structures.</p> <p>Installation of new automatic weather stations.</p> <p>Update of Cemig's Meteorological Radar System.</p>
Reduction of water availability	Hydroelectric generation	Reduction of hydro generation	<p>Construction of solar plants in 2024.</p> <p>Effective management of reservoirs.</p> <p>Repowering and/or Expansion of hydroelectric power plants.</p>	<p>Investments in new sources of energy generation (solar and wind).</p> <p>Effective management of reservoirs.</p> <p>Investment in storage solutions (BESS and Pumped-Storage Plants).</p>

Physical Risk	Business Activity	Potential impact on the business	Actions Implemented by 2024	Actions planned for the next 5 years
Heavy rains	Generation/ Transmission/ Distribution	<p>Discontinuation of electricity supply service</p> <p>Difficulty in accessing assets (flooding or landslides)</p>	<p>Modernization of distribution lines: automation of reclosers, digitization and modernization of substations.</p> <p>Training of Contingency Plans for teams with adjustments and improvements from the last review carried out in the contingency plans.</p> <p>Automation of the electricity distribution system, aiming to reduce the recovery time of the system.</p> <p>Expansion and management of the workforce on critical days</p> <p>Asset maintenance plan.</p> <p>Renewal of assets, aiming at improving the supply of electricity</p> <p>Review of the sizing of asset structures and verification of protections.</p> <p>Coordinated and integrated action with public agencies, in order to promote better service to society, including the possibility of using reservoirs to mitigate and postpone floods.</p>	<p>Constant technical training with O&M teams for the reconstruction of the Lines, investment in the acquisition of emergency structures and optimization of service logistics for all transmission teams.</p> <p>Digitalization of Airline assets in a geospatial environment, modernization of equipment and Line inspection tools.</p> <p>Renewal of assets, aiming at improving the supply of electricity</p> <p>Aneel R&D projects to measure the impact of climate change on airline assets.</p> <p>Explore new engineering solutions in the electrical sector market, national and international.</p> <p>Holding new technical meetings on new technologies applicable in contingency plans in the energy</p>

Physical Risk	Business Activity	Potential impact on the business	Actions Implemented by 2024	Actions planned for the next 5 years
			Creation of a supervisory flood control system.	transmission sector. Renewal of assets, aiming at improving the supply of electricity. Installation of 25 thousand reclosers by 2028. Installation of 1.7 million automated meters by 2028. Structural Assessment of Generation Assets in Periodic Safety Reviews (RPS). Implementation of communication and warning actions and devices for the communities downstream of the plants, including simulated training.
Fires	Transmission/ Distribution	Damage to transmission networks	Mechanized Lane Cleaning, Fire Monitoring System, Online Platform www.apagaofogo.eco.br Replacement of wooden lines with metal structure lines. Acting in a coordinated and integrated manner	Mechanized Lane Cleaning, Fire Monitoring System, Online Platform www.apagaofogo.eco.br Replacement of all wooden lines with metal lines by 2028.

Physical Risk	Business Activity	Potential impact on the business	Actions Implemented by 2024	Actions planned for the next 5 years
			<p>with public agencies, in order to promote the best service to society.</p> <p>Communication Campaigns for the prevention and combat of fires.</p> <p>Improved capacity for fire detection and alerts.</p>	

Source: Cemig, 2025.

7.1.5.1 Transition scenarios

The objective of the transition scenario analysis is to **enable the company to develop robust strategies to face the challenges and take advantage of the opportunities arising from the transition to a low-carbon economy**. The analysis seeks to answer relevant questions for Cemig, ensuring its competitiveness and long-term sustainability. Currently, there are three fundamental objectives in guiding the company's strategy:

- 1. Adaptation to decarbonization policies:** different public policy and regulatory scenarios can affect Cemig's operation and strategy. This includes analyzing how carbon pricing policies, subsidies for renewable energy, and environmental compliance requirements may impact the company's capital and operating costs, as well as growth opportunities.
- 2. Investment in innovation and clean technologies:** The integration of emerging technologies and innovations into operations to reduce emissions and improve energy efficiency is imperative in the sector. This encompasses the adoption of renewable energies such as solar and wind, the development of energy storage solutions, and the implementation of smart grid management systems. The analysis should make it possible to identify the priority areas for R&D investment and the technologies that offer the greatest potential for positive impact.
- 3. Diversification of the energy matrix:** both opportunities and challenges are associated with the expansion of the share of renewable energy sources in Cemig's energy matrix. The analysis allows us to evaluate how different scenarios of market development and technological advancement can influence the viability and competitiveness of new energy sources, contributing to the reduction of dependence on hydroelectric generation and the company's resilience to climate change.

As part of the transition scenario analysis, it is important to identify the **key variables that directly influence Cemig's ability to achieve its strategic objectives in an energy transition context**. These variables are fundamental for the construction and evaluation of the different future scenarios and, in the current context of the company and the sector, include:

- a. **Climate policies and regulations:** including variables such as the implementation of carbon pricing, greenhouse gas emissions regulations, tax incentives for renewable energy, and national carbon reduction targets. The evolution of public policies shapes Cemig's operating environment, affecting costs and growth opportunities.
- b. **Technological advances:** encompasses innovation in renewable energy technologies, energy storage systems, digitalization of grids, and energy efficiency. The adoption of clean technologies can transform Cemig's operation, offering paths to reduce emissions and improve operations.
- c. **Market conditions:** This refers to variables such as the demand for clean energy, energy prices, competitiveness in the renewable energy sector, and the evolution of consumer preferences. Market dynamics influence Cemig's investment decisions and its ability to maintain a competitive position in the transition energy sector.
- d. **Financing and investment:** considers access to capital for investments in low-carbon technologies, financing conditions, and investor interest in sustainable projects. Cemig's ability to attract and allocate financial resources is essential for the implementation of its energy transition strategy.
- e. **Stakeholder expectations:** includes the demands and expectations of customers, investors, regulators and communities regarding Cemig's climate responsibility and sustainability. Stakeholder expectations can drive the adoption of more sustainable practices and influence the company's reputation and social license to operate.

Based on the objectives and the highlighted variables, the IEA NZE 2050, IRENA and IEA STEPS scenarios were selected to make considerations about Cemig's challenges. Cemig's position in each of these contexts is detailed below.

- **IEA NZE 2050 Scenario**

In this scenario, Cemig faces a **strict regulatory environment, with high carbon prices and strong incentives for clean energy**. Adapting to decarbonization policies will require the company to align its operations and investments with these global and national policies, which may include quickly adapting to emissions standards and actively participating in carbon markets.

Cemig can take advantage of **incentives for renewable energy** and low-carbon power supply contracts, strengthening its competitiveness. Cemig is expected to accelerate investments in technologies such as energy storage, *smart grids* and energy efficiency solutions to manage the intermittency of renewable sources and maximize the efficiency of its distribution network.

Carbon capture and storage (CCS) and green hydrogen (H2V) technologies will also be important, as well as the digitalization and automation of operations, in order to ensure the sustainability of the business.

- **IRENA Scenario**

The energy transition is driven by the progressive adoption of renewable energy and a **significant increase in energy efficiency**. Incentive policies and support mechanisms, such as renewable energy auctions and subsidies, will create a positive environment for the expansion of Cemig's operations. The company will be able to take advantage of these incentives by actively participating in auctions and support programs, and adapt its operations to comply with new energy efficiency and emissions regulations.

Technological **innovation** will be a central pillar, and Cemig should strengthen its R&D capabilities in renewable energy and energy efficiency. Investments in new solar and wind technologies, next-generation energy storage systems, and smart grids will be essential to facilitate the integration of

renewable energy and demand management. Innovative solutions in *microgrids* and distributed energy technologies will also be important to offer additional flexibility and resilience to the energy system.

Diversifying the energy mix will require accelerating **solar and wind energy expansion** plans, and exploring opportunities in emerging energies such as geothermal and oceans, depending on technical and economic feasibility. The expansion of distributed generation is a key initiative to diversify Cemig's energy matrix, in addition to considering the electrification of its own processes and the development of solutions for industrial and commercial customers looking to reduce their own carbon footprints.

- **IEA STEPS**

Given that this scenario **considers a climate ambition limited to the policies and goals currently in force in the country and in the energy sector**, it is a scenario in which the temperature increase would exceed the limits established in the Paris Agreement, exceeding 2°C. For Cemig, less ambitious goals at the governmental and sectoral levels may result in a slower pace of energy transition. Due to the dependence on regulatory and market structures, there is reduced expectation of incentives for decarbonization. This slowness can make it difficult to adapt quickly and necessary to meet the growing demands for cleaner and more sustainable energy sources.

Cemig's response to the indicated limitations involves a **strategy of maximizing opportunities within the current regulatory and budgetary context**. For example, Cemig should be attentive to renewable energy auctions and take advantage of subsidies and tax incentives available for clean energy, also continuing investments in *smart grid* technologies and energy storage systems to improve efficiency and facilitate the integration of renewable sources, such as solar and wind, into its energy matrix. In addition, Cemig can adopt a cautious and incremental approach to diversifying the energy matrix. This includes **continuing to gradually expand solar and wind generation capacity** while exploring the economic viability of emerging sources. The company can also strengthen its energy efficiency initiatives and electrification programs, aligning with the efficiency and sustainability policies already in place and ensuring the possible advances towards the Net Zero goal, even if the regulatory environment and sectoral policies are not the ones that most favor the transition.

The analysis of the IEA NZE 2050, IRENA, and IEA STEPS scenarios reveals different paths for Cemig's energy transition, each with its own challenges and opportunities. In the IEA NZE 2050 scenario, Cemig must face strict regulation and high carbon costs, needing to intensify investments in clean technologies in order to align with decarbonization policies. The IRENA scenario offers a more favorable environment, driven by incentives and supportive policies, facilitating the expansion of operations in renewable energy and requiring the adoption of emerging technologies to increase efficiency and integrate new energy sources. The IEA STEPS scenario, more conservative and reflecting current policies, imposes limitations on the pace of the energy transition, challenging Cemig to maximize opportunities within the existing regulatory framework and focus on incremental efficiency improvements and integration of renewable energies. In all scenarios, however, Cemig's strategic adaptation must be in line with **continuous investments in innovation**, essential to maintain its competitiveness and resilience in the transition to a low-carbon economy. For this reason, these measures are part of the resilience strategy developed by the company.

7.1.6 Resilient Strategy: Climate Action Plan

In 2023, Cemig began preparing its Climate Action Plan in partnership with a consulting firm specializing in climate change. This was a significant step, as the company and its subsidiaries are at an adequate level of maturity to commit to more ambitious goals and coordinate a comprehensive decarbonization process, involving all scopes and areas of activity. In the same vein, the second

edition of the TCFD Report was published, bringing updates on the company's progress and greater alignment with TCFD recommendations.

The release of the Climate Action Plan in 2024 consolidated several initiatives and lessons learned by Cemig over the years. This plan represents a milestone, bringing together a more integrated and robust set of climate practices and goals, providing a clear direction for the successful journey that the organization has been taking in combating climate change.

In 2025, Cemig absorbs the directions present in the Climate Action Plan across the company in order to ensure compliance with the goals and commitments listed in the document, now also with goals approved by the Science Based Targets initiative. In addition to mitigation actions, the plan includes adaptation to physical and transition climate risks, governance aspects, internal incentives, and the integration of the climate agenda into the company's strategy. The following are the lines of action adopted by the company and that guide the decarbonization strategy.

Lines of Action – Climate Action Plan

- **Expansion of the generating complex** with investments in renewable energy sources;
- **Tracking of the emission sources** of the energy traded;
- Expansion of energy trading with **renewable energy certificates** (Cemig REC and I-REC);
- **100% renewable** own consumption;
- **Modernization and innovation** of the electricity distribution service;
- **Reduction of losses** in transmission and distribution;
- Engagement with its **suppliers** in order to reduce emissions from services and products;
- **Electrification** of the own fleet of cars;
- **Energy Efficiency Program** and awareness of its customers;
- **Political engagement** aimed at supporting initiatives to decarbonize the economy;
- Investments in innovative projects aligned with the **energy transition**;
- Creation of **incentives** related to decarbonization goals for the entire company.

In order to evaluate and track the investments that have already been made in line with the Transition Plan, **Cemig voluntarily adopted the European Green Taxonomy** (unaudited) to classify its financial expenses, given the absence of a Brazilian taxonomy. This taxonomy defines economic activities considered sustainable and green, helping to clarify for investors which stocks are sustainable from an environmental point of view. Observing this classification, the company has directed its investments in areas such as the production of electricity from renewable sources (such as wind and solar energy), transmission and distribution of electricity, and energy storage.

In addition, **Cemig classifies 100% of its CAPEX investments as taxonomy-eligible**, i.e., all these investments have the potential to be classified as green or environmentally sustainable, but it would still be necessary to meet specific criteria to determine the effective contribution to climate change mitigation or adaptation. The following consolidates this information.

Table 10. Cemig's voluntary classification regarding the alignment and eligibility of Revenue, OPEX and CAPEX for 2024 according to the European Green Taxonomy.

	Revenue	OPEX	CAPEX
Taxonomy-eligible total	82%	81%	100%
Total Taxonomy-aligned	72%	71%	91%
Total not eligible according to Taxonomy	18%	19%	0

Source: Green Financing (Cemig, 2025).

Cemig's proactive approach to adopting international sustainability standards and investing in green technologies and practices not only reinforces its position as a leader in the energy transition, but also demonstrates its commitment to the decarbonization of the economy.

In order to clarify how Cemig has been determining which actions should be prioritized in the face of the scenarios presented, culminating in the preparation of the Climate Action Plan, it is relevant to report how the organization identifies, evaluates and manages the risks and opportunities related to climate change. In this context, the next section will address in detail the processes used by Cemig to address these issues effectively. In addition, how these processes interconnect with the organization's overall risk management will be presented, ensuring an integrated and comprehensive approach to mitigating the impacts of climate change in all areas of the company's operation.

7.2 RISK MANAGEMENT

OBJECTIVE
Disclose how the company identifies, evaluates, and manages climate-related risks.
GUIDELINES
<ul style="list-style-type: none">• Describe the processes for identifying and assessing climate risks:<ul style="list-style-type: none">○ Include the routine associated with transition risks and physical risks.○ Explain how these processes consider magnitude, probability, and time horizon.• Describe how climate risks are managed:<ul style="list-style-type: none">○ Integrate into the company's overall risk management processes.○ Inform the processes for defining mitigation and response strategies.• Explain how climate processes integrate with corporate risk management:<ul style="list-style-type: none">○ Show how governance and strategic decisions are informed by these processes.

Cemig implemented its corporate risk management in 2003 and, since then, has been promoting its continuous improvement. Structured based on processes, this management is aligned with the Master Plan and the Company's strategic planning, and is guided mainly by the [Corporate Risk Management and Internal Controls Policy](#).

7.2.1 Risk identification and assessment process

Since 2003, Risk Management has played a strategic role at Cemig, integrating with the company's Strategic Planning and Master Plan. This performance is mainly guided by the **Corporate Risk Management and Internal Controls Policy**, the most recent version of which was approved by the Board of Directors in 2023, as established in the Bylaws. This policy defines the guidelines and responsibilities for the identification, analysis, treatment and monitoring of risks.

The responsibility for the Corporate Risk Management and Internal Controls Policy is assigned to the Board of Directors, as provided for in Cemig's **Bylaws**. The Board is also responsible for the annual validation of the Company's risk matrix. This engagement at the highest level of governance reinforces both the importance attributed to risk management and Cemig's commitment to good Corporate Governance and Risk Management practices.

Since 2016, the corporate risk management function has been directly linked to the company's presidency. In 2019, the Deputy Director of Compliance, Corporate Risks and Internal Controls was established, unifying these processes under the same management. In June 2023, there was only one change in nomenclature, which was renamed **Compliance Department**. This integration between the risk and internal control processes strengthened the synergy between them, in addition to preserving independence from the other processes, contributing to the decision-making of Senior Management and the protection of the company's value.

Cemig's Corporate Risk Management and Internal Controls Policy establishes the Company's risk appetite and adopts the Precautionary Principle (GRI 102-11) as one of the elements considered in the decision-making process related to risk management. This policy follows guidelines in line with the best market practices, with emphasis on its adherence to the **"Three Lines Model"**, recognized as an effective approach to structuring governance and responsibilities in risk management.

The Three Lines Model provides a clear framework for coordinating the functions involved, avoiding overlapping activities and gaps in controls. It does not require the creation of new organizational structures, but precisely defines the responsibilities of each party involved. In this logic, **each area of Cemig is responsible for managing the risks under its ownership**, while the Risk Management and Internal Controls Department acts centrally in monitoring the risks and controls implemented.

The **first line is composed of the managers and executors** of Cemig's operational and business processes. It is up to these administrative and business areas to lead actions, manage risks directly linked to their activities and apply resources in order to achieve the organization's strategic objectives.

The **second line is formed by the areas responsible for providing technical and methodological support to risk management and internal controls**, in addition to ensuring that practices are being correctly implemented in the first line. This layer also collaborates in the definition of risk tolerance and the dissemination of information related to the topic within the company. At Cemig, the Compliance, Risk Management and Internal Controls areas make up the second line, coordinating processes and offering continuous support to those responsible for risks and controls.

In the end **the third line is constituted by the Internal Audit**, whose role is to provide independent and objective assessments to management and governance bodies. This line verifies the adequacy and effectiveness of governance, risk management and internal control systems, contributing to the achievement of organizational objectives and encouraging continuous improvement. Figure 21 below summarizes the dynamics of the Three Lines Model.

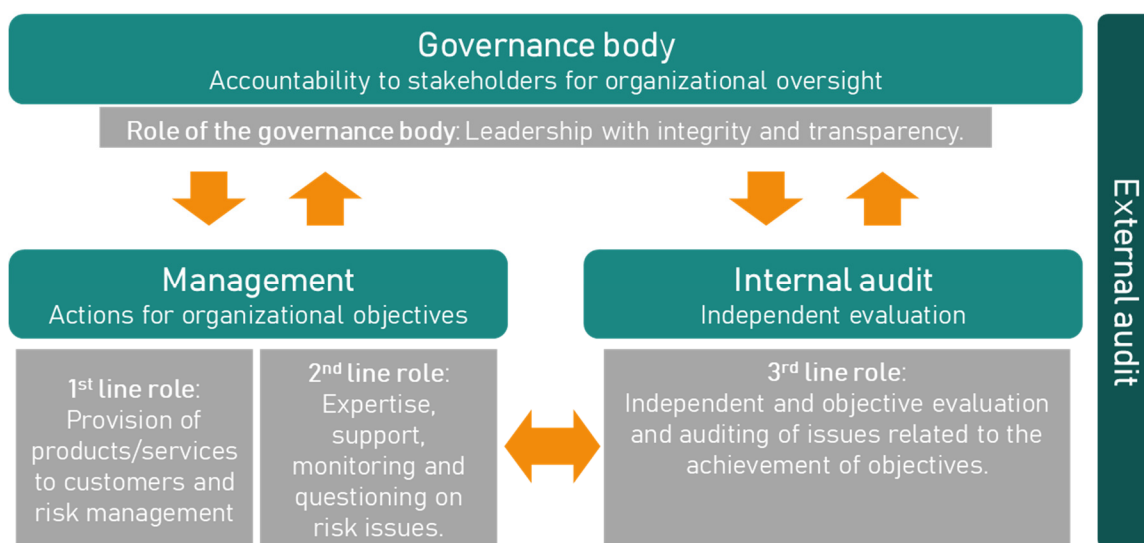


Figure 21. Three Lines Model.

Source: Adapted from Sustainability Report (Cemig, 2024).

To make Cemig's risk management more robust, several initiatives have been implemented by the company in recent years to maintain an integrated risk governance model to ensure the achievement of strategic objectives. Among these activities, the following can be mentioned:

- Review and approval of the Matrix *Top Risks* 2024/2025 by Cemig's various governance forums;
- Evolution in the description of the concept of *Top Risks*, calibrating the exposure of risks in the measurement ranges, giving greater assertiveness to the process;
- Update and approval of the Risk Management and Internal Controls Policy and the Risk Appetite Statement in 2023;

- Hiring of renowned consultancies for maturity diagnosis, improvement of risk management methodology and report of market risk trends;
- Training, for the risk management team and focal points of the risk holder areas, of interpretation and implementation of the ISO 31000 standard;
- Promotion of a risk culture with the intensification of materials disclosed in the Company's communication channels, and
- Dissemination of the risk culture in Cemig's Executive Committees, participating in monthly and/or bimonthly meetings.

As part of the continuous improvement of the risk management process, the achievement in 2023 of the **Declaration of Compliance** in line with the ISO 31000:2018 standard, granted by Bureau Veritas, stands out. Internationally recognized, ISO 31000 is a reference standard that offers fundamental guidelines for planning and, especially, for effective risk management.

This Declaration of Compliance was obtained after a rigorous external audit, which evaluated all of Cemig's boards. The audit process analyzed and validated aspects such as the organizational structure, document procedures, the environment and the risk management culture, ensuring their adherence to the criteria defined by the standard. The declaration was revalidated in 2024, having been maintained.

7.2.2 Risk management process

Based on the guidelines established in the Risk Management and Internal Controls Policy, Cemig has structured a **risk management process that 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 Management, which provides technical support to the different areas of the company. The objective is to provide information to Senior Management for decision-making regarding the most relevant risks and opportunities.

The result is represented in a **6x6 risk matrix**, as presented in Figure 22. As mentioned, each department is responsible for identifying the risks related to its context. The evaluation is made considering the probability of materialization and the maximum financial impact that this materialization would represent for the company.

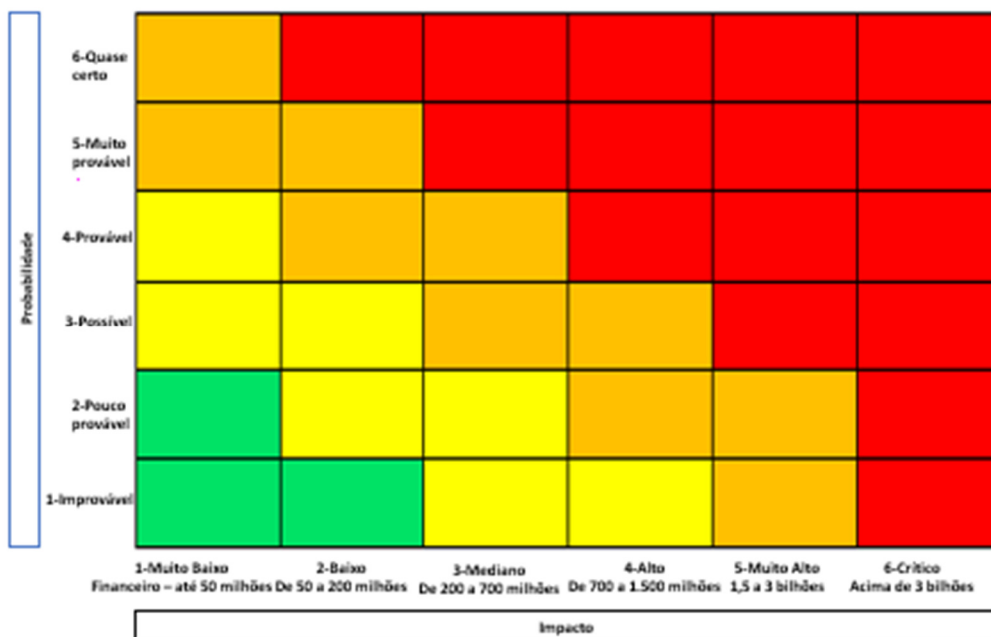


Figure 22. Cemig's risk matrix.

Source: Cemig, 2024.

The result of the crossing between the probability of materialization and the worst scenario among the impacts offers coordinates for the prioritization of risks by the company.

As a practical example in the context of operations, the substantial impact may result, for example, from an event that interrupts the distribution of energy in a certain region, which may have implications such as demand for local operations, fines, among other financial and non-financial consequences. For this reason, Cemig's governance structure provides that the Board of Directors and the Committees consider the perspectives of **environmental and reputational impact in the risk assessment**, factors that will influence the response strategy.

In order to provide information to Senior Management for decision-making related to the most relevant risks and opportunities, Cemig has structured a process for risk management based on the guidelines established in the Risk Management and Internal Controls Policy, enabling the mapping and evaluation of both strategic risks and those arising from operational activities. The 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:

Risk Management Process

1. Planning stage

For the corporate risk management process to be effective, the first step is the approval and internalization of the drivers and strategic objectives that Cemig intends to achieve. It is based on the review of the company's Strategic Planning that the review of the Corporate Risk Matrix is also carried out, based on the analysis of the context.

2. Identification stage

In the risk identification phase, the area responsible for centralized risk management and internal controls analyzes market reports and consults the managers of the areas related to the identified topics; including those that maintain dialogue with external stakeholders, such as Investor Relations, Strategic Planning, Sustainability and the General Secretariat.

Each department, therefore, maps and reviews the risks associated with its activities, identifying their causes and the potential impacts involved.

3. Analysis stage

The analysis stage involves defining the probability of occurrence of risks and quantifying the mapped impacts. The probability assessment considers the potential occurrence of each risk within a previously established time horizon. The measurement of impacts is carried out based on the affected dimensions, adopting a qualitative approach that considers the worst possible scenario of risk materialization.

Based on this process, the Risk Matrix is built, which results from the combination of the probability of occurrence and the maximum impact of each risk. Based on it, Cemig prepares the *Top Risks Matrix*, which covers the priority risks associated with its strategic pillars: Generation, Transmission, Distribution, Commercialization, Information Technology, Institutional Regulation, among others, according to the need to adapt to the current Strategic Planning.

The matrix is submitted to the Executive Board for deliberation, and is subsequently forwarded to the Risk Committee of the Board of Directors and to the Board of Directors itself. The proposal can also be presented to the Audit Committee and the Fiscal Council.

This classification of Top Risks takes place annually and involved, in 2024, all of Cemig's Departments, with the mapping of 26 Top Risks, of which 04 are related to the environment.

4. Treatment stage

This stage comprises the identification of existing controls that exert a mitigating effect on the identified risks, ensuring that the residual risk – or current risk – corresponds to that indicated in the analysis phase. Ongoing action plans to address risks are also considered.

After the definition of the actions by the respective Directors, they forward the responsibilities to the areas involved, which are in charge of implementing and monitoring the measures, periodically reporting the progress obtained.

5. Monitoring stage

For the mapped risks, the Risk Management and Internal Controls Department requests periodic updates on the status of the action plans, as well as reviews that allow the identification of improvements or the reassessment of the assigned priorities.

In the context of physical risk management, Cemig has been developing a Climate Risk Bank focused on its assets. This database includes the history of fires and lightning strikes by transmission line and tower, allowing the identification of those most susceptible to events that may cause shutdowns. Transmission and distribution substations are also included, as well as severe event prediction data for each point analyzed.

The alignment of this methodology with the ISO 14091:2021 standard – Adaptation to Climate Change – is being discussed by Cemig's internal teams, together with specialized consultancies.

7.2.3 *Top Risks* identified by the company

Among the Top Risks mapped in the last revision of the matrix, the following stand out in the environment and climate theme: (1) Risk of non-adequacy to physical and transition risks related to climate change; (2) Risk of negative spillover from exclusion from ESG ratings and the company's inadequate human rights practices; (3) Risk of non-compliance with environmental obligations linked to the authorizing acts; (4) Risk of environmental accidents in Generation and Transmission assets.

The processes for addressing these risks, in summary, are organized as follows:

(1) Risk of non-adaptation to physical and transition risks related to climate change

SITUATION

- The risk refers to the inadequacy of climate change mitigation and adaptation measures, either due to implementation failures or the inefficiency of adopted strategies in minimizing the impacts of extreme weather events. This risk directly affects the operations of Cemig H, Cemig D, and Cemig GT, including their wholly owned subsidiaries. Although the short-term financial impact is considered low, it is projected that, in the medium term, with increasing frequency and intensity of such events, the impact may become moderate (ranging between BRL 200 million and BRL 700 million) in the absence of effective action.

TASK

- To address this situation, Cemig has developed a series of action plans and controls aimed at improving climate change adaptation, with a focus on minimizing financial and operational impacts. Initiatives include the expansion of renewable energy generation (solar and wind), development of projects linked to the energy transition, preparation and disclosure of the Climate Transition Plan, validation of emissions targets by the Science Based Targets initiative (SBTi), and investments to strengthen the energy distribution infrastructure.

ACTION

- The company has already made significant progress in these initiatives and plans further investments to achieve its targets. By 2028, Cemig aims to expand its installed capacity by an average of 870 MW, prioritizing renewable sources (hydropower, solar, and wind), with estimated investments of BRL 150 million. Highlights also include the advancement of energy transition projects, such as green hydrogen, and the validation of climate targets by SBT in 2025. The publication of the Climate Transition Plan provides essential strategic guidelines for these efforts.

RESULT

- These initiatives aim to reduce the company's vulnerability to extreme weather events, mitigating financial and operational risks. These sustained efforts are expected to strengthen the company's resilience, ensuring the continuity and quality of the services provided, while contributing to the long-term sustainability of the business.

(2) Risk of negative spillover from exclusion from ESG ratings and the company's inadequate human rights practices

SITUATION

- This risk refers to the possibility that the company may fail to meet the criteria required by ESG ratings, potentially damaging its reputation, limiting access to sustainable financing (such as green bonds), and reducing its attractiveness to investors. The absence of robust practices in governance, environmental management, and human rights may also lead to mistrust and reputational harm. The financial impact resulting from the materialization of this risk is expected to be low in the short term and moderate in the medium term.

TASK

- To mitigate this risk, Cemig has integrated ESG principles into its Strategic Planning, aligning its organizational ambition with sustainable practices. The company's new ambition is to reaffirm its commitment to ESG policies by taking a leadership role in the sector through advanced environmental management, a positive social impact in the communities where it operates, and excellence in governance as well as health and safety practices.

ACTION

- The company has been implementing and improving several initiatives to mitigate the negative impacts of this risk. These include the annual preparation of its greenhouse gas (GHG) emissions inventory, based on the GHG Protocol, for which Cemig has earned the Gold Seal; quarterly monitoring of the Sustainability Plan indicators; annual analysis of questionnaires from organizations such as the Dow Jones Sustainability Index and ISE B3 to identify gaps and propose improvements; annual renewal of participation in programs such as CDP Reporter Services; hiring of specialized consulting services to support data collection, reporting, and auditing processes; and monthly monitoring and assessment of suppliers.

RESULT

- These actions strengthen Cemig's position in sustainability ratings, support access to green financing, and help maintain stakeholder trust. By adopting a proactive and rigorous approach, the company enhances its reputation, mitigates reputational risks, and ensures its competitiveness in a business environment increasingly driven by ESG criteria.

(3) Risk of non-compliance with environmental obligations linked to the authorizing acts

SITUATION

- This risk refers to non-compliance with terms, conditions, or requirements established by environmental authorities. It may involve operational, technical, or other environmental compliance standards, potentially resulting in severe fines, production shutdowns, loss of licenses, and reputational damage.

TASK

- To keep this risk under control, Cemig incorporates the management of deadlines related to environmental conditions and the monitoring of construction works into its corporate strategy, investing in internal controls and testing mechanisms. The integration of environmental compliance risk - particularly those linked to regulatory permits - into the company's overall risk management framework reinforces the importance of the issue, embedding it transversally across the organization.

ACTION

- The company closely monitors environmental conditions, with specific attention to impacted biomass, when applicable, in order to take timely corrective actions in case of deviations from planned activities. Control testing is carried out by a dedicated internal controls team, which verifies whether the control design is up to date and being properly implemented.

RESULT

- These measures enhance the company's resilience to climate change and strengthen its ability to respond to extreme events. In addition to protecting its strategic assets, Cemig contributes to the transition to a low-carbon economy while seeking to ensure its long-term competitiveness and sustainability.

(4) Risk of environmental accidents in Generation and Transmission assets

SITUATION

- The operation of Generation and Transmission assets involves significant environmental risks, such as dam failures, industrial waste leaks, and impacts on water bodies and ecosystems. The occurrence of such incidents can cause environmental damage, harm the company's reputation, and lead to legal and financial penalties.

TASK

- To mitigate these risks, Cemig has implemented a robust environmental management and operational safety system focused on prevention, monitoring, and rapid response to potential critical events affecting its Generation and Transmission assets. Regarding water resource governance – a critical topic for the company – participation in 19 state watershed committees and 4 federal committees in Minas Gerais enables ongoing risk monitoring and anticipation.

ACTION

- Key measures include conducting periodic environmental audits; continuous monitoring of dams and reservoirs; implementation of emergency response plans and accident simulations; training of teams for response in critical situations; and adoption of technologies that enhance environmental control of operations.

RESULT

- These actions have reduced the likelihood of accidents and associated impacts, while reinforcing Cemig's commitment to environmental preservation and operational safety. This preventive approach helps ensure service continuity with socio-environmental responsibility and alignment with legal requirements and stakeholder expectations.

The processes of identifying, assessing, and prioritizing risks are directly related to the definition of climate goals and metrics. The aspects considered most relevant to the sustainability of the business – especially those that represent material risks or strategic opportunities in the context of climate change – are integrated into the formulation of short, medium and long-term corporate objectives. In this way, the company ensures that its goals reflect not only public commitments and industry trends, but also the specificities of its climate risk matrix, contributing to an integrated, data-driven management in line with international reporting guidelines. The following section identifies the company's goals, presenting the associated metrics and material facts.

7.3 METRICS AND GOALS

OBJECTIVE
Disclose the metrics and targets used to assess and manage climate risks and opportunities, including progress towards the targets.
GUIDELINES
<ul style="list-style-type: none">• Present the metrics used for risk and opportunity assessment:<ul style="list-style-type: none">○ Include cross-cutting metrics, such as GHG emissions, carbon intensity.○ Include industry-specific metrics.• Report GHG emissions (Scopes 1, 2 and, if relevant, 3):<ul style="list-style-type: none">○ Describe calculation methodology and organizational boundaries.○ Inform planned use of carbon credits to achieve targets.• Describe the goals set for risks and opportunities:<ul style="list-style-type: none">○ Explain the rationale behind the targets, if they are aligned with international agreements.○ Inform if targets have been validated by third parties.○ Explain how targets are defined, monitored, and reviewed.○ Present current performance against the targets.

Cemig has been preparing and publicly disclosing the **Greenhouse Gas (GHG) Inventory audited since 2007**, consistent with its commitment to transparency of information, especially in terms of progress related to commitments to reduce emissions and adherence to a renewable matrix. According to the ranking published in the Green Utilities Report (2024) by Energy Intelligence – a leading company in energy information – **Cemig currently occupies the 27th position among the top 100 sustainable independent energy concessionaires and producers**, being the second Brazilian company to appear in the ranking, which considers total emissions and capacity from renewable energy.

Since the beginning of the accounting of emissions in the Greenhouse Gas Inventory, Cemig has established reduction targets in line with its business and sustainability strategy. With the evolution of the topic within the company, today the company presents several goals that will be detailed later. In addition, Cemig has sought to align its emissions reduction targets with best practices and global standards, having committed in 2022 to the Science Based Targets initiative (SBTi), which aims to support companies from the most diverse sectors to establish emission reduction targets in line with scientific recommendations to limit global warming to 1.5°C. In 2025, the **approval of science-based targets by the SBTi** demonstrates the company's commitment to contribute significantly to climate change mitigation and the transition to a low-carbon economy.

7.3.1 Company metrics

To monitor its environmental impact and assess progress on the climate change agenda, **Cemig accounts for greenhouse gas emissions in all its operations and subsidiaries** (Cemig Geração e Transmissão and SPEs – wholly-owned subsidiaries of Cemig GT; Cemig Distribution; Cemig Holding; Cemig Trading; Cemig SIM; Gasmig; Centroeste), following the parameters established by the Brazilian GHG Protocol Program. This monitoring is essential to identify risks and opportunities,

establish reduction goals and guide mitigation actions. Cemig's leadership is heavily involved in discussions on GHG emissions, reflecting its commitment to effective action, evidenced by the voluntary targets for reducing emissions, electricity consumption and energy losses.

In addition to monitoring emissions, the inventory allows Cemig to compare its performance with other peers in the sector and participate in climate disclosure programs. The company accounts for CO₂ (carbon dioxide), CH₄ (methane), N₂O (nitrous oxide) and SF₆ (sulfur hexafluoride) emissions, and optionally also quantifies CO₂ emissions from renewable sources. **Inventory verification ensures the credibility of the data**, which is extracted from Cemig's corporate and operational systems, such as ERP records, invoices and contracts.

Cemig's main sources of GHG emissions are:

- **CO₂:** generated by the burning of fossil fuels (such as diesel, natural gas, and kerosene) in mobile and stationary sources, as well as emissions related to waste treatment, the use of agricultural fertilizers, and vegetation suppression;
- **CH₄:** from the burning of fuels, fugitive emissions in natural gas distribution lines and the decomposition of organic matter during the treatment of solid waste;
- **N₂O:** also generated by the burning of fossil fuels and by waste treatment processes and the use of agricultural fertilizers;
- **SF₆:** used in power transmission and distribution equipment, being generated during the maintenance of these equipment, which use this gas as an insulator or to extinguish electric arcs. Cemig has also developed an SF₆ regeneration process, which has provided environmental gains by reducing the amount of contaminated gas and contributing to the solution of environmental liabilities.

7.3.2 Emissions history

By comparing data collected over a period, it is possible **to identify trends, patterns, and variations in the company's emissions in order to outline mitigation strategies**. Additionally, a comparative analysis for a period can help identify the impact of external factors such as changes in the economy, politics, technology, weather, and other variables that could affect a company's performance. A comparative analysis of Cemig's GHG emissions between 2020 and 2024 will be presented below.

In a historical analysis, between 2020 and 2021, Cemig observed a significant increase in its greenhouse gas emissions, with a growth of approximately 9.76%, considering all scopes. Emissions exceeded 9,758,842.92 tCO₂e in 2020 to 10,711,087.49 tCO₂e in 2021. However, in 2022, there was a sharp drop in emissions, which decreased to 6,254,304.34 tCO₂e, representing a reduction of almost 42% compared to the previous year. Continuing this trend, between 2022 and 2023, Cemig reduced its emissions by just over 13%, reaching 5,432,266.75 tCO₂e in 2023. In 2024, there is a break in the downward trend, with an increase in total emissions, totaling 6,330,244.42 tCO₂e. The Table 11 The following presents the total emissions and by scope over the years.

Table 11. Historical series of Cemig's issuances by scope.

Scope (tCO ₂ e)	2020	2021	2022	2023	2024	Change (2023-2024)
Scope 1	11,419.36	17,048.29	83,451.14	20,630.56	42,860.81	107.75%
Scope 2	448,084.00	861,233.04	291,766.25	305,513.70	376,174.25	23.13%

Scope (tCO ₂ e)	2020	2021	2022	2023	2024	Change (2023-2024)
Scope 3	9,299,339.56	9,832,806.16	5,879,086.95	5,105,931.99	5,911,209.35	15.77%
TOTAL (tCO₂e)	9,758,842.92	10,711,087.49	6,254,304.34	5,432,266.75	6,330,244.42	16.53%

Between 2021 and 2022, the reduction in emissions was mainly related to the decrease in the emission factor of the National Interconnected System network, which peaked in 2021 (0.1264 tCO₂e/MWh) and decreased in 2022 (0.0426 tCO₂e/MWh). **The variation between the emission factors is associated with the change in the rainfall regime**, since in years with less rainfall (total precipitated volume) the hydroelectric plants lose their capacity 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.

In 2024, the 16.53% increase in emissions, compared to 2023, was mainly driven by the increase in the emission factor of electricity generation of the National Interconnected System (SIN), which had a significant growth of 41%, followed by increased vegetation suppression (251.76% growth in the land use change category). Another relevant factor was the 14% increase in energy sales, indicating higher demand, which also contributed to the increase in emissions in the period. In addition, the Scope 3 capital goods category also showed a significant increase of 166.38%, due to the acquisition and implementation of new plants. This growth, however, was punctual, reflecting specific investments made in the year. The Figure 24, presents the evolution of the company's emissions in all scopes over the years.



Figure 23. Historical series of total emissions by scope.
Source: GHG Inventory (Cemig, 2025).

7.3.3 2024 Emissions

In 2024, Cemig's emissions totaled 6,330,244.42 tCO₂e, with scope 3 being the main culprit, corresponding to approximately 93,38% of total emissions or 5,911,209.36 tCO₂e. Then, scope 2 with 376,174.25 tCO₂e or approximately 5,94% share in total emissions. Finally, scope 1, with 42,860.81 tCO₂e and approximately 0,68% share of total emissions (Table 12).

Table 12. Summary of emissions by emission category in 2024.

Scope	Emission Category	Emissions (tCO ₂ e)
Scope 1	Stationary combustion	218.69
	Mobile combustion	7,394.08
	Fugitive emissions	9,313.22
	Agricultural activities	153.46
	Land use change	25,781.36
	Industrial processes	It does not occur
	Solid waste and effluents	It does not occur
	CER Compensation	43,000.00
	TOTAL SCOPE 1	42,860.81
Scope 2	Purchase of electricity	2,258.51
	I-REC Compensation	- 2,252.41
	<i>Balance of electricity acquisition</i>	<i>6.10</i>
	T&D Losses	373,915.74
	Thermal energy	It does not occur
	TOTAL SCOPE 2	376,174.25
Scope 3	Purchased goods and services	72,759.48
	Capital Goods	297,359.75
	Fuel and energy-related activities not included in scopes 1 and 2	3,726,220.68
	Compensated with Cemig-REC	- 141,388.76
	I-REC Compensated	- 122,826.27
	<i>Balance of Fuel and Energy-Related Activities Not Included in Scopes 1 and 2</i>	<i>3,462,005.65</i>
	Upstream leased assets	It does not occur
	Waste generated in operations	175.05
	Business travel	1,332.10
	Employee commuting	120.53
	Upstream Transportation and Distribution	It does not occur
	Downstream Transportation and Distribution	It does not occur
	Processing of products sold	It does not occur

Scope	Emission Category	Emissions (tCO ₂ e)
	Use of goods and products sold	1,794,275.37
	Final disposition of products sold	It does not occur
	Downstream leased assets	It does not occur
	Franchises	It does not occur
	Investments	18,966.40
	Unclassifiable Scope 3 emissions in categories 1 to 15	It does not occur
	TOTAL SCOPE 3	5,911,209.35
TOTAL SCOPE 1 + 2 + 3		6,330,244.42

Source: GHG Inventory (Cemig, 2025).

In this last year, the total intensity of Cemig's emissions, in terms of tons of CO₂ equivalent per GWh generated (15,197.29 GWh), was 416.54 tCO₂e/GWh. Considering only Scope 1 emissions, the intensity was 2.82 tCO₂e/GWh. In relation to the volume of energy traded in 2024 (63,036,951.22 MWh), the intensity of total emissions was 0.10042 tCO₂e/MWh.

The following is a breakdown of the results of emissions in each scope.

7.3.3.1 Scope 1

Scope 1 aggregated emissions from the categories 'Stationary Combustion', 'Mobile Combustion', 'Fugitive Emissions' and 'Agricultural Activities' and 'Land Use Change'. In 2024, Cemig's emissions from this scope represented 42,860.81 tCO₂e or 0.68% of total emissions.

Among scope 1 emissions, emissions related to 'Land Use Change' accounted for the largest share, with 25,781.36 tCO₂e representing 60.15% of total emissions. Next, the 'Fugitive Emissions' category was responsible for the second largest share of emissions, totaling 9,313.22 tCO₂e, or 21.73% of total scope 1 emissions. Emissions related to 'Mobile Combustion' were responsible for the third largest volume of emissions, amounting to 7,394.08 tCO₂e or 17.25% of the scope emissions. Finally, emissions from 'Stationary Combustion' and 'Agricultural Activities' were responsible for the smallest portions in the scope, totaling, respectively, 218.69 and 153.46 tCO₂e, equivalent to 0.51 and 0.36%.

Cemig D had the highest emission for this scope, totaling 34,542.09 tCO₂e, approximately 80.62% of scope 1, followed by Cemig GT, which emitted 4,173.32 tCO₂e, about 9.74% of scope 1 emissions. Gasmig had emissions of 1,495.33 tCO₂e, which represents 3.49% of the company's emissions. The Centroeste unit and the Parajuru and Volta do Rio SPEs had a share between 1.90% and 2.11%, while the other units contributed with less than 0.06% individually. The Cemig H, Trading and SPE Horizontes units did not present issuances for the scope.

Cemig voluntarily offset its Scope 1 emissions, totaling 43,000 tCO₂e. This compensation was certified by the UNFCCC (United Nations Framework Convention on Climate Change), the international body responsible for supporting climate change mitigation actions. The offset was carried out through the Clean Development Mechanism (CDM), which allows emission reduction projects in developing countries to generate certified emission reduction credits (CERs), each equivalent to one ton of CO₂. UNFCCC certification ensures that the carbon credits used follow globally recognized standards of environmental integrity, transparency and traceability.

7.3.3.2 Scope 2

Scope 2 aggregated emissions related to 'Electricity Consumption' and 'Losses in Transmission and Distribution Systems'. In 2024, emissions related to scope 2 were 376,174.25 tCO₂e, representing 5.94% of total emissions.

Among the scope 2 emission categories, Losses in Transmission and Distribution Systems were responsible for most of the emissions, with 373,915.74 tCO₂e or 99.40% of total scope 2, followed by emissions due to Electricity Consumption, which contributed with 2,258.51 tCO₂e or 0.60% of the scope emissions. As it represents the main source of emissions, Cemig has been working on this scope through the implementation of smart meters, with replacements planned for the next investment cycle, as well as inspection actions and regularization of clandestine connections.

It is important to note that all emissions related to electricity consumption in its operations were fully offset through Renewable Energy Certificates (Cemig REC), with the exception only of the Volta do Rio plant, which does not have a commercial electricity supply link with the company. This means that, for each megawatt-hour (MWh) of energy consumed, Cemig has acquired a certificate that guarantees the equivalent generation of energy from renewable sources, thus neutralizing the environmental impact associated with the use of conventional electricity.

7.3.3.3 Scope 3

Scope 3 emissions result from activities that are not directly controlled by Cemig. In 2024, the categories of 'Goods and services purchased', 'Capital goods', 'Activities related to fuel and energy not included in scopes 1 and 2', 'Waste generated in operations', 'Business trips', 'Commuting from home to work of employees', 'Use of goods and services sold' and 'Investments' were counted. Cemig presented 5,911,209.35 tCO₂e in this scope, which represents 93.38% of total emissions.

The category of 'Activities related to fuel and energy not included in scopes 1 and 2' was the one with the highest emissions, with 3,726,220.68 tCO₂e, which represents 63.04% of the emissions in the scope. Next, the category of 'Use of goods and services sold', responsible for 1,794,275.37 tCO₂e or 30.35% of the total emissions of the scope. The category of 'Capital goods' accounted for 297,359.75 tCO₂e, representing 5.03% of the scope, while that of 'Purchased goods and services' accounted for 72,759.48 tCO₂e, or 1.23% of the scope emissions. Emissions in the categories of 'Waste generated in operations', 'Business travel', 'Commuting of employees' and 'Investments' accounted for a very small portion of the total emissions of the scope, only 0.35%.

7.3.4 Power Consumption

Cemig consumes energy in its operations in the form of fuels and electricity. Recognizing the importance of reducing environmental impacts and migrating to renewable sources, the company implements several actions aimed at energy efficiency and sustainability. Among the main energy management actions, the following stand out:

- **Guidelines for the efficient use of energy:** Cemig understands that changing individual behavior is essential for reducing energy consumption. Therefore, it provides practical guidance to its employees on how to adopt more conscious habits in the use of energy, promoting greater engagement in saving resources.

- **Replacement of traditional light bulbs with LEDs:** Replacing conventional light bulbs with LED models, which consume less energy and have greater durability, is an effective measure that significantly reduces lighting costs and energy consumption.
- **Training:** The company offers specific training to its employees on energy efficiency, enabling them to become agents of change inside and outside the Company.
- **Vehicle fleet management:** Cemig adopts practices to improve the energy efficiency of its fleet. One of the measures is the annual renewal of vehicles, ensuring that their average age remains less than five years, which reduces fuel consumption. In addition, the company has continuously invested in the electrification of the fleet, replacing fossil fuel-powered vehicles with cleaner options.
- **Renewable electricity:** The electricity used comes from renewable sources, such as solar and wind. This energy is certified, ensuring that its origin is traceable and meets the highest standards of environmental quality.
- **Innovative solutions with mobile batteries (Mobile BESS):** Cemig is developing energy storage systems by batteries installed in mobile structures. This technology allows for a more efficient and flexible use of renewable energy, being especially useful in maintenance and operation activities of the electrical system.

To comply with these actions, the company monitors energy consumption in MWh and GJ of renewable fuels, non-renewable fuels and electricity.

7.3.5 Company goals

Cemig had its **GHG emissions reduction targets approved by the Science Based Targets initiative (SBTi) in January 2025**. The approval by the SBTi represents a strategic milestone for Cemig, reinforcing its position as a leader in sustainability in the energy sector. The external validation attests to the robustness of the company's commitment to the transition to a low-carbon economy and strengthens the confidence of investors, customers and partners.

The validation includes **short and long-term targets**, aligned with the global warming limit of 1.5°C, as established in the Paris Agreement. The approved commitments, whose base year is the 2021 emissions, are described in the Table 13. Considering the 2024 emissions¹² (base year 2023), the results related to the progress of the goals are presented in Table 13 below:

Table 13. Summary of Cemig's goals and advances. Source: Cemig, 2024.

Goal type	Description	Base year	Scopes	Term	Status (reduction achieved)
SBT	Reduce absolute GHG emissions by 70.8%	2021	1 and 2	2030 (short term)	-55%
SBT	Reduce absolute GHG emissions by 90.0%	2021	1 and 2	2040 (long term)	-55%

¹² The emission sources included and approved in the SBT targets may have a slight difference with the final result of the Inventory, which is the source of the information present in this report. These differences occur due to the rules of the initiative itself.

Goal type	Description	Base year	Scopes	Term	Status (reduction achieved)
SBT	Reduce the intensity of GHG emissions related to electricity sold by 75.8% per MWh	2021	3	2030 (short term)	-54%
SBT	Reduce the intensity of GHG emissions related to electricity sold by 92.4% per MWh	2021	3	2040 (long term)	-54%
SBT	Reduce absolute GHG emissions associated with the use of fossil fuels sold by 42.0%	2021	3	2030 (short term)	-38%
SBT	Reduce absolute GHG emissions associated with the use of sold fossil fuels and other categories by 90.0%	2021	3	2040 (long term)	-38%
SBT	Reduce other absolute GHG emissions by 42.0%	2021	3	2030 (short term)	+23% ^a
SBT	Reduce other absolute GHG emissions by 90.0%	2021	3	2040 (long term)	+23% ^b
SBT	Achieve net-zero GHG emissions across the value chain	-	1, 2 and 3	2040 (Net Zero)	-41%

Source: GHG Inventory (Cemig, 2025).

^{a, b} The performance in the scope 3 targets, where there is an increase in emissions, is temporary and is due to the increase in emissions in the 'Capital Goods' category, related to the construction and operation of solar plants with a total capacity of 155 MWp. Excluding this one-off factor, the emissions linked to these targets would have decreased by 30%.

Although Cemig already has a 100% renewable matrix with low GHG emissions related to its operations, the company remains committed to identifying new strategies to reduce emissions. This includes setting voluntary targets to reduce GHG emissions, electricity consumption, and energy losses.

These guidelines reinforce the company's commitment to the transition to a low-carbon energy matrix, while responding to the need for constant adaptation to climate challenges. As part of the mitigation strategies already underway, Cemig has been renewing its fleet of vehicles with the adoption of electric cars, thus reducing its emissions.

Based on its Strategic Planning, Cemig prepared the 2024-2029 Sustainability Plan, aiming to integrate sustainable practices into its operations and strengthen corporate governance. The plan guides the creation of programs, goals, and indicators, in addition to defining actions and allocating resources to achieve the proposed objectives. In this context, the following axes and public commitments stand out, which will be fulfilled through strategic initiatives and monitored by corporate indicators and goals:

Energy transition:

- Offset 100% of scope 1 emissions by 2026;
- Be net zero by 2040 and reduce total greenhouse gas emissions by 70% by 2030;
- Ensure 100% renewable and certified generation, in addition to selling certificates;
- Ensure that 100% of municipal headquarters have double feeding, connect 7 GW of distributed generation and install smart meters.

Environment:

- Recycle and/or reuse at least 99.5% of the waste generated by 2027;
- Carry out the diagnosis of Cemig's impacts and dependencies on ecosystem services.

In the environmental field, Cemig has developed a process for the regeneration of sulfur hexafluoride (SF₆), a greenhouse gas with high global warming potential used in electrical equipment. This process has provided gains by reducing the amount of contaminated gas and contributing to the solution of environmental liabilities. As a goal, the company seeks to reduce the intensity of SF₆ losses by 50% by 2027, taking the year 2019 as a reference.

Also in 2024, Cemig began preparing its Biodiversity Action Plan, which aims to establish goals and objectives to improve its processes for mitigating, preventing, and compensating for negative impacts, in addition to fostering opportunities for positive impacts on biodiversity. The main impacts have already been mapped with the support of the *Encore (Exploring Natural Capital Opportunities, Risks and Exposure)* tool, along with the environmental sensitivity criteria and relevance factors, considering the assumptions suggested by TNFD (*Taskforce on Nature-related Financial Disclosures*) in the LEAP (Locate, Estimate, Assess, Prepare) approach. TNFD is an international initiative that supports companies in building strategies aimed at preserving nature. Within the scope of its direct operations, 28 hydroelectric plants (HPP, SHP and CGH), 3 photovoltaic plants, 2 wind farms, 5,016.1 km of transmission lines and 565,144 km of distribution lines were evaluated, considering impact factors, heat maps (heatmaps) based on Encore and the interface of these structures with ecoregions and biomes that are priorities for biodiversity conservation¹³.

As part of its broader climate strategy, Cemig has set a target to **reduce non-renewable energy consumption by 40% by 2027**, using 2021 as the baseline. To track progress and ensure continuous improvement, the company conducts quarterly measurements of electricity consumption per employee. In 2024, the average recorded was 8.16 MWh per employee, reflecting Cemig's commitment to energy efficiency and sustainability. Among the initiatives implemented during this period is the mandatory use of ethanol to fuel the company's light vehicle fleet, which has contributed to reducing fossil fuel consumption. In addition, Cemig voluntarily offset its Scope 1 emissions through UNFCCC-certified projects under the Clean Development Mechanism (CDM), as part of its ongoing efforts to support climate change mitigation. The voluntary cancellation certificate (Project/POA number 10337) is available at the link: [CDM: VC Attestation](#)

The energy transition pillar therefore includes the company's participation in projects that generate carbon credits through the production of clean and renewable energy, including six small hydroelectric power plants (SHPs) with a total installed capacity of 96 MW. Highlights include the Guanhães Energia project, Cachoeirão SHP, and Paracambi HPP, in which Cemig holds a 49% stake. In 2024, these ventures resulted in the generation of approximately **57,000 carbon credits**.

¹³ Additional information is available in the study [Summary of the Impact and Dependency Assessment 2025](#).

5. FINAL CONSIDERATIONS

Over the past few years, Cemig has consolidated itself as a national and international reference in sustainability and energy transition, strengthening its operations through concrete climate commitments and structured actions. In a sector highly exposed to climate-related physical and transition risks, the company has demonstrated its ability to adapt, expanding its energy supply, digitizing its operations, and strengthening climate governance.

The progress in the integration of the TCFD guidelines and the IFRS S2 standard into Cemig's corporate practices is in line with the actions that the company has already been adopting, such as increasingly robust risk management tools, in-depth climate scenario analysis and the preparation of a Climate Action Plan aligned with the Paris Agreement. The goal of achieving net-zero emissions by 2040 reaffirms the company's ambition to lead the Brazilian energy transition, while promoting a positive impact on the communities where it operates.

The vulnerabilities revealed by the hydrological conditions in 2024 underscore the importance of investing in alternative sources such as solar and wind energy, as well as in the efficient management of energy distribution and transmission. In this context, Cemig's record investments in recent years – including the expansion of grid infrastructure, technological innovation projects, and new renewable generation ventures – demonstrate the company's ability to allocate capital with climate responsibility and long-term vision.

The company's climate strategy is articulated with a solid financial plan, which combines selective divestments in assets with lower environmental performance with the issuance of sustainable bonds widely recognized by the market. The raising of R\$2.5 billion in Sustainable Bonds in 2024 illustrates Cemig's potential to attract investors committed to ESG criteria, while boosting the financing of sustainable electricity expansion in Minas Gerais.

Cemig understands that the challenges posed by climate change are not static, and that resilience must be built continuously, with innovation, responsibility and engagement. By reinforcing its position as an agent of transformation in the Brazilian electricity sector, the company reaffirms its role as a protagonist in a cleaner, fairer and more inclusive energy future.

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7. TCFD/IFRS S2 SCOREBOARD

General Indicators

Pillar	Indicator	Description	Page	Comment
Governance	Governance structure	Structure of the company	p. 14	
	Board Oversight	Frequency, scope and format of supervision of climate risks	p.15	
	Role of management	How management assesses and responds to climate risks and opportunities	p.16	
	Policy integration and risk management	Relationship with existing structures	p.13 and p. 16	
	Formal documentation	Mandates, terms of reference, policies describing roles	p.13 – 17	
Strategy	Identification of risks and opportunities	Climate risks and opportunities identified in the short, medium and long term	p.28 – 43	
	Localization of risks in the value chain	Most impacted business model areas	p. 28 – 34	
	Impacts on strategy and finance	Expected impacts and response plans	p. 34 – 42	
	Transition plans	Current and future actions to reduce emissions or adapt operations	p.58	
	Climate scenarios used	Including <2°C scenarios, assumptions, methodology and horizon	p.43 – 58	
	Projected financial impacts	Revenue, Expenses, Cash Flow	p.39 – 42	In the Strategy chapter, Cemig presents the main risks and opportunities related to climate change, including cost and investment estimates whenever data are available and can be publicly disclosed. The

				company recognizes the importance of advancing in quantifying the projected financial impacts on revenues, expenses and cash flows, and is working to incorporate these consolidations in a more structured way in future editions of the report.
	Climate investments	CAPEX/OPEX related to adaptation or mitigation	p.39 – 42	Financial information is present throughout the report, but focuses on the financial impacts section.
Risk Management	Risk identification process	Criteria, data sources, scope	p.61	
	Using scenarios for risk	List and describe your integration and usage	p.43 – 58	
	Risk prioritization	How they are classified or ranked	p.65	
	Risk monitoring	Frequency and methodology of follow-up	p.65	
	Integration with corporate management	Integration with enterprise risk management (ERM)	p.64	
	Changes in risk processes	Changes from the previous period	<i>See Comments column</i>	There was no change in the risk management process.
Goals and Metrics	(1) Gross global Scope 1 emissions, percentage covered by (2) emission limitation regulations and (3) emissions carry-forward regulations	Quantification of the company's direct greenhouse gas (GHG) emissions, with emphasis on the percentage subject to regulations that impose legal limits on emissions and/or reporting obligations. Includes emission sources under operational control.	p.71 and p.72	
	Greenhouse gas (GHG) emissions associated with the energy supplied	Estimate of GHG emissions related to the energy generated and distributed by the company, considering the	p.74 and p.75	

		energy sources used and their carbon intensity.		
	Discussion of short- and long-term strategy for managing Scope 1 emissions, reduction targets, and performance analysis against these targets	Description of the approaches adopted to mitigate Scope 1 emissions, including quantitative reduction targets (short and long term), implemented or planned action plans, and assessment of current performance against the established targets	p.77 – 79	

Sustainability Indicators

Theme	Metric	Unit of Measurement	Page	Comments
Water Management	(1) Total volume of water withdraw; (2) Total volume of water consumed; percentage of regions with High or Extremely High Basin Water Stress	Thousand cubic meters (m³), Percentage (%)	<i>See Comments column</i>	The largest volume of water collected at Cemig is not intended for consumption, since it is used only to move the turbines in the generation of energy, being returned in full and without contaminants to the watercourses. Effective consumption is focused only on administrative activities. In 2024, the company captured a total of 224,100 m³ of water, consuming 44,800 m³ (approximately 20% of the total captured). There is no abstraction in areas classified as water stress based on studies carried out using the UN FAO, WRI's Aqueduct Global Water Tool or WWF Water Risk Filter methodologies ¹⁴ .
	Number of incidents of non-compliance with water quality standards, standards and regulations	Number	<i>See Comments column</i>	All water used by Cemig is fresh, with dissolved solids of less than 1,000 mg/L. In 2024, there were no incidents of non-compliance with standards, standards, or regulations related to water quality.

¹⁴ More information is available in the study available at: <https://www.cemig.com.br/en/wp-content/uploads/sites/7/2025/05/report-on-exposure-to-areas-with-water-stress-2025.pdf>

	Description of risks related to water management and discussion of strategies and practices to mitigate them	n/a		
End-Use Efficiency and Demand	Percentage of Electrical Load Served by Smart Grid Technology	Percentage (%) per megawatt-hour (MWh)	<i>See Comments column</i>	Cemig does not adopt the monitoring of the electrical load specifically served by AMI (Advanced Metering Infrastructure) technology based on a percentage of MWh, given that the smart metering infrastructure is in the process of expansion and constant updating, with installations and replacements occurring dynamically.
	Customers' electricity savings through efficiency measures, by market	Megawatt-hours (MWh)	p.42	
Nuclear Safety and Emergency Management	Total number of nuclear power plants per unit, broken down by results of the most recent safety review	Number	Not applicable	Cemig does not operate with this type of source.
	Description of efforts to manage nuclear safety and emergency procedures	n/a	Not applicable	Cemig does not operate with this type of source.
Network Resilience	Number of incidents of non-compliance with physical or cyber security regulations	Number	<i>See Comments column</i>	Cemig did not record any incidents of non-compliance with physical or cyber security standards.
	(1) Average Duration of System Outages (SAIDI), (2) Average Frequency of System Outages (SAIFI), and (3) Average Duration of Outages per Customer (SAIDI/SAIFI), including days with significant events	Number	P.30	

Specific Indicators: Energy Sector

Theme	Unit of Measurement	Page	Comments
Number of customers:(1) residential(2) commercial(3) industrial served	Number	P.06	
Total electricity supplied to: (1) residential customers (2) commercial customers (3) industrial (4) other retail customers (5) wholesale customers	Megawatt-hours (MWh)	P.06	
Extension of transmission and distribution lines	Kilometers (km)	P.06	
Total electricity generated, percentage by main energy source, percentage in regulated markets	Megawatt-hours (MWh), Percentage (%)	P.06	
Total electricity purchased	Megawatt-hours (MWh)	p.39	

8. ANNEX I: COMPARATIVE TCFD X IFRS S2

The requirements of IFRS S2 – Climate-related Disclosures, issued by the International Sustainability Standards Board (ISSB), incorporate and are consistent with the four core recommendations and 11 recommended disclosures published by the Task Force on Climate-related Financial Disclosures (TCFD). The following is a comparison between the TCFD recommendations and the requirements of IFRS S2 as per the document released by IFRS.

GOVERNANCE	
TCFD	IFRS S2
Disclose the company's governance in relation to climate-related risks and opportunities.	Disclose information that enables users of general purpose financial reporting to understand the governance processes, controls and procedures used to monitor, manage and supervise climate-related risks and opportunities.
Recommended Disclosure (a) Describe the board's oversight of climate-related risks and opportunities.	IFRS S2 is broadly consistent with the recommended disclosure (a). IFRS S2 requires the disclosure of more detailed information; For example, how the responsibilities of a governance body or a specific person in relation to climate risks and opportunities are reflected in documents such as terms of reference, mandates, job descriptions, and other applicable policies.
Recommended disclosure (b) Describe the role of management in assessing and managing climate-related risks and opportunities.	IFRS S2 is broadly consistent with the recommended disclosure (b).

STRATEGY	
TCFD	IFRS S2
Disclose the actual and potential impacts of climate-related risks and opportunities on the company's business, strategy and financial planning, where such information is relevant.	Disclose information that enables users of financial reporting to understand the company's strategy for managing climate-related risks and opportunities.
Recommended Disclosure (a)	IFRS S2 is broadly consistent with the recommended disclosure (a).

<p>Describe the climate-related risks and opportunities identified by the company in the short, medium, and long term.</p>	<p>In addition, IFRS S2 requires the company to refer to industry-specific disclosure requirements and consider their applicability in identifying climate-related risks and opportunities.</p> <p>The standard also requires the disclosure of more detailed information about where, within the company's business model and value chain, these risks and opportunities are concentrated.</p>
<p>Recommended disclosure (b)</p> <p>Describe the impact of climate-related risks and opportunities on the company's business, strategy, and financial planning.</p>	<p>IFRS S2 is broadly consistent with the recommended disclosure (b).</p> <p>IFRS S2 requires the disclosure of more detailed information on the effects of those risks and opportunities. For instance:</p> <ul style="list-style-type: none"> • How the company has responded and plans to respond to the identified risks and opportunities; • What are your transition plans; • How it intends to achieve its climate-related goals. <p>Regarding the current and expected effects of these risks and opportunities on the company's financial position, financial performance and cash flow, IFRS S2 defines criteria on when it is necessary to disclose quantitative and qualitative information. Companies may disclose only qualitative information in certain cases; For example, when:</p> <ul style="list-style-type: none"> • It is not possible to identify separately the effects of a risk or opportunity, or • The level of uncertainty in the measurement is very high. <p>IFRS S2 requires the company to use all reasonable and reliable information available at the reporting date without incurring excessive costs or efforts. The approach used should be appropriate to the circumstances of the company.</p>
<p>Recommended Disclosure (c)</p> <p>Describe the resilience of the company's strategy, considering different climate scenarios, including a scenario of 2°C or less.</p>	<p>IFRS S2 is broadly consistent with the recommended disclosure (c).</p> <p>However, IFRS S2 does not require the company to use specific climate scenarios (such as 2°C), but rather to provide additional information about the resilience of its strategy, including:</p>

	<ul style="list-style-type: none"> • Main areas of uncertainty considered in the evaluation; • The company's ability to adapt its strategy and business model over time; • How and when the company conducted its climate scenario analysis. <p>As with the other requirements, IFRS S2 directs the company to use an approach compatible with its specific circumstances, using all reasonable information available at the date of the report, without undue cost or effort.</p>
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RISK MANAGEMENT	
TCFD	IFRS S2
Disclose how the company identifies, evaluates, and manages climate-related risks.	<p>Disclose information that enables users of general purpose financial reporting to understand the processes the company uses to identify, assess, prioritize, and monitor climate risks and opportunities.</p> <p>It should also be informed whether and how these processes are integrated into the company's overall risk management system.</p>
<p>Recommended Disclosure (a)</p> <p>Describe the company's processes for identifying and assessing climate-related risks.</p>	<p>IFRS S2 is broadly consistent with the recommended disclosure (a).</p> <p>However, IFRS S2 requires more detailed information, such as:</p> <ul style="list-style-type: none"> • What input parameters does the company use to identify risks (e.g., data sources, scope of operations analyzed, level of detail of assumptions); • Whether and how the company uses climate scenario analysis to support risk identification; • Whether the company has changed the processes for identifying, assessing, prioritizing, and monitoring risks compared to the previous reporting period.

	In addition, IFRS S2 requires the disclosure of additional information about the processes used to identify, assess, prioritize, and monitor climate-related opportunities.
Recommended disclosure (b) Describe the company's processes for managing climate-related risks.	IFRS S2 is broadly consistent with the recommended disclosure (b). IFRS S2 requirements for risk management disclosure focus on providing information about the processes used to identify, assess, prioritize, and monitor climate-related risks and opportunities.
Recommended Disclosure (c) Describe how climate risk identification, assessment, and management processes are integrated into the company's overall risk management process.	IFRS S2 is broadly consistent with the recommended disclosure (c). IFRS S2 requires additional disclosures on the extent to which and how the processes used to identify, assess, prioritize and monitor climate opportunities are integrated into the company's overall risk management process.

GOALS & METRICS	
TCFD	IFRS S2
Disclose the metrics and targets used to assess and manage climate-related risks and opportunities, where such information is relevant.	Disclose information that enables users of financial reporting to understand the company's performance in relation to climate risks and opportunities, including progress against established climate goals, as well as targets required by laws or regulations.
Recommended Disclosure (a) Disclose the metrics used by the company to assess climate risks and opportunities, in accordance with its risk management strategy and process.	IFRS S2 requires the same categories of cross-cutting metrics (used across different industries) recommended by the TCFD. In addition, IFRS S2 requires the disclosure of industry-specific metrics relevant to the company's business model and activities. Sectoral guidance for implementing IFRS S2 should be considered when providing this information.
Recommended disclosure (b)	IFRS S2 is broadly consistent with this TCFD recommendation. However, while TCFD recommendations call for disclosure of Scope 1 and 2 emissions

<p>Disclose Scope 1, 2 and, if appropriate, Scope 3 GHG emissions and related risks</p>	<p>regardless of materiality and Scope 3 "where appropriate," ISSB standards (such as IFRS S2) require the company to disclose this information only if it is material.</p> <p>IFRS S2 also requires additional disclosures related to the company's greenhouse gas (GHG) emissions, including:</p> <ul style="list-style-type: none"> • Separate disclosure of Scope 1 and 2 emissions: <ul style="list-style-type: none"> ○ For the consolidated accounting group; ○ To associates, joint ventures, unconsolidated subsidiaries or affiliates that are not included in the consolidated accounting group; • Disclosure of Scope 2 emissions using the location-based approach, and provision of information on contractual instruments necessary for users to understand the context; • Disclosure of Scope 3 emissions, including additional information on financed emissions (if the company is active in asset management, commercial banking, or insurance); • Information on the measurement methodology, inputs, and assumptions used to calculate Scope 3 emissions. <p>IFRS S2 also establishes a measurement framework for Scope 3, with guidance on how to prepare for these disclosures.</p> <p>The standard does not require the company to disaggregate its emissions by type of gas (such as CO₂, CH₄, etc.). However, IFRS S1 includes requirements on disaggregation that may lead to mandatory disaggregation if it is considered material (material) information.</p>
<p>Recommended Disclosure (c)</p> <p>Describe the goals used by the company to manage climate-related risks and opportunities, as well as performance against these goals.</p>	<p>IFRS S2 is broadly consistent with this TCFD recommendation. However, there are some key differences:</p> <ul style="list-style-type: none"> • IFRS S2 requires the company to disclose how the most recent international agreement on climate change influenced the setting of the target;

- It is also necessary to inform whether the target has been validated by a third party (for example, an initiative such as the SBTi – Science Based Targets initiative).

In addition, IFRS S2 requires the disclosure of more detailed information on greenhouse gas (GHG) emissions targets, including:

- Additional information on the planned use of carbon credits to achieve net emissions targets;
- Details about the approach used to define and review each goal;
- Explanations of how the company tracks progress toward the goals set.

Elaboração

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