CEMIG'S PATHWAYS
TO LOW-CARBON
TRANSITION

CLIMATE ACTION PLAN

CEMIG

CONTENTS

MESSAGE FROM THE PRESIDENCY

Cemig is a 100% renewable energy concessionaire rooted in sustainability.

Since its foundation, 71 years ago, it has been operating in line with good practices of sustainable development, always valuing the conservation and maintenance of the environment, the continuous improvement of society's living conditions, and the promotion of a fairer and more egalitarian economy.

By embracing the belief that sustainable development – which meets present needs without jeopardizing the well-being of future generations – is integral, Cemig has secured a distinguished standing across the world's primary sustainability indexes associated with the financial market. It is currently part of the Dow Jones Sustainability Index as the only non-European company in the utilities sector. It was elected the best Brazilian company in the Clean 200, in addition to having achieved the highest score in the Brazilian utilities sector in the MSCI.

Cemig's ESG agenda is part of the company's strategy. This allows innovative and robust initiatives to be put in place for an effective energy transition.

One of these initiatives was a milestone for sustainability in Minas Gerais. In 2022, Cemig joined the international movement to become carbon neutral by 2040 and reduce its greenhouse gas emissions by approximately 70% by 2030, compared to 2021.

Today, it has a record investment plan, with a strong expansion of renewable energy generation, either by Cemig itself or by Cemig SIM, its subsidiary in distributed generation. After almost 20 years without new generation assets, Cemig will soon inaugurate two new power plants: the solar photovoltaic plants Jusante and Boa Esperança.

All investments have a far-reaching capacity for social transformation. Each expansion is linked to a greater supply of energy to the customers, allowing the diversification of the economy of Minas Gerais and generating better-quality jobs.

In the countryside, a program to expand 30 thousand km of three-phase network is in force. By replacing single-phase lines, the farmer will be able to mechanize his production and gain increasingly more efficiency.

In communities located around the concession area, the energy supply is being regularized, to benefit 240,000 families in Minas Gerais. Furthermore, the impact of social projects has already surpassed the initial goal, benefiting a total of

100,000 children, young people, the elderly, and individuals with disabilities. And there is also an active effort to bring the benefit of the social tariff to more low-income families. Thus, more than 1.3 million customers have discounts today on their energy bills.

In line with the ambition to stand out as a benchmark in sustainability, the Climate Action Plan started to be designed in 2023, towards the decarbonization of all the company's operations.

The energy sector is crucial for the energy transition. The Brazilian energy matrix is 82.7% renewable. In Minas, this number exceeds 95%, while Cemig presents a commendable 100% reliance on renewable energy. In contrast, Europe stands at 41%, Asia at 22%, and the United States at 18%.

Minas Gerais has abundant renewable natural resources, including water, sun, and wind. It has the largest volume of hydroelectric power generation and solar generation in the country. In the case of solar energy, for example, Cemig has enabled the connection of more than 3 GW in recent years from rooftops and small plants, after investments of more than R$ 2.4 billion.

Cemig is committed to making substantial contributions to the economy's decarbonization. This includes spearheading the electrification of various sectors, certifying the use of renewable energy, and enhancing competitiveness in the productive sector.

The pursuit of sustainability for Cemig is encapsulated in a single phrase:

TRANSFORMING LIVES THROUGH OUR ENERGY

REYNALDO PASSANEZI - BRASIL | PRESIDENT

01. AMBITION:

CEMIG ON THE PATH TO DECARBONIZATION

1.1 | About Cemig

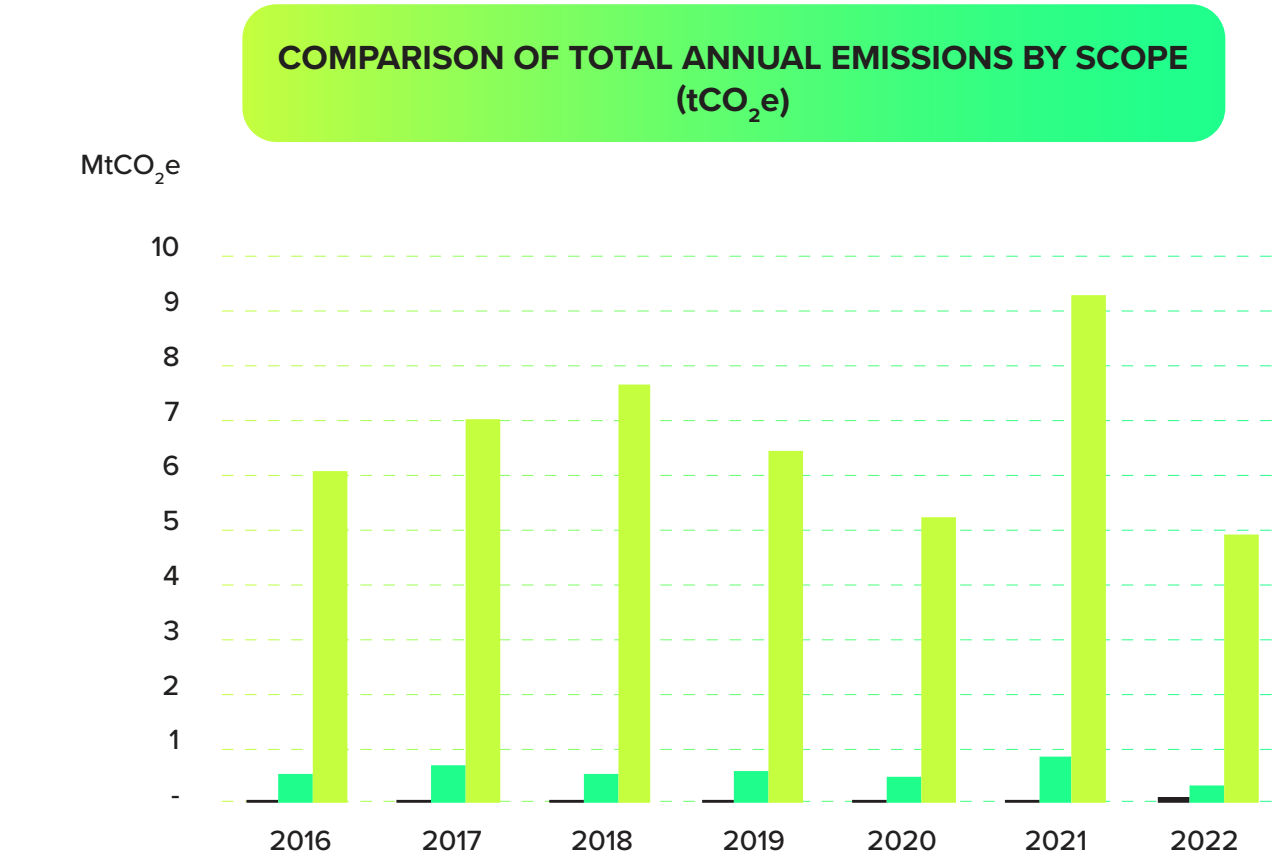
Companhia Energética de Minas Gerais (Cemig) operates in the areas of **generation, transmission, commercialization, and distribution of electricity, energy solutions** (Cemig SIM), **and distribution of natural gas (Gasmig). The group consists of the holding company Companhia Energética de Minas Gerais (Cemig), the wholly-owned subsidiaries Cemig Geração e Transmissão S.A. (Cemig GT) and Cemig Distribuição S.A. (Cemig D), totaling 102 Companies, 9 Consortiums and 2 FIPs (Private Equity Investment Funds)** with assets and businesses in several states of Brazil.

Cemig's generating complex is 100% renewable: the current installed capacity is 5,265 MW, of which 95.73% refers to hydraulic generation, 2.63% to wind generation, 0.07% to solar generation, and 1.57% to distributed generation. Figure 1 shows the location of the company's plants, whose total generation is in the order of 18,275,919.0 MWh. At the end of 2022, the Company had 60 Hydroelectric Power Plants (HPPs), Small Hydroelectric Power Plants (SHPs) and Hydroelectric Generating Plants (HGPs), two photovoltaic plants and seven wind farms. In addition, the organization has a total of 5,016 km of transmission lines. In the area of electricity distribution, it is responsible for the management of the largest electricity distribution network in Latin America, with 565,144 km in length.

Cemig is **internationally recognized as a benchmark in sustainability** within its sector. For 24 years, the company has been part of the Dow Jones Sustainability Index (DJSI) as the only company in the utilities sector in the Americas to be listed, along with fourteen other European companies. The Company figures in B3's Corporate Sustainability Index (ISE) for the 19th consecutive year and was selected to compose the Carbon Efficient Index (ICO2), created in 2010 by B3 and BNDES, for the 13th time.

Seeking to make increasingly ambitious climate commitments, Cemig has been striving in all areas of activity to **monitor the relevant indicators and prioritize initiatives aligned with a low-carbon future.** In this sense, since 2011, the company has disclosed the inventory of greenhouse gas emissions with independent verification, identifying the main sources of emissions and seeking to develop appropriate strategies.

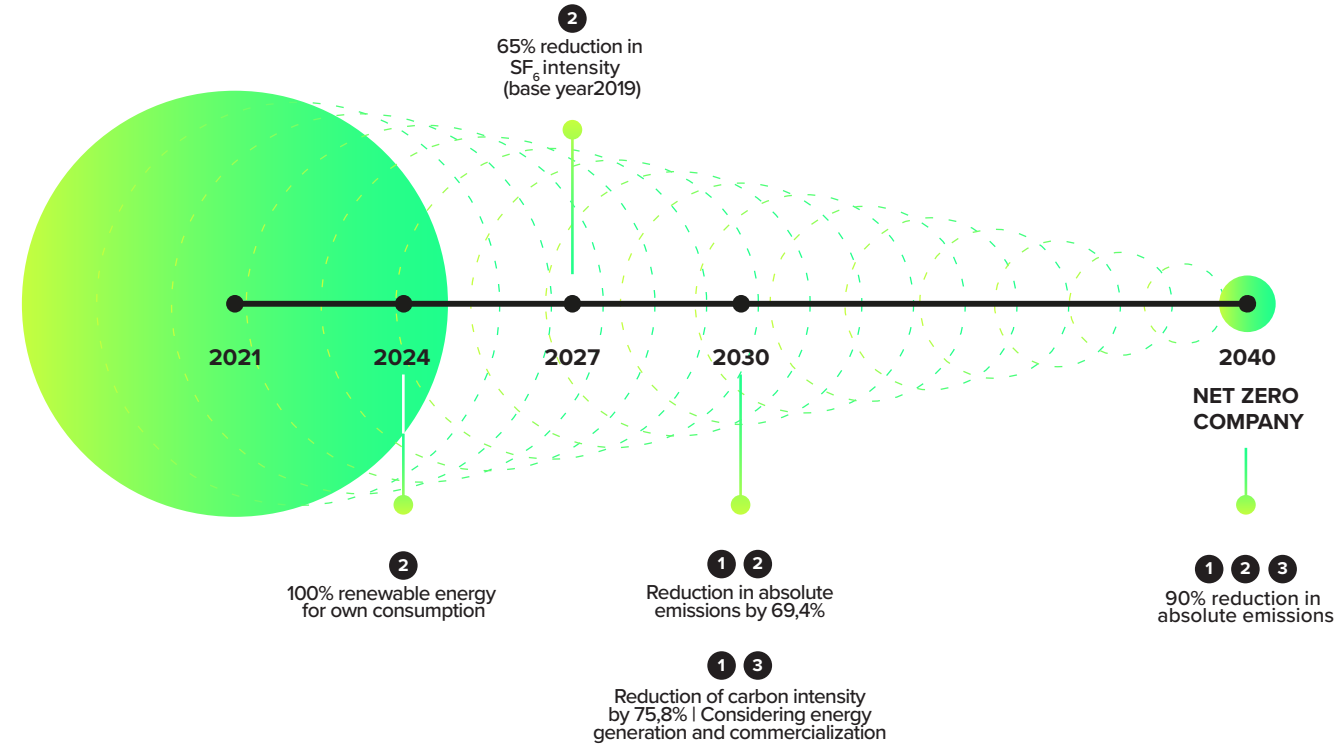
Figure 2. Comparison of Cemig's annual emissions by scope according to the Emissions Inventory (2023).



	2016	2017	2018	2019	2020	2021	2022
scope 1	15.463	48.849	35.568	51.939	11.419	12.848	83.357
scope 2	552.805	664.413	518.280	598.518	448.083	861.233	291.766
scope 3	6.065.110	7.007.449	7.644.131	6.451.462	5.246.668	9.280.380	4.921.854

In 2022, Cemig's Board of **Directors approved the adhesion to the Global Compact's Net Zero Ambition Movement**, the Company's Net Zero Commitment – which aims to reduce the company's emissions and achieve emissions neutrality by 2040. In the same year, **the company committed to developing a series of science-based targets for the reduction of GHG emissions,** as recommended by the Science Based Targets Initiative (SBTi), which establishes guidelines and methodologies for the development of science-based emission reduction targets to limit global warming to 1.5°C. The main goals established are highlighted in Figure 3 below.

Figure 3. Cemig's emission reduction targets.



1 Applied to Scope 1 emissions (direct emissions)
2 Applied to Scope2 emissions (indirect emissions)
3 Applied to Scope 3 emissions (indirect emissions)

Starting from 2023, **Cemig has been structuring its decarbonization process through the preparation of its Climate Action Plan,** in line with the main recommendations of frameworks and initiatives such as CDP (former Carbon Disclosure Project), Transition Plan Taskforce (TPT) and Assessing Low-Carbon Transition (ACT).

Cemig's Climate Action Plan therefore constitutes **a time-bound action plan that outlines how the organization will achieve its strategy to guide its existing assets, operations, and entire business model toward a trajectory aligned with the latest and most ambitious climate science recommendations.** The objective of the Plan is to bring Cemig in line with the goals of the Paris Agreement, doing its part to limit global warming to 1.5°C.

The Climate Action Plan seeks to highlight efforts on the following key elements: governance and incentives; value chain engagement; low carbon initiatives; financial planning; political engagement; risks and opportunities; accounting for scope 1, 2, and 3 emissions; setting goals; and, organizational culture.

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CEMIG JORNEY

1992

- Launch of the first version of Cemig's Environmental Policy, revised in 2016 and 2023

2007

- Submission of the first CDP Climate Change questionare

2009

- Adhesion to the Global Compact initiative, created to accelerate the goals proposed by the UN 2030 Agenda

2011

- Publication of the first independently verifed Greenhouse Gas Emissions Inventory
- Inclusion of the Company in B3's Carbon Efficient Index (ICO2)

2019

- Total decommissioning of thermal power plant
- Creation of Cemig SIM, which operates in distributed generation, energy efficiency, cogeneration, electric mobility and other innovative solutionsin the energy sector

2020

- Development of Cemig's Renewable Energy Certificate, Cemig-REC
- Adhesion to the Climate Action Alliance in line with the goals of the Paris Agreement

2022

- Launch of the 1st edition of the annual report on Climate-related Financial Disclosures as recommended by the TCFD
- Adhesion to the UN Global Compact's Net Zero Ambition Program

2023

- Holding of the 1st Awarenessraising Workshop on the Climate Action Plan
- Cemig Distribution completes the largest issuance of Sustainable Bonds in the domestic market
- 19 consecutive years in the Corporate Sustainability Index and 24 consecutive years in the Down Jones Sustenability Index

1.2 | Energy and climate

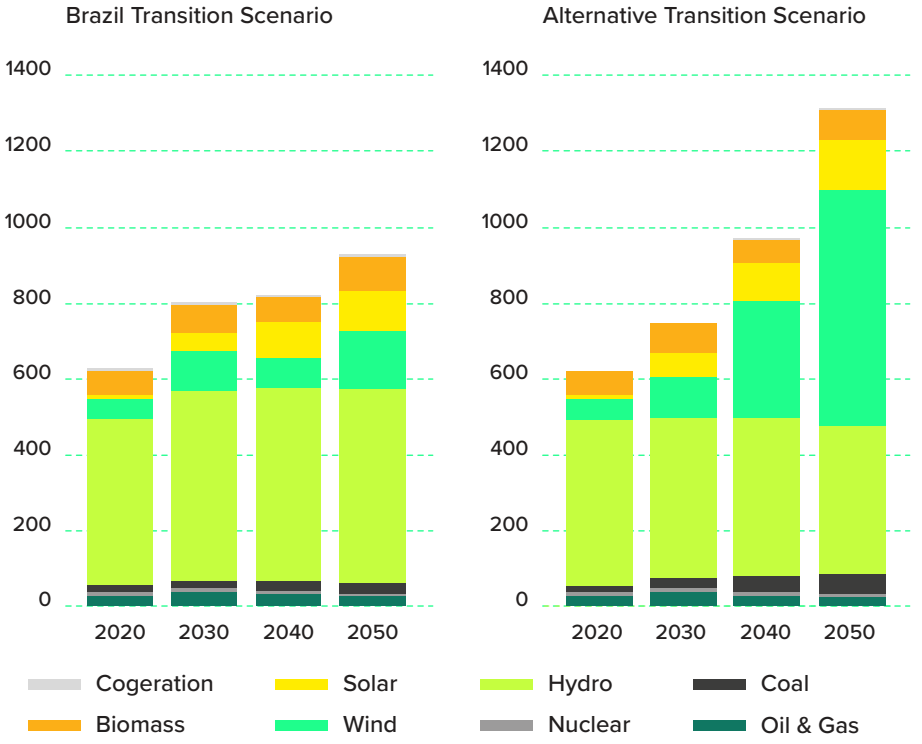
Climate change poses a global threat, and the energy sector plays a central role in this scenario. Responsible for three-quarters of global greenhouse gas emissions (UNFCCC, 2022), energy production and consumption from fossil fuels are the main drivers of the climate crisis. **The transition to sustainable sources is essential to contain the increase in global temperatures and to mitigate the associated impacts, especially from extreme weather events, which are increasingly frequent and intense.**

The energy sector, in addition to intensifying climate change, is also **impacted by extreme weather events** associated with those changes. They include disruptions in power supply, fluctuations in generation resources, transmission interruptions, sudden increases in demand, system

overvoltages, and other impacts associated with extreme weather events such as storms, floods, droughts, and heat waves. These events pose significant risks to the infrastructure and operation of production, transmission, and distribution systems, affecting the reliability of supply.

To address these challenges, global initiatives have been established, with the 2015 Paris Agreement being a key milestone. From this Agreement, countries committed to limit the increase in global temperature and to pursue carbon neutrality. Governments, corporations, and diverse members of civil society join forces to turn national commitments into effective action.

Figure 4. Perspectives of electricity generation in Brazil, in TWh, based on two scenarios: Brazil Transition Scenario: cost-efficient trajectory; and Alternative Transition Scenario: alternative technological trajectory. (CEBRI, IDB, EPE, CENERGIA, 2023)



In the Brazilian context, **the country is in a privileged position concerning the energy transition,** with the share of renewable sources in the energy matrix of almost 88% in 2022 (BEN, 2023). However, the **decarbonization trajectories for the coming years require new policies and investments to achieve the climate ambition of carbon neutrality**[1]. In 2022, according to the National Energy Balance (BEN, 2023), the Brazilian electricity sector emitted 61.7 kg CO2 to produce 1 MWh, a low rate compared to countries in Europe, the USA, and China, but which still needs reduction efforts for Brazil to achieve its neutrality.

In 2022, 61.9% of the renewable energy shipped in Brazil was from hydropower, followed by 11.8% from wind, 8% from biomass, 4.4% from solar, and 2.1% from nuclear (BEN, 2023). The perspectives for the Brazilian matrix point to an **expansion of generation capacity, led by wind, solar, and biomass sources,** with a relative reduction in hydroelectricity. The modernization of the energy sector is crucial for the effective integration of these technologies, while the expansion of transmission lines is imperative to support the increased flow of electricity.

Cemig, already counting with 100% renewable generation, remains vigilant and responsive to technological challenges and pathways, also seeking its own decarbonization, especially in the

1- In accordance with Article 4, paragraph 12 of the Paris Agreement, Brazil reinforced, in October 2023, through its Nationally Determined Contribution (NDC), its long-term goal of becoming carbon neutral by 2050.

commercialization of energy and gas, but also in the rest of its corporate emissions. That is why the company maintains its commitments to initiatives such as the UN Global Compact, the Alliance for Climate Action (ACA-Brasil), the Science Based Targets Initiative (SBTi), and the Net Zero Ambition Movement, in addition to striving for the transparency of climate-related data, such as the Emissions Inventory, Annual and Sustainability Report, TCFD Report and reporting to CDP and Dow Jones questionnaires.

1.3 | Overview of climate transition

The following are Cemig's major figures that provide an overview of the Company's transition.

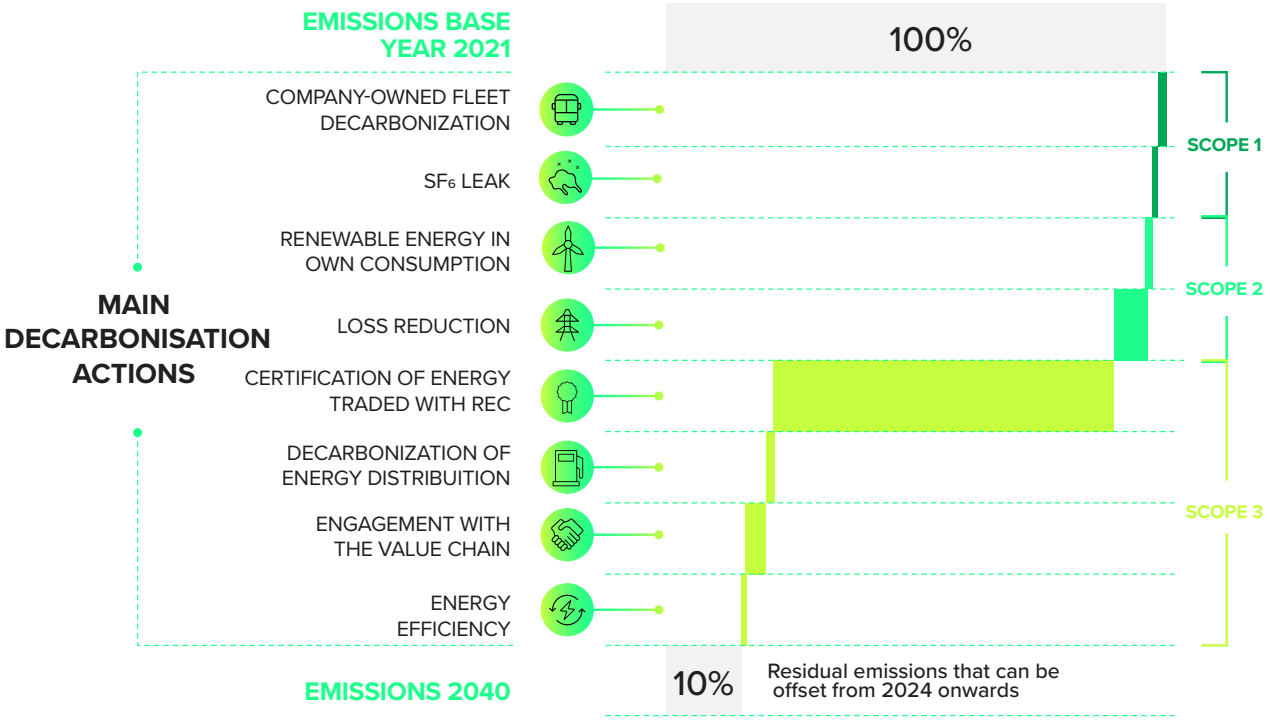
DECARBONIZATION PATH	**Total decommissioning** of thermal power plants in 2019		**Approximately 48%** reduction in absolute emissions in 2022 (base year: 2021)	Definition of targets aligned with **1.5°C** according to Science Based Targets	2040 Target: **Net Zero Company**
OPERATIONS & INNOVATION	**100% renewable** generation		**69 plants** in operation	**Net Zero Company**	**R$ 1.4 billion** to invest in innovation by 2027
RESULTS 2022 (last investment cycle 2018 - 2022)	Distribution: **R$ 2,923 million**	Generation: **R$ 137 million**	Transmission: **R$ 339 million**	Cemig SIM: **R$ 82 million**	Gasmig: **R$ 53 million**
PLANNED INVESTMENTS (2023 – 2027 cycle)	Distribution: **R$ 18.4 billion**	Generation: **R$ 13.4 billion**	Transmission: **R$3.5 billion**	Cemig SIM: **R$ 3.2 billion**	Gasmig: **R$ 2,3 billion**
ENGAGEMENT with customers, suppliers, and associations	Attendance at 100% of the meetings promoted by the Global Compact in 2022		Cemig SIM reached 7,000 consumer units in the state of Minas Gerais in 2022	25 supplier projects participating in the sustainability category for the Best Suppliers Award in 2023	25% of Cemig's suppliers report presenting an Emissions Inventory[1]

1- Based on an internal Cemig survey in 2023 (total respondents = 166).

1.4 | Strategic ambition: An action plan based on concrete actions

In the execution of its strategic ambition, Cemig has been discussing a series of actions that cover the company's entire value chain, always prioritizing actions capable of producing the greatest impact. The following is a summary of the main decarbonization levers identified so far and which have the potential to contribute to the Company's Net Zero trajectory, in accordance with the rules of the main decarbonization benchmarks available in the market.

Figure 5. Illustration of Cemig's main decarbonization levers.



- Use of ethanol in the company's own fleet, reduciong emission by 15%
- Increase in the amount of biodiesel in diesel to 15% in 2026
- Fleet electrification and use of renewable fuels

- Use of modern equipment with solid insulation and reduction of SF_6 leakage
- Reduce emissions by 5% until 2032 and 10% until 2035

- 100% renewable energy in self-consumption sources starting from 2024

- Reduction of the company's technical and non-technical losses by more tha 680,000 MWh/year
- Reduction of the SIN Emission Factor, reducing emissions in the category by 67% by 2040

- Energy commercialized with REC
- Reduction of the SIN Emission Factor
- Combined actions reducing category emissions by 72,8%

- BTZero: Reduction of non-technical losses by 104,4kWh/customer/month and wast by 64 kWh/customer/month
- Advanced Metering Infrastructure (AMI): reduced fuel consumption with cut/rewire operations

- Engagement actions, especially with suppliers
- Reductions of category emissions by 10% by 2030 and 20% by 2040
- Encouraging the circular economy

- Energy efficiency actions linked to the Energy Efficiency Program (PEE)
- 335 million to be invested by 2027

- Percentage eligible for compensation from 2040 onwards

As depicted in Figure 5, Cemig's Climate Action Plan relies on a set of decarbon**ization levers, specifically targeting the substantial reduction of emissions from various sources identified in the Company's Emissions Inventory. The Plan does not emphasize offsetting actions or utilize carbon credits as elements supporting decarbonization, although such measures may be considered for implementation in the coming years. If this occurs, Cemig will favor forest planting activities to the detriment of the purchase of credits**. It is also important to highlight that, according to the guidance of the Science Based Targets initiative, **although offsetting can be used, it should only be applied to the company's residual emissions; that is, only 10% of the total emissions of the base year (2021) can be offset by 2040**. Cemig follows this guideline and is committed to promoting concrete actions for the real reduction of emissions. Given these principles, the Company proposes an integrated and inclusive approach to the construction of the Action Plan to be able to meet the established goals.

1.5 | Building the Action Plan: A Participatory Approach

The preparation of Cemig's Climate Action Plan involved a **comprehensive collaborative effort**, with emphasis on the **participation and engagement of all the Company's stakeholders,** ranging from the President and Directors, involving the Superintendents and Management levels, and the Operational areas. **To enhance understanding and align expectations regarding the Action Plan, an Awareness-raising Workshop was held.** which was attended by more than 150 Cemig employees on October 11, 2023. This broad engagement sought to encourage employees to adopt a "climate perspective" and sustainability, internalizing the concepts and actions related to climate change as an inherent part of their daily activities.

CRUCIAL IMPORTANCE THAT THE LESSONS DRAWN AND THE GUIDANCE OUTLINED IN THE CLIMATE ACTION PLAN PERMEATE THE ENTIRE ORGANIZATION

Prior to this event, **more than 30 meetings had already been held with different Cemig stakeholders, including members of the Audit Committee and Board of Directors, to discuss decarbonization actions, business strategy, climate governance, risk management, forms of engagement, data collection processes to improve and expand the Emission Inventory, among other issues**. The information collected was useful not only for the Transition Plan, but also for Cemig's response to CDP, for the preparation of the TCFD report, for the Inventory, among other documents and reports that the company responds to.

After the Awareness-raising Workshop, **more than 10 meetings were also held with Cemig's strategic sectors, covering essential areas for defining decarbonization trajectories.** Sectors such as engineering, innovation, and commercialization have played a prominent role in the formulation of this Plan, bringing diverse perspectives and the expertise needed to address climate challenges.

It should be noted that **Gasmig's participation was strategic in the**

discussions, bringing a deeper understanding of its relevance in the context of decarbonization as a supplier of transition fuel. There were discussions about the opportunities for the company to move towards a business model with cleaner alternatives, especially based on studies for the use of hydrogen and biomethane.

It is of **crucial importance that the lessons drawn and the guidance outlined in the Climate Action Plan permeate the entire organization.** Therefore, the entire process was designed and carried out in such a way that the discussions did not take place in isolation, but served as catalysts for the mobilization of concrete efforts to achieve the emission reduction targets. It is also important to mention that not all actions will be immediate and, therefore, **Cemig is committed to revisiting the Plan at least every three years,** under the recommendations of the main methodological references, enabling discussions on new actions and technologies for even more significant advances. The dissemination of the information in this Plan, as well as the discussions held for its elaboration, must permeate from senior management to the operational teams, **establishing a new organizational culture, oriented towards sustainability and a transformation of the company towards a low-carbon future.**

02. GOVERNANCE

The effectiveness of the execution, control, and monitoring of the Climate Action Plan is directly associated with the company's ability to adapt and properly direct its resources and organizational processes, so that corporate governance must be aligned with the best practices in the market. In this context, it is essential that the company is able **to define clear roles and responsibilities for the execution and supervision of the Action Plan.** This implies the designation of dedicated teams, with specific competencies, capable of enabling the implementation of the Plan efficiently. In addition, it is necessary to align the organizational culture and incentive structures with the strategic ambition set out in the Plan.

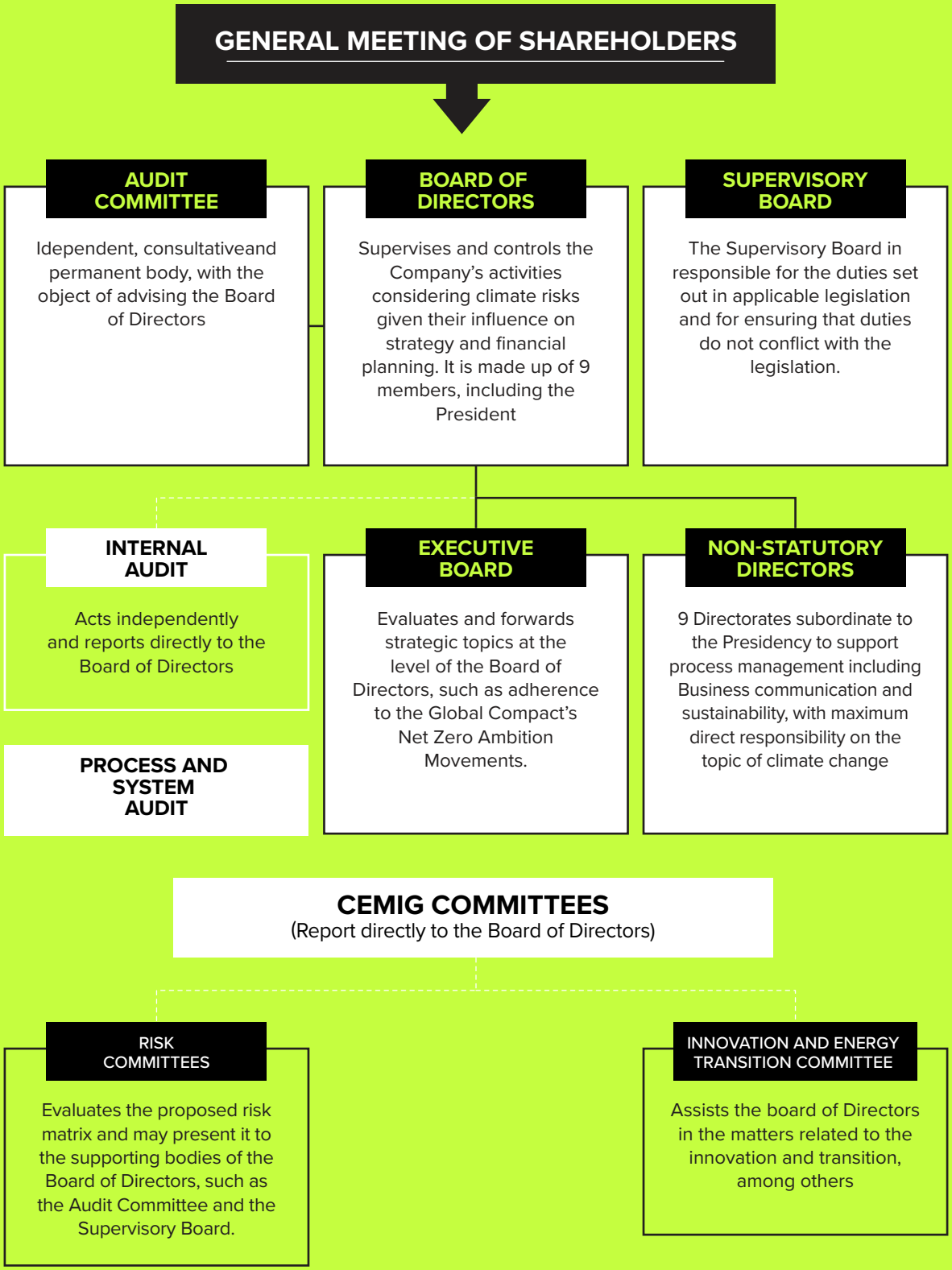
Governance is critical to the success of the decarbonization trajectory. It ensures that the company not only sets ambitious goals, but also ensures the resources, constant monitoring, and adaptability needed to achieve those goals in an ever-evolving world.

The following topic covers Cemig's governance and incentive's structure, aiming to clarify how the climate agenda has been addressed by the organization and what are the increments in the company's strategies and policies that will allow the success of the Plan.

2.1 | Structure

Cemig's corporate governance is based on the principles of transparency, equity and accountability. The Company's Senior Management is composed of the Board of Directors and the Executive Board, and also has a permanent Supervisory Board. The members of the Board of Directors, elected by the General Shareholders' Meeting, elect the Chief Executive Officer and appoint the Executive Board. All of them are subject to the provisions of the Company's Bylaws and applicable legislation.

Figure 6. Cemig's corporate governance structure.



As stipulated in the Internal Regulations, the Board of Directors plays the role of supervising and controlling the Company's activities, assuming concrete responsibilities with regard to the strategy and direction of the business. This body entrusts the ordinary management of affairs to the executive bodies. The management of climate issues is part of these duties, considering that the climate risks and opportunities mapped by the Company exert an influence on

strategy and financial planning. This impact is particularly evident when Cemig mobilizes efforts to establish and achieve decarbonization goals in the short, medium, and long term. Recognizing the importance of a well-equipped and informed Board of Directors, Cemig has members specialized in the electric power sector, in regulatory issues relevant to the Company, as well as professionals with academic and professional experience in the field of Corporate Governance.

In addition, whenever it is necessary to approve a deliberative topic, the Executive Board evaluates and forwards the matter to the Board of Directors. **For example, issues such as the definition of the growth strategy in generation focused on renewable sources, the adhesion to the Net Zero Ambition Movement of the United Nations (UN) Global Compact, and the construction of photovoltaic plants were submitted for analysis and approval by the Board of Directors.**

Under the President's supervision, the **Communication and Sustainability Officer** is the position with the highest direct responsibility for climate change at Cemig. Its responsibilities include the approval of technical standards and normative instructions essential for the advancement of corporate sustainability, climate change, and social responsibility, in line with strategic directions and sectoral regulations.

In 2023, given the importance of the topic of climate change, the Board of Directors created the **Innovation and Energy Transition Committee.** Among the duties of this Committee are:

1. assist the Board of Directors on issues related to the Company's Innovation and Energy Transition issues at the national and international levels in the energy sector;
2. to give an opinion on the establishment of short-, medium- and long-term strategies for technological innovation and the energy transition;
3. support the promotion of initiatives and debates on the Energy Transition and Innovation in the energy sector;
4. advising the Board of Directors on technical and institutional developments related to climate change and the associated mitigation, compensation, and adequacy best practices;
5. monitor market trends related to technological innovation and energy transition

To monitor ESG initiatives, including those related to climate change, the Sustainability Management presents the progress of the main actions to the Audit Committee on a quarterly basis, along with the indicators report. The Audit Committee plays the role of an auxiliary collegiate body of the Board of Directors in its audit and oversight duties, covering the quality and integrity of the financial statements, compliance with legal, statutory and regulatory standards, as well as the effectiveness of internal control systems and internal and independent audits. This committee is composed of four (4) members, all independent, appointed and elected by the Board of Directors, and one of the members is also a member of the Board of Directors. It is important to note that one of the members of the Audit Committee is an expert in climate change.

2.2 | Incentives

Cemig encourages the management of issues related to climate and water resources, integrating goals and results directly linked to financial rewards. As of 2021, the Profit Sharing (PLR) of employees is now **composed of 25% of corporate indicators, and 75% of area-specific indicators.** This comprehensive approach also incorporates quality indicators in the supply of electricity, such as DEC (the Equivalent Duration of Interruption per Consumer Unit).

The implementation of incentives plays a crucial role in Cemig's decarbonization trajectory, not only as a means of motivating its employees but as a formal instrument to consolidate and amplify the company's commitment to global environmental goals. The effectiveness of these incentives lies in the ability to mobilize human resources and foster an **organizational culture focused on sustainability,** triggering tangible and measurable actions toward reducing greenhouse gas emissions.

The formalization of incentives not only raises motivation but also serves as a public and formal declaration of Cemig's commitment to decarbonization and the construction of a sustainable economy. This formality reinforces the company's position as a leader in the energy sector, contributing significantly to the achievement of the global climate goals set. The following are some strategies that the Company should adopt in terms of incentives to accelerate the transition.

As a result of the preliminary discussions related to the Climate Action Plan, Cemig has already been implementing new incentives. For the beginning of 2024, the target linked to the Company's performance in ESG indices was approved for 100% of the leadership and executive board, including the presidency. In order to encourage progress towards Net Zero, Cemig has also been studying other incentives, such as those highlighted below.

ENVISAGED INCENTIVES

FINANCIAL INCENTIVES FOR INNOVATIVE IDEAS

Cemig shall implement a system of incentives for the presentation and implementation of innovative ideas that contribute significantly to the reduction of emissions and the identification of opportunities. Rewarding employees whose proposals demonstrate effectiveness and applicability in the context of Cemig's climate goals will also foster corporate innovation.

SUSTAINABILITY CERTIFICATIONS

Cemig shall offer certifications in the area of sustainability to employees who demonstrate exceptional commitment and significant contribution to Cemig's emissions reduction targets. These certifications can be linked to training and professional development programs.

By implementing these incentive strategies, Cemig creates favorable conditions to promote the Company's climate agenda, reinforcing that climate issues are the responsibility of all areas. Thus, efforts towards decarbonization are establishing themselves as a culture and ensuring the necessary adaptation to climate change.

03. EFFORTS

ADAPT THE COMPANY TO CLIMATE CHANGE

Initiatives in favor of the climate transition are not only related to the reduction of emissions, but also to the company's ability to anticipate climate risks or deal with them when they inevitably materialize. By understanding the role of risk management in strengthening the Climate Action Plan, Cemig has well-defined controls and structures to effectively address climate-related challenges.

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

Based on the guidelines established in the Risk Management and Internal Controls Policy, **Cemig structured a risk management process that allows the mapping and evaluation of both strategic risks and those arising from operational activities.** This process is coordinated by the Risk Management and Internal Controls Department, which provides technical support to the different areas of the Company. The objective is to provide information to Senior Management for decision-making regarding the most relevant risks and opportunities.

CEMIG STRUCTURED A RISK MANAGEMENT PROCESS THAT ALLOWS THE MAPPING AND EVALUATION OF BOTH STRATEGIC RISKS AND THOSE ARISING FROM OPERATIONAL ACTIVITIES.

Among the climate risks already mapped, the change in the precipitation pattern, associated with water scarcity, and the risk of an increase in the frequency and intensity of extreme weather events, such as cyclones and floods, stand out. For a more detailed view of climate risks, it is recommended to consult Cemig's Climate-related Financial Disclosures Reports (TCFD).

In short, **to protect its portfolio, Cemig monitors, every year, transition risks and physical risks related to the impacts of climate change** on products and services, on the value chain, as well as on investments in innovation, operations, operating revenues, acquisitions, etc. For both physical and transition risks, monitoring is carried out with the help of climate scenarios, which allows not only the best preparation to deal with extreme weather events, and regulatory changes, among others, but also to find opportunities associated with new technologies and market changes.

Três Marias Hydroelectric Power Plant

04. IMPLEMENTATION STRATEGY:

OUR DECARBONIZATION ACTIONS

Cemig has been working on its decarbonization strategy considering two main aspects: the first is the distribution of emissions by scope and source, i.e., categories with the highest total emissions are identified as those to be prioritized in planning; the second factor relates to what the Company has already mapped or has been implementing in terms of improvements and innovations that generate climate benefits. Based on this scenario, Cemig seeks to optimize its efforts and results in the Net Zero trajectory.

The following are some of the Company's outstanding actions to reduce its emissions, as summarized in Figure 5. Whenever available, estimates of emission reduction over time are presented, comparing the scenario considering the implementation of the proposed mitigation actions and the linear emissions projection scenario considering the maintenance of current business conditions - also called the Business-as-usual or BAU scenario.

4.1 | Company-owned fleet decarbonization

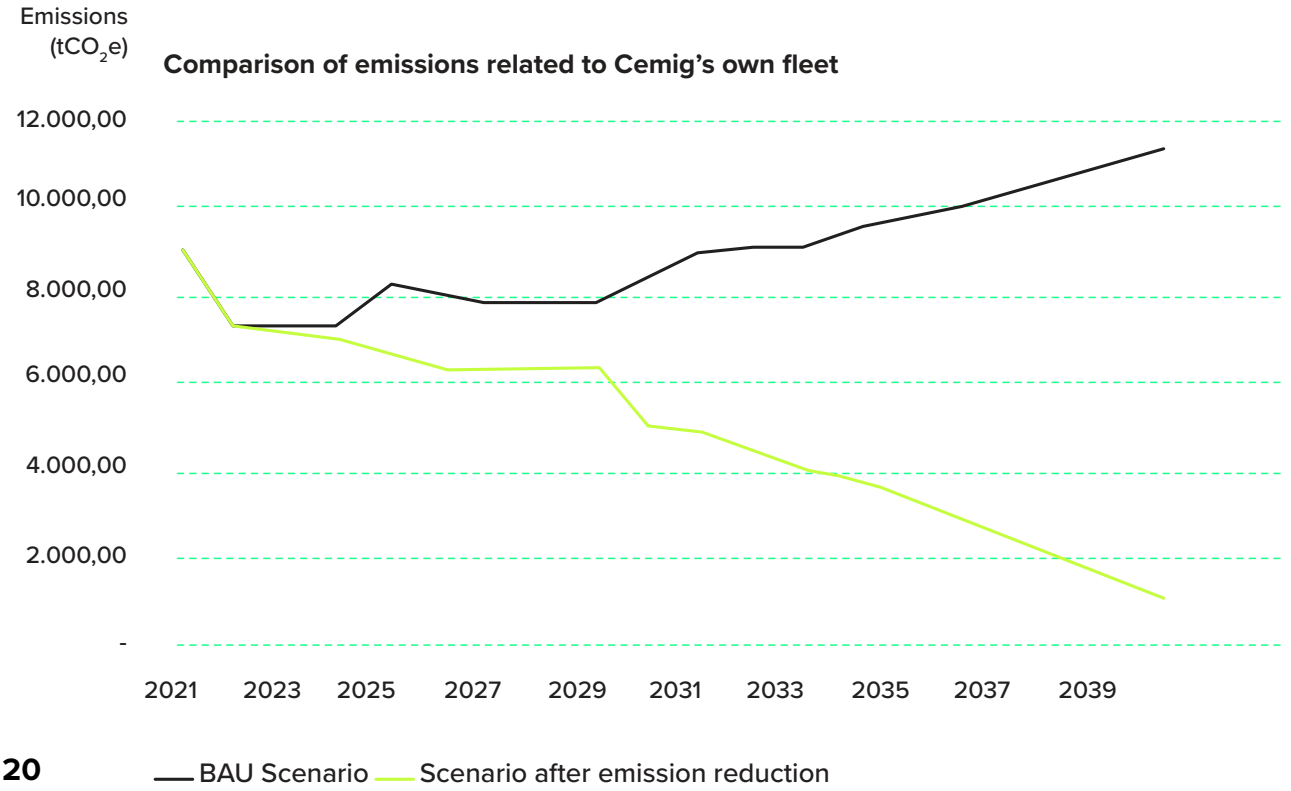
The management of owned and outsourced fleet is a priority for Cemig in the decarbonization process. Currently, the company-owned fleet totals 329 vehicles, consisting of 307 trucks, 1 pickup truck, 1 automobile and 1 UTV (multi-task utility vehicle); The outsourced fleet totals 1,337 vehicles, consisting of 31 trucks, 776 pickup trucks, and 530 automobiles. In 2022, fleet emissions accounted for, in tons of carbon equivalent (tCO2e), 986 tCO2e in scope 1 (own fleet) and 4,492 tCO2e in scope 3 (outsourced fleet). Aware of the challenge related to the reduction of emissions associated with the fleet, Cemig is committed to seeking solutions, either through awareness campaigns and guidance on the use of ethanol in automobiles, or by replacing vehicles and trucks with more efficient models. In this sense, the Plan recommends that only ethanol be used in its fleet of flex-fuel cars from 2025. Another measure that has already been adopted is the replacement of electric vehicles.

Cemig has also been studying ways to engage its service providers to adopt similar measures, based on the **establishment of rules in bidding and contracts for suppliers to use more efficient vehicles.**

Based on the emission mitigation actions planned for scope 1, including diesel replacement and fleet electrification, Cemig is expected to avoid more than 80,000 tCO2e by 2040, compared to the Company's Business-as-usual (BAU) emission curve, as shown in the chart below:

CEMIG IS EXPECTED TO AVOID MORE THAN 80,000 TCO2E BY 2040,

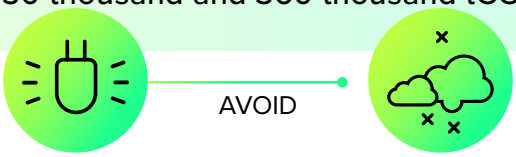
Figure 7. Expected emissions related to Cemig's own fleet in Business-as-usual scenario and with mitigation measures implemented.



4.2 | Renewable energy and own consumption

Cemig has a stake in 69 plants, 59 of which are hydroelectric, 9 wind and 1 solar, i.e., a 100% renewable generating complex. Given the company's commitment to sustainability, **the goal, reflected in the strategic planning, is to continue investing in renewable sources,** both through consolidated technologies (hydroelectric, onshore wind and photovoltaic) and in other innovative technologies, such as offshore wind and green hydrogen, in the long term. The company's strategic planning foresees the following investments in the generation of clean energy:

The resumption of the expansion of the Company's generating complex in clean energy projects has been challenged by the approved projects of the floating plants of Três Marias I, Emborcação, Cajuru, and UFV 4, which total 350.68 MW of power, which avoid between 250 thousand and 360 thousand tCO2e per year.



350,68 MW
POWER

250 - 360 thousand
tCO_2e

2- Carbon footprint takes into account two scenarios, one for inflexible open cycle power plant fueled by natural gas and another with a combined cycle power plant

In Distributed Generation, projections so far foresee an increase of 602 MWp by 2026, but the company continues to study increasing its generation portfolio with solar, wind and hydro sources. **Innovation and renewable energy continue to be priority themes for the Company,** and are reflected in the Materiality Matrix of the ESG 2030 Plan. The following are milestones in Cemig's trajectory in distributed solar generation:

- Cemig connected about 238,000 distributed generation units
- Record capacity of 7 GW connected and approved
- **Cemig's investment of more than R$ 2.4 billion in Distributed Generation since 2018**
- 190% increase in annual connections between 2009 and 2022

> 43 thousand
tCO_2e by 2024

From the perspective of energy consumption, there is an opportunity not only for Cemig to contribute to the decarbonization mission of its customers, but also for the **Company itself to have its own 100% renewable consumption, reducing emissions linked to scope 2 by almost 43,000 tCO2e by 2040,** and aligning its operations with a sustainable future. Therefore, the Company's goal is, **as of 2024, to have its own consumption fully certified with Renewable Energy Certificates (REC).**

ALMOST 43,000 TCO2E BY 2040

4.3 | Loss reduction

Cemig's strategic approach also aims to make efforts to reduce technical and commercial losses. In the context of technical losses, the Distribution Development Plan **provides for investments in a series of projects that seek to reduce more than 680,000 MWh per year.** In the fight against commercial losses, significant investments in CAPEX and OPEX (over R$ 7.8 billion) illustrate the Company's commitment.

REDUCE MORE THAN 680,000 MWH PER YEAR

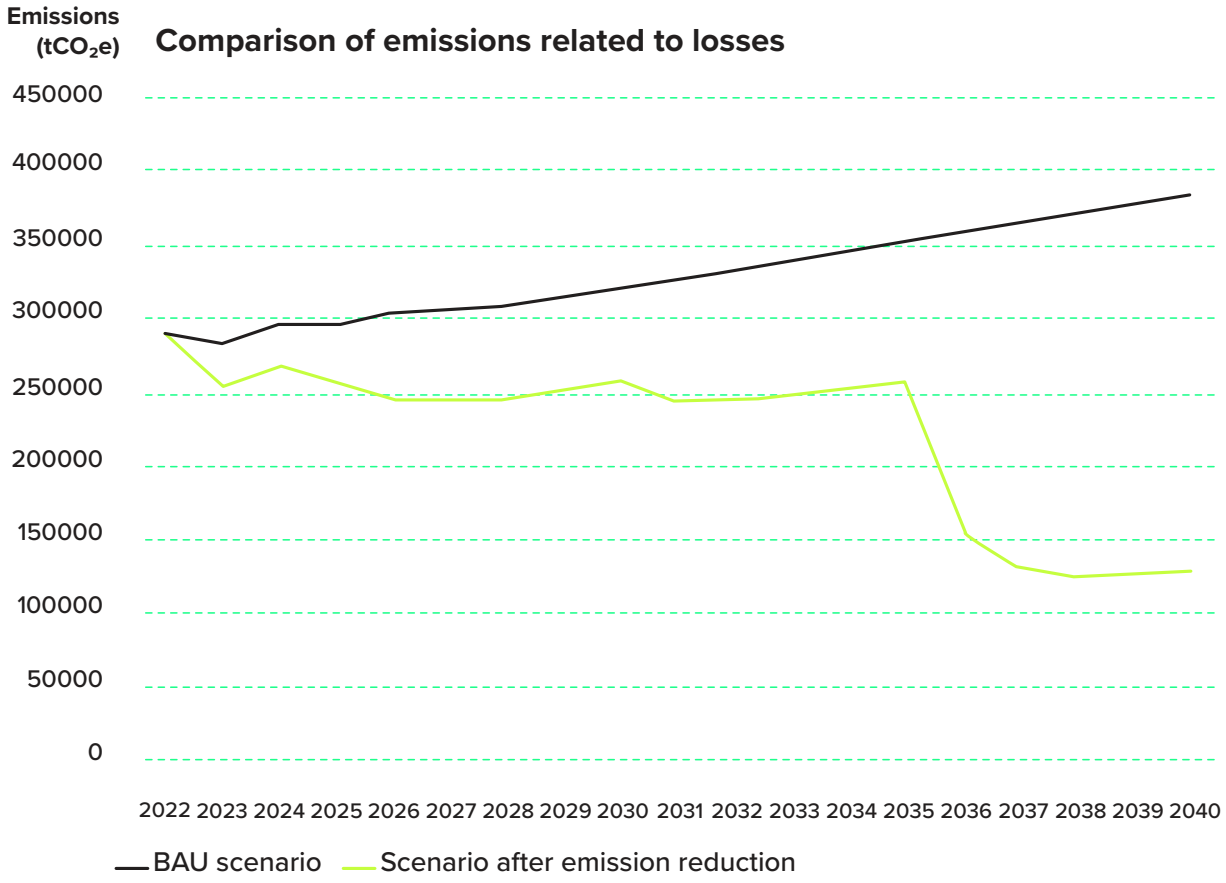
Currently, loss management is one of the main challenges for Cemig, as the calculation of losses – following the GHG Protocol methodology – requires considering the emission factor of the National Interconnected System (SIN), whose trend directly impacts the associated emissions. Therefore, methodologically, if the Company's losses remain high, as well as the System's emission factor, the total associated emissions tend to increase, even if the company sells renewable energy.

Based on the projections of the DDP (Deep Decarbonization Pathways) scenario, developed by the Center for Integrated Studies on the Environment and Climate Change (Centro Clima/COPPE/UFRJ), the company considers an emission factor that should decline over the years, reducing its emissions. At the same time, the company is preparing for different scenarios related to the emission factor and will be able to implement additional efforts, especially in technology, over the years.

It is important to highlight that the regulation established by Aneel (the Brazilian National Power Agency) plays a fundamental role in the management of losses, providing a regulatory framework that guides and governs the actions of the sector. Compliance with these rules will contribute significantly to Cemig's operational efficiency, aligning with the guidelines established by the regulatory agency.

In this way, Cemig has been preparing to manage losses more effectively with innovative practices in the electricity sector. By 2030, it is expected that the company's efforts, added to the evolution of the SIN's emission factor, will be able to mitigate about 20% of emissions per year, totaling a reduction of more than 410 thousand tCO2e between 2023 and 2030. **The reduction is expected to reach under 67% by 2040, for a total reduction of more than 2 million tCO2e.**

Figure 9. Expected emissions related to Cemig's losses in a Business-as-usual scenario and with mitigation measures implemented.



4.4 | Certification of energy commercialized with REC

The main challenge of Cemig's decarbonization lies in Scope 3 emissions, with the largest portion of these emissions originating from the sale of energy and natural gas. In 2022, emissions from this sale totaled 4,887,786 tCO2e, and emissions related to the sale of electricity were 2,795,583 tCO2e. **Cemig identifies the certification of commercialized energy as the main instrument to formalize the reduction of these emissions, in the same way guaranteeing the reduction for customers in terms of Scope 2 emissions.**

This is because, although the Company already has a 100% renewable energy matrix, also in this case, the calculation of emissions, following the GHG Protocol methodology, implies considering the emission factor of the National Interconnected System (SIN). Therefore, the way to circumvent the percentage of emissions allocated to the Company due to the SIN factor is

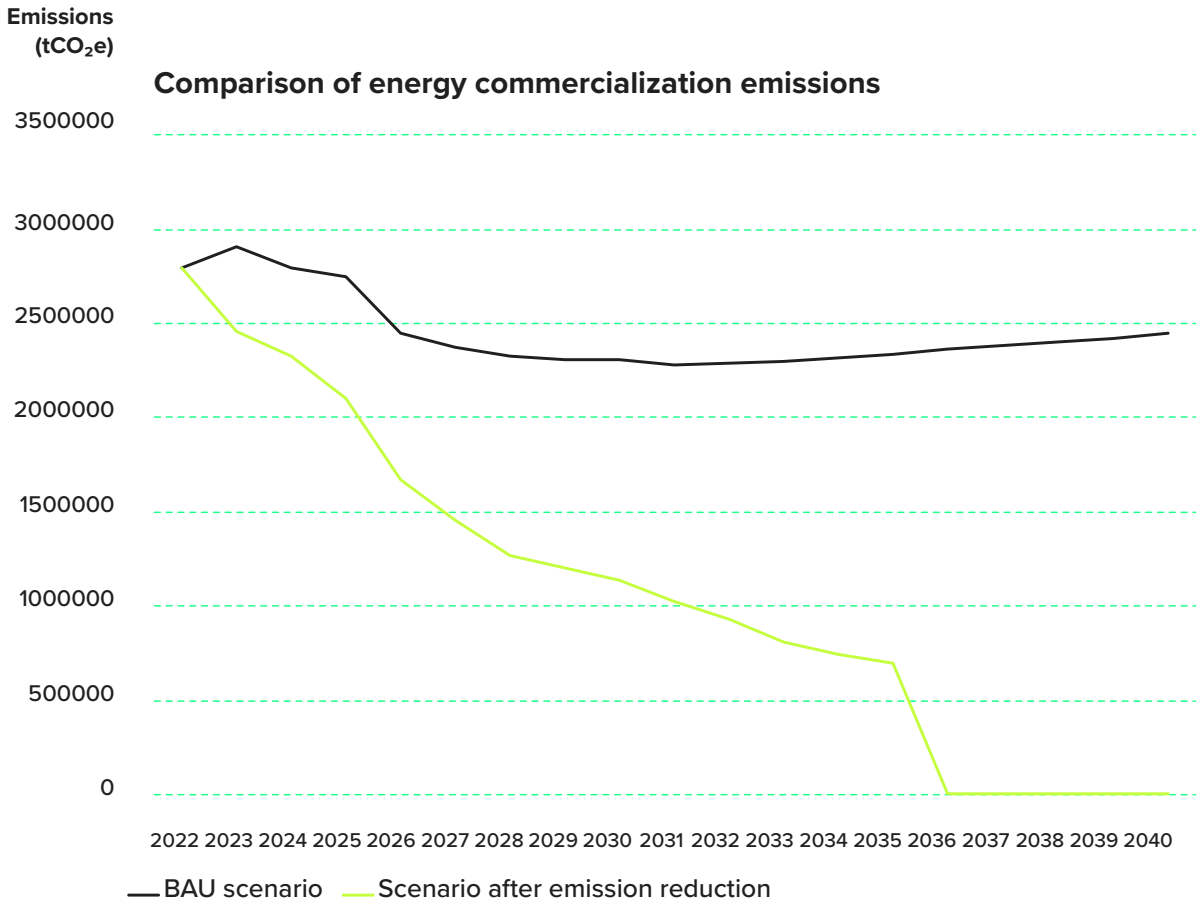
precisely to certify that the energy sold is clean, especially in the Free Contracting Environment (ACL).

This certification would be made from Cemig REC and I-REC – which is one of the Company's strategic ESG guidelines. Considering the projections for energy commercialization, Cemig expects to certify more than 277 million MWh by 2040, helping to significantly reduce Scope 3 emissions, allowing the achievement of the targets. Cemig therefore projects that it will sell more and more certified energy, notably from its own 100% renewable generation, but also from the acquisition of energy from third parties, as long as it is renewable and certified.

In terms of the evolution of emissions related to the commercialization of energy, Cemig presents an ambitious plan for the issuance of RECs. From 2035, the opening of the energy market could allow 100% of commercialized energy to be renewable and certified, which would result in a 100% reduction in emissions in this category by 2036**, totaling more than 25 million tCO2e avoided between 2023 and 2040.** In different scenarios of the evolution of the emission factor of the SIN, Cemig will be able to certify a greater amount of energy.

TOTALING MORE THAN 25 MILLION TCO2E AVOIDED BETWEEN 2023 AND 2040

Figure 10. Expected emissions related to Cemig's energy commercialization in Business-as-usual scenarios and with mitigation measures implemented.



4.5 | Decarbonization of the Power Distribution Business

Cemig has been investing heavily in innovation, given the changes that the energy sector has been experiencing, such as the increasing decentralization of energy production, the advancement of energy storage technologies, increased digitalization throughout the value chain, the growth of renewable sources and decarbonization needs. In this sense, some initiatives created by Cemig stand out, such as the Inova Cemig Lab, an open innovation program, and the Venture Builders project, which concentrates specialists fully dedicated to innovation in technological verticals: smart-grid, hydrogen, battery storage, solar energy, mobility, and artificial intelligence. In 2022, approximately R$ 24 million was invested in all research and development initiatives.

Some of the Company's innovative projects, which have the potential to reduce GHG emissions, are presented below, and some of them also act on technical and non-technical losses:

CEMIG'S INNOVATIVE PROJECTS WITH THE POTENTIAL TO REDUCE EMISSIONS

LITHIUM BATTERIES IN RECLOSERS:

Compared to lead-acid batteries, the replacement time increases from three to five years, reducing the need for technicians to travel and saves fuel consumption

GREEN CABLE

Use of an insulator with sugarcane biopolyethylene that has a lower carbon footprint compared to the traditionally used cable.

ESG+ SUBSTATIONS

Application of new technologies, with digitalization and ESG concepts in Compact Integrated Solution (CIS) and Hybrid substations, without the use of SF_6, reduction of copper used and use of solid insulation. The reduction of SF6 represents a benefit for decarbonization.

BIM – BUILDING INFORMATION MODELING

A platform for integrating project information from the initial process, in order to promote the management of all stages of the project. The project should enable the reduction of waste and the optimization of performance, reducing the carbon footprint of the projects.

BGAN

Expansion of satellite communication to serve more automatic reclosers, promoting the improvement of communication media and significant reduction of maintenance teams' trips to service this equipment, both in emergency and scheduled situations.

TRANSITION PROJECT

Promotes the improvement of telecom for substation and adjacency reclosers, avoiding the need to travel to service equipment or substations, both in emergency and scheduled situations.

SELF-HEALING

Automatic restoration of energy, without the intervention of the electrical system operator, and with a significant reduction in the displacement of maintenance teams for these services.

STATCOM

Static converter for voltage control that promotes the improvement of energy quality and reduction of the impacts of distributed generation, with benefits such as reduction in the use of inputs for network construction and the displacement of teams to reinforce the network.

Specifically for Cemig D, the decarbonization strategy involves innovative initiatives ranging from new standards for more compact substations to advanced metering infrastructure and implementation of the Advanced Distribution Management System (ADMS). In this way, the company seeks operational efficiency, automation and emission reduction. **The modernization of the substations, in line with digitalization, reinforces Cemig's commitment to technological innovation.**

DISTRIBUTOR DEVELOPMENT PROGRAM – PDD

NEW SUBSTATION STANDARDS

Compact, simpler, more reliable and automated substations, with the use of high-tech equipment. The new substation standards represent a significant opportunity for a reduction of approximately 400 tCO2e annually, given the expected decrease of about 65% in displacements compared to the previous standard.

ADVANCED METERING INFRASTRUCTURE (AMI)

avoided **370 thousand** tCO_2e

Cemig is implementing a technological solution for the installation of smart meters that perform remote operations in the Metropolitan Region of Belo Horizonte (RMBH), avoiding vehicle displacement, increasing the speed of service, and reducing losses in the meter itself. By December 2022, 235,426 meters were replaced in the Metropolitan Region of Belo Horizonte, In addition to benefits such as revenue recovery, the technology also reduces displacements, It is estimated that between 2022 and 2027, the emission of more than 37 thousand tCO2e will be avoided.

IMPLEMENTATION OF ADVANCED DISTRIBUTION MANAGEMENT SYSTEM (ADMS)

reduced emissions by avoiding **65 thousand** services

Integrated system for control, operation, and management of high, medium, and low voltage networks. It is the system responsible for controlling the entire electrical system of Cemig Distribuição. Advanced functionalities such as load forecasting, self-healing, distributed generation functions including generation forecasting and others are functions available in the ADMS solution. Reduces emissions by reducing the number of trips with diesel-powered vehicles. **Cemig has achieved a significant reduction in CO2 emissions, by avoiding about 65,000 services with improper/unproductive travel annually.**

DISTRIBUTOR DEVELOPMENT PROGRAM – PDD

DIGITALIZATION AND MODERNIZATION OF SUBSTATIONS

Digitalization project of the Substation Automation System, comprising the replacement of conventional Protection, Control, and Supervision equipment with digital equipment, as well as modernization of the Substation with replacement of obsolete primary equipment, such as circuit breakers, transformers, reclosers, disconnect switches and banks of capacitors and/or reactors. Throughout the project, about 150 substations should be contemplated, resulting in an improvement in the quality of energy supplied and a reduction in displacements.

LOW VOLTAGE BT ZERO

reduction
84 thousand
$kgCO_2e$

Focusing on informal urban centers in the process of land tenure regularization, Low Voltage (BT, acronym in portuguese) Zero, part of the Legal Energy program, aims to provide regular and safe energy to vulnerable communities in the metropolitan region of Belo Horizonte. The central innovation of the project lies in the integration of a digital transformer into the centralized measurement system. BT Zero has the ambition to benefit 240,000 families in Minas Gerais and has notable impacts, with an average regularization of 104.4 kWh/month/customer and a reduction in energy waste reaching an average of 64 kWh/month/customer. **This represents a reduction of approximately 84 kgCO2e per year per customer.**

In addition to these projects, Cemig has been working on other actions focused on efficiency that also have the potential to reduce emissions and bring other climate co-benefits.

Cemig Substation

4.6 | Engagement with the value chain

It is crucial to understand that climate-related actions cannot be carried out in isolation by Cemig, but must be the result of a joint effort of its entire value chain. In addition, not all actions in the Climate Action Plan are immediately associated with an amount of avoided emissions. In many cases, these are actions aimed at intensifying the engagement of the Company's relevant actors in the transition in order to foster progress towards decarbonization. For this reason, Cemig **recognizes the need to extend the issue beyond its organizational boundaries, fostering a culture that transcends its operations.** In this sense, Cemig's engagement strategies seek not only to impact its own practices but also to positively influence the political, regulatory, and sectoral scenario. By actively working on its engagement strategies, **Cemig aims to strengthen alliances, raise awareness among its stakeholders,** and thus play a significant role in building a sustainable and resilient future.

By engaging with policymakers and professional associations, **Cemig continuously evaluates the consistency and alignment of its positions and actions with the goals of the Paris Agreement.** This assessment is an integral part of the company's commitment to transparency, accountability, and effective contribution to climate change mitigation.

Table 1. Examples of engagement actions led by Cemig.

SUPPLIERS

INFORMATION COLLECTION:

Cemig adopts a strategy of collecting annual data on Greenhouse Gas (GHG) emissions from its suppliers, especially in the Transportation and Distribution (upstream) category of the GHG Inventory. Currently, 7% of suppliers already voluntarily participate in this process, contributing to transparency and awareness of the importance of climate management. The company aims to expand this initiative by reaching a greater number of suppliers each year.

ENGAGEMENT & INCENTIVES:

In order to encourage sustainable practices, Cemig introduced the Sustainability Award in its Best Suppliers Program. This category covers crucial environmental topics, from waste management to climate change mitigation. In 2022, the share reached 2.3% of suppliers, with 25 projects submitted. The award aims to recognize and encourage the best social and environmental practices. The measure of success is linked to the number of suppliers that apply and meet the requirements of the award, promoting continuous improvements and innovations in the environmental performance of their processes.

Seeking to strengthen and engage with supplier partners, Cemig also promoted training on the topic of Sustainability – ESG, including climate issues in Supplier Management. The objective is to engage suppliers in issues related to Sustainability (ESG), aiming at training and adaptation to the standards, laws,

and criteria of each supply category. The first class, in 2023, involved 30 service providers with great potential for ESG impact. It is expected that other classes of this training will be held throughout 2024 so that suppliers incorporate good practices in ESG.

CLIENTS

LEARNING/INFORMATION SHARING:

Cemig conducts engagement campaigns to educate its clients on performance and strategies related to climate change. In 2022, 286,748 consumers were impacted by campaigns running in various media channels. The focus of these initiatives is to promote the rational use of energy, combating waste.

The Company also seeks to publicize the importance of the topic through a podcast both for customers in the free market and Cemig SIM.

INNOVATION WITH CEMIG SIM:

Cemig SIM is dedicated to shared generation and energy efficiency. All of its customers are engaged in sustainable practices, which is evidenced by the 100% Clean and Renewable Energy Certificate and the Cemig SIM Renewable Energy Seal. In three years, the company served 7,000 consumer units, avoiding the emission of more than 25,000 tons of CO2. This approach aims to reduce costs for consumers and the productive sector, providing an economical, clean, and renewable option for energy generation and consumption.

INNOVATION WITH CEMIG REC:

Cemig issues Renewable Energy Certificates (RECs), called Cemig REC, to prove that the energy sold comes from renewable sources. In 2022, 8.73% of Cemig's customers acquired these certificates. The Company's strategy aims to consolidate Cemig as a reference in the sale of certified renewable energy, serving customers who seek to reduce GHG emissions.

ASSOCIATIONS, INITIATIVES AND OTHER COMMITMENTS

DIRECT ENGAGEMENT ACTIVITIES WITH PUBLIC POLICYMAKERS AND PARTICIPATION IN ASSOCIATIONS:

COUNCIL OF ENTREPRENEURS FOR THE ENVIRONMENT OF FIEMG

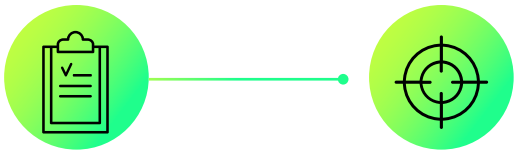
Cemig is active in FIEMG's Council of Entrepreneurs for the Environment, specifically in the Working Group on Climate Change and Air Quality (CEMA). The company participates in periodic meetings and promotes discussions on

possible changes in legislation related to the implementation of the National Policy on Climate Change. Cemig publicly supports CEMA's position and collaborates in the construction of carbon pricing instruments. Participation in the meetings covers relevant regulatory topics, such as state legislation, CNI initiatives, and local climate action plans.

UN GLOBAL COMPACT - CLIMATE ACTION PLATFORM

Cemig is a signatory to the UN Global Compact and actively participates in the Climate Action Platform. The company follows the principles of corporate social responsibility and sustainability advocated by the Global Compact, guiding all its relationships and activities under these principles. Participation includes periodic meetings, presentation of projects on specific panels, and contributions to activities such as Climate Accelerator, Advisory Committee, CEO Roundtable, and Benchmark Meetings. Cemig finances this participation as part of its strategy to promote the Global Compact Principles agenda throughout Brazil. The company regularly assesses whether its engagement with the Global Compact is aligned with the goals of the Paris Agreement.

Photo by Zac Wolff on Unsplash



166
RESPONDENTS

25%
EMISSION INVENTORY

In line with its decarbonization actions, Cemig highlights the crucial importance of **establishing robust indicators and metrics to closely monitor the investments and results obtained in its engagement initiatives.** The careful definition of these parameters not only enables an accurate assessment of the impact and effectiveness of these actions, but also serves as a fundamental guide in identifying areas for improvement.

ESTABLISHING ROBUST INDICATORS AND METRICS TO CLOSELY MONITOR THE INVESTMENTS AND RESULTS OBTAINED IN ITS ENGAGEMENT INITIATIVES

Still within the scope of measurement, today the Company recognizes that the lack of data on the part of many suppliers contributes to the underestimation of the emissions associated with this category. In this context, Cemig is committed to leading by example, actively collaborating with its suppliers to establish cycles for measuring, reporting, and implementing sustainable actions. The first step is to define a joint support plan for carrying out the emissions inventory, thus contributing to a sustainable transition not only for Cemig but for the entire economy in its sphere of influence. This approach exemplifies Cemig's commitment to building sustainable partnerships and promoting systemic change towards a greener economy.

In order to work in this direction, obtaining inventory data is highlighted as a key practice. Cemig actively seeks to collaborate with its suppliers in the collection and analysis of emissions-related data, establishing a solid foundation for future assessments and enhancing environmental transparency in the supply chain. In 2023, Cemig has already conducted a first survey with suppliers, reaching 166 respondents, of which 25% reported carrying out an emissions inventory. The result points to an opportunity for greater engagement on the subject, and Cemig is already structuring a training agenda for suppliers focused on accounting for emissions.

The inclusion of specific requirements in contracts and tenders represents another relevant initiative that should be adopted in the coming years. By incorporating criteria related to carbon footprint and life cycle analysis (LCA), Cemig aims to encourage more sustainable practices among its business partners, promoting a positive change in procurement choices.

It is worth noting that, even with their currently low representation in Cemig's inventory, these emissions have the potential to play a more significant role in the future, especially as accounting improves.

In line with the company's increasingly ambitious goals, a series of actions and engagement strategies are being studied and should be used by Cemig in the coming years:

SUPPLIERS

- **Formalization of requirements:** Currently, Cemig relies on voluntary reports from suppliers regarding climate actions. The Company shall include requirements in contracts and bids for suppliers to account for their emissions, calculate the carbon footprint of products and services, and commit to actions that can reduce their emissions. This is an opportunity and strategic move that will strengthen the company's commitment to climate sustainability, ensuring that suppliers are fully aligned with the Company's objectives in mitigating GHGs.
- **Training and Awareness:** Cemig will expand training programs for suppliers, highlighting the importance of sustainable practices, training them in Emissions Inventories, and providing resources and information to improve their environmental performance. This is a strategy that favors the company in the medium to long term, stimulating better management of services and products throughout the value chain.
- **Establishment of Shared Goals:** Cemig encourages suppliers to set goals, preferably based on science, promoting a collaborative approach in the supply chain.

CLIENTS

- **Consumer Education:** Cemig will expand educational campaigns aimed at customers, highlighting the importance of sustainable choices in energy consumption and offering information on how consumers can contribute to reducing emissions.
- **Feedback and Active Participation:** Cemig will establish mechanisms to collect continuous feedback from customers on sustainable initiatives, promoting active participation and providing a more engaging experience.

OTHER VALUE CHAIN PARTNERS

- **Expansion of Collaboration with Associations:** Cemig will intensify collaboration with associations, actively participating in working groups and discussion forums, seeking to positively influence sectoral policies.
- **Promoting Innovation in Partnerships:** The company should explore opportunities for collaborative innovation with other partners in the value chain, stimulating joint solutions to shared climate challenges.
- **Encouraging Proactive Employee Participation:** Cemig will commit to strengthening awareness and engagement among employees, recognizing that they play a crucial role in the success of sustainable initiatives. From the incentives for active participation in internal programs, workshops, and awareness-raising initiatives, it must be ensured that all team members are aligned with environmental objectives.

4.7 | Energy Efficiency

Cemig has historically invested in energy efficiency, mainly through the Energy Efficiency Program, regulated by the Brazilian National Electric Energy Agency (Aneel). The purpose of the program is to disseminate the culture of efficient use of energy, with an emphasis on

Três Marias Hydroelectric Power Plant

sustainability and compliance with the Sustainable Development Goals (SDGs) of the United Nations (UN).

Cemig's Energy Efficiency Program achieves two notable milestones, representing a solid commitment to sustainability in Minas Gerais. With significant investments of R$ 1 billion, the program aims not only to promote energy efficiency but also to raise awareness in society about the importance of these practices.

Throughout its 25 years of operation, since 1998, the program has demonstrated significant impacts in reducing carbon emissions. The remarkable contribution of approximately **520,000 tons of CO2 avoided** is equivalent to the carbon absorbed by 3.7 million trees during their first 20 years of life. This environmental commitment is a key part of the fight against climate change.

In addition, the program achieved significant results in terms of energy demand. The avoidance of 168 MW at the peak is comparable to the combined power of the Queimado (105 MW) and Rosal (55 MW) Hydroelectric Power Plants. This achievement highlights the program's effectiveness in positively influencing energy demand, contributing to the stability and sustainability of the sector.

520,000 TONS OF CO2 AVOIDED

Energy savings are also noteworthy, totaling 7,423 GWh. This amount not only represents an efficient management of resources but is also enough to supply, over the course of a year, 3.5 million families in Minas Gerais. This is a tangible indicator of the program's direct impact on the lives of communities, providing concrete benefits to citizens.

In summary, Cemig's Energy Efficiency Program emerges as an exemplary model of environmental and social commitment. With quantifiable results and a substantial investment, the initiative not only contributes to environmental sustainability but also promotes effective awareness in Minas Gerais society, marking a positive trajectory towards a more sustainable and resilient future.

In addition to the Public Call for Energy Efficiency, Cemig is expected to invest in the 2024-2028 cycle in a series of initiatives linked to the Program, organized through subprograms such as 'Cemig in the Cities', with investments of more than R$ 256 million, 'Cemig in Hospitals', with an investment of more than R$ 60 million in health equipment, 'Cemig in Schools', with itinerant educational actions and exchange of equipment in schools, investing more than R$ 78 million and 'Cemig in the Countryside' and 'Cemig in the Communities', with investments in the order of R$ 40 million to serve low-income families in urban and rural areas and quilombola and indigenous communities.

Figure 11. Summary of Cemig's energy efficiency programs

CEMIG IN THE CITY

Projects that seeks to operate in actions that broadly benefit various sectors of society. Highlights incle the replacement of public lighting. Financial incentives for the exchange of inefficient equipment and the efficiency of companies and bodies providing public services.

CEMIG IN HOSPITALS

Projects aimed at improving the efficiency of public and philanthtopic health equipment, such as hospital, health posts, and vaccination centers, among others, with the replacement of lighting, autoclaves, laundry equipment, surgical lights, and solar plants.

CEMIG IN SCHOOLS

Set of initiatives of an educational and school efficiency nature, with emphasis on itinerant activities throughout the Cemig Distribuição concession area with demonstration units and plays for primary and secondary school students.

CEMIG IN THE COMMUNITIES AND IN THE COUNTRYSIDE

Projects developed for low-income communities in urban and rural areas, quilombola and indigenous communities, with actions to replace inefficient equipment and guidance for the safe and efficient consumption of electricity, always respecting the culture and particularities of each audience.

PUBLIC CALL

Annual public notice, open to all classes of Cemig Distribuição costumers, in which projects that propose actions to reduce consumption and demand at the peak can be presented to receive financing with resources from the Energy Efficiency Program.

In November 2023, the company's Energy Efficiency Program reached the mark of R$ 1 billion in investments in Minas Gerais since the creation of the initiative in 1998. In addition, in 2023, this Program reached the distributor's entire concession area, which covers 774 municipalities in Minas Gerais, benefiting about 900 thousand families throughout the state, and representing energy savings of 7,423GWh – enough to supply about 3.5 million customers in one year.

05. GASMIG'S ROLE IN DECARBONIZATION

Companhia de Gás de Minas Gerais (GASMIG) plays a key role as the **exclusive distributor of piped gas throughout the territory of Minas Gerais,** operating in the industrial, commercial, and residential sectors in the State of Minas Gerais. By 2033, Gasmig expects to sell approximately 17 billion cubic meters of natural gas. However, in line with market movements and the search for cleaner fuels, **Gasmig directs R&D investments, totaling R$65 million by 2033, with a special focus on hydrogen and biomethane.**

In this context, it is relevant to mention that natural gas is considered by Cemig as a transition fuel when it replaces another with a higher emission factor, such as diesel. Some customers in Minas Gerais have already modified their processes and equipment for the use of this fuel. This was only possible thanks to Gasmig's investments in infrastructure, in addition to the affordable costs for adapting industrial facilities. However, studies, such as the one by the Energy Research Company (EPE), indicate that the role of natural gas may be limited after 2040, since renewable sources will gain prominence in energy matrices to achieve decarbonization goals (EPE, 2018).

TOTALING R$65 MILLION BY 2033, WITH A SPECIAL FOCUS ON HYDROGEN AND BIOMETHANE

Cemig is attentive to **efforts to find viable solutions for natural gas after 2040,** so the topic has been discussed in different spheres and **Gasmig remains attentive to new trends.** In 2023, the Government of Minas Gerais, through the State Secretariat for Economic Development, published Resolution No. 34/2023, establishing conditions for the commercialization and distribution of biomethane. This initiative reinforces the trend and the need for energy diversification and decarbonization of the mining economy. The regulation covers the use of structuring networks and piped gas in the state, in addition to supporting measures to promote the production chain.

The biomethane resolution is part of the actions aligned with the Race to Zero, a global campaign that aims to achieve net-zero emissions by 2050. In line with the resolution of the Government of Minas Gerais, Gasmig, on November 22, 2023, opened a public call for the supply of biomethane. This is the first acquisition of this type of gas to serve the State of Minas Gerais.

For a trajectory aligned with Cemig's goals, Gasmig's large investments in Research and Development (R&D), especially in the areas of biomethane and hydrogen, reflect the company's commitment to the environment, state and national commitments, innovation and the continuous search for more sustainable solutions. Considering the importance of natural gas for the economy of Minas Gerais, Gasmig emerges as a key player in the transition to cleaner energy sources. The company not only boosts the economy of Minas Gerais, but also enables various sectors, from households to industries, to reduce their carbon footprint, contributing to decarbonization goals. Thus, Gasmig's proactive action not only follows global movements towards a more sustainable energy matrix but also places Minas Gerais at the forefront of the transition to a cleaner and more resilient future.

06. METRICS AND TARGETS:
MONITORING OUR RESULTS

The Science Based Targets initiative (SBTi) mobilizes companies to adopt ambitious, science-based targets for reducing their greenhouse gas (GHG) emissions, driving the transition to a low-carbon economy. Science-based targets provide a clearly defined path for companies to effectively reduce greenhouse gas (GHG) emissions, helping to prevent the worst impacts of climate change and future-proof business growth.

These targets are considered science-based if they are aligned with what the latest climate science deems necessary to achieve the goals of the Paris Agreement – to limit global warming to well below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C.

By assuming this commitment publicly, Cemig seeks to give visibility to its ambitions and encourage suppliers, value chain partners, and their peers to adopt a similar strategy. Science-based targets offer feasible and step-by-step parameters for achieving results. Instead of a single goal on the distant horizon, Cemig unfolds its goals in ambitious steps in the short, medium, and long term.

Photo by Sungrow EMEA on Unsplash.psd

Through the goals, Cemig reinforces its commitment to the environment, climate, and society, contributing to a more sustainable future. This Climate Action Plan should help the company align its strategic planning, actions, and investments to a scenario in which the temperature is well below 2ºC.

The Company's most ambitious targets are being validated by the Science Based Targets initiative, which has been proposing improvements throughout 2023 in terms of the approach to each of the scopes and the definition of intermediate targets. Aware of the challenges of its ambition, Cemig has already been identifying actions to reduce emissions in order to accelerate results and achieve a favorable performance each year. The main goals, identified in Figure 3, are detailed in Table 2 below:

Table 2. Description of Cemig's science-based goals.

DESCRIPTION	SCOPES COVERED	TERM	STATUS (REDUCTION ACHIEVED)[1]
Achieve the milestone of 100% energy from renewable sources to meet Cemig's internal needs, promoting energy consumption from a totally clean and traceable source.	2	2024	86%
Achieve a significant reduction of 69.4% in Cemig's absolute emissions.	1 & 2	2030	57%
Reduce carbon intensity by 75.8%, considering both energy generation and trading. This overarching target reflects Cemig's comprehensive commitment to reducing its carbon footprint in all aspects of its value chain.	1 & 3	2030	63%
Reduce Cemig's absolute emissions by 90%, achieving the Net Zero Target and identifying the opportunity to offset residual emissions (limited to the 10% that were not feasible to reduce).	1, 2 & 3	2040	48%

1- Status considering the performance of emissions from the sources corresponding to each target in 2022 in relation to the base year of 2021.

07. CEMIG ON THE WAY TO TRANSITION

Cemig reinforces its commitment and effort for the success of the Climate Action Plan and, therefore, of the decarbonization process. The Plan sets out high-level ambitions to mitigate, manage and respond to climate change, seizing the opportunities of the transition to a low-carbon economy.

Through the Climate Action Plan, Cemig also responds to a growing demand from investors to provide transparency on the paths that will be executed and that will support the achievement of the established climate goals. Cemig has therefore been defining a series of short-, medium- and long-term actions to achieve its climate ambition.

By addressing various aspects of decarbonization in line with international benchmarks such as CDP, ACT, and TPT, Cemig stands out among industry peers. The efforts undertaken by Cemig in its decarbonization process not only put it at the forefront but also set an inspiring benchmark for other companies to work on their climate ambition.

Boa Esperança Photovoltaic Plant

TO ACHIEVE THE NET ZERO TRAJECTORY, THE COMPANY FORMALIZES ITS MAIN LINES OF ACTION:

- Expansion of its power generation capacity with investments in renewable energy sources
- Expansion of energy commercialization with renewable energy certificate (Cemig REC and I-REC)
- 100% renewable self-consumption
- Modernization and innovation of the electricity distribution service
- Reduction of transmission and distribution losses
- Engagement with its suppliers in order to reduce emissions linked to services and products
- Fleet electrification and use of renewable fuels
- Energy Efficiency Program and customer awarenessclientes
- Political engagement aimed at supporting initiatives to decarbonize the economy
- Investments in innovative projects aligned with the energy transition
- Creation of incentives related to company-wide decarbonization goals

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Because our **impact** matters