

BIODIVERSITY AND CONSERVATION AT CEMIG 2025



1. Flora



Vegetation is essential for the conservation of water resources, soil, and climate balance, as well as contributing to the well-being of the population by providing access to green public spaces. In this context, Cemig develops programs for flora restoration, urban tree management, and ecosystem recovery.

The Itutinga Environmental Station has a nursery that produces native species from the Cerrado and Atlantic Forest biomes, used for reforestation, spring recovery, and support for Environmental Education actions.

As part of forest compensation, Cemig has already exceeded the planting target of 678.33 hectares set for the 2020–2025 period, with 803.54 hectares effectively planted. Maintenance covers more than 4,000 hectares, and 96.60 hectares were compensated through land regularization between 2022 and 2023.

Cemig also maintains three Private Natural Heritage Reserves (RPPNs) in different biomes of Minas Gerais: Galheiro (2,700 ha), Fartura (1,455 ha), and Usina Coronel Domiciano (263.56 ha). These protected areas promote the conservation of fauna and flora, water resources, and spring protection. The Galheiro RPPN is home to over 1,200 plant species from the Cerrado. The Fartura RPPN, located in a transition zone with the Atlantic Forest, has 278 identified plant species, some of which are not yet classified, and supports biodiversity conservation research.

These initiatives highlight Cemig's commitment to sustainability and reaffirm its active role in protecting natural resources, with a focus on flora conservation.

2. ENVIRONMENTAL EDUCATION



Cemig continuously invests in expanding knowledge and disseminating good environmental practices, promoting actions aimed at conserving fauna, flora, and water resources, as well as waste management. Through monitoring programs, rescue operations, recovery of degraded areas, and vegetation restoration, as well as R&D projects in partnership with public and private institutions, the company seeks to prevent, mitigate, and offset environmental impacts related to energy generation, transmission, and distribution.

Environmental education is a cornerstone of this effort, with actions aimed at raising awareness among employees and society at large. Topics include the rational use of water resources, care for springs, preservation of aquatic and terrestrial animals, sustainable management of native vegetation, energy conservation, and proper waste disposal. Activities include training sessions, seedling planting, visits to preserved areas, distribution of educational materials, workshops, plays, and games. These actions reach a diverse audience, including students, rural producers, riverside residents, and communities near power plants.

Since June 2024, Cemig has launched EcoCiente, its Corporate Environmental Education Program, to reinforce the company's environmental commitment by bringing environmental education into the corporate context. EcoCiente develops inter-, multi-, and transdisciplinary actions aligned with the UN's 2030 Agenda and the company's ESG commitments. The program was designed based on active listening to employees and other stakeholders, resulting in a proposal aligned with real needs.

By promoting environmental awareness at all levels, Cemig strengthens its role as a transformative agent and fosters an organizational culture focused on sustainability and ecosystem preservation, contributing to the protection of fauna, flora, and water resources, with special attention to fish.

3. TERRESTRIAL AND SEMI-AQUATIC FAUNA



Terrestrial fauna plays a vital role in maintaining ecosystems by contributing to pollination, seed dispersal, soil restoration, nutrient cycling, and control of exotic species. This biodiversity—comprising amphibians, reptiles, birds, mammals (flying and non-flying), insects, and other invertebrates—interacts directly with flora and supports environmental balance.

Cemig carries out continuous actions to conserve fauna, from rescuing wildlife during project implementation to monitoring key species in ecosystems.

Cemig runs terrestrial fauna programs at the Irapé, Queimado, and Salto Grande Hydroelectric Plants, and at the Volta do Rio and Praias de Parajuru Wind Farms, expanding its presence across different biomes and reinforcing its commitment to biodiversity, water resources, and ecosystem services. These actions are part of the company's commitment to sustainable development and the protection of fauna, flora, and water resources in its areas of operation.

Fauna monitoring at the Emborcação HPP led to the publication of Illustrated Guides launched in 2020. These guides include photographic records and descriptions of bird, reptile, amphibian, and mammal species, contributing to environmental education and local biodiversity awareness among schools, universities, and environmental agencies.

This initiative reinforces Cemig's commitment to environmental conservation and the dissemination of scientific knowledge, especially in the region influenced by the plant, located between Minas Gerais and Goiás. The materials are available online and play an important role in valuing regional fauna and raising public awareness for its preservation.

4. PACUERA



The environmental management of hydroelectric reservoirs is guided by the preparation of the Environmental Plan for the Conservation and Use of the Surroundings of Artificial Reservoirs (PACUERA), as required by Brazilian legislation. The responsibility of the developer, PACUERA is developed by a multidisciplinary team that conducts a detailed diagnosis of the socioeconomic, physical, and biotic characteristics of the surroundings, including aspects related to flora, fauna, fish, and water resources.

Based on this information, an environmental zoning plan is defined, serving as a key tool for the conservation, recovery, and sustainable use of land in urban and rural areas near the reservoirs. This zoning can even support the creation of municipal laws for land use planning, promoting greater integration between the project and the local community.

Once completed, PACUERA is submitted to the competent environmental authority for review and made available for public consultation, ensuring transparency and social participation in the process. In specific cases, such as the Camargos plant (which does not have a Permanent Preservation Area) and Coronel Domiciano (located within a conservation unit), the requirement is waived.

To ensure the effectiveness of the zoning, Cemig implements, when necessary, the Participatory Management Program (PGP), which fosters dialogue among company representatives, civil society, public authorities, and watershed committees. This reinforces the company's commitment to the sustainable use of the surroundings, contributing to the preservation of water resources, flora, fauna, and fish, and promoting shared responsibility in the environmental management of reservoirs.

5. PEIXE VIVO PROGRAM



Launched in 2007, Cemig's Peixe Vivo Program operates on two main fronts: preserving native fish communities in Minas Gerais through support for scientific research, and developing strategies to prevent fish mortality at hydroelectric plants. After more than 15 years of operation, the program has become a benchmark in the energy sector, achieving a 76% reduction in the annual average of fish deaths and a 97.7% decrease in environmental fines. These achievements reflect Cemig's commitment to aquatic fauna conservation, grounded in technical and scientific knowledge.

The program is structured around three main pillars:

- **Research and development**, with partnerships involving over 10 universities and research centers. A total of 24 projects have been carried out with investments exceeding R\$ 40 million. The results include over 500 technical-scientific works, including 90 articles, seven books, and 42 chapters, as well as the training of 15 PhDs and 46 Masters.
- **Management and conservation**, involving risk assessments for ichthyofauna, monitoring fish abundance and water conditions downstream of the plants. Vulnerable species are studied, and when necessary, fish passage structures are evaluated and implemented to ensure migration between feeding and breeding areas.
- **Community engagement**, the third pillar. Since 2007, the program has held workshops with fishers, NGOs, and public managers, developed environmental education activities with children and local populations, and supported scientific and participatory events across the country. By integrating science, social participation, and responsible management, the Peixe Vivo Program reaffirms Cemig's commitment to conserving fauna, flora, and water resources in its areas of operation.

6. WATER RESOURCES



Brazil holds one of the largest freshwater reserves on the planet, containing 50% of South America's and 11% of the world's water resources. Cemig uses this essential resource to generate energy through hydroelectric plants, where water drives turbines and is immediately returned to rivers without being consumed.

Reservoirs regulate water availability in basins, contributing to safety during droughts or floods. In addition to energy generation, stored water is also used by communities for supply, irrigation, navigation, recreation, tourism, and fish farming in net tanks.

Cemig invests in technology and science to ensure the sustainable use of water through monitoring points that assess rainfall, river flows, water levels, and climate conditions, as well as water quality, sediments, and aquatic fauna. At the plants, sediment control and monitoring of organisms such as golden mussels and cyanobacteria are also conducted.

R&D projects with universities aim to improve water monitoring, control invasive species, and conserve river and lagoon biodiversity, focusing on fauna, flora, and fish.

Cemig actively participates in water resource management, joining Watershed Committees and state and federal councils. In these forums, it contributes to the development of plans, regulations, and strategies for water and aquatic ecosystem preservation.

Through science, innovation, and environmental commitment, Cemig reinforces its role in protecting water and river life, promoting clean energy and the conservation of Brazilian fauna and flora.