

CEMIG



2025

BIODIVERSITY

REPORT

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LIST OF ABBREVIATIONS AND ACRONYMS

APA – Área de Proteção Ambiental (Environmental Protection Area)	PCS – Programa de Comunicação Social (Social Communication Program)
APP – Área de Preservação Permanente (Permanent Preservation Area)	PEA – Programa de Educação Ambiental (Environmental Education Program)
ARIE – Área de Relevante Interesse Ecológico (Area of Significant Ecological Interest)	PIRCEH – Plano Integrado de Relacionamento com as Comunidades do Entorno da UHE Queimado (Integrated Community Engagement Plan for the Communities Surrounding the Queimado HPP)
BPBES – Plataforma Brasileira de Biodiversidade e Serviços Ecossistêmicos (Brazilian Platform for Biodiversity and Ecosystem Services)	PMQA – Programa de Monitoramento da Qualidade das Águas (Water Quality Monitoring Program)
CDP – Carbon Disclosure Project	PRAD – Programa de Recuperação de Áreas Degradadas (Program for the Recovery of Degraded Areas)
CEBDS – Conselho Empresarial Brasileiro para o Desenvolvimento Sustentável (Brazilian Business Council for Sustainable Development)	PTRF – Projeto Técnico de Reconstituição da Flora (Technical Project for Flora Restoration)
Cetec – Fundação Centro Tecnológico de Minas Gerais (Minas Gerais Technology Center Foundation)	RDS – Reserva de Desenvolvimento Sustentável (Sustainable Development Reserve)
CNUC – Cadastro Nacional de Unidades de Conservação (National Register of Conservation Units)	REBIO – Reserva Biológica (Biological Reserve)
DJSI – Dow Jones Sustainability Index	RESEX – Reserva Extrativista (Extractive Reserve)
EAIT – Viveiro Florestal da Estação Ambiental de Itutinga (Forest Nursery of the Itutinga Environmental Station)	REVIS – Refúgio de Vida Silvestre (Wildlife Refuge)
Enel – Ente Nazionale per l'Energia Elettrica	RPPN – Reserva Particular do Patrimônio Natural (Private Natural Heritage Reserve)
ERPs – Emergency Response Plans	SBT – Science-Based Targets
ESEC – Estação Ecológica (Ecological Station)	SBTi – Science Based Targets Initiative
ESG – Environmental, Social, and Governance	SDGs – Sustainable Development Goals
FAO – Food and Agriculture Organization	SEGRH – Sistema Estadual de Gerenciamento de Recursos Hídricos
FLONA – Floresta Nacional (National Forest)	SHP – Small Hydropower Plant
GHG – Greenhouse Gases	SINGREH – Sistema Nacional de Gerenciamento de Recursos Hídricos (National Water Resources Management System)
GRI – Global Reporting Initiative	SNUC – Sistema Nacional de Unidades de Conservação (National System of Conservation Units)
HPP – Hydroelectric Power Plant	TL – Transmission Line
IBAMA – Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (Brazilian Institute of the Environment and Renewable Natural Resources)	TNFD – Taskforce on Nature-related Financial Disclosures
Igam – Instituto Mineiro de Gestão das Águas (Minas Gerais Institute of Water Management)	UC – Unidade de Conservação (Conservation Unit)
IPCC – Intergovernmental Panel on Climate Change	UN – United Nations
IUCN – International Union for Conservation of Nature	UNEP – United Nations Environment Programme
LPI – Living Planet Index	WF – Wind Farm
MONA – Monumento Natural (Natural Monument)	WQI – Water Quality Index
PARNA – Parque Nacional (National Park)	

01. PERFORMANCE, TRANSPARENCY, AND PARTICIPATION



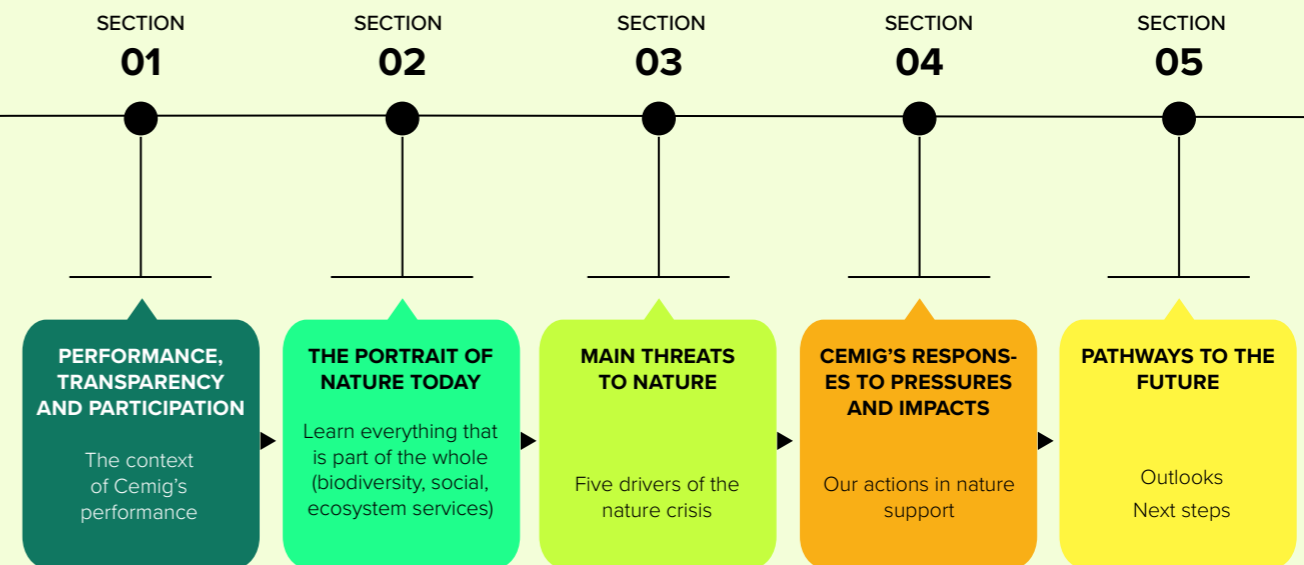
WELCOME TO THE NEW EDITION OF CEMIG'S BIODIVERSITY REPORT!

This publication represents an “X-ray of nature” from the perspective of our company and the territories where we operate. Here we have gathered information that shows how Cemig relates to nature, presenting an overview of its current state, trends, main pressures, and threats, as well as the actions, policies and programs we have implemented to protect, conserve and restore nature.

The preparation and publication of this report reinforce our commitment to transparency, social and environmental responsibility, and sustainable development. Our goal is to share knowledge, strengthen dialogue with society, and encourage everyone to participate in biodiversity conservation—an essential asset for the well-being and future of the next generations.

The report also provides a vision of future scenarios and perspectives, highlighting how we are preparing for the challenges and opportunities of a world in transitioning towards a more sustainable and positive model for nature.

Explore Cemig's Biodiversity Report and discover how energy and life are connected.



Here in **Section 1**, we introduce who we are, our businesses, and the territory in which we operate. In **Section 2**, we reveal a current picture of nature, highlighting biodiversity in Brazil and our assets. Next, in **Section 3**, we address the main environmental threats and acknowledge the impacts resulting from our activities. Based on this diagnosis, **Section 4** brings together the actions, policies, and programs we have developed to mitigate our impacts and

promote environmental conservation. In this chapter, we also present our main results and analyze how nature has responded to these initiatives, generating lessons that strengthen our performance. Finally, in **Section 5**, we outline our next steps, reaffirming our commitment to continuous improvement and building a more sustainable future.

In addition to this publication, Cemig periodically releases other corporate documents that reinforce our commitment to transparency and responsible management of its interactions with the environment and society. These materials complement our company's communication about our progress, challenges,

and results related to sustainability, biodiversity, and climate change, offering an integrated view of our performance in relation to ESG issues. Among the main publications are:



- Annual Sustainability Report – RAS ([RAS_2024](#))
- EcoCiente Performance Report ([EcoCiente_2024/2025](#))
- Annual Social and Environmental Responsibility Report for Electric Power Companies (Aneel) ([Cemig GT_2024 e Cemig D_2024](#))
- Quarterly ESG Performance Report ([ESG_2025](#))
- Climate-Related Financial Disclosures Report ([TCFD_2025](#))
- Climate Change Adaptation Plan ([2024](#))
- Water Security Questionnaire ([CDP_2025](#))

CEMIG: LEARN ABOUT THE PATHS OUR ENERGY TAKES TO REACH YOU

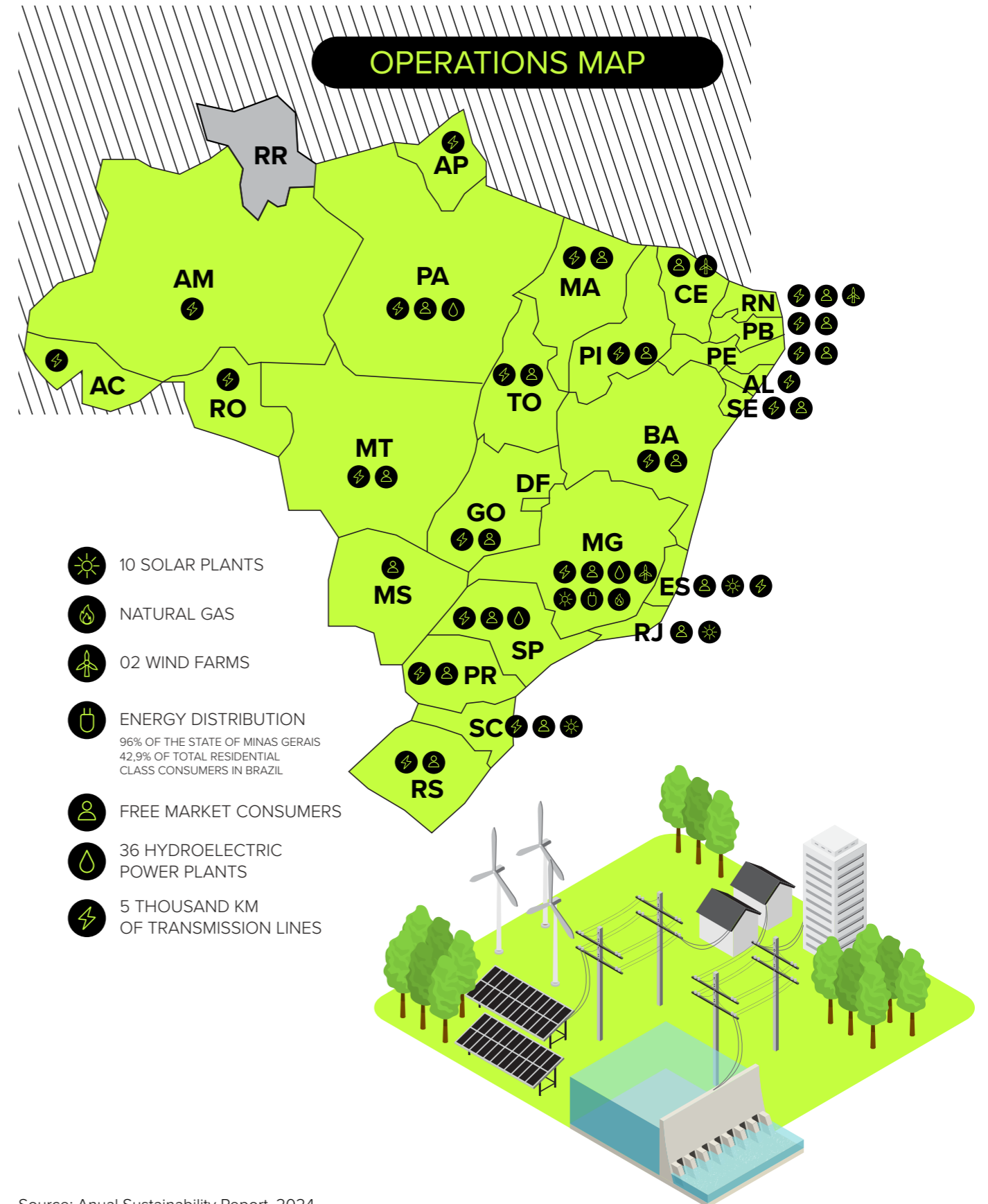
For over seven decades, Cemig has been part of the history and development of Minas Gerais and Brazil. Our company was founded with the mission of bringing energy, progress, and quality of life to millions of people, and today it is recognized as the largest integrated company in the Brazilian electricity sector.

With a presence in 25 states and the Federal District, Cemig operates in 774 municipalities, serving more than 9.4 million electricity customers, in addition to 33,000 solar energy subscribers and more than 100,000 natural gas users.

Our portfolio is broad and diversified: we have 83 generation projects, including hydroelectric, wind,

and solar plants, in addition to more than 5,000 kilometers of transmission lines that cross the country. Cemig is also one of the largest electricity distributors in Brazil, reaching 96% of the state of Minas Gerais, and distributes natural gas through Gasmig, serving everything from residences to large industries.

More than just an energy company, Cemig is a company of people, territory, and nature. Its operations are based on principles of innovation, efficiency, and sustainability, constantly seeking a balance between development, environmental responsibility, and collective well-being.



Source: Anual Sustainability Report, 2024.

O2. THE PORTRAIT OF NATURE TODAY



WHAT DO WE UNDERSTAND AS NATURE?

Certainly, ideas such as “environment,” “animals,” and “forests” come to mind... and that’s right, but it’s not just that. Nature represents everything that exists on the planet that has not been created by humans. It is the set of living beings (plants, animals, fungi, microorganisms) and the natural environments where they live, such as forests, savannas, rivers, seas, mountains, soils, and the air we breathe.

Nature is the system that sustains life, providing what we need to live: clean water, food, fresh air, a balanced climate, raw materials, and landscapes that inspire well-being. **Caring for nature means caring for our own survival and the quality of life of future generations.**



Biodiversity, or biological diversity, represents the variability of all life forms on Earth - from differences between genes within the same species to the variety of species and ecosystems (Swed-Bio, 2025). It is fundamental to the proper functioning of nature, helping ecosystems recover from changes and extreme events, such as droughts and floods, as well as ensuring the provision of essential ecosystem services, such as pollination, seed dispersal, and nutrient cycling (Enel, 2024; BPBES, 2025). Conserving biodiversity is therefore about caring for the environmental balance and well-being of people, since our food, economy, and climate depend on it.



Climate refers to the statistical average of atmospheric conditions in a region over long periods (30 years or more), considering variables such as temperature, precipitation, and wind (IPCC, 2023). Climate change represents changes in the patterns of these variables that impact the functioning of ecosystems and modify both the hydrological cycle and the carbon cycle, compromising climatic and ecological balance (Artaxo, 2022).



Water, through the hydrological cycle, regulates water availability in ecosystems and sustains terrestrial and aquatic life. Climate change, by altering temperature and precipitation patterns, directly affects the distribution and renewal time of water, intensifying droughts, floods, and water shortages in various regions (FAO, 2022).

REVEALING BIODIVERSITY: OUR FAUNA AND FLORA

Fauna and flora represent, respectively, the set of animals and the set of plants in a determined region. In particular, fauna encompasses different groups of invertebrates (e.g., mosquitoes, snails, spiders, ants) and vertebrates (e.g., fish, frogs, snakes, birds, monkeys), which are distributed across a wide variety of environments.

reflected in the richness of the main groups of vertebrates, which make Brazilian territory a true mosaic of unique ecosystems.

In this context, Brazil stands out as the most biodiverse country, home to between 15% and 20% of all global biological diversity (UNEP, 2019) and with a high rate of endemism (i.e., species that occur exclusively in our country). This immense variety of life forms is

Brazilian flora, in turn, has more than 50,000 cataloged species (IPCC, 2023; Flora e Funga do Brasil, 2025), many of which are endemic to different biomes such as the Amazon, Cerrado, and Atlantic Forest. This plant diversity sustains vital ecosystem services but is increasingly threatened by deforestation and habitat degradation.

(ICTIOFAUNA)

FISH

The main group of aquatic vertebrates and the most numerous worldwide, fish are found in rivers, lakes, and oceans. In Brazil, there are more than 5,000 registered species (including freshwater and marine fish), making it the richest country in South America (Vieira, 2023; FishBase, 2025). It is estimated that about 50% of freshwater species are endemic to our country.

(HERPETOFAUNA)

AMPHIBIANS

These include animals popularly known as toads, tree frogs, frogs, blind snakes, and salamanders, most of which have a biphasic life (partly in water and partly on land) and are important bioindicators of environmental quality. Brazil stands out for having the world's greatest diversity of this group, with more than 1,100 species, over 80% of which are endemic (Segalla et al., 2021; Frost, 2025).

(HERPETOFAUNA)

REPTILES

A diverse group comprising snakes, lizards, tortoises, turtles, and alligators. They were the first animals to dominate the terrestrial environment thanks to their hard-shelled eggs and impermeable skin covered with scales. Brazil ranks third in reptile diversity, with 856 species, approximately 65% of which are endemic (Guedes et al., 2023).

(AVIFAUNA)

BIRDS

Known for the beauty of their feathers, birds are the group of animals that have mastered the ability to fly. With over 2,000 species, Brazil ranks third in the world in bird diversity, with approximately 13% endemic species (Piacentini et al., 2015).

(MAMMIFERA)

MAMMALS

Highly diverse, they include terrestrial, aquatic, and flying species, such as jaguars, ant-eaters, monkeys, whales, and bats. Currently, more than 800 species of mammals (small, medium, and large) are registered in Brazil, distributed throughout all of our country's biomes, with almost 35% of these species being endemic (Abreu et al., 2024).

Endemicism... Endemic species... do you understand what that means?

Endemicism is when a species lives only in a certain geographical region (it can be a biome, a river basin, a river, a mountain) and is not found naturally anywhere else on the planet. Therefore, species that have a distribution with some spatial restriction/delimitation are considered endemic (e.g., endemic to the Atlantic Forest, endemic to the Mantiqueira Mountains, endemic to the São Francisco River).

Learn about some endemic species and their distributions



- The pirá (*Conorhynchos conirostris*) is a fish endemic to the São Francisco River basin; it currently occurs in the upper-middle São Francisco River region (main channel and lower reaches of major tributaries) in the state of Minas Gerais (ICMBio, 2026).
- The blue-tailed calanguinho (*Micrablepharus atticolus*) is endemic to the Cerrado and occurs in open-land plateau areas, where it forages among grasses and leaf litter.
- The gray-headed broadbill (*Mionectes rufiventris*) is a bird endemic to the Atlantic Forest and is considered a specialist of the interior of well-preserved forests (WikiAves, 2025).
- The pink jequitibá (*Cariniana legalis*) is endemic to Brazil and occurs in the northeast, southeast, and south of the country, especially in the Atlantic Forest biome.

Endangered species: how are they classified?

Red Lists of endangered species classify species according to their risk of extinction in the wild, based on internationally recognized scientific criteria applied at different geographic scales. These criteria guide both global assessments, such as those by the International Union for Conservation of Nature (IUCN), and national (MMA, 2022) and state-level (e.g., COPAM, 2010 in Minas Gerais) lists, prepared by competent agencies, which consider ecological and biogeographic particularities as well as regional pressures on the species. The criteria assess factors such as population size and trends, range, habitat fragmentation, and intensity of threats (e.g., hunting, deforestation, pollution).

The categories range from "Least Concern" (LC) to "Extinct" (EX), including Vulnerable (VU), Endangered (EN), and Critically Endangered (CR). This classification guides conservation policies, the prioritization of efforts, and environmental monitoring, serving as an essential tool for protecting biodiversity and preventing further extinctions. For clarification, the acronyms presented for each category correspond to the English categories indicated by the IUCN and are also used at the national level and in the different Brazilian states.

Extinct	Threatened	Non-Threatened
EX Extinct	CR Critically endangered	NT Near Threatened
EW Extinct in the wild	EN Endangered	LC Least concern
	VU Vulnerable	

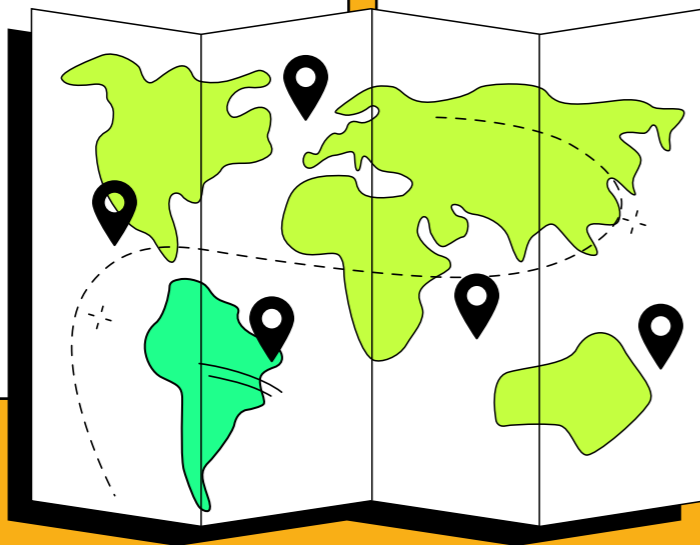
FUN FACT: WHY DO ANIMALS MIGRATE?

Migration is a periodic and predictable movement of individuals between different geographic areas, usually in search of better conditions for feeding, reproduction, or survival. It occurs in virtually all major groups of vertebrates, but is particularly memorable among fish and birds, which have turned this movement into a true survival strategy.



MIGRATORY FISH - TRAVELERS OF THE WATERS

In aquatic environments, migration is deeply linked to the reproductive cycle and environmental conditions of the water, such as temperature, oxygenation, and currents. Some fish undertake journeys that can exceed thousands of kilometers, navigating by currents, magnetic fields, chemical odors, and even the position of the sun.



MIGRATORY BIRDS - TRAVELERS OF THE SKY

In the world of birds, migration is a spectacle of endurance and precision. Every year, billions of birds migrate to other regions or even across continents, guided by inherited instincts and environmental cues — such as day length, air currents, and the Earth's magnetic field. These journeys ensure that birds find safe, food-rich locations during the summer and warmer refuges in the winter.

Both fish and birds demonstrate that migration is a survival strategy shaped by evolution. Migration allows species to take advantage of what each season has to offer: food, climate, shelter, and safe breeding grounds. But it also reveals how the integrity of ecosystems — free-flowing rivers, forests, wetlands, and preserved coastlines — is essential to maintaining these cycles.

When a river is dammed or a resting area is destroyed or altered, it is not just an animal's path that is lost: it is an entire network of ecological relationships that is severed. Protecting migration routes is, therefore, protecting the continuity of life.

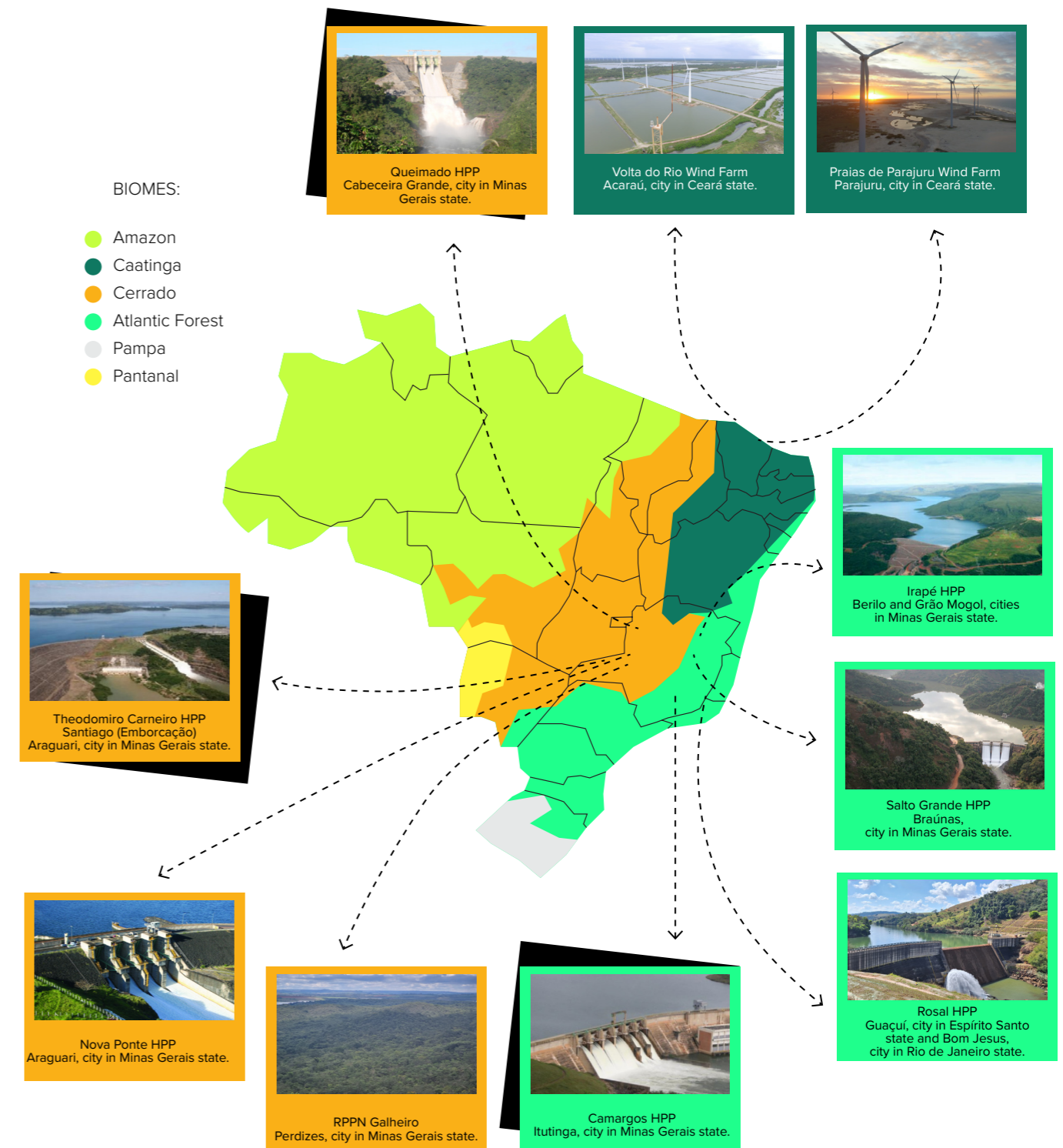
WHERE WE ARE, THE FAUNA WE FIND

Considering our extensive operations in Brazil, in different biomes (such as the Atlantic Forest and the Cerrado, mainly), in the areas of each of our units we find and study the diversity of animals that live there.

Come closer and discover this wealth too:

BIOMES:

- Amazon
- Caatinga
- Cerrado
- Atlantic Forest
- Pampa
- Pantanal

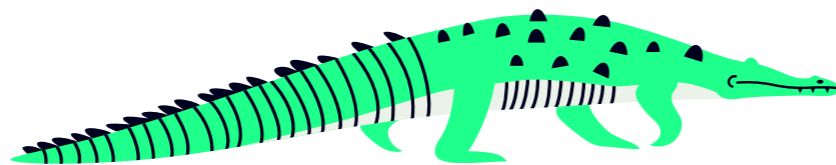


The QUEIMADO Hydroelectric Power Plant (HPP)

is located between the municipalities of Cabeceira Grande and Unáí (MG), Cristalina and Formosa (GO), in the São Francisco River basin, in a region with forest and savanna formations within the Cerrado. In this region, **87 species of fish** have been recorded, 26 of which are considered endemic to the São Francisco River basin, such as the lambari-cahcorra (*Roebooides xenodon*), the piaba (*Phenacogaster franciscoensis*), the peixe-sapo (*Lophiosilurus fowleri*), and 16 are migratory – such as the piauji (*Leporinus taeniatus*), the piau-três-pintas (*Megaleporinus reinhardti*), the tabarana (*Salminus hilarii*), and the curimba (*Prochilodus costatus*). For **herpetofauna**, 111 species were recorded, including **55 amphibians and 56 reptiles**. Noteworthy are 19 species considered endemic to the Cerrado, such as the monkey tree frog (*Pithecopus azureus*), the warty toad (*Odontophrynus cultripes*), the blue-tailed skink (*Micrablepharus atticolus*), the Cerrado

jararaca (*Bothrops moojeni*), and the chumbinho snake (*Trilepida koppesi*).

There are also 326 species of birds, eight of which are classified as endangered (according to the state list of MG (COPAM, 2010), national (MMA, 2022) and/or global (IUCN, 2025), such as the red-arara (*Ara chloropterus*), the crested curassow (*Crax fasciolata*), the chestnut-bellied guan (*Penelope ochrogaster*), the wagler's woodcreeper (*Lepidocolaptes wagleri*), the curió (*Sporophila angolensis*), and the spoon-bill (*Platalea ajaja*). For the mammals, 104 species were recorded, of which 11 species are considered endangered, such as the maned wolf (*Chrysocyon brachyurus*), ocelot (*Herpailurus yagouaroundi*), jaguarundi (*Leopardus pardalis*), otter (*Lontra longicaudis*), fox (*Lycalopex vetulus*), giant anteater (*Myrmecophaga tridactyla*), puma (*Puma concolor*), tapir (*Tapirus terrestris*), and the Cerrado bat (*Lonchophylla dekeyseri*).



The NOVA PONTE HPP

is located on the Araguari River, in the Paranaíba River basin, in the municipality of Nova Ponte (MG), completely within the Cerrado domain. The reservoir for this plant also permeates the municipalities of Santa Juliana, Pedrinópolis, Iraí de Minas, and Perdizes (MG). This region is located in areas of importance for biodiversity conservation, especially for herpetofauna, avifauna, and mammals (IDE-SISEMA, 2024).

Thirty species of fish have been recorded in the area around this plant, including five migratory species: the piapara (*Megaleporinus piavussu*), the mandi (*Pimelodus microstoma*), the curimba (*Prochilodus lineatus*), the mandi-amarelo (*Pimelodus cf. maculatus*), piau-três-pintas (*Leporinus frederici*) – the only species endemic to the basin, and seven exotic species, notably the red piranha (*Pygocentrus nattereri*), the yellow peacock bass (*Cichla kelberi*) and the giant peacock bass (*Cichla temensis*), species that are important for sport fishing and have great predatory potential. For **herpetofauna**, 39 species were recorded, including **26 amphibians and 13 reptiles**, among which 13

species endemic to the Cerrado stand out, such as the Cerrado arrow frog (*Ameerega flavopicta*), the Cerrado jararaca (*Bothrops moojeni*), the papa-vento (*Enyalius capetinga*), and one from the Atlantic Forest – the two-striped chameleon (*Enyalius bilineatus*).

For **birdlife**, **205 species** were identified, of which only two are classified as endangered at the state level COPAM (2010): the blue-and-yellow macaw (*Ara ararauna*) and the banded curassow (*Crax fasciolata*). Also noteworthy are five species endemic to the Cerrado, such as the river wagtail (*Clibornis rectirostris*) and the helmeted tit (*Antilophia galeata*), and four endemic to the Atlantic Forest, such as the juruva (*Baryphthengus ruficapillus*) and the flautim (*Schiffornis virescens*). For **mammals**, **56 species** were recorded, 11 of which are in threat categories, such as the maned wolf (*Chrysocyon brachyurus*), the giant anteater (*Myrmecophaga tridactyla*), and the tapir (*Tapirus terrestris*), and only two are endemic to the Cerrado and Caatinga biomes—the pampas fox (*Lycalopex vetulus*) and the capuchin monkey (*Sapajus libidinosus*).

The GALHEIRO PRIVATE NATURAL HERITAGE RESERVE (RPPN)

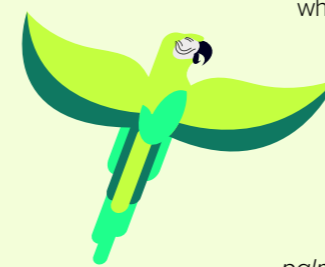
was created in accordance with legal requirements due to the construction of the Nova Ponte Hydroelectric Plant. It is located in the upper part of the reservoir and includes the Quebra-Anzol and Galheiro rivers within its boundaries, in the municipality of Perdizes (MG). Fourteen species of **herpetofauna** were recorded in this conservation area, including **eight amphibians and 12 reptiles**, three of which are endemic to the Cerrado. **Seventy-one bird species** were identified, one of which is endemic to the Cerrado (soldadinho) and three are from the Atlantic Forest

(abre-asa-de-cabeça-cinza, juruva, and flautim), with the mutum-de-penacho being the only species threatened with extinction. For **mammals**, **31 species** were recorded, eight of which are classified as endangered, according to state (COPAM, 2010), national (MMA, 2022), and global (IUCN, 2025). Among them are the cateto (*Dicotyles tajacu*), the puma (*Puma concolor*), and the giant armadillo (*Priodontes maximus*).



The VOLTA DO RIO WIND FARM (WF)

is located in the Caatinga biome in the municipality of Acaraú (CE), on the lower course of the Acaraú River near its mouth, where the coast is bathed by the Atlantic Ocean. **Seventy-six bird species** have been recorded in this region, with emphasis on migratory species: semipalmated sandpiper (*Charadrius semipalmatus*), black-bellied plover (*Pluvialis squatarola*), semipalmated sandpiper (*Tringa semipalmata*), greater yellowlegs (*Tringa melanoleuca*),



yellow-legged sandpiper (*Tringa flavipes*), curlew sandpiper (*Numenius hudsonicus* – endangered species), Spotted Sandpiper (*Actitis macularius*), Turnstone (*Arenaria interpres*), Sanderling (*Calidris alba*), Grey Plover (*Limnodromus griseus*), and Little Stint (*Calidris pusilla* – endangered species). Also, the Jamaican sparrow (*Icterus jamaicai*) – the only species endemic to the Caatinga recorded in the area. As for **flying mammals**, only **eight species** of bats were recorded.

The PAJURU-BEBERIBE 69kV TRANSMISSION LINE (TL)

is 34 km long, running from the Praias de Parajuru Wind Farm to the urban area of Beberibe (CE), a region located in the Metropolitan Basin of Ceará and the Caatinga biome. In this area, **173 species of birds** have been recorded, including six endangered species – the muscovy duck (*Cairina moschata*), the little stint (*C. pusilla*), the curlew sandpiper (*N. hudsonicus*), Sanderling (*S. antillarum*), Wilson's Plover (*C. wilsonia*), and White-rumped Sandpiper (*L. griseus*). Ten species endemic to the Caatinga were also recorded, such as the Caatinga warbler (*Radinopsyche sellowi*), the Caatinga warbler (*Radinopsyche sellowi*), the northeastern tail-balancer (*Polioptila atricapilla*) and the casaca-decouro (*Pseudoseisura cristata*).

migratory and one is endangered, while **37 species** have been recorded in the reservoir of the **Irapé Hydroelectric Plant** (Jequitinhonha River), including 9 endemic and 6 migratory species. The **Nova Ponte HPP** has **30 species** (5 migratory), while the **Queimado HPP** reveals a significant biodiversity of **87 species**, 26 of which are endemic to the São Francisco River basin and 16 migratory. The **Theodomiro Carneiro Santiago HPP**, meanwhile, holds the greatest recorded biodiversity richness, with **88 species**, including 18 endemic to the Paranaíba River basin, 9 migratory, and one threatened; in parallel, the **Salto Grande HPP** (Doce River) is home to **39 species**, including 2 threatened and 5 migratory species, and the **Rosal HPP** rounds out the group with **30 species**, of which 2 are endemic to coastal basins and 2 exhibit migratory behavior.

In terms of **ichthyofauna**, there is a richness of **50 species** at the **Camargos Hydroelectric Plant**, located on the Rio Grande, of which 5 are considered

SNAPSHOTS OF OUR FAUNA →



Dogfish
(*Acestorhynchus britskii*)



Lambari-cachorra
(*Roeboides xenodon*)



Piaba
(*Phenacogaster franciscoensis*)



Toadfish
(*Lophiosilurus fowleri*)



Trahira
(*Hoplias malabaricus*)



Curimba
(*Prochilodus costatus*)



Basin White-lipped Frog
(*Leptodactylus sypfax*)



Monkey frog
(*Pithecopus azureus*)



Wart frog
(*Odontophrynus cultripes*)



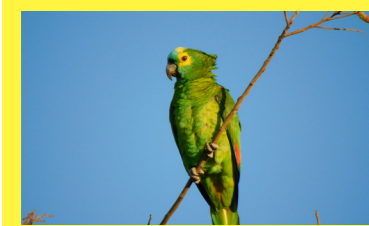
Black-and-white Tegu
(*Salvator merianae*)



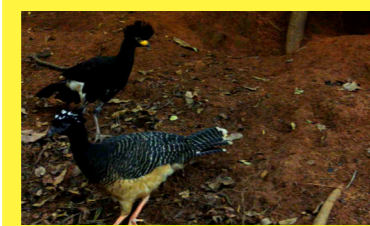
Brazilian Lancehead
(*Bothrops moojeni*)



Brazilian Lancehead
(*Trilepida koppesi*)



Turquoise-fronted Amazon
(*Amazona aestiva*)



Bare-faced Curassow
(*Crax fasciolata*)



Jabiru
(*Jabiru mycteria*)



Ultramarine Grosbeak
(*Cyanoloxia brissonii*)



King Vulture
(*Sarcoramphus papa*)



Roseate Spoonbill
(*Platalea ajaja*)



Maned Wolf
(*Chrysocyon brachyurus*)



Common Brown Brocket
(*Subulo gouazoubira*)



Ocelot
(*Leopardus pardalis*)



Neotropical Otter
(*Lontra longicaudis*)



Giant Anteater
(*Myrmecophaga tridactyla*)



Puma
(*Puma concolor*)



Hoary Fox
(*Lycalopex vetulus*)



Lowland Tapir
(*Tapirus terrestris*)



Dekeyser's Nectar Bat
(*Lonchophylla dekeyseri*)

And where does all this data come from? Our knowledge about the occurrence of fauna species in the areas where we operate comes from various actions carried out by Cemig, including fauna monitoring programs (ichthyofauna, herpetofauna, avifauna, and mammals) and fauna enhancement programs, among others. Want to know more? See **Section 4** to learn more about these programs and other actions we take to benefit wild animals.

THE FLORA THAT SHELTERS US

Cemig is present in all Brazilian continental biomes – Amazon, Cerrado, Atlantic Forest, Caatinga, Pampa, and Pantanal – territories that are home to an extraordinary diversity of landscapes and plant formations.

Our broad presence reflects the scale of our operations and, at the same time, requires environmentally responsible action, especially because the implementation of our units (e.g., power plants and power

transmission lines) generates impacts on these environments, such as deforestation. Aware of these challenges, Cemig adopts environmental mitigation and compensation measures, focusing on the conservation and recovery of native vegetation throughout the territories where it operates (see **Section 4**).

LEARN MORE ABOUT BRAZILIAN TERRESTRIAL BIOMES

According to the IBGE, biomes are geographic regions characterized by plant and animal life that share similar geoclimatic conditions, ecological histories, soil types, and vegetation formations. Each biome expresses its own unique mode of interaction between nature and humans, being one of the foundations of Brazil's environmental and cultural diversity.

Amazon: Brazil's largest biome, occupying nearly half of the country's territory. It is characterized by dense, humid forests, extensive rivers, and a wide variety of species.

Cerrado: known as the "Brazilian savanna", it is home to vegetation rich in thick-barked trees with deep roots, adapted to fire and drought. It is considered the source of Brazil's water, as it is home to the headwaters of major river basins.

Atlantic Forest: stretching along the country's coastline, it is one of the world's most threatened biomes due to historical human occupation. Although fragmented, it still harbors a great diversity of endemic species and ecosystems of ecological and social value.

Caatinga: this is the only biome exclusive to Brazil, with vegetation adapted to the semi-arid climate, characterized by cacti, thorny shrubs, and trees that shed their leaves during the dry season. Its biodiversity is unique and plays an essential role for life in the country's North-east region.

Pampa: located in the far south of the country, it is characterized by natural grasslands and low-lying vegetation, which support a rich variety of wildlife and traditional livestock farming.

Pantanal: recognized as the largest wetland on the planet, it has natural cycles of floods and droughts that maintain a delicate balance between rivers, fields, and forests, supporting a lush fauna.

The region under the influence of the **THEODOMIRO CARNEIRO SANTIAGO (EMBORÇAÇÃO) HPP**, in the Triângulo Mineiro, is formed by plateaus and long slopes with steep gradients and is part of a complex vegetation mosaic, with forest formations (cerradão, seasonal forest, and riparian forests) and savanna formations (natural fields, veredas, and cerrado in the strict sense), but with high anthropization and fragmentation of natural environments, especially due to agricultural activities. A study conducted in this region recorded **112 plant species** belonging to 42 botanical families, with emphasis on two endangered species - the peroba-do-campo (*Paratecoma peroba*) and the jacarandá-da-bahia (*Dalbergia nigra*).

In the **GALHEIRO RPPN**, the native vegetation forms a mosaic of phytophysionomies, which includes wooded savanna, arborized savanna, gallery forests, semi-deciduous seasonal forest, and exotic pastures.

Covering approximately 2,700 hectares (ha), the area is of high biological importance, harboring a valuable plant heritage for the Triângulo Mineiro region and for Brazil. The latest inventory estimated more than **1,200 plant species** belonging to 148 families.

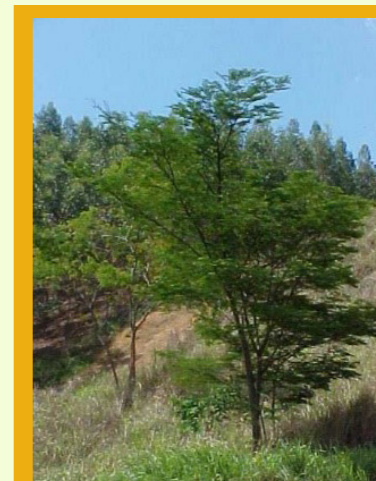
The **FATURA RPPN** is located in the municipality of Capelinha (MG), in the Jequitinhonha Valley, in a transition region between the Atlantic Forest and Cerrado biomes, with a predominance of Seasonal Semideciduous Forest. It covers an area of 1,455 ha and is home to **278 plant species** belonging to 55 botanical families, according to a study conducted in the region by the Federal University of the Jequitinhonha and Mucuri Valleys (UFVJM). Among the records made, the species bicuíba-branca (*Virola bicuhyba*) stands out, considered endangered and endemic to the Atlantic Forest.

SNAPSHOT OF OUR FLORA →



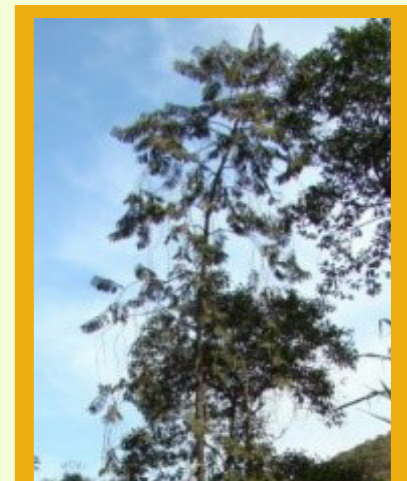
Peroba-do-campo
(*Paratecoma peroba*)

It is a hardwood tree, resistant and of excellent quality, widely used in construction and carpentry. It suffers from pressure from logging and habitat loss and is considered endangered in some regions.



Bahia rosewood
(*Dalbergia nigra*)

A tree native and endemic to the Atlantic Forest, distributed from northeastern to southern Brazil. Its wood, which is dense and dark in color, is highly valued in the manufacture of fine furniture and musical instruments.



Bicuiba-branca
(*Virola bicuhyba*)

It produces light wood that is easy to work with, used in construction and furniture making, and its seeds are rich in aromatic oil. It is endangered due to deforestation and selective logging.

Source: Árvores do Brasil.



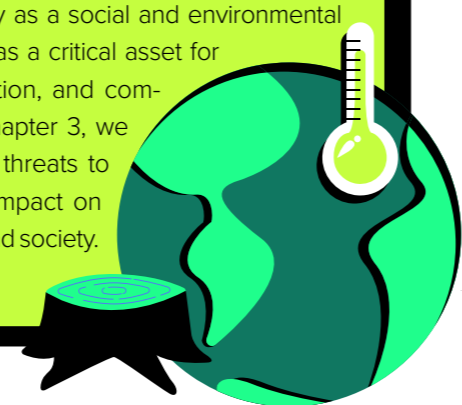
UNDERSTAND THE BIODIVERSITY CRISIS

Global indicators have pointed to an accelerated decline in the diversity of life on Earth, meaning that we are losing different forms of life and, as a result, we are witnessing species extinctions at a faster than natural rate, which affects the stability of ecosystems and human well-being. The main drivers of this crisis include changes in land use, overexploitation of resources (overfishing), urbanization, the introduction of invasive species, and climate change (Hald-Mortensen, 2023).

Between 1970 and 2020, monitored wildlife populations declined by 73%, according to the Living Planet Index (LPI), which analyzed about 35,000 population trends for 5,495 species, including amphibians, birds, fish, mammals, and reptiles. Latin America and the Caribbean recorded the largest regional loss: a dramatic 95% decline (WWF, 2024). This decline is not limited to fauna. Global flora also faces increasing

pressures: an estimated 40% of plant species are at risk of extinction, especially in tropical regions (Antonelli et al., 2023).

In this context, Brazil, despite standing out as a megadiverse country, also presents a worrying picture: according to the *International Union for Conservation of Nature* (IUCN), almost 2,500 species of plants, animals, and fungi found in our country are classified as threatened with extinction (Pesquisa FAPESP, 2024). This scenario highlights the idea that biodiversity needs to be integrated into business strategies, not only as a social and environmental responsibility, but as a critical asset for resilience, innovation, and competitiveness. In Chapter 3, we address the main threats to nature and their impact on the environment and society.



THE SOCIAL ASPECT IS ALSO PART OF IT

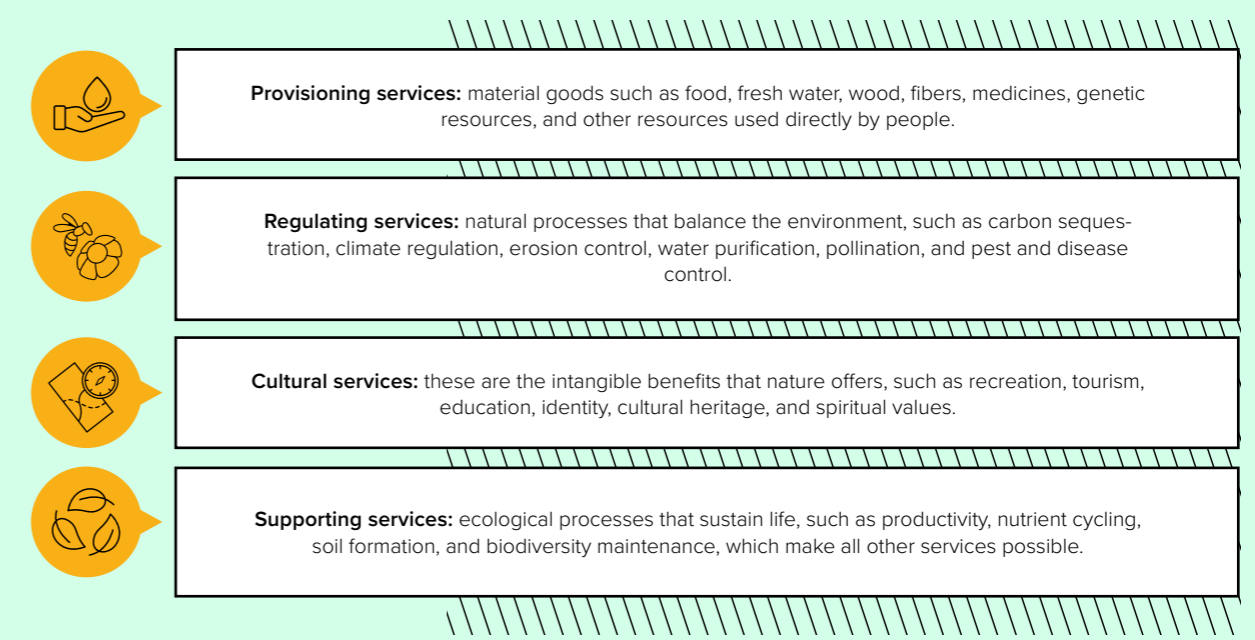
In addition to the elements that make up nature — such as soil, water, air, fauna, and flora —, human beings are also part of it and depend on its resources to live, while at the same time exerting influence on its ecosystems. This interdependence is highlighted by the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES, 2019), which places the relationship between humanity and nature at the center of both the crisis and the solutions to biodiversity loss, emphasizing that human well-being depends directly on the integrity of ecosystems and that addressing this crisis requires profound social and cultural changes.

This relationship shows that the environment and society form an integrated system in which ecological, economic, and cultural aspects are interconnected. Each person has a fundamental role in the sustainability of ecosystems and is capable of living in harmony with nature, provided they are taught to do so (Unesco, 2022).

In this sense, Cemig develops several socio-environmental initiatives focused on strengthening the participation of communities that live or work in the areas covered by hydroelectric projects, whether in the vicinity of reservoirs, transmission lines, or energy distribution areas, as well as promoting educational practices aimed at environmental conservation. Among these initiatives, the following programs stand out: **Environmental Education, Social Communication, Participatory Management, and the Integrated Plan for Relations with Communities Surrounding Hydroelectric Plants (PIRCEH)**, as well as **EcoCiente (Cemig's Corporate Environmental Education Program)**, which promote dialogue, awareness, and the development of sustainable projects. These initiatives are described in greater detail in **Section 4**.

HAVE YOU HEARD OF ECOSYSTEM SERVICES?

Ecosystem services are ecological functions or processes that have monetary or non-monetary value for individuals or society (IPCC, 2023). In other words, they represent benefits that people obtain from nature, such as clean water, food (fruits, roots, animals, honey, vegetables), raw materials (wood, biomass, plant oils), climate regulation, and well-being (Artaxo, 2022), and are classified as:



The valuation and conservation of ecosystem services are directly related to Cemig's activities, especially in its interface with essential natural resources such as water. Operating in areas with rivers, reservoirs, riparian forests, and recharge areas, the company recognizes that its sustainability depends on preserving the benefits these ecosystems offer.

Water is a resource related to several ecosystem services that are fundamental to the energy sector, especially for hydroelectric power generation, which represents a large part of Cemig's business model. The regulation of flow and precipitation patterns, self-purification, and soil and sediment retention ensure not only the direct supply of fresh water, but also the stability and resilience of associated aquatic and terrestrial ecosystems.

These intrinsically interconnected processes contribute to maintaining water quality, aquifer recharge, and control of extreme events such as droughts and floods, which directly impact energy generation

capacity. Aquatic ecosystems and associated areas, such as riparian forests and aquifer recharge zones, play a critical role in sustaining these services, ensuring the continuous flow and self-purification of water, which are essential for power generation, especially for hydroelectric plants.

The monitoring programs and conservation actions implemented by Cemig seek both to ensure compliance with legal requirements and to promote conscious resource management, strengthening the understanding of the importance of ecosystem services in all spheres involved. This integration between environmental management and natural resource conservation is fundamental to ensuring the continuity of the processes that sustain energy generation and the well-being of the communities present in the areas of influence of the projects. These actions will be detailed in **Section 4**.

O3. MAIN THREATS TO NATURE



AWARE OF OUR ACTIONS

Cemig recognizes that all human activity interacts with nature, especially those related to energy generation, transmission, and distribution, which involve complex interfaces with terrestrial and aquatic ecosystems. Conscious of our actions, we understand that these interactions can have potential impacts on biodiversity, soil, water resources, and climate.

This understanding is the starting point for identifying the dependencies, risks, and opportunities associated with our operations, enabling us to act in an increasingly responsible and strategic manner in the face of environmental challenges.

Aware of its responsibilities and the possible impacts on water, aquatic and terrestrial fauna, flora, soil, and the social environment, Cemig adopts practices aimed at preventing, reducing, mitigating, and compensating for environmental impacts, aligning itself with a

stance of continuous improvement and commitment to sustainability (see **Section 4**).

In this sense, projects and programs are developed to minimize the adverse effects resulting from our company's different types of assets - such as hydroelectric plants, small hydroelectric plants, wind and solar farms, and transmission and distribution lines - reinforcing our role in balancing energy development with environmental conservation.

The following are the main pressures on nature - in a broad context and those associated with Cemig's activities - which guide and underpin the responses that will be detailed in the next sections.

FIVE DRIVERS OF THE BIODIVERSITY CRISIS

Use and alteration of terrestrial, aquatic, and marine ecosystems



This driver refers to habitat loss caused by deforestation, agricultural/urban expansion, and flooding areas. In the context of Cemig, most of its assets are located in sensitive biomes such as the Cerrado and Atlantic Forest, where changes in land use directly affect the flora and

habitats of terrestrial and semi-aquatic fauna. The area occupied by reservoirs and other infrastructure can generate impacts related to habitat loss. In addition to direct impacts on biodiversity, these changes negatively influence essential services such as water regulation and soil and sediment retention, affecting the stability of terrestrial and aquatic ecosystems and, consequently, the company's own energy generation, transmission, and distribution operations.

It is essential to highlight that these pressures, often generated outside the company's direct area of influence, are cumulative in nature and can exacerbate existing impacts, reinforcing the importance of complying with current environmental legislation, such as the Forest Code (Law No. 12,651/2012), and strengthening local environmental policies.

Aware of these impacts, Cemig coordinates remediation and compensation actions. Initiatives include planting seedlings, recovering degraded areas, controlling erosion, and investing in preserved areas, complemented by wildlife monitoring and micro-basin recovery programs, such as PTRF (Technical Project for Flora Restoration), PRAD (Program for the Recovery of Degraded Areas), and compensation related to deforestation and land regularization (all of these actions are detailed in **Section 4**).

Climate change

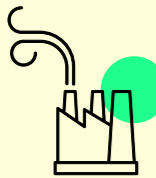


Although energy generation (hydroelectric, wind, and solar) is not closely associated with greenhouse gas (GHG) emissions due to its renewable nature, the repair of infrastructure in Cemig's assets, and the transmission and distribution of energy can release GHGs due

to combustion in power transformers and the energy used for heating, cooling, and lighting facilities and equipment, contributing to air pollution.

Aware of the importance of an integrated approach to the climate-nature nexus, Cemig is already active in the climate agenda and is working to reduce greenhouse gas emissions, climate risks, and develop decarbonization and adaptation strategies. A highlight is our Cemig Climate Action Plan (see the full text of PLAC) and Cemig's commitment to developing emission reduction targets based on Science-Based Targets (SBTi) guidelines. More details on these actions are described in **Section 4**.

Pollution (air, soil, water)



Pollution is one of the main environmental pressures, involving the introduction of contaminants into the air, soil, and water, as well as the generation of solid waste that also compromises the quality of ecosystems. These pollutants can directly affect the health

of flora, fauna, and the functioning of ecosystem services, altering natural processes and reducing the capacity of environments to sustain economic and social activities in a balanced and sustainable manner.

In the context of Cemig's operations, the impacts of pollution occur sporadically, but with different levels of relevance depending on the environment affected. **Air pollution** is primarily related to vehicle and aircraft emissions. 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 under five years, which reduces fuel consumption. Additionally, one of the initiatives implemented in 2024 was the mandatory use of ethanol to fuel the light fleet, contributing to a significant reduction in the consumption of non-renewable fuel. There was also an increase in the consumption of S10 diesel, a fuel with a lower sulfur content, among others.

Noise pollution is generally associated with the operation of heavy machinery and equipment in power plants and substations and is considered to have a low scope and localized impact. **Light pollution** occurs in an even more restricted manner, resulting from operational structures that use continuous artificial lighting.

Power generation operations also produce solid waste, sanitary and industrial effluents, originating from both operational and maintenance activities. Although the materiality of this waste is considered low when compared to other sectors, Cemig adopts a rigorous waste management policy. This management includes: the correct treatment, segregation, and disposal of hazardous and non-hazardous waste, as well as continuous monitoring of environmental quality and ichthyofauna, establishing research partnerships, and adopting innovative practices to improve its treatment and reuse processes (more details on these actions in **Section 4**).

Invasive alien species



Invasive alien species are among the main global pressures on biodiversity. They represent introduced organisms that establish themselves in environments where they did not occur naturally, often causing significant ecological imbalances, such as competition with

native species, habitat alteration, and reduction of local diversity.

In the specific case of Cemig, although the company is not responsible for the introduction of these species, it recognizes the threat posed by the golden mussel (*Limnoperna fortunei*), an invasive Asian mollusk that has spread rapidly through Brazilian rivers, affecting native species, and causing damage to infrastructure, such as the functioning of reservoirs and damage to

hydraulic equipment.

The golden mussel arrived in Brazil, possibly in the ballast of ships from Asia in the late 1990s, quickly colonizing rivers in the La Plata Basin due to its high reproduction rate and ability to adhere to submerged surfaces.

The detection and control of this species involve rigorous monitoring of infested areas, the use of physical and chemical methods to contain its spread, and the implementation of national control plans that guide coordinated actions to minimize its negative effects.

In this scenario, Cemig contributes to combating the invasion of the golden mussel through its monitoring, the dissemination of booklets and reports on its website about control measures (see more details in **Section 4**).

Overexploitation of species and resources (fishing, hunting, unsustainable extraction)



This pressure is associated with the excessive exploitation of natural resources beyond the capacity of ecosystems to regenerate, compromising fauna and flora populations and affecting the ecological integrity of environments. Overexploitation occurs, for example, through

predatory fishing, illegal hunting, and plant extraction without management practices, leading to reduced biodiversity and the loss of essential ecosystem services,

such as climate regulation, pollination, and habitat maintenance.

However, this pressure is not considered material to Cemig's operational context, since its energy generation, transmission, and distribution activities do not involve processes that directly promote the extraction or intensive use of biological resources. On the contrary, Cemig has activities within the socio-environmental programs of its projects aimed at reducing this type of impact by raising awareness among local residents.

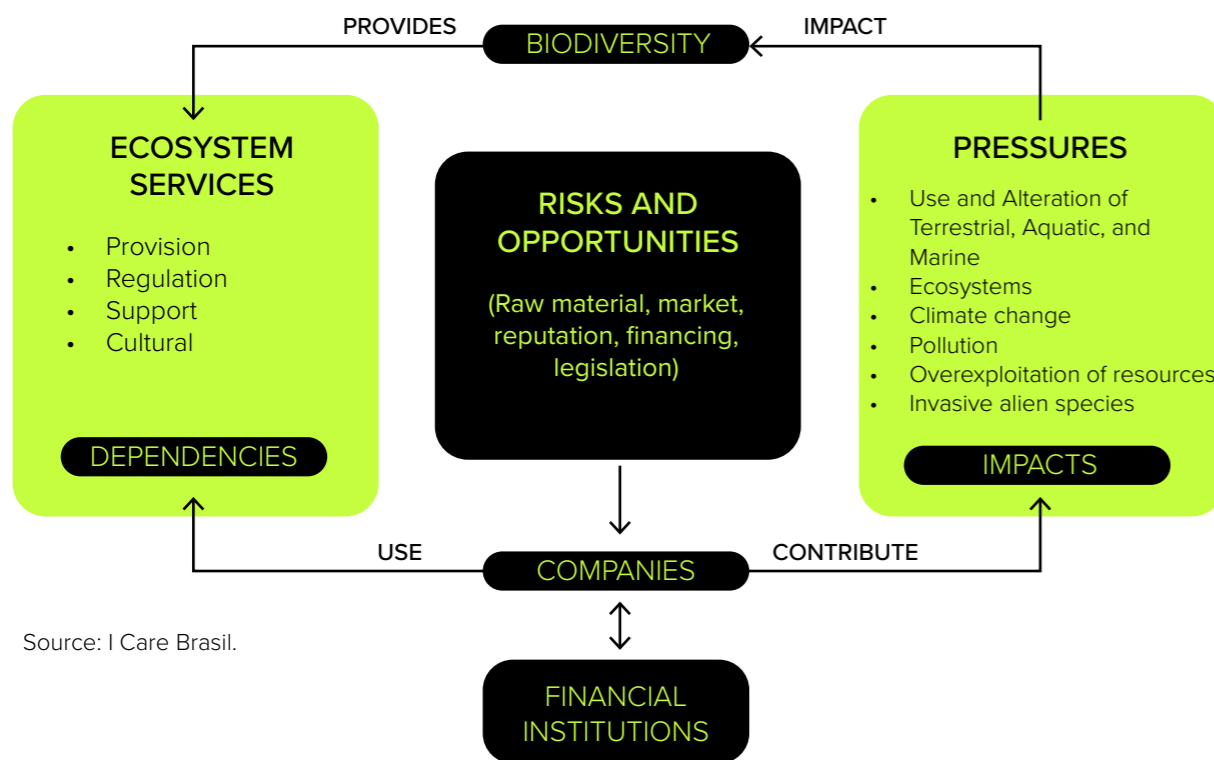


ARE YOU FAMILIAR WITH THE TERM “DOUBLE MATERIALITY”?

The concept of “**double materiality**” applied to the theme of biodiversity and business refers to a “**two-way street**,” in which a company generates potential impacts that affect ecosystems and the services they provide, while at the same time depending on these services to maintain its activities. In practice, this means that an organization needs to assess both **how much it depends on the ecosystem services provided by biodiversity** (e.g., water supply, climate regulation, support for the production chain, cultural values) and **the effects of its operations**, such as pressure on habitats, pollution, and the introduction of invasive species.

From an understanding of impacts and dependencies, the risks and opportunities associated with nature that are relevant to the company can be derived. Risks may be related to issues such as sourcing raw materials, reputation, market, or operating costs, considering the company’s degree of exposure to these aspects. Opportunities indicate possible paths to a more sustainable business model through innovation and conservation initiatives.

Double materiality therefore becomes a strategic lens: incorporating biodiversity into corporate governance, investment decisions, and value chains is not only beneficial to nature, but also ensures the longevity of operations and adds value to the organization. This reinforces the role of nature not only as a “resource” to be used, but as an integral part of the business strategy that must be intentionally managed to balance conservation, operations, and society’s demands. By adopting this approach, Cemig integrates into its planning both strategies to manage business risks and opportunities and concrete actions for prevention, mitigation, and restoration.



Source: I Care Brasil.

04. CEMIG'S RESPONSES TO PRESSURES AND IMPACTS



TAKING ACTION: THE WORLD, BRAZIL, AND CEMIG

Caring for biodiversity: from compliance with the law to building sustainable futures

Biodiversity conservation begins with something most people are already familiar with: environmental licensing. It is in this process that companies such as Cemig, when planning a new venture (e.g., power plants, transmission lines), need to assess their impact on the environment and adopt measures to avoid, minimize, restore, and compensate for environmental impacts.

This is the regulatory basis that ensures development occurs responsibly, balancing progress and preservation, whether at the national, state, or municipal level, according to the requirements of the environmental agencies corresponding to each jurisdiction. Typical actions in this process include programs for monitoring wildlife, water quality, and effluent emissions; a program for the recovery of degraded areas (known by the acronym PRAD); and the creation of conservation units, among other control, monitoring, and mitigation actions.

It is worth noting that biodiversity conservation actions are not limited to legal requirements. They have evolved into a broader set of practices involving strategic planning, science, and socio-environmental commitment, toward a more sustainable use of resources. In recent years, this movement has gained momentum with global sustainability agendas, which have placed biodiversity at the center of business decisions. Today, companies are not only evaluated for their economic performance, but also for their ability to generate environmental and social value.

In this context, international frameworks have guided this new perspective, such as the **Global Biodiversity Framework (GBF)**, which sets global targets to halt and reverse biodiversity loss; the **Global Reporting Initiative (GRI)**, within the guidelines for Sustainability Reports, which provides guidance on how companies should report their impacts on ecosystems and species; and the **Sustainable Development Goals (SDGs)**, which reinforce the global commitment to protect and restore nature. Recent initiatives such

as the **TNFD (Taskforce on Nature-related Financial Disclosures)** have broadened this vision by integrating the value of nature into metrics through the LEAP approach, which translates companies' relationship with nature into tangible indicators, integrating biodiversity into business strategy and financial management.

Thus, what was once only a regulatory obligation is now becoming a voluntary and strategic commitment. Caring for biodiversity today means managing risks, innovating, and ensuring the sustainability of companies and the territories in which they operate.

“ BIODIVERSITY IS NOT AN ISOLATED ISSUE, BUT THE FOUNDATION ON WHICH ENERGY, THE ECONOMY, AND LIFE THRIVE AND ARE SUSTAINED.”

At Cemig, this whole scenario translates into concrete actions: from strict compliance with licensing conditions (adoption of monitoring programs, reforestation activities, water quality control, and other provisions) to alignment with global sustainability agendas. This path, which starts with legal responsibility and advances toward environmental and social leadership, reflects an essential understanding that biodiversity is not an isolated issue, but the foundation on which energy, the economy, and life thrive and are sustained.


Learn about our actions

Currently, our operating facilities have Environmental Licenses in different categories. In summary, the requirements included in the operating licenses are:



In the following items, we detail the development of these programs according to our main areas of activity - water, flora, fauna, and the social environment.

Beyond legal compliance, Cemig reaffirms its responsibilities and commitments through its own policies regarding nature:



ENVIRONMENTAL POLICY
Sustainable Development

- Balance economic development, biodiversity conservation, and the use of natural resources.
- Reduce the impacts of our activities.

Legislation


- Comply with environmental laws and regulations.

Dialogue

- Raise awareness (improve communication and environmental education).

Internal Procedures

- Integrate company areas and structure processes.



BIODIVERSITY POLICY
Strategy

- Include biodiversity in planning and actions.

Impacts


- Develop activities that minimize negative impacts and maximize positive ones.

Fauna, Flora, and Water

- Implement programs with attention to vulnerable areas and endangered species.

Innovation

- Conduct research and develop technologies for biodiversity conservation.



WATER RESOURCES POLICY
Management

- Improve resource use and provide security to communities.
- Promote partnerships with public agencies and society for water conservation and preservation of water sources.

Technical Contribution

- Actively participate in the public management of water resources by contributing to bills and regulations.

Monitoring

- Conduct climatological, quantitative, and qualitative monitoring of water and sediment.

Communities

- Involve residents and other stakeholders in reservoir management.

Cemig on the international agenda

Cemig has been actively participating in various external initiatives, beyond regular licensing, as it recognizes the impacts generated by its operations and the importance of addressing environmental issues. These initiatives strengthen Cemig's commitment to sustainability and the mitigation of environmental impacts.

Since its creation in 1999, Cemig has participated in **the Dow Jones Sustainability Index (DJSI)**. We are currently the only company in the electricity sector outside Europe to be included in the DJSI, and this

international recognition reinforces Cemig's alignment with best environmental, social, and governance (ESG) practices, demonstrating that it is possible to reconcile economic value creation with social and environmental responsibility.

Since 2007, we have been reporting to **the CDP** on the risks and opportunities for our business associated with climate change and monitoring and control measures, as well as setting targets and deadlines for reducing impacts.

In 2011, we joined the **ICO2 Carbon Efficient Index (B3)**, reaffirming our commitment to transparency and efficient management of greenhouse gas (GHG) emissions.

Since 2016, we have followed the **GRI (Global Reporting Initiative)** sustainability reporting standards, covering topics such as climate change, renewable energy, water resources, local communities, and biodiversity (see our RAS, 2024).

The Climate Action Platform mobilizes members of **the Global Compact** to integrate the climate agenda into organizational strategies, promoting a resilient and carbon-neutral economy. In 2020, we became members of this initiative, highlighting our progress in the 10 principles of the Global Compact and the UN SDGs. By joining the Compact, organizations commit to sustainability, human rights, labor, the environment, and anti-corruption, contributing to the 2030 Agenda.

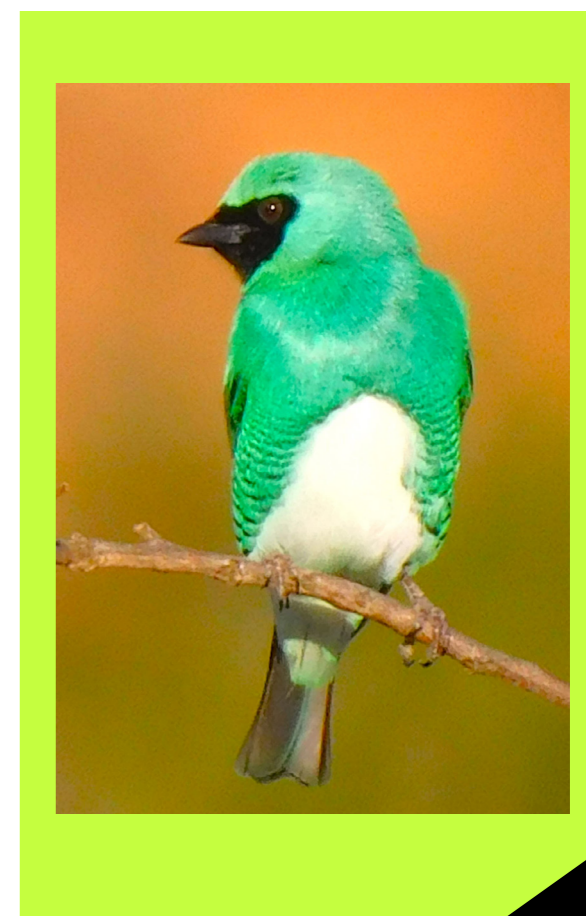
In 2022, Cemig joined the **Net Zero Ambition Movement** of the Global Compact Network Brazil, committing to ambitious, science-based climate goals aligned with SDG 13 and the Paris Agreement, integrating climate action into its business strategy.

In 2024, our company took two important steps: joining the CEBDS and the SBTi. **The Brazilian Business Council for Sustainable Development (CEBDS)** is an organization that works to empower the business sector in the transition to more sustainable business models, contributing to addressing the main socio-environmental challenges of today. **The Science Based Targets initiative (SBTi)**, on the other hand, is an initiative that guides companies to reduce emissions on a scientific basis, in line with the Paris Agreement. In January 2025, Cemig had its short-term (2030) and long-term (2040) targets approved.

More recently, and still ongoing (2024-2025), we are guided by the **TNFD** recommendations and conducting assessments in accordance with the **LEAP** approach. The TNFD is based on four interconnected pillars — Governance, Strategy, Risk Management, and Metrics and Targets, which structure how companies

assess, and report impacts, dependencies, risks, and opportunities associated with nature, providing clear information to investors and other stakeholders.

Finally, the development of the **Biodiversity Action Plan** will mark another decisive step by Cemig in consolidating its environmental commitments. By applying the LEAP approach, the company is moving forward in organizing structured actions that strengthen sustainability, increase business resilience, and integrate biodiversity into its corporate strategy. This movement reaffirms Cemig's responsibility to protect nature, reduce impacts, and promote actions that are increasingly aligned with global best practices.



FOR THE SAKE OF OUR WATERS

Water is the link that connects energy generation, ecosystem balance, and life in all its diversity. In Brazil, a country that is home to about 12% of the planet's surface freshwater, this resource is both a natural heritage and a strategic asset for economic and social development.

Recognizing its importance, the country established, through **Law No. 9,433/1997**, the **National Water Resources Policy (Water Law)**, which defines water as a public and limited resource with economic value. This policy introduced innovative management tools, such as the River Basin Committees and the **National Water Resources Management System (SINGREH)**, which promote participatory governance and the multiple and sustainable use of water.

In Minas Gerais, the **State Water Resources Policy (Law No. 13,199/1999)** complements this structure, organizing the **State Management System (SEGRH-MG)** and reinforcing the monitoring, granting, and charging for water use, mechanisms that are essential for the conservation and efficient management of this resource.

Cemig plays a decisive role in this area. As one of the largest electricity generators in the country, the company operates in strategic river basins and adopts an **integrated approach to water management**, combining operational efficiency, technological innovation, and biodiversity conservation. The commitment is to ensure that the water that enters its reservoirs returns to the rivers with the same quality, ensuring ecological balance and the well-being of surrounding communities.

In line with **CDP Water Security 2025**, Cemig has established **sustainable water use goals** that reinforce its ambition for leadership in water governance and environmental transparency:

- **Reduce specific water consumption** in its operations, expanding reuse and loss control practices;
- **Ensure 100% environmental and regulatory compliance** in all water projects;
- **Improve the climate and water resilience** of its operations, based on diagnostics and adaptation plans in the basins where it operates.

These goals reinforce Cemig's commitment to the transition to a resilient and sustainable energy model, which recognizes water not only as an input for generation, but as a symbol of environmental balance and shared value between society, nature, and energy.

The importance of water to Cemig is also reflected in ongoing awareness and engagement initiatives. Throughout 2025, through EcoCiente, the company supported and participated in educational events aimed at promoting responsible water use, particularly in celebration of World Water Day, reinforcing to various audiences the importance of sustainable water management, the protection of aquatic ecosystems, and the conscious consumption of water resources.

In addition, Cemig systematically monitors administrative water consumption (in m³), periodically disclosing this data in the company's Quarterly Sustainability (ESG) Performance Report (Cemig, 2025).

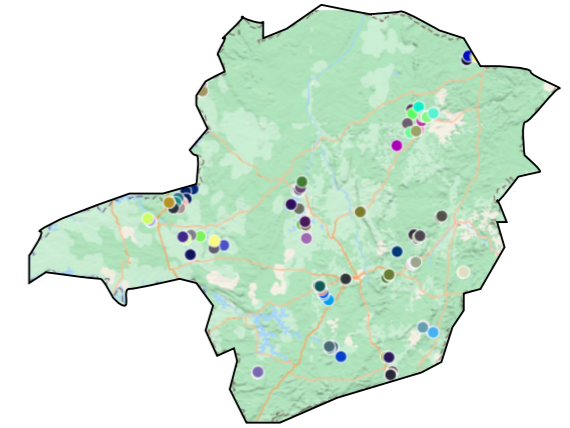


Water Quality Monitoring Program (PMQA)

Created more than a decade ago, the program aims to **assess and monitor water quality** in the main river basins where the company operates, ensuring that the operation of its hydroelectric plants occurs in harmony with aquatic ecosystems.

Currently, the **PMQA** systematically monitors **28 hydroelectric plants**, covering **154 sampling sites** distributed throughout the state of Minas Gerais. The work involves the **analysis of physical-chemical, bacteriological, and biological parameters**, allowing for the identification of changes in environmental integrity and guiding preventive and corrective actions.

In addition to complying with legal requirements, the program plays a strategic role: it supports environmental decision-making, generates highly relevant scientific information, and strengthens the integrated management of water resources and biodiversity.



Sampling sites in MG

Water quality monitoring is a dynamic process, adjusted according to the objectives and phase of each project. The configurations vary according to local conditions, the size of the plant, and the level of detail required for each environmental assessment, as shown in the image below.



Among the advances in monitoring, the aquatic biodiversity results obtained **between 2014 and 2024** stand out, revealing the significant richness of the ecosystems influenced by Cemig's plants:

- 827** → **phytoplankton taxa**, distributed across nine divisions and 17 classes;
- 509** → **zooplankton taxa**, including rotifers, microcrustaceans, and protozoa;
- 249** → **taxa of benthic macroinvertebrates**, recognized as sensitive indicators of environmental quality;
- 186** → **species of aquatic macrophytes**, which play an essential ecological role in nutrient cycling and habitat stability.

This data consolidates the **PMQA** as a benchmark in aquatic biodiversity monitoring and conservation, providing valuable input for universities, environmental agencies, and public water management policies. Overall, the program puts Cemig's commitment to water governance and biodiversity conservation into practice. It also represents the convergence point between science, technology, and social and environmental responsibility.

LEARN A LITTLE MORE ABOUT HYDROBIOLOGICAL COMMUNITIES

Hydrobiological communities are groups of organisms that have in common the fact that they live entirely or at some stage of their life cycle in the aquatic environment. These groups range from microscopic beings to animals visible to the naked eye, all of which are fundamental to the balance of freshwater and marine ecosystems.

Among their main components are phytoplankton, zooplankton, and benthic macroinvertebrate (zoobenthos) communities, as well as aquatic macrophytes.

In general, these communities function as true thermometers of the health of these ecosystems (they are considered excellent indicators of water quality), since they respond quickly to changes in the aquatic environment, indicating pollution, eutrophication, or other environmental changes.



Micrasterias furcata

PHYTOPLANKTON

It is formed by photosynthetic microorganisms that live suspended in the water column (of rivers, lakes, reservoirs, etc.), such as green algae, diatoms, cyanobacteria, among others. They play essential roles in aquatic ecosystems as: the basis of the food chain (phytoplankton is the main primary producer), producing much of the planet's oxygen, and participating in the cycling of nutrients (carbon, nitrogen, and phosphorus).



Arcella dentata

ZOOPLANKTON

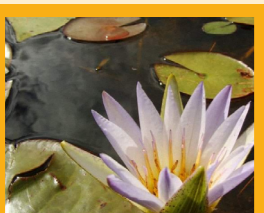
It is composed of microscopic or small animals that live suspended in the water column, such as protozoa (e.g., ciliates), rotifers, cladocerans (e.g., Daphnia), copepods, aquatic insect larvae, and fish larvae (ichthyoplankton). These organisms vary in shape, size, and life cycle, but they share the habit of floating or being carried by the water. These animals are fundamental in the food chain, as they are the main primary consumers (they feed on phytoplankton) and serve as food for fish and invertebrates.



Dragonfly larva

BENTHIC MACROINVERTEBRATES

They are small to medium-sized invertebrates that live at the bottom of aquatic environments — such as rivers, lakes, streams, reservoirs, and wetlands. They inhabit sediments, rocks, logs, and submerged vegetation, forming a community known as zoobenthos (benthos, from the Greek = “bottom”). Examples such as aquatic insects (dragonfly larvae, mosquitoes' larvae, beetles' larvae, among others), mollusks (snails and bivalves), annelids (aquatic worms and leeches), crustaceans, and planarians make up this community. Like the communities already presented, they are also fundamental in the food chain (by serving as food for fish, amphibians, birds, and other invertebrates, sustaining higher trophic levels), in the cycling of organic matter and in the maintenance of the habitat (by digging, filtering, scraping, or grinding materials, they contribute to the aeration of sediments, cleaning of the bottom, and circulation of nutrients).



Lírio-d'água
(*Nymphaea* sp.)

AQUATIC MACROPHYTES

Another important group is aquatic macrophytes — plants, visible to the naked eye, adapted to life in an aquatic environment, which can be floating (water hyacinth, water lettuce, water lilies), submerged (water thyme, elodea), emergent, or rooted (cattail). They occur in rivers, lakes, marshes, dams, flooded areas, and the banks of aquatic environments. They provide shelter and food for various species, contribute to nutrient cycling, help stabilize banks, and reflect local ecological conditions.

Science applied to water management

Water quality monitoring is one of Cemig's main preventive environmental management tools. Through **PMQA**, the company continuously monitors the conditions of the reservoirs and rivers under its influence, ensuring ecological balance and compliance with environmental determining factors. By regularly providing detailed reports on water quality, Cemig demonstrates its commitment to transparency and environmental responsibility, highlighting the importance of protecting and preserving water resources for the benefit of future generations.

Each monitoring campaign generates information and scientific knowledge and guides improvements in plant operations, strengthening the integration between research, innovation, and environmental management. Among the most representative examples of this work are the **Emborcação, Salto Grande, and Queimado**

plants, which reflect different hydrological and ecological realities in Minas Gerais and illustrate how applied science aids Cemig's responsible decisions.



Emborcação HPP: Water Quality Monitoring and Invasive Species

Located on the Paranaíba River in the Triângulo Mineiro region, the Emborcação Hydroelectric Plant is one of Cemig's largest projects and one of the most consistent examples of integration between science, operation, and environmental conservation. Monitoring at the plant allows the **Water Quality Index (WQI)** to be calculated based on nine parameters — including dissolved oxygen, turbidity, thermotolerant coliforms, and biochemical oxygen demand. The results of the campaigns carried out between 2022 and 2024 showed ratings between “good” and “excellent,” reflecting the success of the control and mitigation measures adopted.

In addition to monitoring physical and chemical quality, Cemig maintains specific monitoring in Emborcação of the **golden mussel (*Limnoperna fortunei*)**, an invasive species that threatens the ecological integrity and operation of hydraulic structures. The company

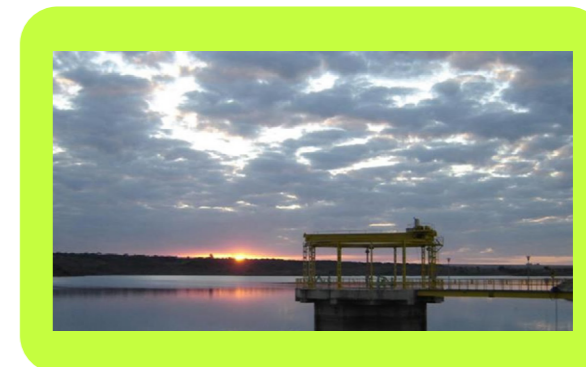
works in partnership with research centers to map the presence of the species, prevent its spread, and develop control measures, such as cleaning protocols, technical inspections, and awareness campaigns. This ongoing work makes Cemig one of the national references in the monitoring of exotic species in continental aquatic environments.

Another important monitoring activity carried out by the plant is the monitoring of **cyanobacteria** (belonging to the phytoplankton community). These organisms can produce toxins and make water unsuitable for consumption and recreation, posing a risk to human and environmental health. Although the water quality at the Emborcação Hydroelectric Plant is considered satisfactory, **continuous monitoring of this group** is essential to prevent changes and ensure the safe use of the reservoir.

WQI VALUE	CLASS	MEANING
90 < IQA ≤ 100	Excellent	Suitable water for conventional treatment for public supply.
70 < IQA ≤ 90	Good	
50 < IQA ≤ 70	Medium	
25 < IQA ≤ 50	Bad	Water unsuitable for conventional treatment for public supply, requiring more advanced treatments.
IQA ≤ 25	Very Bad	

Queimado HPP: monitoring, participation, and environmental education

In northwestern Minas Gerais, the Queimado HPP represents an exemplary case of participatory socio-environmental management. Built on the Preto River and in operation since 2004, the plant extends to the Federal District and the state of Goiás, covering a region of great importance for local water security.



Cemig conducts quarterly water quality monitoring there, assessing both physical-chemical parameters and hydrobiological communities. The historical assessment (2018–2024) of the Queimado HPP indicated good water quality and strong self-purification capacity, as well as good reservoir stability. For hydrobiological communities, tolerant species prevailed overall, reflecting anthropogenic pressures on the basin. The variations observed are related to seasonality and the reservoir's surroundings, reinforcing the need for integrated management of basin uses.

In this sense, Cemig continues to promote environmental education and awareness actions with surrounding communities, encouraging sustainable practices and the appreciation of natural heritage. This integrated work makes the Queimado HPP an example of how environmental monitoring can become an instrument for social engagement and biodiversity conservation.

SEEDS: CARING FOR OUR FLORA

Cemig's operations are marked by direct interaction with the diversity of Brazilian ecosystems, with a presence in all of Brazil's continental biomes: **Amazon, Cerrado, Atlantic Forest, Caatinga, Pampa, and Pantanal** (recall these in **Section 2**).

ecosystem services essential to biodiversity. These actions also strengthen erosion control, improve water infiltration, and create safe habitats for fauna and flora, reflecting the company's commitment to ecological restoration and climate adaptation.

Our presence in these territories, which are home to the headwaters of large river basins and endangered species, imposes an environmental responsibility commensurate with their ecological and social relevance. For this reason, the company conducts a series of programs and projects aimed at the conservation and restoration of flora, ranging from the monitoring of degraded areas and the control of erosion processes to riparian reforestation, the recovery of springs, and compensatory forest restoration.

In addition to its own programs, Cemig maintains partnerships with scientific institutions, environmental agencies, and local communities, expanding the reach and effectiveness of its vegetation management initiatives.

Between 2020 and 2024, **approximately 6,000 hectares were included in forest restoration initiatives**, contributing to an increase in native vegetation cover, connectivity between fragments, and the recovery of

The company also integrates practices from **Cemig Distribuição**, which include studies on power line routing to avoid deforestation in sensitive areas and environmental compensations. With an integrated approach, its flora management combines research, technology, and collaboration with environmental agencies to promote landscape regeneration and conserve biological diversity in the biomes where it operates. In 2025, this commitment was reinforced



mexilhão-dourado (*Limnoperna fortunei*)

INVASIVE SPECIES: THE CHALLENGE OF THE GOLDEN MUSSEL

The **golden mussel** (*Limnoperna fortunei* – already discussed in **Section 3**) is one of the main threats to biodiversity and reservoir operation in Brazil. Capable of forming dense colonies and attaching itself to hydraulic structures, it causes **ecological imbalance** and **significant operational damage**.

Cemig has been monitoring the presence of golden mussels in its reservoirs since 2004, with emphasis on the Emborcação HPP, where surveillance actions are part of the PMQA. Monitoring involves collections, underwater inspections, and laboratory analyses, allowing for the detection and control of outbreaks of the species before they cause greater impacts. Addressing the golden mussel threat reflects the company's stance on environmental challenges: a science-based approach driven by innovation and cooperation, safeguarding biodiversity while ensuring water and operational security for its assets.

Salto Grande HPP: ecological integrity and aquatic biodiversity

Located in the Doce River Valley, between the municipalities of Braúnas and Joanésia, the Salto Grande HPP operates in an environment of high biological relevance. Its two reservoirs — one on the Santo Antônio River and the other on the Guanhães River — are home to a significant diversity of aquatic organisms, a direct result of the region's natural conditions.

Periodic monitoring of water quality in these reservoirs allows for understanding the local ecological dynamics and supports sustainable management. Because it has shallow and well-oxygenated reservoirs, the Salto Grande HPP has constant circulation between surface and deep waters, which contributes to the balanced distribution of nutrients and organisms throughout the water column.

In its latest assessments (2024–2025), the Salto Grande HPP presented good overall water quality, the system's self-purification has remained efficient, and the sampling stations were classified as good according to the WQI. The aspects involving the phytoplankton community showed compliant results, especially for cyanobacteria, whose densities were below legal limits and without blooms.

The integrated analysis of physical-chemical parameters and hydrobiological communities reinforces the role of the Salto Grande HPP as a model for aquatic biodiversity conservation, where Cemig combines energy generation and maintenance of ecosystem services.

by the efforts of the Cemig Distribuição team, which began conducting specific training for the technical monitoring of restoration projects in the Conservation Areas. Currently, a dedicated team systematically monitors the application of appropriate techniques, the quality of the seedlings used, and the proper execution of field activities, ensuring greater effectiveness in the planting and maintenance of restored areas.

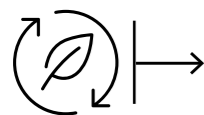
In projects to expand distribution lines and high-voltage substations, construction work is carried out by a specialized technical team that operates as an integral part of the construction process, conducting fauna removal and verifying vegetation removal, ensuring that interventions occur exclusively within duly authorized areas. Additionally, regarding planting, Cemig Distribuição works to promote sustainable urban afforestation through the **Circuito de Arborização**, an event featuring a series of lectures,

specific mini-courses, practical demonstrations, and discussions with participants to bring knowledge to the municipalities of Minas Gerais. The goal is to discuss with society the importance of planning, implementation, maintenance, legislation, and best practices in arboriculture to ensure better coexistence between trees and other forms of urban infrastructure.

In 2025, another edition of the Circuit was held on November 12 and 13 at Univercemig, located in the city of Sete Lagoas. The event featured lectures on vegetation management and was attended by 80 people. The discussions contributed to the dissemination of sound knowledge about urban trees, strengthening the relationship with Government Authorities and facilitating the maintenance processes of the electrical system.



Circuito de Arborização Urbana held at Univercemig.

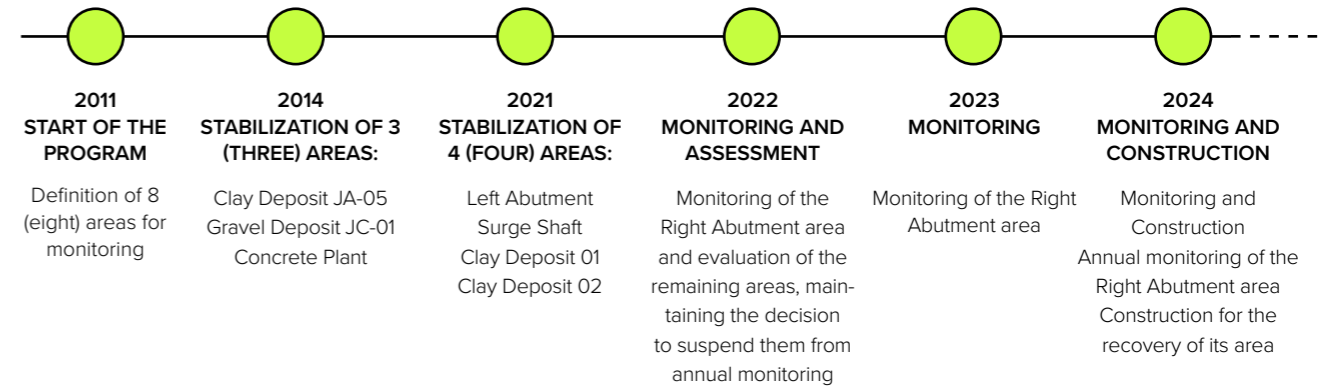


Degraded Area Recovery Program (PRAD) – aimed at restoring vegetation in areas impacted by construction and development projects, prioritizing native species adapted to each biome.

At the **Rosal HPP**, located in the city of São José do Calçado (ES) and on the Itabapoana River, between the cities of Guaçuí (ES) and Bom Jesus do Itabapoana (RJ), Cemig maintains ongoing work to recover and control degraded areas, with a special focus on the right bank of the reservoir, a region that requires constant attention to ensure soil stability and the return of native vegetation.

The program was born out of an environmental commitment made by the company to the Brazilian Institute of the Environment and Renewable Resources (IBAMA) and has been conducted since 2011, with the aim of preventing erosion and promoting the balance of the natural landscape surrounding the plant.

During the annual monitoring campaigns, the progress of regeneration and the development of the planted species are evaluated. The most recent results, from 2025, showed a significant improvement in vegetation cover and terrain stability.



Right bank - Rosal HPP.

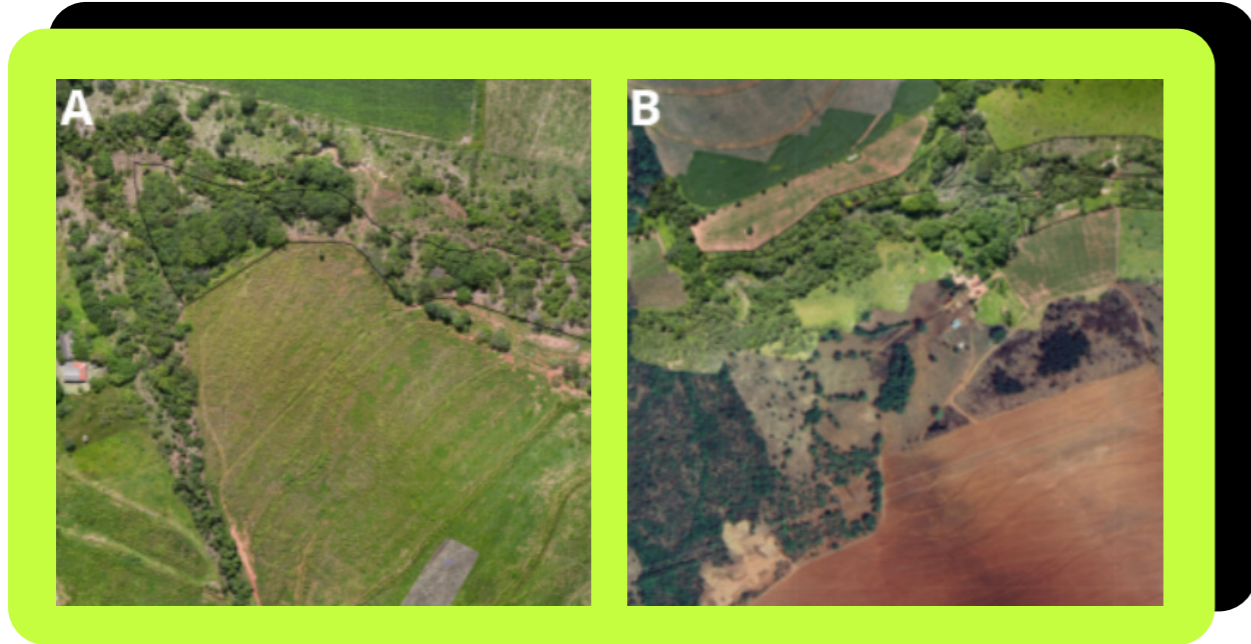


Microbasin Recovery Program – which aims to restore riparian forests.

At the **Theodomiro Carneiro Santiago (Emborcação) HPP**, Cemig is developing the **Microbasin Recovery Program**, an initiative aimed at restoring native vegetation and protecting the springs and watercourses that flow into the plant's reservoir. The work is done in partnership with rural producers in the region, strengthening the link between environmental conservation and local development.

The program emerged as an evolution of the former Reservoir Riparian Reforestation Program, incorporating more effective techniques for ecological restoration and forest enrichment. Since its creation, it has become a benchmark in the recovery of degraded areas, especially in Permanent Preservation Areas (APPs).

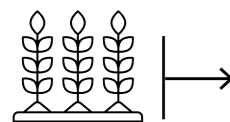
In recent years, the project has undergone important updates, aligning its goals and indicators with IBAMA guidelines, with the aim of making monitoring even more accurate and efficient. Actions include planting native species, controlling erosion, and monitoring natural regeneration.



The Chácara do Jerry (A) and Saudade (B) properties showed excellent results after five years: >90% survival, 1,000–1,200 individuals/ha and >500 regenerants/ha, in addition to strong ecological dynamics.

The monitoring results obtained up to 2025 showed consistent progress: areas that were previously degraded now have **better vegetation cover, more stable soil, and greater water infiltration**, directly benefiting water quality and biodiversity in the surrounding area. In other words, there has been significant improvement in the areas under recovery, with good seedling establishment, active natural regeneration, and progress in ecological succession. Challenges remain, such as invasive grasses, erosion, and animal trampling, requiring specific actions — invasive species control, ant management, erosion stabilization, and fence maintenance.

The program reinforces Cemig's commitment to combining science, management, and community participation to ensure a more sustainable future.



Technical Projects for Flora Restoration (PTRFs) – compensation measures implemented by Cemig to restore areas of vegetation that have been cleared.

IRAPÉ HPP

The **Irapé HPP** is one of Cemig's benchmarks in forest restoration and environmental compensation. The project is home to the **PTRF**, developed in partnership with the **Lapa**

Grande State Park, with the aim of restoring areas of Cerrado and promoting ecological connectivity between fragments of native vegetation.

Started in 2023, with monitoring until 2025, the results of **the PTRF** have been significant: the project already has **survival rates above 75%** of the planted species, with increasing natural regeneration, and floristic diversity has remained high, with 18 and 19 species in the two plots, indicating good ecological resilience and consolidation of vegetation corridors that favor local fauna. In addition, the program adopts practices adapted to the edaphoclimatic conditions of northern Minas Gerais, prioritizing native species and low-impact planting techniques.

This initiative reflects Cemig's commitment to restoration that integrates technical knowledge and continuous monitoring, promoting benefits for the entire local community.



Planting, evaluation, and monitoring of seedlings at the Irapé HPP.

POÇO FUNDO PCH

At the **Poço Fundo Small Hydroelectric Plant (PCH)**, Cemig conducts actions aimed at restoring vegetation in APPs, especially on the banks of the reservoir. The goal is to recover the riparian forest, increase water infiltration into the soil, and create refuge areas for local fauna.



Development conditions in the PTRF implementation areas at the Poço Fundo SHP

The work includes planting native species, maintaining areas that have already been restored, and monitoring natural regeneration. In addition, the actions are integrated with environmental education programs, strengthening community participation and a sense of shared responsibility for conservation.

The experience of the Poço Fundo SHP demonstrates that even smaller projects can have significant positive impacts on the landscape, contributing to the protection of water resources and the ecological balance of the region.



Production and donation of native seedlings

The production of native seedlings is one of Cemig's most symbolic actions in promoting biodiversity. Through the **Itutinga Environmental Station (EAIT) Forest Nursery**, the company integrates science, environmental education, and ecological restoration in an initiative that connects energy generation with care for the territory.

From 2020 to 2025, the nursery produced and distributed **167,000 native seedlings** for forest restoration, riparian reforestation, urban afforestation, and recovery of degraded areas throughout the state of Minas Gerais.

These seedlings strengthened Cemig's own programs and served city halls, schools, universities, social organizations, and rural producers, expanding the social and environmental reach of the initiative. Between 2023 and 2025 alone, more than 60 projects and partner institutions benefited, such as the Peixe Vivo Program, the Águas da Formosa Project, the Pakré Project, as well as city governments in Campestre, Luminárias, Poço Fundo, and José Gonçalves de Minas, among many others.

The nursery also plays an important role in the conservation of endangered and endemic species. Between 2020 and 2025, more than **8,000 seedlings of endangered species** were produced, including jussara (*Euterpe edulis*), and cedar (*Cedrela fissilis*), and **11,000 seedlings of Brazilian endemic species**, such as yellow ipê (*Handroanthus vellosi*).

These plantings directly contribute to increasing the genetic representativeness of native flora and strengthening ecological corridors in the Cerrado and Atlantic Forest biomes. The diversity of species cultivated reflects the breadth of Cemig's environmental commitment: there are more than 70 tree varieties, including several ecologically important species, such as ipês, aroeiras, jacarandás, pau-ferro, jatobá, and tamboril — plants that are essential for regenerating soils, sheltering fauna, and restoring riparian forests.



Itutinga Environmental Station Forest Nursery.

In addition to producing seedlings, the **Itutinga Environmental Station** is also a space for education and research. Since 2018, it has received more than **1,500 visitors**, including students, teachers, technicians, senior citizens, and Cemig employees, in activities to raise awareness and learn about conservation and reforestation.

The facility also houses the **Fish Farming Laboratory**, which supports scientific research projects on aquatic biodiversity. Since 2021, eight studies have been supported in partnership with universities and research centers, addressing topics such as the reproduction and conservation of native fish, cryopreservation of reproductive cells, and the genetics and physiology of aquatic species.

With the **Itutinga Nursery** as a technical and educational reference, Cemig reaffirms its vision that planting is more than reforestation — it is sowing balance, connecting people, and regenerating the future.

OUR WEALTH: FAUNA

The electricity sector, through the construction of hydroelectric plants, transmission lines, and energy distribution centers, causes changes in the physical space of ecosystems, suppressing riparian vegetation, fragmenting habitats, and modifying areas for feeding, shelter, and reproduction of wild animals (fauna). In the aquatic environment, the transformation of river sections into reservoirs alters the dynamics of the water, potentially eliminating vital sites for spawning and growth of native fish — critical impacts that also affect the entire associated food chain.

Faced with this challenging context, Cemig takes an active and committed stance on conservation, recognizing that the impact of all stages of energy generation, distribution, and transmission on natural environments can be significant for terrestrial, semi-aquatic, and aquatic fauna. In this sense, Cemig

understands the importance of implementing actions that go beyond legal compliance and executes projects, ongoing monitoring programs, and specific sub-programs that seek to generate data that enable the adoption of effective practices for the maintenance and growth of populations of different species in the study regions, mainly focused on environmental education, management, conservation, and preservation of habitats occupied by the species.

In critical areas, Cemig replaces standard power lines with protected or isolated lines to minimize impacts on fauna. It also installs devices to prevent animals from climbing the lines and protective measures to minimize contact between the system and wildlife at its substations.



Actions for Ichthyofauna

The conservation of native fish species in aquatic environments plays a central role in Cemig's environmental programs, especially in the context of hydroelectric plants. Cemig recognizes that the conservation of ichthyofauna is essential to prevent the loss of aquatic biodiversity and ensure the sustainability of water resources in the territories where it operates. For this reason, it implements **Monitoring Programs** and manages strategies to minimize environmental impacts caused by hydroelectric power generation.

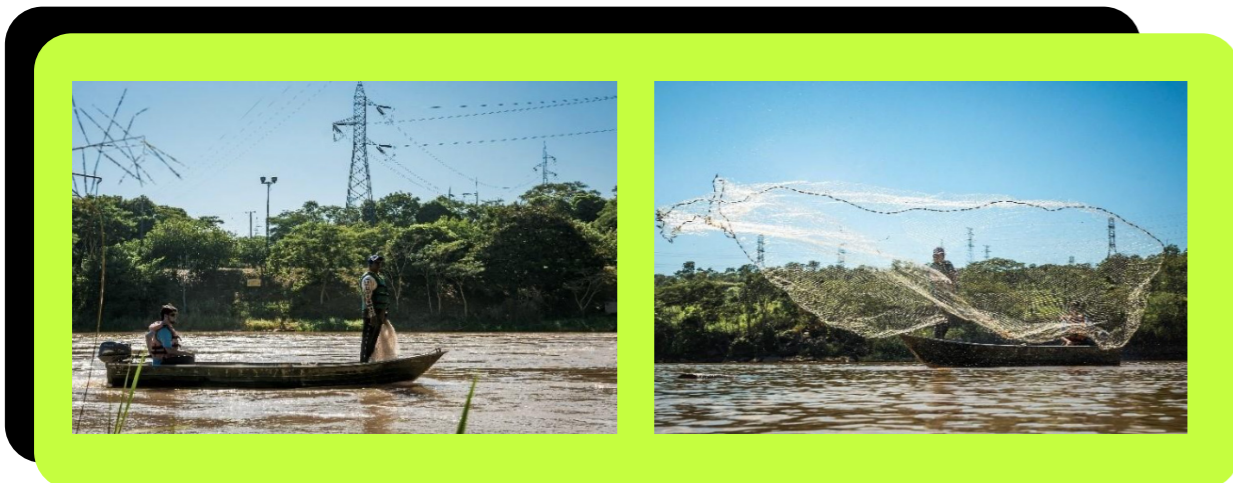
Thus, programs focused on ichthyofauna not only meet legal requirements, but also reflect Cemig's commitment to the integrity of aquatic environments and the perpetuation of the essential ecosystem services provided by these organisms.

Cemig's monitoring programs at hydroelectric plants such as Queimado, Irapé, and Camargos reveal a wide diversity of fish, even in the face of changes caused by the operations. Monitoring reports reveal, for example, that 87 species were identified at the Queimado HPP, 37 species at Irapé, and 50 species at Camargos, with the latter accounting for approximately 45% of the total known species richness in the Grande River basin. Fish from different groups and with different habits, such as migratory, rheophilic, generalist, and even some non-native species (such as pirambeba, tucunaré, and tilapia), composes these communities.

Monitoring also showed that, in reservoirs, species such as pirambeba become dominant and can alter the balance of aquatic fauna. On the other hand, the stretches of natural rivers upstream of the dams are home to a greater diversity of species and are essential for reproduction, especially of migratory fish.

Campaigns carried out throughout different periods of the year highlighted how environmental conditions influence the presence and life cycle of fish, including the recording of eggs, larvae, and juveniles in priority areas. In addition, the presence of endangered and endemic species reinforces the importance of integrated conservation and adaptive management actions in areas influenced by Cemig's hydroelectric plants.

Another important initiative voluntarily promoted by Cemig is the **Peixe-Vivo Program**. Created in 2007 to minimize the impact of power plant operations on native species, the Peixe Vivo initiative is based on three pillars: conservation and management, research and development, and community relations. Among its results, **more than 750 technical and scientific publications** stand out, as well as a reduction of **up to 77%** in the biomass affected by **fish mortality** and a **99.7% drop in environmental fines** related to the issue.



Community engagement activities promoted by the Peixe Vivo Program

With the aim of creating opportunities for technical discussions and sharing with the general community the knowledge gained over nearly two decades of existence, the Peixe Vivo Program organized, in 2025, technical and scientific events for the general public.

In celebration of World Water Day on March 31, 2025, the 1st Symposium on Integrated Reservoir Management was held, an event dedicated to the challenges and prospects of water resource management and cyanobacterial blooms. The event featured lectures by renowned experts and discussions on the impacts of climate change, the multiple uses of water, and strategies for monitoring and mitigating cyanobacterial blooms in Minas Gerais.



The event served as a forum for knowledge exchange and the collective development of sustainable solutions to current water challenges. During the event, a booklet on cyanobacteria prepared by Cemig was launched; this informational resource is designed to raise public awareness. In addition, the public had the opportunity to visit an interactive space, developed by the EcoCiente and Peixe Vivo Programs in partnership with the LIMNEA and ECOPeixes laboratories at UFMG, where educational materials on hydrobiological organisms were presented. The event, held in a hybrid format, brought together approximately 249 participants, including both online and in-person attendees.

In September 2025, the 7th Seminar of Cemig's Peixe Vivo Program was held in person and online, a free event considered the **leading national gathering in the electricity sector** focused on the conservation of aquatic biodiversity and water resource management. The event brought together researchers, students, companies, environmental agencies, and professionals from the electricity sector across the country, providing a space for dialogue and reflection on the challenges and advances in the conservation of Brazilian aquatic ecosystems.

Traditionally focused on the ichthyofauna conservation, the Peixe Vivo Program has evolved to incorporate an integrated approach, recognizing the interdependence between fish and water resources. Grounded in scientific thinking and a continuous pursuit of innovation, the program has maintained its tradition of biennial seminars since 2009. In this 7th edition, the event has won a new identity: it is no longer called the "Seminar on Strategies for Fish Conservation" but has been renamed the Peixe Vivo Program Seminar, broadening its scope to foster greater integration between issues related to fish and the management of water resources in Brazilian rivers, within the context of the electricity sector.



Actions for Herpetofauna

In the area of amphibians and reptiles, **monitoring** efforts in environments such as reservoirs, rivers, and lagoons of crocodilians and chelonians at the Queimado HPP, Irapé HPP, and Salto Grande HPP stands out. Generalist species, such as *Phrynops geoffroanus* (bearded turtle), were found in significant abundance, while crocodilians and other chelonians showed stable distribution, but dependent on the preservation of riverbanks and connectivity between river and lake environments.



Methodologies for capturing, weighing, and tagging chelonians.

In the monitoring of other terrestrial herpetofauna groups conducted at the hydroelectric plants mentioned above and at the Nova Ponte HPP, several endemic species and potential bioindicators of environmental quality were identified, such as *Bothrops moojeni* (jararaca), *Enyalius bilineatus* (wind-eating chameleon), *Boana lundii* (forest frog), *Bokermannohyla sazimai* (frog) e *Ameerega flavopicta* (yellow-spotted-arrow-frog). These species reinforce the importance of maintaining remnants of the Cerrado and Atlantic Forest, both biodiversity hotspots. Amphibians and reptiles, widely recognized as bioindicators due to their environmental sensitivity and ability to bioaccumulate contaminants, contribute to the assessment of the conservation status of the monitored biomes.



Actions for Avifauna

At the Queimado HPP, specific programs are carried out, such as **monitoring swifts** at nearby waterfalls, as well as general **bird monitoring** aimed at analyzing population structure in vegetation patches, interaction with human activities, and the ability to contribute to environmental recovery. Regular monitoring through censuses, banding, and field observations has already enabled the mapping of breeding areas and the role of vegetation mosaics in maintaining the functional diversity of birds, including endemic and threatened species. The campaigns also indicate that conserved fragments and restored environments serve as sources of recolonization and support for regional avifauna.



Swifts circling above the pool at Salto do Itiquira Waterfall (Formosa-GO).

White-collared tinamous (*Streptoprocne zonaris*) individuals preening their fur after bathing at a waterfall.

Data presented in the 2024 monitoring report for **the Volta do Rio Wind Farm** show that the accumulated species richness data is already close to what is expected for the Caatinga biome, with 76 species of birds identified, including endangered species such as the curlew sandpiper and the little stint. The operations area provides a suitable habitat for shorebirds and migratory birds to feed and rest.

Monitoring campaigns are also conducted at the **Praias de Parajuru Wind Farm Complex** to assess the risk of bird collisions with power lines. The study found that there is a low probability of accidents involving birds, both resident and migratory, although it is essential to implement appropriate aerial warning systems and other measures to minimize interference with migratory routes.



Actions for Mammal Fauna

Programs covering primates, carnivores, xenarthrans, and bats use methods such as camera traps, controlled captures, and transects to inventory and monitor terrestrial and flying fauna. Data accumulated at different plants show that, even in fragmented areas, there is still a significant diversity of species, with the presence of ecological guardians such as the maned wolf, giant anteater, and puma. Records of bats, especially at wind farms, reveal high diversity and highlight the important role these animals play in ecological balance, both through pollination and insect population control.

Located near the Nova Ponte HPP reservoir, the **Galheiro RPPN** has been used as a reference area for **research, monitoring, and release of wild animals** in partnership with Cemig. The RPPN stands out for its impressive abundance and frequency of wildlife sightings, harboring emblematic species that are important for regional conservation. Among the animals regularly observed are the giant anteater (*Myrmecophaga tridactyla*), the collared peccary (*Pecari tajacu*), the maned wolf (*Chrysocyon brachyurus*), and the curassow (*Crax fasciolata*). The presence of the giant armadillo (*Priodontes maximus*), the

largest living armadillo species and extremely rare, has also been recorded. The results of the **Nova Ponte HPP** monitoring program show that although the region is characterized by small remnants of forest and savanna linked to altered areas, the area has the potential to harbor flying mammal species.

The importance of the **Fartura RPPN** for mammals is also evidenced by the results of the **Irapé HPP Wild Population Monitoring Subprogram**, which considers this private reserve a strategic area for the conservation of endangered and endemic species, especially primates, carnivores, and xenarthrans. Of particular note is the record of the masked titi monkey (*Callicebus personatus*), a primate endemic to the Atlantic Forest and classified as vulnerable. These findings reinforce the fact that, due to its size and the complexity of its vegetation, the **Fartura RPPN** offers ideal conditions for refuge and reproduction for forest fauna sensitive to fragmentation. In addition to primates, other mammals such as maned wolves, ocelots, small wildcats, field foxes, wildcats, and pumas have been recorded within the RPPN, proving that the connectivity and native coverage maintained by the reserve allow for the persistence of rare and endangered species.

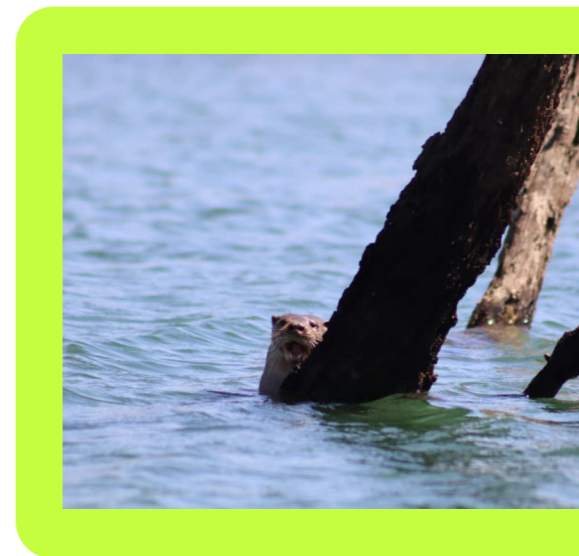
The **Lontra longicaudis Monitoring Subprogram at the Queimado HPP** stands out for its regular surveys combining active searches and camera traps and has already recorded **more than 700 occurrences of the species**, documenting environmental preferences, seasonal distribution, shelters, and territories. Despite the low population density, the constant presence of otters reinforces the importance of riparian microhabitats and riparian forests, strengthening the role of vegetation fragments and the **Bezerra River** as a cradle of regional biodiversity. In addition to monitoring, the program is active in environmental education, raising awareness among residents and landowners about the conservation of native vegetation strips and APPs, which are essential for the protection and reproduction of otters.



Direct observation of an otter in the Preto River.



Recording of an individual by a camera trap.



Direct observation of an otter on the Preto River.



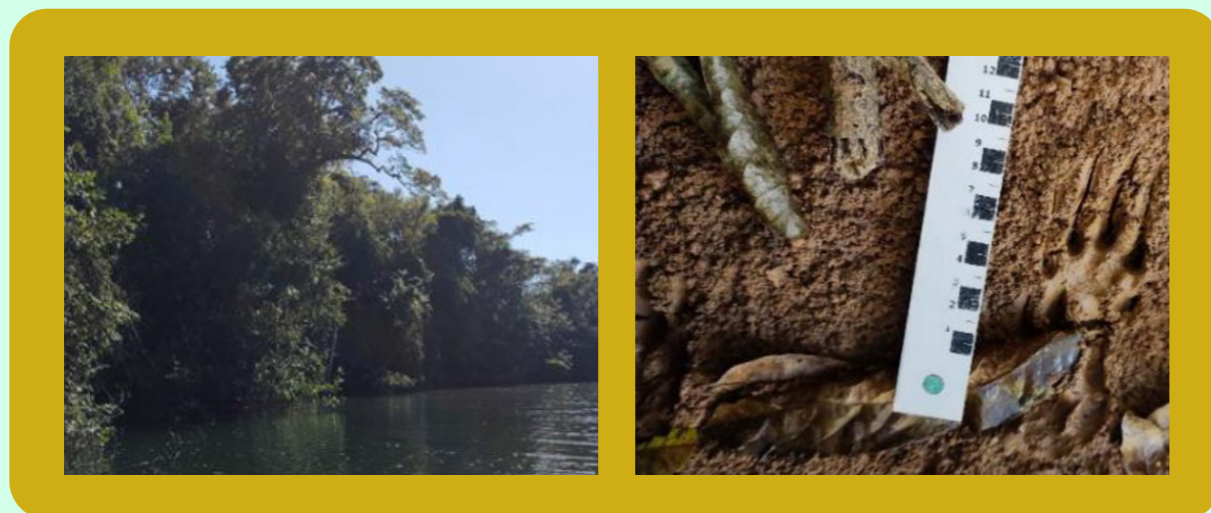
Recording of an individual by a camera trap.



→ **Activities for various groups: Fauna Enhancement Subprogram**

Implemented in areas influenced by the **Queimado HPP**, this subprogram seeks **to create favorable conditions for the restoration of animal communities in degraded environments or those undergoing recovery**. To this end, ecological nucleation techniques are used, such as the installation of artificial perches, wood piles, and the planting of zoochoric seedlings, with the aim of attracting seed dispersers and pollinators and promoting the use of the environment as a refuge or breeding ground.

In this context, this subprogram differs from the monitoring programs mentioned above in that it takes an integrated approach by considering wildlife groups (amphibians, reptiles, birds, and mammals) collectively and viewing their presence as both an indicator and an active agent in the recovery of these areas, thereby contributing to the restoration of ecological functions and habitat.



The area surrounding the Bezerra River.

Otter tracks in the monitored areas

SOME TECHNIQUES FOR INCREASING WILDLIFE POPULATIONS



Wooden perches connected by cables

Wooden racks

SPECIES RECORDED DURING MONITORING IN AREAS OF FAUNA ENHANCEMENT



Four-eyed frog
(*Physalaemus nattereri*)

Boipeva
(*Xenodon merremii*)

Papa-vento
(*Norops meridionalis*)

White Anu (*Guira guira*) using an artificial perch

Red-crested Woodpecker
(*Campephilus melanoleucos*) on the lot

Nest built on the support structure

PROTECTED AND CONSERVED AREAS

Conservation Units (UCs) are the main legal instrument for biodiversity protection in Brazil. Created by the National System of Conservation Units (SNUC – Law No. 9,985/2000), they play essential roles in maintaining ecosystem services, protecting fauna and flora, regulating climate, and offering sustainable economic alternatives, such as tourism and sustainable use of natural resources.



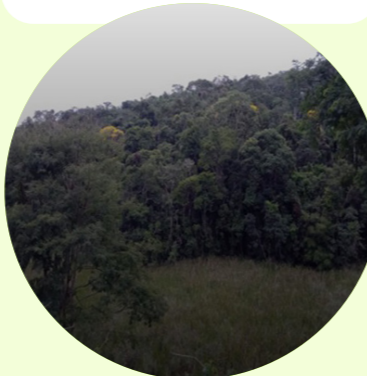
According to the Brazilian Conservation Units Panel (MMA, 2025), managed by the Department of Protected Areas of the Ministry of the Environment (MMA), in 2025 there will be 3,300 active CUs (state, federal, and municipal). The SNUC divides the conservation units into two groups: Integral Protection (PI) and Sustainable Use (US), as shown in the table below:

SUSTAINABLE USE GROUP (SU)		
ACRONYM	UC CATEGORY	CHARACTERISTICS
APA	Environmental Protection Area	Public or private area where conservation is compatible with the sustainable use of natural resources.
ARIE	Area of Ecological Interest	Areas smaller than APAs, publicly or privately owned, aimed at preserving ecosystems and regulating the use of areas for conservation and human activities.
FLONA	National Forest	Publicly owned unit with the objective of sustainable use and scientific research.
RESEX	Extractive Reserve	Publicly owned area managed by traditional extractive populations, who live in harmony with nature and practice sustainable extractivism.
RDS	Sustainable Development Reserve	Publicly owned unit that allows traditional populations to exploit natural resources and maintain their way of life, subject to defined rules.
RPPN	Private Natural Heritage Reserve	A privately owned unit, created on the initiative of the owner, who commits to the perpetual conservation of the area.

INTEGRAL PROTECTION GROUP (PI)		
ACRONYM	UC CATEGORY	CHARACTERISTICS
ESEC	Ecological Station	Prioritizes nature preservation and scientific research. Public visitation is prohibited, except for educational or research purposes.
REBIO	Biological Reserve	Seeks the integral preservation of biota and other natural attributes, without direct interference. Public visitation is prohibited, except for educational purposes.
PARNA	National Park	Intended for the protection of ecosystems of great ecological importance and scenic beauty. Allows controlled public visitation for recreational, educational, and research purposes. Ownership is public.
MONA	Natural Monument	Protects rare, unique natural sites of great scenic beauty, allowing visitation. Ownership may be public or private, provided that the activity is compatible with conservation.
REVIS	Wildlife Refuge	Aims to protect natural environments where the existence or reproduction of local fauna and flora species is ensured. Visitation is permitted, provided it does not interfere with preservation. Public or private ownership.

Source: ICMBio (2025).

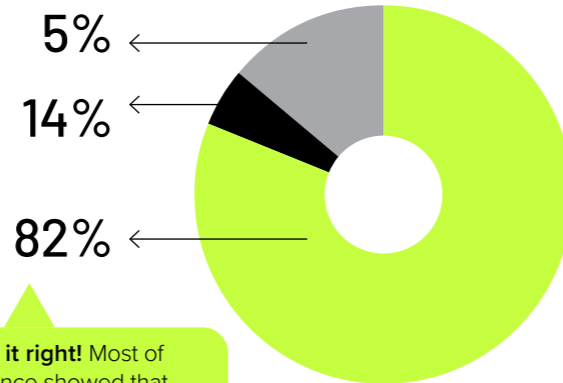
In this context, Cemig has **three Private Natural Heritage Reserves and five Environmental Stations**. The RPPNs alone total more than 4,400 ha of protected native vegetation.

RPPN USINA CORONEL DOMICIANO (1994)	RPPN GALHEIRO (1996)	RPPN FARTURA (2004)
<p>Area: 263.56 ha</p> <p>Location: Muriaé and Rosário da Limeira/MG (PCH Coronel Domiciano)</p> <p>Biome: Atlantic Forest.</p>	<p>Area: 2,695 ha</p> <p>Location: Perdizes/MG (UHE Nova Ponte)</p> <p>Biome: Cerrado.</p>	<p>Area: 1,455 ha</p> <p>Location: Capelinha/MG (UHE Irapé)</p> <p>Biome: Transition zone between Atlantic Forest and Cerrado.</p>
		

CEMIG ASKED ABOUT THE RPPNS ON ITS SOCIAL MEDIA PLATFORMS

1) Cemig owns RPPNs located in the Cerrado and Atlantic Forest biomes in Minas Gerais. **The acronym "RPPN" stands for:**

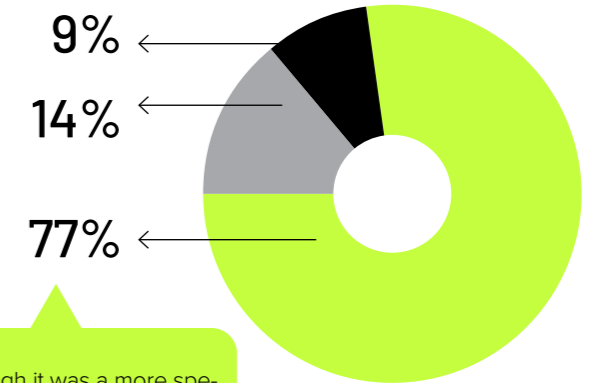
- Reservatório Protegido pelo Patrimônio Natural (Reservoir Protected by Natural Heritage)
- Reserva Particular do Patrimônio Natural (Private Natural Heritage Reserve)
- Relação de Patrimônio Protegido Nacionalmente (List of Nationally Protected Heritage)



82% got it right! Most of the audience showed that they are already familiar with the topic.

What are the names and municipalities where Cemig's RPPNs are located?

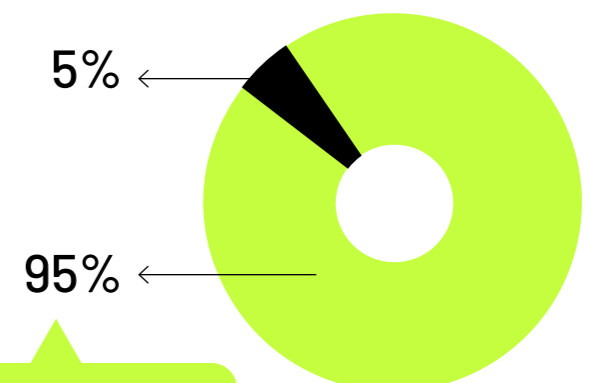
- Galheiro (Perdizes/MG), Fartura (Capelinha/MG), Usina Coronel Domiciano (Muriaé and Rosário da Limeira)
- Três Marias (Três Marias/MG), Fortuna (Grão Mogol/MG), Itutinga (Itutinga/MG)
- Emborcação (Araguari/MG), Santuário do Caraça (Catas Altas/MG), Guilman-Amorim (Antônio Dias/MG)



Even though it was a more specific question, **77% answered correctly**. Excellent performance!

What is the significance of establishing RPPNs in Minas Gerais, such as those damaged by Cemig?

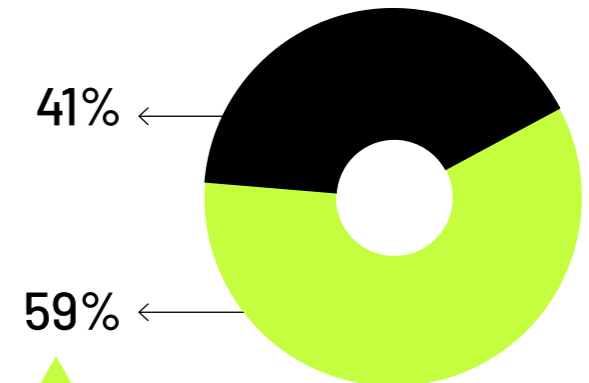
- Contributes to the expansion of protected areas in the country, protecting the biodiversity of the biomes
- Expands the supply of electricity generation in Minas Gerais
- No relevance since possession/ownership is exclusive to Cemig



WOW! 95% correct! Almost unanimous! A sign that everyone understands the importance of RPPNs.

The establishment of an RPPN—that is, the creation of such an area as recognized by law—may be carried out by:

- Legal entities that operate exclusively in the electricity sector, which may include generation, transmission, or distribution of energy.
- Individuals or legal entities that own rural or urban properties with potential for nature conservation.
- Legal entities that own property for creation with subsequent deforestation of the site.



That was a tough one! **Only 59% correct**, but that's all part of the learning process.

REDUCING POLLUTION AND WASTE

Cemig follows a strict solid waste management process, in accordance with current environmental regulations and the company's internal policies. Solid waste management adheres to the **mitigation hierarchy** principle, which establishes an order of priority: it begins with prevention, moves through reduction, reuse, recycling, and treatment, and continues through to environmentally sound final disposal.

The main waste generated by Cemig consists of **materials and equipment classified internally as unusable** (items that no longer serve an operational purpose for the company). However, most of these materials have recycling potential and are reintroduced into the production chain, reinforcing the logic of the circular economy.

To respond to accidents or emergencies involving hazardous products or waste that could cause serious harm to the environment and public health, Cemig maintains **Emergency Response Plans (ERPs)**.

These plans are developed in accordance with the company's operations and contain the procedures and information necessary to ensure rapid and efficient responses in emergency situations. They also provide for:

- Emergency response kits at strategic locations;
- Contract with a company specializing in environmental emergency response;
- Conducting theoretical and practical training for operational teams.

In addition, the company has Water and Oil Separation Systems at its substations and power plants to prevent soil and water contamination in the event of major oil spills.

WHAT IS BEING DONE FOR PEOPLE?

We understand that promoting sustainability depends on cooperation between different sectors of society. That is why we value the active participation of local communities, civil society organizations, the private sector, and academia in our programs and projects. This collective engagement strengthens the impact of socio-environmental actions and contributes to the sustainable development of the regions where we operate. Below, we present initiatives that exemplify this integration and Cemig's commitment to building sustainable solutions in a participatory manner.

Cemig recognizes that its activities generate direct and indirect impacts on the communities where it operates and, therefore, adopts a stance of social and environmental responsibility based on dialogue, active listening, and valuing people.

In its risk and opportunity management and in the exercise of corporate governance, the company pays constant attention to the demands of the populations living in the vicinity of its facilities, whether hydroelectric plants, transmission lines, or energy

distribution areas. This stance is reflected in its internal policies and guidelines, which ensure that local communities and government representatives have opportunities to be heard and participate, promoting dialogue and the joint development of solutions.

In practice, Cemig's social and environmental, or socio-educational, activities seek to bring the company closer to local populations through environmental education programs, cultural activities, and social engagement initiatives that promote awareness and sustainable development.



PROGRAM	OBJECTIVE
Participatory Management Program	Strengthen the participation and organization of surrounding communities by raising awareness about sustainable use and harmonious coexistence with the reservoir, through the creation of a Management Committee and monitoring of the action plan and timeline.
Environmental Education Program	Promote environmental awareness, strengthen civic engagement, and maintain ongoing dialogue with communities, workers, and key stakeholders, integrating Cemig's social and environmental initiatives into lectures, site visits, workshops, and educational activities.
Environmental Education Program	Promote environmental awareness, strengthen civic engagement, and maintain ongoing dialogue with communities, workers, and key stakeholders, integrating Cemig's social and environmental initiatives into lectures, site visits, workshops, and educational activities.
Integrated Community Engagement Plan for the Areas Surrounding the Hydroelectric Plant	Implemented exclusively at the Queimado HPP, the plan aims to strengthen dialogue between Cemig and the communities neighboring the operations, promoting social participation and the development of joint initiatives focused on sustainability through training, project development, and the establishment of advisory and deliberative bodies.

Active community participation at the Queimado HPP

The Queimado HPP, located on the Rio Preto and covering municipalities in Minas Gerais, Goiás, and the Federal District, exemplifies the breadth of **socio-educational actions** developed by Cemig in collaboration with the surrounding communities. Between

2017 and 2024, **more than 500 activities** focused on community relations and socio-environmental development were carried out in the areas surrounding the installations.

Environmental Education Program (PEA)

In this context, the **Environmental Education Program (PEA)** has established itself as a cornerstone of the company's socio-environmental activities, promoting environmental awareness, strengthening civic engagement, and fostering ongoing engagement with surrounding communities, employees, and key stakeholders.

During this period, the PEA carried out approximately **350 educational activities**, involving more than 5,000 participants, through initiatives such as lectures, training sessions, theatrical performances, visits to the Queimado HPP, visits to preserved areas and educational spaces, as well as tree-planting and donation of native seedlings initiatives. These initiatives reached diverse audiences, including students, teachers, local residents, rural producers, and plant workers.

As part of the **School Environmental Education Project**, efforts focused on educational and experiential activities, contributing to environmental education and the engagement of local schools in the sustainability agenda. Highlights include: 106 guided tours of the plant, attended by **over 3,000 participants**, and approximately **1,000 students and teachers** who attended lectures and training sessions.

Projects aimed at **surrounding communities and plant workers** included lectures and training sessions with **over 800 participants**, as well as mobile outreach programs, fairs, technical visits, and hands-on activities, with a focus on promoting sustainable agricultural practices, responsible use of natural resources, and the adoption of good environmental practices in daily operations.



Social Communication Program (PCS)

Between 2017 and 2024, the program established itself as a strategic channel for engagement, fostering active listening and shared responsibility in social and environmental management.

During this period, the PCS participated in **12 regional events** and received **294 inquiries** through its communication channels (email, phone, and suggestion boxes). The **Queimado HPP website** also stood out as a tool for engaging with society, recording an average of **944 monthly visits** and **37 content updates** over the period. In addition, **5,685 newsletters** and **4,086 brochures and booklets** were distributed, expanding the reach of information and guidance on the plant's activities.

The program also maintains strong institutional coordination: **252 regional entities** are registered as potential partners, including public officials, local

organizations, and educational institutions, strengthening the ties between Cemig and its stakeholders.

One of the highlights of the PCS is the ongoing dialogue with local communities that are potentially affected by flooding from the Preto River. **Seven community meetings** were held to address safety and **flood warnings**, with the participation of **411 residents**. In addition, **three inter-institutional meetings** were held with the other power plants located downstream, with the aim of improving **operational coordination**, ensuring both efficiency in power generation and the **safety of riverside communities**.

Integrated Plan for Relations with Communities Surrounding the Queimado HPP (PIRCEH)

Between 2017 and 2024, the PIRCEH of Queimado HPP became a permanent forum for dialogue, cooperation, and participatory governance, involving local leaders, public institutions, rural producers, and community representatives. Structured around three pillars — **Stakeholder Dialogue, Local and Regional Development, and Interrelation with Other Environmental Plans and Programs** — the plan guided actions aimed at strengthening institutional relationships and community leadership in the project's areas of influence.

Within the **Stakeholder Dialogue** pillar, the **Community Advisory Councils** and the **Integrated Committee for Relations with Communities Surrounding Hydroelectric Plants** stood out. Throughout the period, more than 70 meetings and gatherings were held, where dozens of socio-environmental issues were discussed and community proposals were recorded regarding environmental restoration, environmental education, waste management, support for rural producers, conservation of water resources, and the revitalization of public spaces. These forums have established themselves as regular channels for direct dialogue, transparency, and inter-institutional articulation.

In the area of **Local and Regional Development**, PIRCEH organized **training sessions and support initiatives for the development of socio-environmental projects**, strengthening local expertise in participatory methodologies, project management, and sustainable practices. The initiatives involved **dozens of training sessions**, trained representatives from various local institutions, and resulted in **support for community projects and initiatives**, accompanied by technical meetings and guidance activities, thereby expanding communities' autonomy in the formulation and implementation of local solutions.

In the area of **Interrelation with other Environmental Plans and Programs**, **training activities for environmental agents** stood out, aimed at disseminating knowledge and strengthening community-based environmental monitoring. **Training sessions** were held **involving participants from different institutions**, addressing topics such as environmental enforcement, good agricultural practices, and biodiversity conservation. These initiatives contributed to community engagement and to strengthening of social control over the territory, highlighting the integration of PIRCEH with other aspects of the socio-environmental management of the Queimado HPP.

Corporate Environmental Education Program (EcoCiente)



In addition to the social programs associated with licensing, Cemig also carries out its own environmental education initiatives at the corporate level. One of the main ones is the **EcoCiente Program** (Cemig, 2025 - Educação Ambiental), created in June

2024 on World Environment Day, to strengthen the culture of sustainability among employees, partners, and communities, independently of the local actions of the plants.

The program seeks to expand knowledge on environmental issues and integrate sustainability into the company's daily activities. Its actions include training, lectures, seedling planting, guided tours, and educational activities focused on the conservation of fauna, flora, water resources, and rational energy use.

It promotes interdisciplinary and multidisciplinary activities aligned with **the United Nations (UN) 2030 Agenda** and the **Sustainable Development Goals (SDGs)**, incorporating ESG (environmental, social, and governance) principles into Cemig's management.

The initiative reinforces the company's commitment to train citizen advocates and disseminate good environmental practices throughout its network of relationships.

In 2024, during the week of the Program's launch, more than 220 students and teachers from various educational institutions in Belo Horizonte and São José da Lapa were welcomed at Cemig's Headquarters Building to participate in educational socio-environmental activities with the Giramundo theater group.



EcoCiente's Support for the Zero Waste Fishing Project.

the preserved, tree-lined grounds on campus. In Ouro Fino, workshop participants took a pleasant stroll through Recanto dos Lagos, rediscovering the municipality's natural beauty and appreciating the well-being promoted by urban green spaces.

EcoCiente also supported an important initiative by fishermen from Três Marias and São Gonçalo do Abaeté in the Zero Waste Fishing project, which aims to contribute to the care of the São Francisco River through a collaborative underwater cleanup of the river sections that run through the region.



Walk organized by Univercemig in Sete Lagoas.

Pouso Alegre Walk.

That year, Ecociente organized workshops, training sessions, nature walks, lectures, and recreational activities involving Cemig employees and their families, as well as students from schools and institutions supported by the company and residents of nine municipalities (Montes Claros, Juiz de Fora, Uberlândia, Lavras, São Gonçalo do Abaeté, Diamantina, Sete Lagoas, Ouro Fino, and Antônio Dias). The activities involved **937 participants** and covered topics such as urban green spaces; combating wildfires; ecological relationships; sustainability; mental health; solid waste generation and disposal; and the functioning and operations of hydroelectric power plants.

Curricula were developed for 7 free courses, made available on the Univercemig platform to anyone interested, in addition to the creation of 4 manuals and a booklet with the aim of disseminating important

information about the relationship between the electric power system and the community.

Ecological Walks, an initiative to raise employees' awareness of the resources and services provided by nature, which are essential for human health and well-being and the importance of each individual's participation in environmental preservation and conservation, were held at Victório Siquierolli Municipal Park in Uberlândia, at the Federal University in Lavras, at the Botanical Garden of the Federal University in Juiz de Fora, and at Lapa Grande State Park in Montes Claros.

Univercemig opened its doors so that residents of Sete Lagoas could learn a little about its history and facilities, touring everything from classrooms, equipment testing areas, and training facilities to

One of the participants left a review of the work carried out

“**CEMIG IS ALWAYS INNOVATIVE, AND BY LAUNCHING THE ECOCIENTE PROGRAM, IT OPENED THE DOOR FOR THE COMMUNITY AT LARGE TO UNDERSTAND THE IMPORTANCE OF CARING FOR THE ENVIRONMENT, ESPECIALLY REGARDING NON-RENEWABLE RESOURCES. I LOVED IT!**”

In 2025, the program continued to promote various awareness-raising activities with company employees, in schools, parks, events, and universities across Minas Gerais. In summary, our results were:

- **More than 6,500 participants** reached through **46 activities** held in **16 municipalities**;
- **More than 3,000 native seedlings** produced at the EAIT nursery used in planting and restoration initiatives;
- **More than 5,600 educational booklets** distributed, including materials on wildfires, waste, water, biodiversity, and climate change;
- Diverse activities, including lectures, workshops, field trips, nature walks, educational booths, environmental games, interactive activities, and participation in municipal, school, and institutional events;
- Active participation in symposia, themed weeks, regional environmental projects, and community outreach events;
- Engagement with various partners (elementary and secondary schools, city governments, urban parks, community associations, universities, and technical teams).



Among the activities promoted by EcoCiente, we highlight the **Ecological Hike**, which involved 81 Cemig employees and their families in the municipalities of Uberaba, Pouso Alegre, and Contagem (MG). The activity fostered contact with nature, learning about fauna and flora, and promoted physical and mental well-being. According to one of the participants:

“

IT WAS ALL SO GOOD, SO PERFECT!! I'D LIKE TO EXPRESS MY THANKS TO THE ORGANIZERS, WHO TOOK CARE OF EVERY DETAIL TO EVERYONE'S COMFORT, FROM TRANSPORTATION TO MEALS. IT WAS CERTAINLY A VERY PRODUCTIVE SUNDAY MORNING, PROVIDING KNOWLEDGE ABOUT OUR FAUNA AND FLORA, AND AN EXCELLENT WAY TO EXERCISE BOTH BODY AND MIND.”

In March, the program celebrated **World Water Day** with educational activities, lectures, and interactive sessions, as well as the distribution of over 1,000 seedlings (in partnership with the Itutinga Environmental Station), booklets, and educational materials, strengthening community engagement and raising awareness about responsible water use. The activities took place in Divinópolis, São Gonçalo do Rio Abaixo, Quartel Geral, Lavras, and Belo Horizonte, reaching more than **1,650 people**.

World Environment Day activities took place in June in Ijaci, Lavras, Cachoeira Dourada, and Belo Horizonte, reaching **more than 800 people** through environmental education and community outreach events. The activities included lectures, booths, and exhibitions, as well as the distribution of more than 800 educational materials and seedlings. Institutional participation was expanded through activities at Cemig's headquarters, support for Bayer's Proverde program, and sponsorship of the ECO Forum.

Casa Aberta, an event where employees' children are invited to visit their parents' workplace at Cemig, attracted **approximately 800 participants** in Belo Horizonte, Lavras, and Uberlândia, involving employees and their families. The activities included educational games, the distribution of materials, and special experiences, such as visits to the Itutinga and Camargos power plants, as well as planting activities, addressing topics such as biodiversity, water, energy, and sustainability.

Tree Day activities took place in Belo Horizonte, Lavras, Varginha, and Ijaci, featuring educational activities, seedling distribution, and technical events. The highlight was the Tree Day Symposium in September in Belo Horizonte, bringing together experts in environmental conservation and restoration. There were also recreational activities with children, symbolic plantings, and the distribution of native and fruit tree seedlings.



Between August and September, more than **270 students and teachers** from Belo Horizonte participated in lectures, workshops, and guided tours in partnership with the Sagrada Família I and Coronel Manoel Soares Couto state schools, addressing topics such as biodiversity, the restoration of green spaces, rational water use, and energy efficiency. The activities included **planting native seedlings** and **recreational activities**, connecting environmental theory and practice. An event was also held at **Colégio Santo Agostinho** in Divinópolis with **37 elementary school students**, addressing the theme of “Water” through presentations, the donation of educational booklets, the distribution of native seedlings, and interactive demonstrations with models of hydroelectric plants. In November, the program held a sensory experience at E.E. Dr. Amaro Neves, involving **34 special education students** in activities to connect with nature, collective planting, and the creation of a display on “a greener school,” in addition to the donation of seedlings produced at the Itutinga Environmental Station's nursery.

In addition, in partnership with the Peixe Vivo Program, it participated in the **UEMG Environmental Engineering Academic Week** – Ibirité Campus, presenting lectures on sustainability in the electricity sector and the relationship between energy generation, aquatic fauna, and water quality. The **National Science and Technology Week**, held at the Youth Reference Center in Belo Horizonte, featured the participation of EcoCiente and the Energy Efficiency Program with an interactive booth that brought together around 1,500 participants. Also in November 2025, EcoCiente offered educational activities for about 100 visitors, including games, a collaborative panel, and seed planting as part of the **Ambientar Program**, held at Mangabeiras Municipal Park.

These initiatives reinforce Cemig's commitment to **fostering environmentally conscious citizens, exchanging knowledge, and promoting good environmental practices**, expanding the reach of environmental education beyond its own operations.

O5. PATHWAYS TO THE FUTURE: CHALLENGES, DECISIONS, AND NEXT STEPS



PERSPECTIVES

Climate and land transformations and implications for energy security

The coming decades may bring profound changes in climate and land use, the intensity of which will depend on the paths taken for the conservation and sustainable use of nature. Different scenarios illustrate the possible paths and their implications for natural and economic systems.

In a **business-as-usual** scenario (meaning continuing to do everything as it has always been done, i.e., maintaining traditional practices, processes, and models without significant changes), these changes tend to follow the current pace, with progressive degradation of ecosystems, greater climate variability, and increasing risks, including for the operation of the electricity sector.

In a **nature positive** scenario (i.e., acting in a way that improves nature over time), in which society, governments, and companies advance policies for conservation, restoration, and sustainable use of the territory, negative impacts are reduced and an environment more favorable to water, energy, and ecological resilience is created.

In the **sand in the gears** scenario (an expression that literally means "sand in the gears" and is used figuratively to indicate something that hinders, hinders, or slows down a process), characterized by regulatory setbacks, poor institutional coordination, and disorderly expansion of land use, environmental impacts intensify sharply, significantly increasing risks to ecosystems, communities, and energy infrastructure.

These three scenarios show that future transformations are neither linear nor inevitable; they depend on the collective choices made today.

In territories where the energy matrix is largely dependent on water resources, trends such as greater rainfall variability, longer periods of drought, increased average temperatures, and changes in the hydrological regime are already emerging as critical vectors of attention.

These phenomena affect the availability of water in reservoirs, alter essential ecological cycles, and can be aggravated by changing patterns of land use and land cover, which place greater pressure on native vegetation and can result in increased soil degradation, habitat fragmentation, increased

erosion processes and sediment transport to water bodies, a reduction in the rate of water recharge, and an increase in the frequency of fires, for example.

These processes can compromise ecosystem services that are essential to the energy sector, especially those related to regulating the hydrological cycle, controlling erosion, soil stability, and water quality. With the aim of aligning its business model with scenarios that have a lower environmental impact, Cemig has developed a Biodiversity Action Plan, which includes a set of goals and actions designed to increase positive impacts on nature. The plan underscores the need and importance of integrating biodiversity, climate, and land management as a core component of its strategy.

From analysis to action: the LEAP approach and the development of our Plan

Faced with this scenario, Cemig structured its analysis using the LEAP approach proposed by the TNFD (Taskforce on Nature-related Financial Disclosures), which guides the management of nature-related risks and opportunities through four steps:




Carrying out these steps made it possible to organize information regarding Cemig's relationship with biodiversity and nature, transforming a broad set of data on impacts and critical dependencies, future scenarios, and material risks into a structured overview. This overview guides the Biodiversity Action Plan, which charts a course for reducing impacts, amplifying positive effects, and strengthening business resilience.


Interface with Nature


In the first step, 'Locate', the company's sites with the greatest significance for biodiversity were identified by cross-referencing operational data with global databases covering various ecological sensitivity criteria. This process identified the priority assets that should be the focus of attention to guide Cemig's efforts on its path to sustainability.

Dependencies on priority ecosystem services

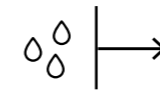
In the step 'Evaluate', significant dependencies of Cemig on ecosystem services were identified. Among the services on which Cemig's operations most heavily depend, the following stand out:

- 

Global climate regulation
Global climate stability, influenced by ecosystems such as forests and natural areas, is crucial for the predictability of hydrological regimes and the occurrence of extreme events. The loss of this service can intensify droughts and storms, directly affecting reservoirs, transmission structures, and production in solar and wind farms.
- 

Local climate regulation
Native vegetation, healthy soils, and water bodies contribute to balancing temperature, humidity, and wind circulation on a local scale. The degradation of these systems can alter wind and solar radiation patterns, which are essential for the performance of wind and solar farms and intensify heat islands and microclimates that influence transmission and distribution infrastructure.
- 

Soil and sediments retention
Intact ecosystems, especially riparian vegetation, and vegetation cover on slopes, reduce erosion and prevent excessive sedimentation in rivers and reservoirs. The loss of this service results in increased silting, reduces the useful life of reservoirs, increases dredging and maintenance costs, and compromises the efficiency of hydroelectric generation.



Water flow regulation

Forests, permeable soils, and wetlands ensure infiltration, aquifer recharge, and gradual water release throughout the year in the watershed. These processes stabilize flows and reduce extremes such as floods and severe droughts. When this service is compromised, water variability increases, generating operational risks, productivity losses, and a greater need for supplemental energy dispatch.

The deterioration of these four services is directly linked to business risks.

Risks associated with nature

The 'Assess' step made it possible to identify the risks and opportunities associated with Cemig's operations. The risks are categorized into two types:



Physical risks

Are those resulting from direct changes in the natural environment. They include extreme events such as droughts, floods, storms, and fires (acute risks), as well as gradual changes such as changes in rainfall patterns, increases in average temperature, and degradation of watersheds (chronic risks). For the electricity sector, these risks can affect everything from the availability of water for hydroelectric generation to the integrity of transmission lines, substations, wind farms, and solar parks. In short, these are risks related to the concrete impacts that climate and ecosystem integrity have on infrastructure and operations.



Transition risks

Arise from society's response to the context of climate change and the state of nature. They involve new public policies, regulatory requirements, climate and biodiversity targets, technological changes, evolving investor expectations, market adaptations, and changes in consumer behavior. As governments, financial institutions, and society move toward an ecological transition, companies need to adapt processes, business models, and reporting mechanisms — which can generate significant costs or reconfigurations.

At the same time, this ecological transition scenario also creates a significant set of opportunities associated with nature.

Opportunities for a more sustainable energy sector

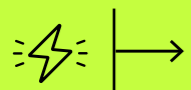
The preservation and restoration of ecosystems become strategic vectors for increasing water resilience, reducing long-term operating costs, and strengthening energy security. Initiatives such as watershed conservation, sustainable land management, nature-based solutions, and the integration of biodiversity metrics into management can generate operational gains, expand access to green financing, improve regulatory performance, and strengthen the company's reputation. In addition, the transition to cleaner and more resilient energy models opens space for innovation, partnerships, and the development of new services that connect nature, climate, and energy, increasing the social, environmental, and economic value of the business.

Integration with public policies and local initiatives

The management of risks and dependencies related to nature does not occur in isolation. It is directly linked to planning tools and public policies. In Brazil, tools such as the Forest Code, water resource plans, and ecological-economic zoning guide land use and contribute to the conservation of essential ecosystem services.

Ecosystem services support essential pillars of economic and social life: food, water, and energy security. For the electricity sector, the integrity of these services is directly proportional to the reliability of the matrix and the continuity of energy supply.

Water and energy security



conserved ecosystems ensure water infiltration into the soil, aquifer recharge, less occurrence of flash floods and silting, and greater stability in river flow — fundamental elements for hydroelectric generation.

In this context, Cemig has the opportunity to play an active role in strengthening the implementation of these policies through actions such as sharing environmental and hydrological data, supporting conservation programs in strategic basins, participating in territorial and water resource management committees, providing technical collaboration in regional planning processes, and encouraging participatory governance mechanisms.

In addition, we increasingly seek to deepen and strengthen structured partnerships with public

agencies responsible for managing conservation units, state environmental institutes, universities, and research institutions, contributing resources, technical knowledge, monitoring, and joint conservation and restoration projects. These partnerships increase the effectiveness of public policies, strengthen the scientific basis for decision-making, and help build integrated solutions that reduce risks, generate shared value, and promote greater environmental and energy resilience in the long term.

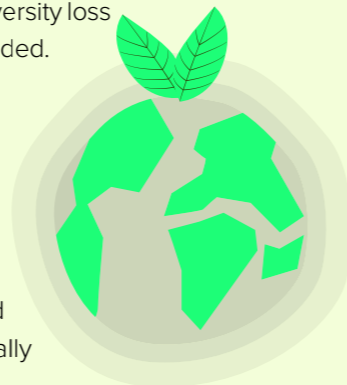
PRIORITY ACTIONS: how strategy translates into action

Cemig's biodiversity conservation strategy is based on a structured policy and the results obtained from the LEAP-TNFD approach, which are broken down into priority lines of action and an integrated action plan.

The priorities reflect the internationally recognized hierarchy of mitigation of impacts on biodiversity and nature. It is a sequential set of steps used in the environmental planning and management of projects to address risks and impacts on biodiversity. This approach recommends, first, **avoiding** impacts whenever possible; if this is not feasible, **reduce** or **mitigate** adverse effects through management and control; then prioritizing **the restoration of** affected areas

and ecological processes; and finally, when residual impacts persist, applying **compensation** through specific conservation-oriented actions. This system aims to ensure that negative impacts are addressed responsibly, and that net biodiversity loss is minimized or, preferably, avoided.

The mapping of priority actions guides the adoption of environmental management systems, the strengthening of wildlife monitoring, adaptive vegetation management, and ecological restoration, especially



in critical areas and reservoir margins. When necessary, environmental compensation actions are carried out, including partnerships with Conservation Units, for example in public areas such as Parks or Private Natural Heritage Reserves (RPPNs).

In line with global commitments to the biodiversity and nature agenda, including the SDGs, the Global Biodiversity Framework, and the adoption of the TNFD framework, Cemig seeks to integrate these processes into its strategic planning, strengthen institutional relationships, and promote transparency in reporting to stakeholders. Material topics such as water management, decarbonization, sustainability governance, and environmental education remain at the center of the agenda, ensuring that the path outlined in the priority lines of action contributes directly to business sustainability, ecosystem health, and progress in meeting global goals for ecological transition.

LEARN ABOUT OUR BIODIVERSITY ACTION PLAN

Cemig's Biodiversity Action Plan was designed in a participatory manner, with I Care Brasil support, integrating the best practices and **guidelines of the TNFD**, internationally recognized as a benchmark in transparency and management of risks and opportunities related to nature.

The plan systematizes the main results of previous stages of **the LEAP journey**, defines strategic guidelines, and presents a robust roadmap for the progressive integration of biodiversity into Cemig's governance and business model, promoting an ecological trajectory with the aim of achieving a net neutral impact on biodiversity, following the principle of **"No Net Loss."**

Among the objectives of the Biodiversity Action Plan are:

- Consolidate the company's biodiversity strategy, aligning it with international best practices.
- Integrate and optimize existing initiatives and actions in the areas of fauna, flora, and water resources, strengthening their synergies and monitoring.
- Propose actions aligned with the mitigation hierarchy.
- Set robust goals and performance indicators, aligned with sectoral and global commitments, for effective monitoring.
- Provide support to enable the cross-cutting integration of the biodiversity agenda into business decision-making and planning processes.

The structure of Cemig's Biodiversity Action Plan is guided by the four fundamental pillars defined by the TNFD (Governance, Strategy, Risk and Impact Management, and Metrics and Targets), which organize and group **14 recommendations** for transparency, accountability, and systemic management of impacts, dependencies, risks, and opportunities related to nature.

The Cemig's Biodiversity Action Plan organizes its goals into five integrated thematic pillars — **Social, Governance, Data, metrics, and goals management, Nature, and Climate** — ensuring that the biodiversity agenda is embedded across the company's strategy and operations. These pillars reflect the material issues identified and are aligned with the Corporate Governance and Environment framework presented in Cemig's Annual Sustainability Report. Cada eixo cumpre um papel específico:

SOCIAL

It focuses on **supply chain management**, with an emphasis on identifying critical suppliers and conducting structured assessments. Based on this understanding, the goal is to strengthen **engagement** and capacity-building within the supply chain on nature-related issues, expanding risk and impact management beyond the company's direct operations.

GOVERNANCE

Establishes the groundwork for integrating biodiversity into decision-making. This includes **managing impacts, dependencies, risks, and opportunities**; organizing internal departments; and strengthening corporate governance to enable strategic action on the biodiversity agenda. It also involves establishing **budgetary guidelines** to facilitate the implementation of the actions outlined in the plan.

The Plan strengthens supply chain management, establishes a dedicated nature governance framework, enhances the environmental data infrastructure, and directs investments and partnerships toward conservation and innovation, consolidating a risk-, materiality-, and performance-driven approach. Within the Nature and Climate pillars, targets integrate conservation, sustainable resource use, and operational resilience, with a focus on water security, biodiversity protection, circular economy, decarbonization, and energy transition, including the ambition to achieve biodiversity footprint neutrality by 2050.

Collectively, these guidelines reinforce Cemig's commitment to increasingly resilient, efficient, and best-practice-aligned operations, contributing to sustainable value creation and to building a nature-positive future for society.

DATA, METRICS, AND GOALS MANAGEMENT

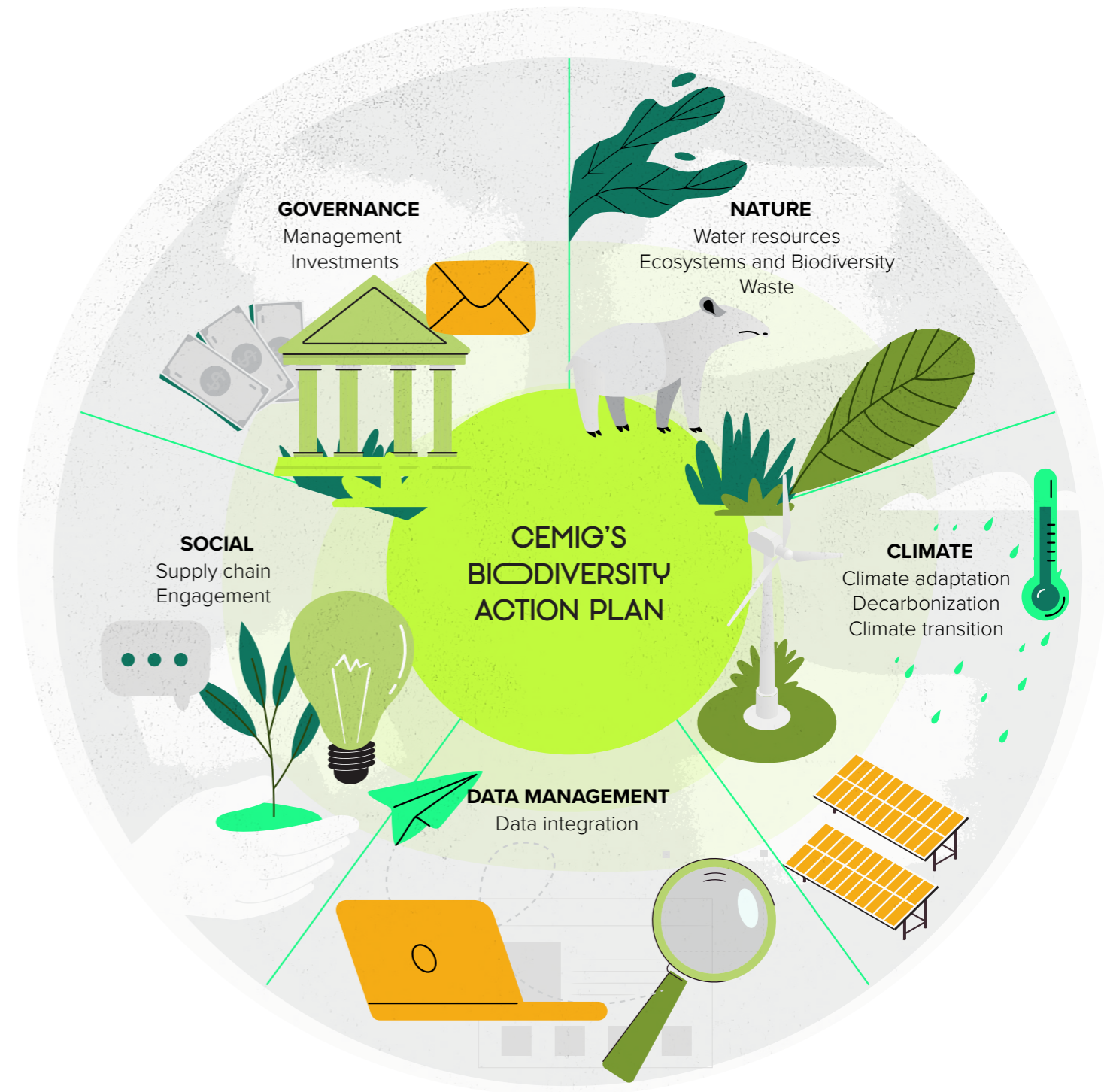
Its aim is to **integrate** biodiversity-related information by unifying the company's data platforms. This foundation is essential for improving monitoring, supporting decision-making, and ensuring consistency in the reporting and management of indicators associated with the plan.

NATUREZA

It focuses on actions directly related to the conservation and management of natural resources. The **ecosystems and biodiversity** sub-pillar include goals aimed at mitigating negative impacts on biodiversity, environmental education initiatives and seedlings planting, the protection of endangered species, and ecosystem restoration. The Nature pillar also covers **water resource** management, with a focus on reducing consumption and ensuring water security; and **waste** management, including reuse, recycling, and recovery of industrial waste, as well as the proper management of hazardous waste.

CLIMA

It coordinates actions related to **climate adaptation, decarbonization, and the energy transition**, including initiatives to reduce emissions, expand the use of renewable energy sources, and manage climate-related risks and opportunities.



CEMIG



**GOVERNO
DE MINAS**

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