Water Efficiency Management Programs 2026

Sumário

1. Introduction

Cemig continuously monitors water use in its operations, particularly in hydroelectric plants and administrative facilities, systematically evaluating consumption patterns, losses, and process efficiency. Additionally, the company identifies assets most exposed to changes in hydrological regimes, using these analyses to prioritize operational improvement actions and optimize the use of water resources.

The company adopts a structured, systematic, and data-driven approach to water management, encompassing continuous monitoring of water withdrawa, consumption, and key water performance indicators in its operations.

Water use assessments include:

- Detailed analysis of consumption patterns, operational efficiency, and water losses, focusing on identifying opportunities for improvement;
- Identification of critical assets located in water-sensitive or hydrologically vulnerable areas, allowing for the prioritization of actions;
- Assessment of exposure to water risks, including variability in hydrological regimes, supporting risk-based management and operational resilience.

Figure 1: Pillars of Action – Water Efficiency

2. Actions to reduce water consumption

The Company adopts measures such as optimizing operational processes, preventive maintenance of hydraulic systems, loss control, and equipment modernization, aiming to reduce water consumption. Practices for rational use are also promoted in administrative and operational environments. Another initiative is the construction of new substations with rainwater harvesting, reuse of water from the cooling system, use of spray taps, and toilets with technology to reduce water consumption. A prime example is the construction of the new Integrated Operations Center (COI).

The New COI Project includes the following actions to reduce water consumption: reuse of air conditioning water for garden irrigation, drip irrigation system, dual-flush toilets, urinals with automatic shut-off, and sensor-activated taps.

Video: NOVO COI.mp4

Figure 2: View of the new IOC

3. Actions to improve wastewater quality

Cemig implements effluent treatment systems and continuous monitoring of environmental parameters, ensuring full compliance with applicable environmental regulations. These actions aim to reduce impacts on water bodies and ensure the adequate return of water to the environment. In our assessment, 100% of the effluents generated by Cemig met the effluent discharge standards of Brazilian legislation. It is worth noting that the effluents generated by Cemig are domestic, therefore, with low polluting potential. Annually, Cemig presents to the state environmental agency, as Illustrated below:

Tabela 05 - Resultados do monitoramento dos efluentes sanitários.

Parâmetros	Padrões de lançamento*	IR-ES 01a Efluente bruto	IR-ES 01b Efluente tratado
Temperatura (°C)	<40 [a, b]	25,8	25,2
pH	5,0 a 9,0 [a,b]	6,38	6,65
Material flutuante	ausente	presente	ausente
DBO_5 (mg/L)	60 ou remoção ≥60% [a] 120 ou remoção ≥60% [b]	505	27,5 (remoção = 94,6%)
DQO (mg/L)	180 ou remoção ≥55% [a]	899	140 (remoção = 84,4%)
Óleos e graxas (mg/L)	100 [a,b]	4,13	<2,5
Sólidos sedimentáveis (mL/L)	<1 [a, b]	11,0	0,50
Sólidos em suspensão (mg/L)	≤100 [a]	793	58,0
Coliformes totais (NMP/100mL)	-	$1,5x10^7$	$2,5x10^7$
Coliformes termotolerantes (NMP/100mL)	-	$5,0x10^6$	$3,3x10^5$
Enterococos/ Estreptococos (UFC/100mL)	-	$2,9x10^5$	$7,3x10^3$
Nitrogênio amoniacal (mg/L)	20 a**	131	50,8

Oil and Water Separator System - CSAO

Figure 3: General view of the water and oil separator box.

Figure 4: Collection process for effluent analysis at CSAO.

Figure 5: Photos of industrial effluent sampling

Figure 6: Sanitary effluent sampling

4. Establishment of Targets to Reduce Water Use

The Company establishes internal water efficiency targets, accompanied by performance indicators that allow for the evaluation of consumption reduction and the effectiveness of actions implemented over time.

In 2025, a new target of a 25% reduction in total water consumption by 2032 was established, using 2021 as the base year, with a consumption of 51,999.10 m³. This sets a target of 38,999.33 m³ by 2032. Total water consumption was 44,317.97 m³, a performance that met the target reduction for the period, remaining approximately 5% below the stipulated value.

5. Application of water recycling

Water reuse and recycling practices are applied whenever technically feasible, including:

- Rainwater harvesting systems
- Reuse of water from air conditioning systems
- Implementation of reuse systems in substations and operational facilities

These initiatives contribute to reducing withdrawal and improving overall water efficiency.

Collection of water from air conditioning – João Monlevade Substation

Figure 7: Water collection system from air conditioning system

Rainwater and air conditioning condensate collection in substations

Rainwater and air conditioning condensate collection system implemented in 5 substations:

Figure 8: Rainwater and air conditioning collection system

6. Employee Awareness Training

Training, internal campaigns, and awareness-raising actions focused on the conscious use of water are promoted, strengthening the organizational culture of sustainability and engaging employees in the continuous improvement of water management.

Events promoted by the Environmental Education Program (cemig.com.br/wp-content/uploads/2026/02/relatorio-desempenho-programa-ecociente-2025.pdf)

Cemig in 2025: in the Divinópolis regional office, employees participated in a chat and activities commemorating World Water Day, addressing pollution, waste, and the importance of water, in addition to the distribution of seedlings of native Cerrado species. The event had 64 participants. (Ecociente 2025, page 6)

Themes covered in Ecociente related to the topic:

- World Water Day and the importance of this resource
- Sustainability and sustainable practices
- Importance of the environment and our role in its conservation
- Relationship between water and electricity
- Importance of vegetation for environmental balance

In 2026, a lecture on Water and conscious consumption: a journey to the future was held. The lecture was moderated by Giuliana Morrone, an ESG (Environmental, Social and Governance) specialist with a consolidated career in Brazil and abroad. With a degree in Journalism and an MBA in ESG from PUC Rio, Giuliana combines

experience in communication, corporate education and sustainability, bringing an integrated approach that connects environmental responsibility, organizational strategy and corporate culture.

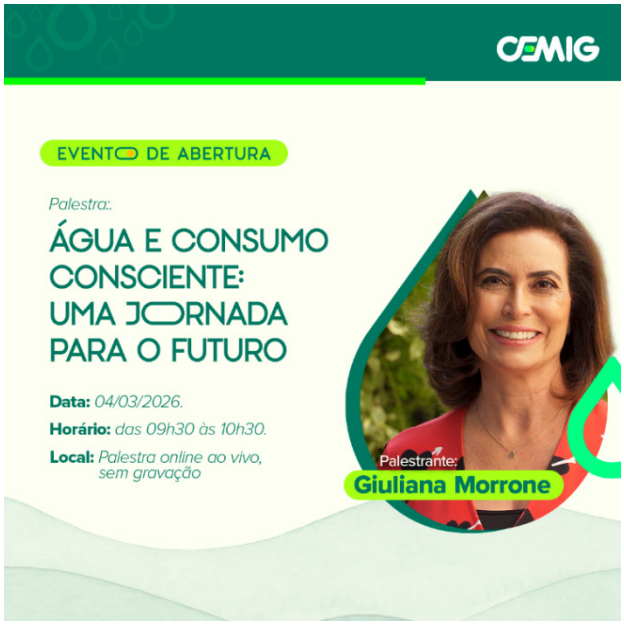

Figure 9: Lecture Invitation

In March 2026, Ecociente launched the Water Expedition Drawing Contest, aimed at the children of employees. The initiative invites children to put their creativity into practice to reflect, in a playful way, on the importance of the conscious use of water in daily life.

With the theme "A journey towards efficient water management," the contest continues the actions of the Water Expedition and seeks to strengthen the culture of sustainability within families as well. The proposal is simple and inspiring: through drawing, children can represent actions that help preserve this essential resource for life.
Cursos EcoCiente – Univercemig

https://lxp.cemig.com.br/course/management.php?categoryid=100

Curso 1 – Prevenção de Queimadas – Espalhe essa Idéia
Curso 2 – Melhores Práticas Ambientais Relacionadas à Vegetação
Curso 3 – Conexão Natureza: Cuidados com a Biodiversidade
Curso 4 – Mudanças Climáticas e Eficiência Energética
Curso 5 – Práticas de Sustentabilidade
Curso 6 – Vivendo com Segurança Próximo aos Sistemas de Energia Elétrica
Curso 7 – Consumo Consciente de Água