

Operational efficiency



OPERATIONAL EFFICIENCY

G4-DMA

Our generation complex is comprised of 9 plants and 3 small hydroelectric plants (SHEPs) connected to the SIN (National Interconnected System). Five of them are located in the Tietê River and, besides generating energy, they allow for river navigation – through six locks that we control – and the development of fish farming, irrigation, recreation and flood control activities. Thus, we enable multiple uses of the waters. In Rio Grande, the Água Vermelha plant, with a generation capacity of 1,396 MW, is our largest energy production unit. In Rio Pardo, we operate three other hydroelectric plants – Limoeiro, Euclides da Cunha and Caconde.

Average plant availability factor (%) G4-EU30



Last year, our plants produced 13,108.9 GWh of energy, a volume 65.1% greater than in 2015, due to better water availability conditions in the period along with the higher power generation program coordinated by AES Tietê together with the ONS (National Operator of the Electric System). The storage level of our reservoirs was 38.74% in the end of the period, despite the good flow in the state of São Paulo in 2016.

In the last couple of years, we have invested approximately BRL 111 million in modernization and preventive maintenance at the Água Vermelha plant. Between 2017 and 2021, the company plans to invest approximately BRL 400 million, especially in the modernization of hydroelectric plants, aiming to continuously improve operating conditions and ensure the availability of energy generation for our plants.

In 2015, we were the first company in Latin America to receive ISO 55001 certification, which establishes a set of requirements for high performance in asset management and refers to our operation and maintenance of hydropower plants and SHEPs – the recertification took place last year. The operation according to this standard drives operating and management improvements,

with cost reduction and fewer forced shutdowns of our assets.

We invested BRL 21.4 million, in 2016, to build the new COGE (Generation and Locks Operations Center), located in the city of Bauru, in the state of São Paulo, which is responsible for the centralized management of our plants. The new COGE headquarters, whose operation starts in 2017, will be equipped with photovoltaic panels and a fuel cell that will contribute to the local energy supply.

G4-6



In 2016, we innovated in the way we operate our locks on the Tietê River, São Paulo. The implementation of technological resources allowed the **OPERATION** to be made **REMOTELY**, directly from **COGE**. This is a pioneering solution in Brazil and is approved for the Bariri, Ibitinga, and Promissão plants, in São Paulo. The Barra Bonita and Nova Avanhandava locks (both in the state of São Paulo) also have the technology and have already initiated the process for remote operation.

CONTROL OF OCCUPATION ON THE MARGINS

G4-DMA

We continuously monitor and control the use and occupation on the margins of our reservoirs, focused on preservation of natural resources, safety of the population and on preventing environmental impacts such as erosion of margins and silting of dams.

To inspect the occupations, two drones are used – one of which purchased in 2016 –, that fly over the reservoirs and allow us to identify places where use does not comply with environmental legislation. Our field teams make regular inspections and, when they identify irregular situations, make measurements and inspections, and inform occupants about the necessary procedures to regularize their property and activities. In some cases, we may request ownership repossession of the areas to ensure compliance with environmental legislation.

Among the cutting-edge technologies we use, we also have a boat remotely operated by radiofrequency to measure the flow of the reservoirs' tributaries, perform bathymetry – measuring of depth in the reservoirs – and silting evaluation.

Reforestation in the reservoirs

In 2016, we reforested 409 hectares surrounding our reservoirs, as a result of our own initiatives and investments, and the partnerships with the SOS Mata Atlântica Foundation, universities, companies and municipalities. We are committed to reforesting at least 243 hectares per year until 2029.

AES Tietê itself produces the seedlings used in this project in a nursery located

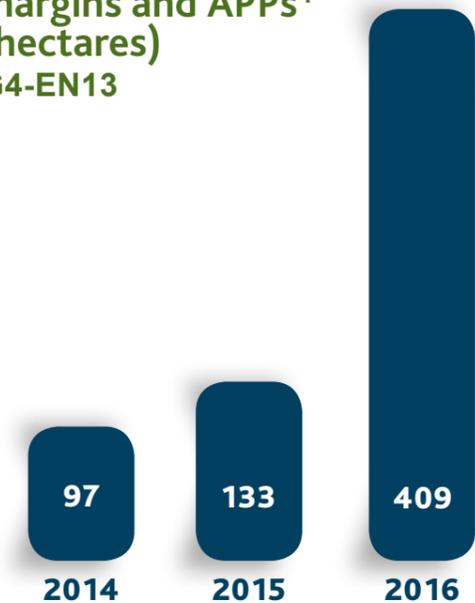
in the Promissão plant. Annually, we produce approximately 1 million seedlings of more than 120 tree species. Part of this production is donated to city halls, NGOs, and owners of land near the reservoirs in order to encourage reforestation.

Last year, we also launched the *Mãos na Mata* (Hands in the Forest) program, aimed at promoting the reforestation of 3,000 hectares around AES Tietê's 12 reservoirs.



Reforestation of margins and APPs* (hectares)

G4-EN13



*APP: Permanent Preservation Area.