

# ITAIPU IN NUMBERS

2023 – 2025





PHOTO: RUBENS FRAULINI

# HERE IS ITAIPU, HERE IS THE GOVERNMENT OF BRAZIL.

**Itaipu Binacional is one of the largest hydroelectric power plants in the world and a symbol of integration between Brazil and Paraguay, the partner countries behind the plant.** For over 40 years, it has been generating clean and renewable energy with efficiency, safety, and environmental responsibility. The power of its turbines drives development in both countries and has already produced enough energy to supply the entire planet for six days.



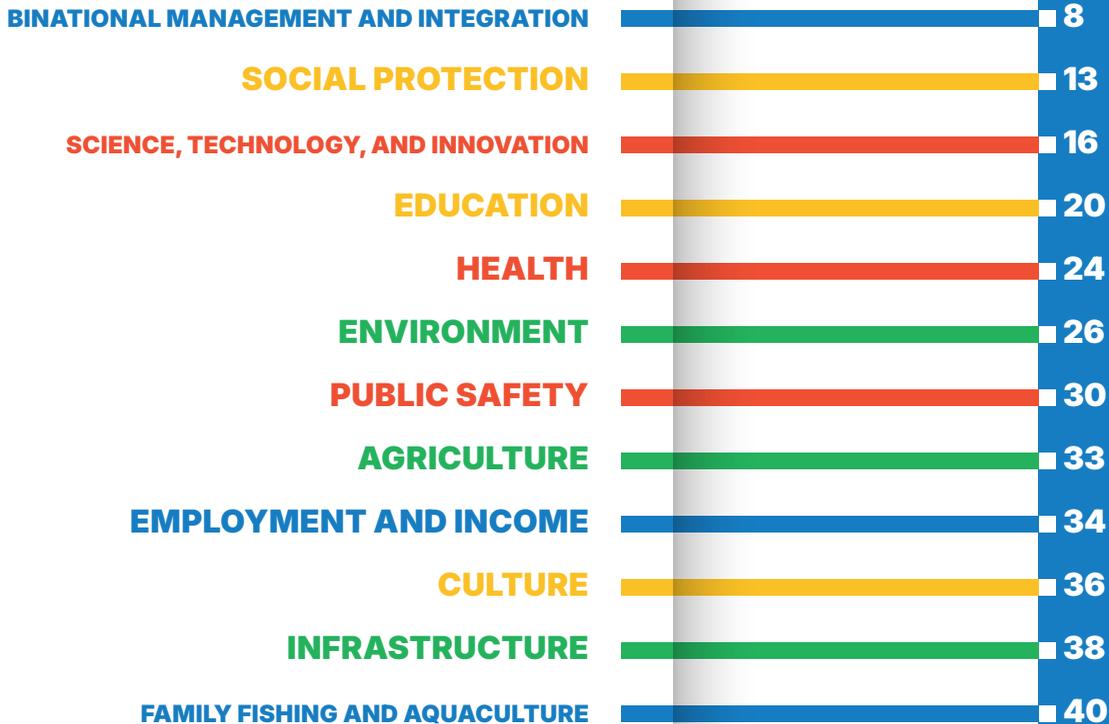
Today, Itaipu is more than a power plant. Through the sustainable structural actions of the **Itaipu More than Energy Program** — an initiative aligned with the policies of the **Government of Brazil** — the company takes care of the reservoir, extending the lake's useful life to nearly 200 years and ensuring the continued generation of clean, renewable, and affordable energy for future generations. It also contributes to addressing climate change, strengthens communities, protects nature, and promotes innovation.

**Since 2023, Itaipu's social and environmental projects have benefited 434 municipalities in Paraná and southern Mato Grosso do Sul,** transforming local realities. From supporting family farming to restoring natural springs, from installing solar energy in schools and hospitals to training teachers, from promoting culture to improving roads and enhancing public safety, Itaipu is present in the territory — caring for people and fulfilling its mission to generate energy and sustainable development.

The following content presents key figures and tangible results that show that wherever there is Itaipu, there is development for everyone.

Here is Itaipu, here is the Government of Brazil.







## BINATIONAL MANAGEMENT AND INTEGRATION

### INTEGRATION BETWEEN TWO COUNTRIES

→ For over half a century, Itaipu has symbolized cooperation and joint development between Brazil and Paraguay.



PHOTO: ITAIPU COLLECTION

### TWO COUNTRIES, ONE PLANT

→ Itaipu is a binational entity created by Brazil and Paraguay under a treaty signed in 1973. With 51 years of history and 41 years of energy generation, its trajectory has been defined by efficiency and innovation.

## STRUCTURE

- The plant has 20 generating units and 14,000 megawatts (MW) of installed capacity. Since generation began in 1984, Itaipu has produced 3.1 billion MWh. The reservoir covers 1,350 km<sup>2</sup> and holds 29 billion m<sup>3</sup> of water.
- The dam is approximately 8 Km long and the reservoir is 170 Km long, with an estimated lifespan of 190 years.

## ENERGY FOR TWO COUNTRIES

- In 2024, Itaipu supplied 7% of Brazil's energy and 78% of Paraguay's. Currently, the plant plays a strategic role for Brazil: it is the system's battery, ensuring that homes, businesses, and industries never run out of power when solar and wind sources cease producing energy.
- 97.28% average availability of generating units in 2024, the third highest in history.

## TOURISM AND KNOWLEDGE

- Itaipu has welcomed 26.7 million visitors since 1977.

## WORLDWIDE RECOGNITION

- 3<sup>rd</sup> largest hydroelectric plant in the world in terms of installed capacity and 1<sup>st</sup> in the world in of accumulated generation.
- Recognized by the Guinness World Records as the largest producer of accumulated electrical energy on the planet.

## ECONOMIC CONTRIBUTION

- It transferred US\$14.5 billion through royalties to the treasuries of Brazil and Paraguay.
- In 2024 alone, it paid R\$ 1.2 billion in royalties to 6 states and 347 municipalities.
- Itaipu's tariff, set in April 2023, remains at US\$16.71 per kilowatt-month until the end of 2027, representing a 26% reduction compared to the previous value (US\$22.60/kW-month). To enable this tariff—lower than that stipulated in the agreement with Paraguay (US\$19.28/kW-month)—Brazil makes an annual contribution of approximately US\$300 million.
- This measure ensures tariff stability and keeps Itaipu among the lowest-cost energy sources in the country, with clean, renewable, and safe generation for Brazil and Paraguay.



PHOTOS: DANIEL SNEGE

## SOCIAL PROTECTION

### SOCIAL ORGANIZATIONS

→ 1,021 organizations benefited in 297 municipalities, totaling R\$ 305 million.

### EMERGENCY ASSISTANCE FUND

→ 370 social projects supported, with R\$ 37 million invested.

### HUMAN RIGHTS

→ 9 agreements signed, with R\$ 57 million invested, benefiting youth, women, the elderly, the LGBTQAAPN+ population, migrants, and refugees.

### STRENGTHENING SOCIAL TIES AND CULTURE

→ 18 agreements focused on sports and culture, totaling R\$ 90 million.

### EMPLOYMENT AND INCOME GENERATION

→ 3 agreements with R\$ 20 million for employment and income generation.

### HEALTHCARE SUPPORT

→ 16 agreements in the health sector, totaling R\$ 223 million.

### SPONSORSHIPS

→ 670 sponsorships granted since 2023, benefiting 22.5 million people.

### DIGITAL INCLUSION

→ 804 informatics equipment units donated to social organizations.

### INDIGENOUS PEOPLES

→ 31 Indigenous communities benefited with resources for land acquisition.

### WOMEN'S PROTECTION

→ R\$ 12 million allocated to the Casa da Mulher Brasileira in Foz do Iguaçu.

### HOUSING AND DIGNITY

→ R\$ 91 million invested in the construction of 414 affordable housing units.

### SUPPORT FOR MIGRANT FAMILIES

→ Over R\$ 8.4 million allocated to the Transit House for emergency support to migrants, refugees, stateless persons, and victims of human trafficking in Foz do Iguaçu.



PHOTOS: WILLIAM ROBERTO BRISIDA



## SCIENCE, TECHNOLOGY, AND INNOVATION

### INVESTMENT IN TECHNOLOGY

→ R\$ 5 billion allocated to the plant's technological upgrades over the project's 14-year lifespan.

### SOLAR ENERGY IN INSTITUTIONS

→ 70 entities supported in the installation of photovoltaic systems.

### RURAL BIODIGESTERS

→ Installation of 500 small-scale biodigesters, potentially producing biogas equivalent to the monthly consumption of LPG by approximately 1,000 families.

### INNOVATIVE SOLAR ENERGY

→ Installation of 1,568 floating photovoltaic panels on the lake's surface, with 1 megawatt-peak (MWp) of power.



PHOTO: DANIEL SNEGE



PHOTO: DANIEL SNEGE

### GREEN HYDROGEN

→ A 100% hydrogen-powered boat and technology center, producing 1 Kg of hydrogen per hour — enough to power a car for 150 km.

### ELECTRIC MOBILITY

- 93 vehicles donated to regional consortia, including 44 electric.
- 8 electric vehicles donated to government agencies and foundations linked to Itaipu.

### BIOENERGY

→ The Toledo Bioenergy Plant (PR) treats waste from 41,000 animals, a R\$ 19 million investment financed by Itaipu, generating enough energy for 1,500 homes.

## EDUCATION

### MORE IDEB PROGRAM

→ R\$ 24 million invested in 16 municipalities bordering Lake Itaipu.

### TEACHER TRAINING

→ 8,000 teachers trained in 56 municipalities.

### UNIVERSITY EXTENSION

→ R\$ 24 million for 200 extension projects.

### RESEARCH AND INNOVATION

→ R\$ 25 million invested in projects related to the 2030 Agenda, the UN's action plan to achieve sustainable development.

### SCHOLARSHIPS

→ 1,000 scholarships for undergraduate students and faculty.

### UNILA

→ R\$ 752 million for the resumption of construction at the Federal University for Latin American Integration, designed by Oscar Niemeyer.



PHOTO: ALINE CZEZACKI



PHOTO: RODRIGO REMEDIOS/SECOM/UNILA



ILLUSTRATION: UNOPS ARCHIVE



PHOTO: DANIEL SNEGE

### SCHOOL STRUCTURES

→ R\$ 17 million for 278 schools in Foz, Cascavel, and Toledo.

### MORE ENGINEERING PROGRAM

→ 100 scholarships for specialization in public management in engineering and 50 scholarships for sustainable development projects in municipalities of Paraná.

### EXTERNAL TRAINING

→ 153,708 people trained through 15,029 training activities.

### WORK INITIATION

→ 992 young people assisted since 2023 through the Plant's Work Initiation and Internship Programs.

## HEALTH

### CLEAN ENERGY IN HEALTHCARE

→ 80 hospitals with photovoltaic plants in Paraná.

### INVESTMENT IN SOLAR ENERGY

→ R\$ 81 million invested, with annual savings of R\$ 12 million.

### PROFESSIONAL TRAINING

→ R\$ 13 million invested in training healthcare professionals in Foz do Iguaçu.

### HEALTHCARE SUPPORT AGREEMENTS

→ 16 agreements, totaling R\$ 223 million.

### PONTA GROSSA SANTA CASA HOSPITAL

→ R\$ 15.3 million for improving the maternity and oncology hospital infrastructure.

### WATER SUPPLY

→ 150 new systems installed, benefiting 8,000 families.

### INDIGENOUS COMMUNITIES

→ 18 Indigenous communities with access to drinking water, benefiting 76,000 people.

### MEDICINAL PLANTS

→ R\$ 1 million for projects promoting Non-Conventional Food Plants (PANCs).



PHOTO: DANIEL SNEGE



PHOTO: ALEXANDRE MARCHETTI

## ENVIRONMENT

→ **100,000 hectares** of forests protected in Brazil and Paraguay. Recognized as a UNESCO Biosphere Reserve.

### REFORESTATION

→ 24 million trees planted — enough to form a forest the size of 24,000 soccer fields.

### SPRING RESTORATION

→ Over 9,000 springs under restoration.



PHOTO: ALEXANDRE MARCHETTI

## RECYCLING

→ Savings of 17.9 million m<sup>3</sup> of water — equivalent to the annual consumption of a city with 240,000 inhabitants — and 386.7 thousand tons of CO<sub>2</sub> avoided, equal to taking 84,000 cars off the streets for a year.

## TREES SAVED

→ 2.6 million trees saved since 2018, equivalent to a forest the size of 2,600 football fields.

### REUSED WASTE

→ 198,000 tons of materials diverted from landfills — equal to the weight of 400 fully loaded Boeing 747 aircraft.

### POSITIVE CARBON BALANCE

→ 3.5 million tCO<sub>2</sub>e<sub>q</sub> sequestered — 1,446 times greater than the plant's own emissions.

### PROTECTED WILDLIFE

→ 50 species preserved at the Bela Vista Biological Refuge, including the harpy eagle and jaguar.

### PARTICIPATORY GOVERNANCE

→ 21 Socioenvironmental Cooperation Centers established in Paraná and southern Mato Grosso do Sul.

### SOCIOENVIRONMENTAL GOVERNANCE

→ Over 1,400 institutions participating in the Centers.

### SOIL AND WATER CONSERVATION

→ 125,266 tons of soil preserved annually — equivalent to 125,000 tons of fertile soil, enough to cover 18,000 soccer fields with a 1 cm layer.



PHOTO: MARCOS PRADO

## PUBLIC SAFETY

### INVESTMENTS

→ R\$ 170 million allocated to public safety, including:

#### VEHICLES AND BOATS

→ R\$ 35 million for armored vehicles and boats for public safety agencies.

#### POLICE FACILITIES

→ R\$ 30 million for police stations and specialized units, including the construction of the second headquarters of the Border Police Battalion (BPFron).

#### SURVEILLANCE TECHNOLOGIES

→ R\$ 75 million for technology and monitoring, such as the Digital Wall project.

#### LAKE SECURITY

→ R\$ 30 million for the delivery of the Border Battalion to monitor the area between Foz and Guaira.



PHOTO: FEDERAL POLICE ARCHIVES



PHOTO: ALEXANDRE MARCHETTI

## AGRICULTURE

### FAMILIES SERVED

→ Over 7,000 farming families assisted through Technical Assistance and Rural Extension (Ater).

### TECHNICAL ASSISTANCE

→ 6,333 technical assistance (Ater) services provided in 2024.

### TERRACING

→ 1,160 km<sup>2</sup> of terracing implemented — nearly double the area of the city of Curitiba.

### CONTAINMENT STRUCTURES

→ 23,000 km of agricultural terraces completed — nearly the total length of all federal highways in Paraná and Mato Grosso do Sul combined.

### SOIL PRESERVED

→ 125,266 tons of soil preserved — equivalent to 20,878 truckloads of earth.

## EMPLOYMENT AND INCOME

### AGREEMENTS

→ R\$ 20 million in 3 agreements for income generation.

### WASTE PICKERS BENEFITED

→ 4,600 waste pickers supported with trucks and equipment.

PHOTO: DANIEL SNEGE

### RECYCLING STRUCTURES

→ 170 Recycling Recovery Units (UVRs) under implementation.

### RECYCLING COLLECTION FLEET

→ 177 trucks allocated to municipalities under Call Notice 01/2024.

### TOTAL INVESTMENT

→ R\$ 337.1 million invested in selective waste collection works and equipment.



## CULTURE

### CULTURAL CALL NOTICES

→ R\$ 7 million in two cultural sponsorship calls (2024–2025).

### FAIRS AND EXHIBITIONS

→ R\$ 8.5 million in two sponsorship calls for municipalities (2024–2025).

### CULTURAL STRENGTHENING

→ 18 agreements, totaling R\$ 90 million.

### BARRAGEIRO MARKET CULTURAL CIRCUIT

- 212 performances by artists selected through public call.
- Over 46 special events, in addition to recurring editions of regular events.
- 282,605 visitors since the opening of the Market.
- R\$ 2.6 million invested in cultural activities.



PHOTO: ITAIPU COLLECTION



Before the "Água de Mina" erosion containment work in Loanda.

PHOTO: HUDSON CARLOS LISSONI LEONARDO

## INFRASTRUCTURE

### RURAL ROADS

→ 7,332 km of roads upgraded — a distance equivalent to a trip from Foz do Iguaçu to Dakar, Senegal.

### CONAB WAREHOUSE RENOVATION

→ R\$ 55.47 million invested in renovating the National Supply Company (Conab) warehouse in Ponta Grossa, increasing static capacity by 120 thousand tons — equivalent to 2.4 million 50 kg grain sacks or 2,000 fully loaded grain trucks.



During the "Água de Mina" erosion containment work in Loanda.

PHOTO: MUNICIPALITY OF LOANDA

### EROSION CONTROL

→ R\$ 46.1 million invested to contain the "Água da Mina" erosion in Loanda (PR), and R\$ 24.9 million allocated in Colorado (PR) for the recovery of degraded areas — benefiting 3,000 residents and 900 meters of drainage.

### SANITATION PLANS

→ 30 municipal plans developed or updated.

### SOLAR ENERGY IN PUBLIC BUILDINGS

→ 60 MWp installed in schools, hospitals, and universities — enough energy to supply about 100,000 people.

## FAMILY FISHING AND AQUACULTURE

### DEVELOPMENT OF THE FISHING SECTOR

→ R\$ 9 million for strengthening artisanal fishing and family aquaculture — benefiting over 12,000 professionals and 49 organizations.



PHOTO: EDINO KRUG



Data collected in October 2025.



SUPPORT



NÚCLEOS DE COOPERAÇÃO  
SOCIOAMBIENTAL



