







# Conciliating Conservation and Economic Activity

Some contributions of Itaipu Binational towards environmental sustainability through local actions.

James Spalding June 22nd 2021







With an installed capacity of 14,000 MW (700MW x 20), Itaipu is the second largest hydroelectric dam in the world. In operation since 1984, Itaipu is the world leader in accumulated clean and renewable energy generation, having surpassed 2,794,952 GWh to May 2021. In 2016, Itaipu was the first to generate over 100,000,000 Mwh in a year, setting a world record.

#### ITAIPU CLEAN AND RENEWABLE ENERGY GENERATION

AVG. YEARLY ENERGY GENERATION 92,000 GWh

TO PRODUCE THE SAME AMOUNT OF ENERGY, IT WOULD BE NECESSARY APROX...

420,000 BARRELS OF OIL PER DAY

EMISSIONS OF CO2

AVOIDED

79 MILLION TONS BASED ON COAL 35 MILLION TONS BASED ON GAS





#### **PROTECTED AREAS**

TOTAL PY + BR : 104,732 ha

7,5 hectares/MW installed

Paraná River Buffer Zone

PY side 31,226ha.

BR side

29,475ha.

TOTAL BR & PY 60,701ha.





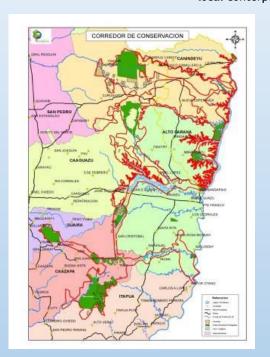
Based on a 2015 study led by the World Wildlife Fund (WWF) in Paraguay, Itaipu received in 2016 a recognition for the conservation of 74,000 hectares of the Paraguayan Atlantic Forest, achieving the production of oxygen for over 22,000,000 people per day.



#### PARAGUAY BIODIVERSITY

Value: US\$ 18,291,450

GEF: US\$ 4.500.000/ ITAIPU: US\$ 6,000,000/ PRODERS: US\$ 6,310,200
local conterpart of beneficiaries: US\$ 1,481,250



Objective: Maintain and restore the connectivity of the Atlantic Forest corridors and its biodiversity as well as promoting activities to conserve the forest through alternative sources of income.

The Project relies on the implementation of sub projects with strong support of local leaders, stakeholders and indigenous communities.

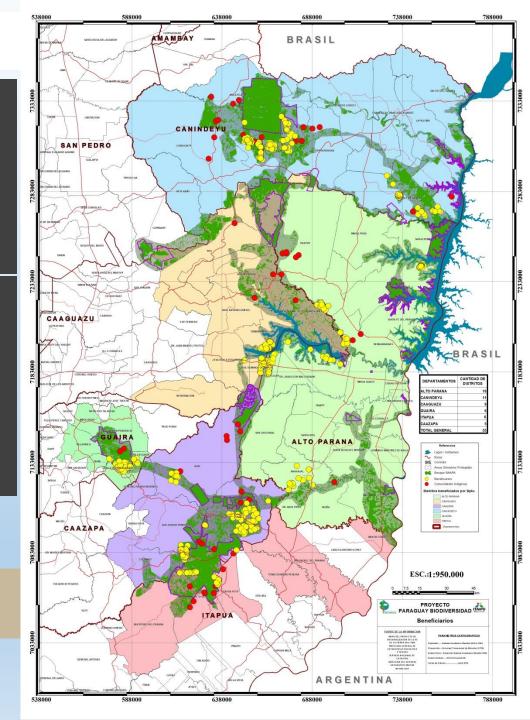


#### **BENEFICIARIES**

1,102
RURAL (FARMING) FAMILIES
≥ 6.000 people

55
NDIGENOUS COMMUNITIES
2,303 families
≥11,000 people

Surface of corridor 1,226,000 ha





#### ITAIPU PRESERVA

Investment: U\$ 11,500,000

With an extension of over 1,500 kms and 2,560 hectares of restauration, this initiative is one of the most important environmental programs led by Itaipu. This initiative is being proposed to be presented this November during COP 26.







#### **ITAIPU AT COP 21**

Paris, France 2015



President Horacio Cartes, arriving to La Seine to address the Plenary Session



WE

Stand ITAIPU Binacional stand at La Galerie



Biodiversity Conservation and Watershed Management Event



Event organized by WWF



Itaipu Environmental Actions Event

Since 2015, Itaipu has had a more prominent role at the COP events, joining forces with the United Nations to showcase its social and environmental programs in the framework of the SDGs.

## "I felt very inspired when I visited Itaipu. This is a place where the power of water is used for humanity, for development, for peace and harmony."

Ban Ki-moon, United Nations Secretary-General, Itaipu Binational August 7th 2016







para la Educación, · y la Biosfera la Ciencia y la Cultura

#### PROGRAMA SOBRE EL HOMBRE Y LA BIOSFERA

Por decisión del Consejo Internacional de Coordinación del programa sobre el Hombre y la Biosfera, se certifica que



forna parte integrante de la Red Mundial de Reservas de la Biosfera.

Los principales tipos de ecosistemas y paisajes de nuestro planeta están representados en esta Red, que está consagrada a la conservación de la diversidad biológica, a la investigación científica y a la observación permanente, así como a la definición

> Participar en la Red Mundial facilita la cooperación y los intercambios a nivel regional e internacional.

FECHA DE INSCRIPCIÓN

DIRECTORA GENERAL DE LA UNESCO

14 de junio de 2017

Ling Bourns

In the 29º Session of the International Council for the coordination of Man and the Biosphere Program (MAB) of UNESCO, held in June 2017 at UNESCO in Paris, the Council approved the inclusion of Itaipu -Py side- into the "World Network of Biosphere Reserves", making Itaipu the first power plant in the world to form part of this Network.



### Binational International Center on Hydroinformatics for Integrated Water Resouces Management (CIH)

Designated as Category 2 by UNESCO with the presence of the former Director General of UNESCO Irina Bokova, June 2016



#### FINANCIAL CONTRIBUTION BY ITAIPU

- ➤ Under the Treaty of Itaipu, the binational company pays "royalties" to both Governments, which is calculated based on the amount of energy generated. This royalty payment is indirectly linked to the right to the use of the water for energy production.
- ➤ Since operation and at the close of 2020, Itaipu has transferred over 6 billion dollars to the Paraguayan Government in royalties and almost 5 billion dollars in compensation for excess energy contracted by Eletrobras (Brazil).
- In the case of Paraguay, and under current national law, a percentage of this income is redistributed to all the subnational governments and is an important source of "non tax" income.





Founded at the initiative of CNR in 2017, **Initiatives for the Future of Great Rivers (IFGR)** is an **association in the general interest**, chaired by Erik Orsenna, economist and member of the French Academy. IFGR brings the experience of members from throughout the world.

Collective of actors, IAGF give a singular voice to rivers, alongside other water actors. Gathering river managers, representatives of institutions (basin management agencies, and national supervisory bodies) and experts (climatologist, anthropologist, economist, historian, etc.), IFGR provides a **forum for original dialogue (international, multidisciplinary, open to stakeholders and oriented towards action) for the rivers of the whole world**.

Its works are organized around three themes: **governance**, **human and ecosystem health**, **and the relation between rivers and oceans**. It aims to make known and perpetuate the wealth represented by rivers for the benefit of the territories they cross, through collective reflection, spreading awareness among the general public, alerting and developing solutions.

In summary, I believe that Itaipu Binational is a clear example of how energy needs and conservation of our biodiversity can coexist, living in harmony with nature on one of the world's great rivers, as well as contributing actively to national and subnational environmental sustainability actions.

Thank you!