





Sustainable Water and Energy Solutions supporting Climate Change and Biodiversity Objectives through Innovation and Clean Technologies



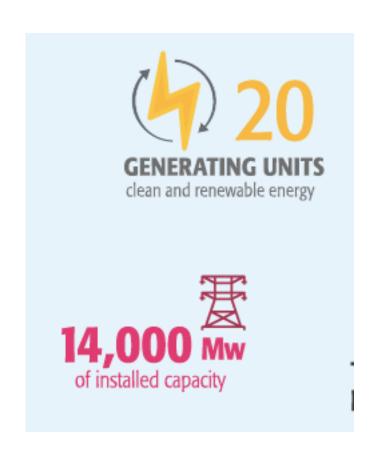
### **ENERGY PRODUCTION**

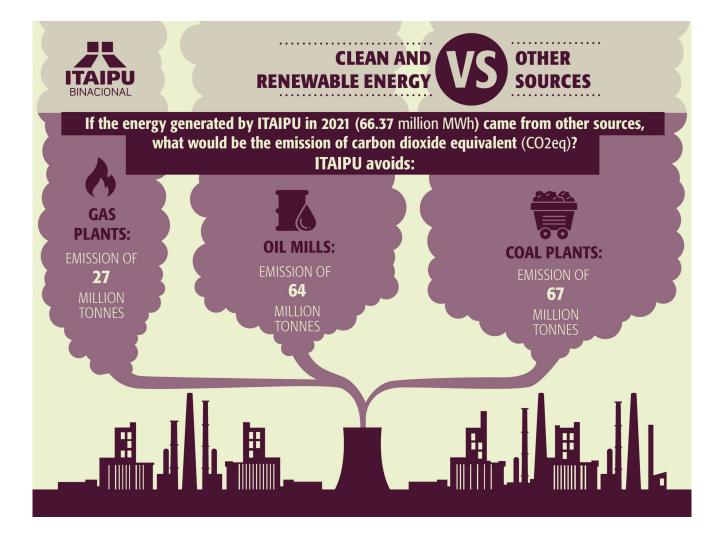






Total Hydro-Energy produced by Itaipu: 2,8 billion MWh







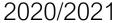


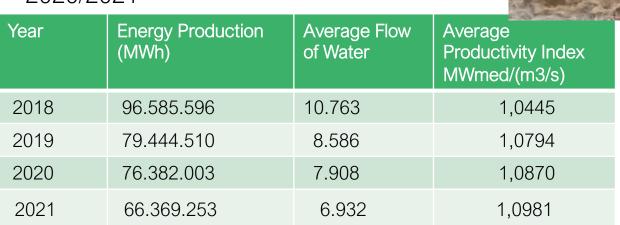


2022

## REGIONAL EXTREME CLIMATE EVENTS (DROUGHTS AND FLOODS)









ESTADOS DEL RÍO PARANÁ	COTA EN PUENTE DE LA AMISTAD (metros)	OBSERVACIÓN
SIN INUNDACIONES	COTA ≤ 105,59	- Sin afectaciones
PRÓXIMO A INUNDACIONES	105,60 ≤ COTA ≤ 107,99	
PRIMERAS INUNDACIONES	108,00 ≤ COTA ≤ 118,79	Son afectadas viviendas, instalaciones o infraestructuras
INUNDACIONES MODERADAS	118,80 ≤ COTA ≤ 128,99	
INUNDACIONES SEVERAS	COTA ≥ 129,00	







# INTERDEPENDENCE BETWEEN HYDROLOGICAL RESOURCES AND TERRESTRIAL ECOSYSTEMS

- Hydropower production depends on water
- Climate Monitoring Stations
- Specialized studies of the atmosphere
- Recuperation of water sources
- Water monitoring, sediments monitoring
- Reforestation and Restoration of Forests.



Energy Production+ Water Protection+ Biodiversity
Preservation + Key partners

# CLIMATE MONITORING IN THE INFLUENCE REGION

## Main Objective

Observation and monitoring of climate conditions in the Resevoir of Itaipu







#### **Stations:**

- 6 Conventional Stations
- 12 Automatic Stations







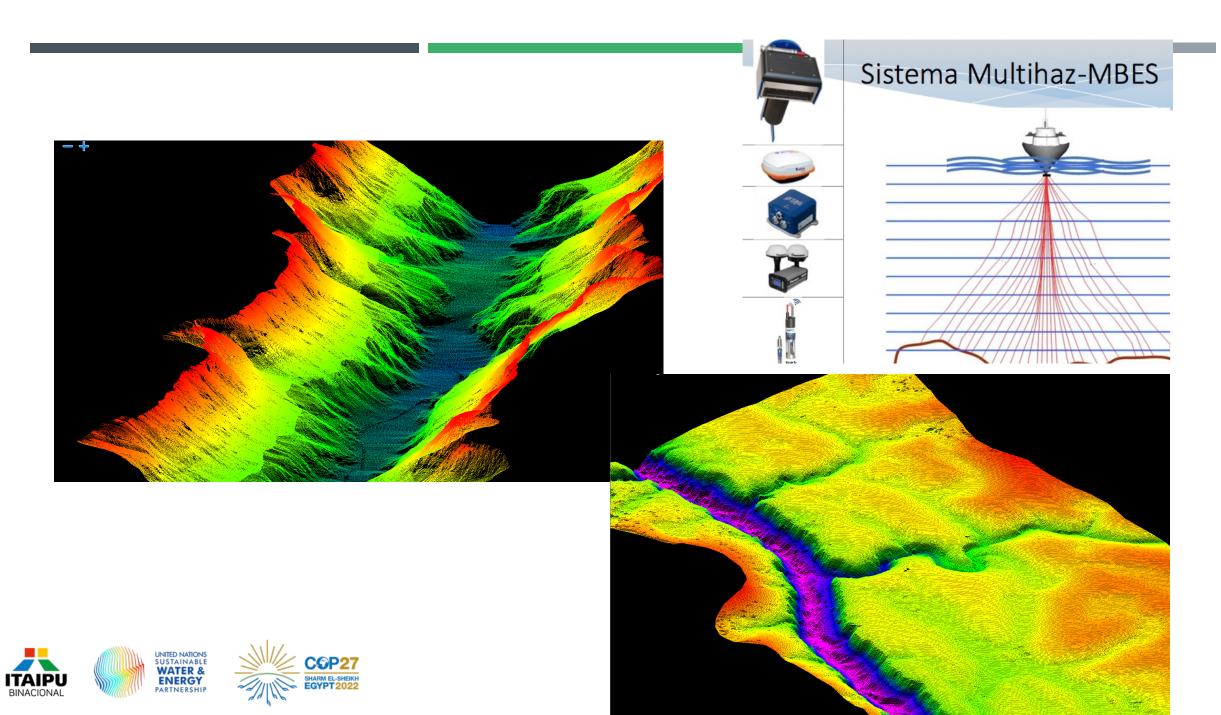


















#### RENEWABLE ENERGY PROJECTS

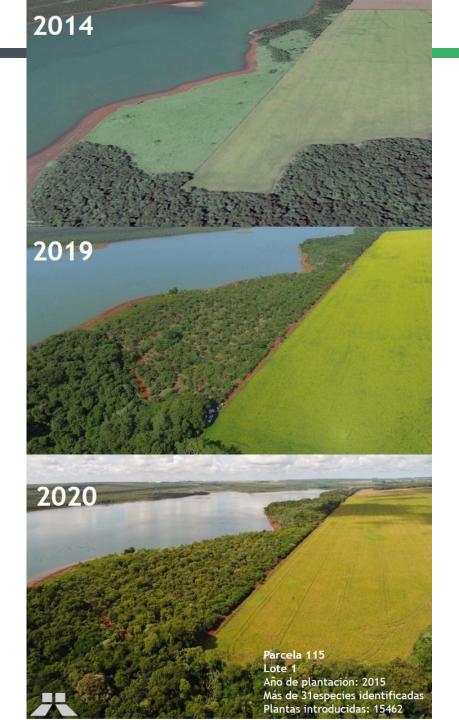
- Cooperation for Energy Security in isolated territories of the Paraguayan Chaco.
- Promote sustainable mobility- Ruta verde solar fotovoltaica del Paraguay
- Improved biogas cooking stoves (ecofogones)
- Biodigesters at Natural Reserves of ITAIPU
- Use of solar panels for thermal heating

























- Today, working on actions to implement the Sustainable Development Goals is crucial.
- Sustainable Development is "development that meets the needs of the present without compromising the ability of future generation to meet their own needs" (Brundland Report 1987)
- All we do today will have an impact on our future generations.
- To face the challenges, adverse environmental impacts, climate change, all actors are important.
- If we all work together, we can win the fight against climate change!







# THANK YOU!

