

Sustainable Energy For All

*Global Workshop on  
Low Carbon Power  
Sector Development*

December 14, 2011



**IDB**



A high-angle, wide shot of a massive crowd of people, likely at a festival or sporting event. The crowd is dense and extends far into the background, filling the entire frame. People are wearing various casual clothing, including t-shirts, hats, and sunglasses. The overall atmosphere is one of a large-scale public gathering.

Middle class by 2030  
500 million people



# Electricity Demand vs Electricity Supply 2006-2030 (TWh)



The image features a dramatic sunset sky with a gradient from deep blue at the top to bright orange and yellow near the horizon. Silhouetted against this sky are several high-voltage electrical transmission towers and their associated power lines. The towers are lattice-structured and extend across the frame from left to right. The power lines are thin and create a complex web of lines across the sky. In the foreground, the dark silhouettes of trees and streetlights are visible against the bright horizon.

# US\$ 55 billion

Per year for energy sector



# US\$ 6.8 billion



energy projects

more than

## 30

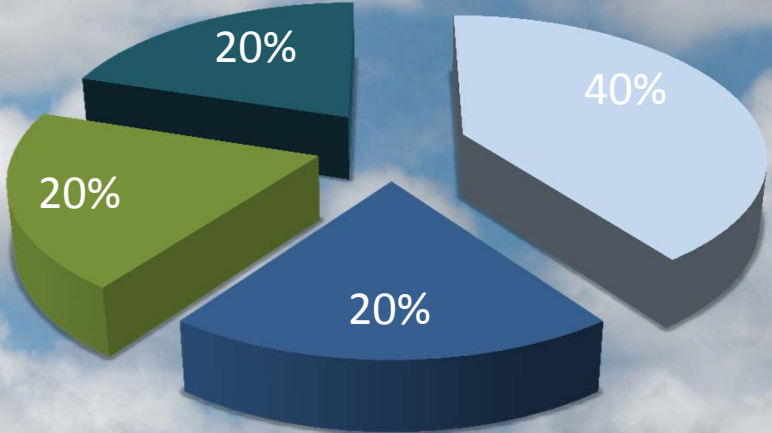
project loans

more than

## 75

technical cooperation grants





■ hydro ■ transmission ■ rural ■ RE and EE

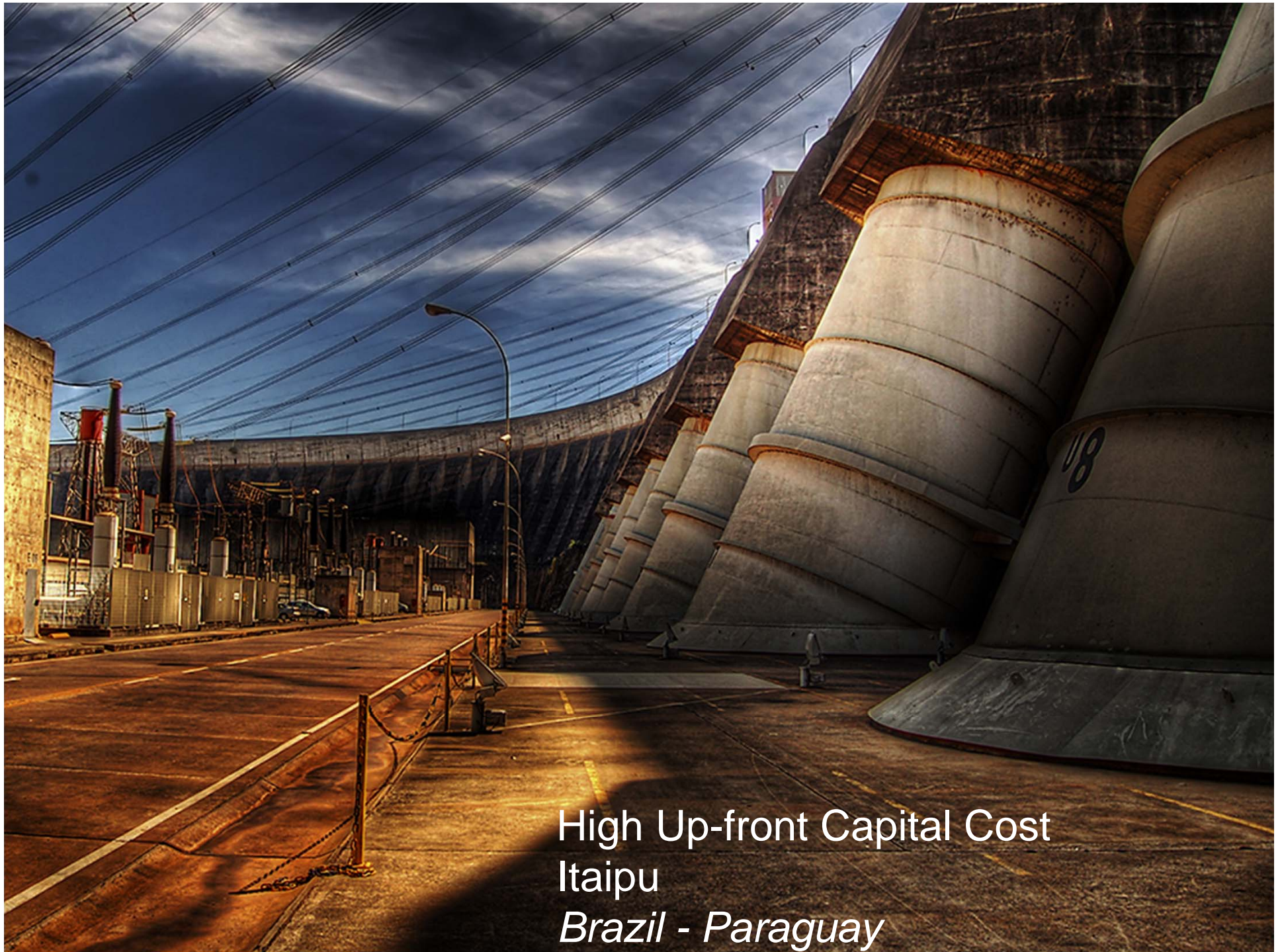
Osorio wind farm, Brazil



A satellite view of Earth from space, showing the Americas. South America is prominently featured in the center, with its green and brown terrain clearly visible. The surrounding oceans are a deep blue, and white clouds are scattered across the globe. The text "Barriers to Investment" is overlaid in white, sans-serif font across the lower-left portion of the image.

# Barriers to Investment





High Up-front Capital Cost  
Itaipu  
*Brazil - Paraguay*

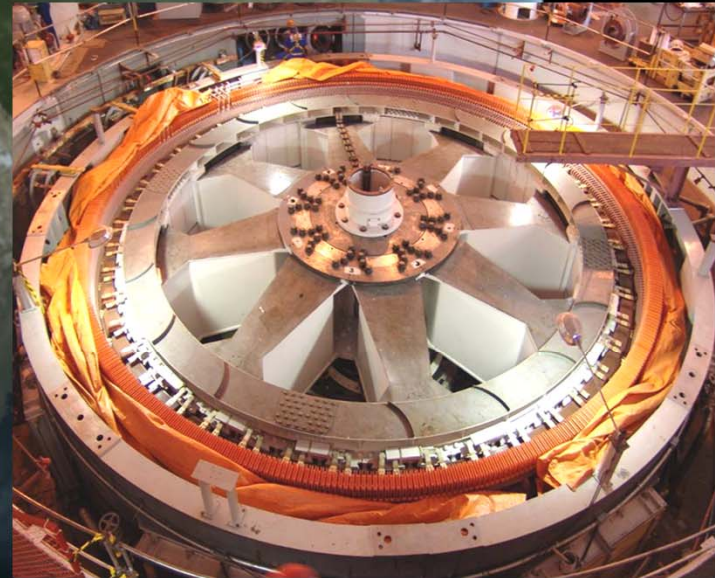




before

electric generator rotor

# Cutting Edge Equipment Hydroelectric furnas

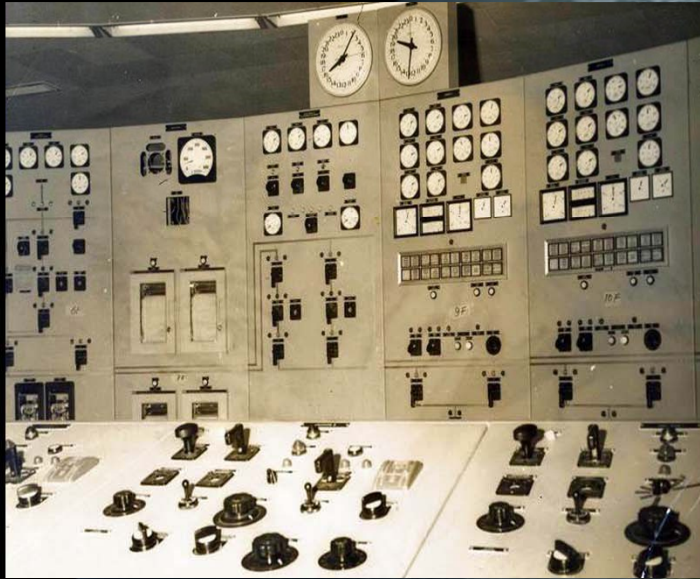


after

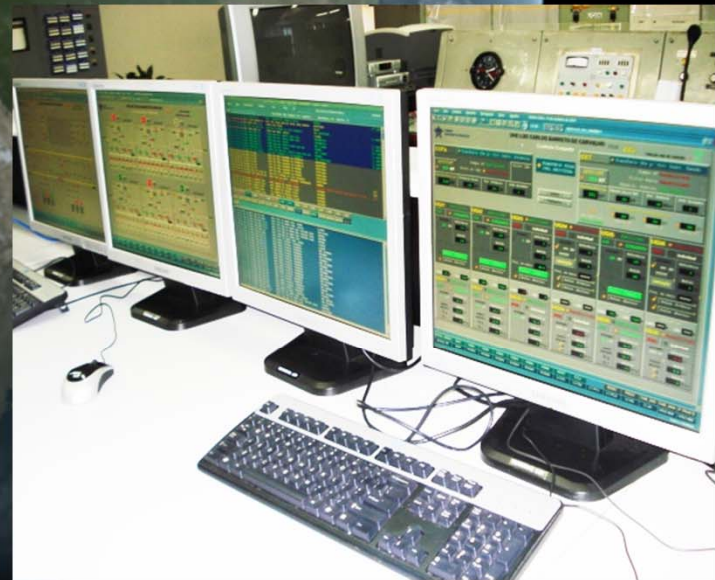


# Hydroelectric furnas

before



control room



after

before



turbine cover

# Cost Competitive Hydroelectric furnas



after





*Haiti*





*Colombia*





Electricity  
transmission





A photograph of a lush, green forested hillside. Several high-voltage power line towers are visible, stretching across the landscape. The foreground shows some large, green leaves, possibly from a tropical plant. The background features rolling hills covered in dense vegetation.

SIEPAC  
*Costa Rica*



A satellite view of Earth showing South America and the surrounding oceans. The text is overlaid on the lower-left portion of the image.

Lowest Cost  
Up-front solutions  
Rural  
Electrification



A satellite view of Earth from space, showing the Americas and parts of Africa and Europe. The image is set against a black background. The text is overlaid on the left side of the image.

more than  
**30 million**  
without basic services











A satellite-style image of the Earth, showing the Americas (North and South America) in the center. The image is set against a black background. The text is overlaid on the left side of the image.

# Financial Approaches to Renewable Energy and Energy Efficiency



wind power



Eurus wind farm  
*Oaxaca, Mexico*





# Mitigating Exploration Cost



geothermal  
*El Salvador*



*Costa Rica*





# biofuels

mechanized sugarcane harvest  
*Brazil*







Market  
Transformation

Sao Paulo, Brazil



# Subsidies & Grants

solar power for rural schools  
*Brazil*

solar power







Specific Examples

solar highway

lighting

*Chile*



## Specific Examples

solar power for small islands  
*Brazil*





A satellite-style view of Earth from space, showing the Americas and the Atlantic Ocean. The text "Special initiatives" is overlaid in white.

**Special  
initiatives**



What's your bright idea?



**IDEAS**

Energy Innovation Contest

Up to \$200,000  
(USD) per project

[www.iadb.org/ideas](http://www.iadb.org/ideas)





# Energy Innovation Center





# Sustainable Energy For All



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