



IHA World Congress 2013  
**Current initiatives and  
what we are taking away to Brazil**

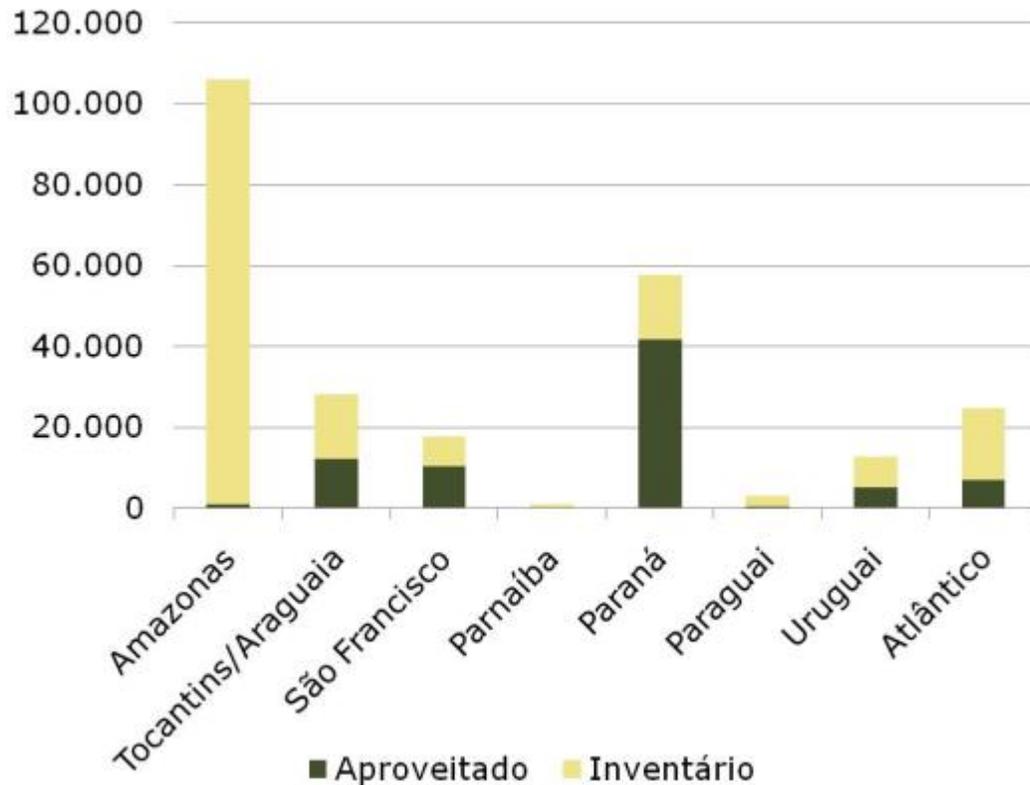
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Kushing, May 24 2013

- ❑ **Brazil has a total installed capacity of 80,800 MW, 32% of its full potential. Brazil has the world's third biggest hydropower potential (behind China and Russia).**
- ❑ **Over the past auctions, some hydropower plants were not acquired due to high social and environmental costs and more competitive prices of other energy sources, especially wind power.**
- ❑ **New projects are facing a lot of conflicts due to the potential interference in indigenous territories**
- ❑ **The duration of environmental licensing processes is long and involves different demands (from indigenous people, archeological requirements, public health institutions obligations).**
- ❑ **The social and environmental costs are increasing in Brazil. In the 90's, it represented, on average, 10% of the total cost of new projects. Now it represents 14.5% on average (some projects go above 30%).**

## Challenge 1:

### Exploring the hydropower potential in the Amazon River Basin

**Brazilian Hydropower Potential (MW)**



- ❑ **The Brazilian hydropower potential is 250,000 MW**
- ❑ **Brazil exploited 32% of its full potential**
- ❑ **The greatest potential is available in the Amazon River basin, of which 17% was tapped**
- ❑ **There are important restrictions for the construction of 50,000 MW hydropower (interference in protected areas or indigenous territories)**

Source: EPE, Plano Nacional de Energia 2030, 2007

**Challenge 2:**

***Regulate the consultation process to indigenous people***



- ❑ **According to the Brazilian legislation, 16,089 MW (or 82% of the total 19,673 MW of additional power forecasted in the “10-Year Energy Plan, Horizon 2021” document) affect indigenous lands.**
- ❑ **The Brazilian Constitution establishes (paragraph 3. art. 231) : “The use of water resources, including **energy potential**, ... **on indigenous lands** depends on the authorization of the **Congress**, provided that the affected **communities are heard...** ”**

- ❑ **Brazil learned how to deal with sustainability and it has incorporated its implications in its infrastructure projects.**
- ❑ **The Hydropower Sustainability Assessment Protocol (HSAP) is a good tool to evaluate social and environmental aspects. In Brazil, the first evaluation HSAP dealt with the Jirau plant.**
- ❑ **The Water (ANA – Agência Nacional de Águas) and Energy (ANEEL – Agência Nacional de Energia Elétrica) Regulatory Agencies in Brazil already work together, but there is room for improvement. Although hydropower projects need the approval of ANA, the planning of both sectors should be done jointly by a multidisciplinary team.**
- ❑ **There are two working groups preparing the regulation that will define the consultation process for indigenous people.**

- ❑ **The Brazilian electricity sector needs to learn how to COMMUNICATE.**
- ❑ **Some effort needs to be directed towards DIVULGING the results of reservoir GHGs emissions in order to show that reservoirs in fact do not contribute significantly to GHG emissions and could be a good alternative to meet energy demand.**
- ❑ **DEMONSTRATE the sustainability implications of delays in hydropower projects.**
- ❑ **PRESENT both positive and negative impacts of energy projects to the communities.**
- ❑ **ASSURE that the consultation process involving indigenous people will be free, prior and informed, and will encompass all phases of the project.**

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