

Fearnside, P.M. 2011. Will the Belo Monte Dam's benefits outweigh the costs? *Latin America Energy Advisor*, 21-25 Feb. 2011, p. 6. [<http://www.thedialogue.org>]

[www.thedialogue.org](http://www.thedialogue.org)

February 21-25, 2011

# INTER-AMERICAN DIALOGUE'S

LATIN AMERICA ADVISOR ► ENERGY

## FEATURED Q&A

### *Will the Belo Monte Dam's Benefits Outweigh the Costs?*

**Q** In January, the Brazilian government issued a partial license, a deviation from typical procedure, to begin clearing land around the 11,200 MW Belo Monte dam, set to be the world's third largest. The consortium cannot begin construction on the dam itself, however, until it proves it has met 40 socio-environmental conditions. Indigenous groups and environmentalists have petitioned the government with more than half a million signatures in opposition to the project, claiming the dam threatens both native peoples and the area's biodiversity. Will the protestors be successful in slowing or stopping the dam's construction? What would be the dam's impacts? Do the project's economic and energy generation benefits outweigh its costs?

**A** Philip M. Fearnside, research professor at the National Institute for Research in the Amazon (INPA) in Manaus:

"One would be naïve not to recognize the power of the Brazilian federal government to do whatever it wants, regardless of whether it is illegal, unjust or simply foolish from the standpoint of the country's interests. Nevertheless, it is an error to be fatalistic. The 'partial' license for the construction site is clearly illegal, as detailed in the Brazilian Public Ministry's recommendation to IBAMA and in its civil public suit. No separate environmental impact statement was prepared for the construction site. Rather, it is an integral part of the licensing for the overall project, for which 40 conditions are still pending. After over a year, virtually nothing has been done to meet those conditions. More important than the legal questions are the project's understated impacts, overstated benefits and a decision-making process that is blind to both. The official scenario, known as the 'institutionalized lie' by opponents, is that there will be only one dam on the Xingu River. However, Belo Monte by itself is economically unviable because the highly seasonal water flow in the river would leave the 11,000 MW main powerhouse completely idle during 3-4 months out of the year. An economic analysis estimates only a 28 percent chance of breaking even. This was based on a June 2001 official cost estimate of 9.6 billion reais. Since then the official cost estimate has risen to 19 billion reais, and the estimates of private construction companies exceed 30 billion reais. Since no one would invest these sums with the intention of losing money, it suggests that the government and the investors are, in fact, counting on the upstream dams that would flood vast areas of indigenous land and tropical rainforest. Much of the electricity is for export in the form of aluminum ingots with minimal benefit for Brazil."

---

*The Energy Advisor welcomes responses to this Q&A. Readers can write editor Gene Kuleta at [gkuleta@thedialogue.org](mailto:gkuleta@thedialogue.org) with comments.*

## Latin America Energy Advisor

*is published weekly by the  
Inter-American Dialogue  
Copyright © 2011*

**Erik Brand**

General Manager, Publishing  
[ebrand@thedialogue.org](mailto:ebrand@thedialogue.org)

**Gene Kuleta**

Editor  
[gkuleta@thedialogue.org](mailto:gkuleta@thedialogue.org)

**Rachel Sadon**

Reporter, Assistant Editor  
[rsadon@thedialogue.org](mailto:rsadon@thedialogue.org)

## Inter-American Dialogue

Michael Shifter, President

Peter Hakim, President Emeritus

Katherine Anderson, V.P., Finance & Administration

Genaro Arriagada, Senior Fellow

Sergio Bitar, Visiting Senior Fellow

Joan Caivano, Director, Special Projects

Paul Isbell, Visiting Senior Fellow

Claudio Loser, Senior Fellow

Nora Lustig, Senior Fellow

Manuel Orozco, Director, Remittances  
and Development Program

Tamara Ortega Goodspeed, Senior  
Associate, Education

Marifeli Pérez-Stable, Senior Fellow

Jeffrey Puryear, Vice President, Social Policy

Viron Vaky, Senior Fellow

Subscription Inquiries are welcomed at  
[fretrial@thedialogue.org](mailto:fretrial@thedialogue.org)

Latin America Energy Advisor is published weekly, with the exception of some major US holidays, by the Inter-American Dialogue  
1211 Connecticut Avenue, Suite 510  
Washington, DC 20036  
Phone: 202-822-9002 Fax: 202-822-9553

The opinions expressed by the members of the Board of Advisors and by guest commentators do not necessarily represent those of the publisher. The analysis is the sole view of each Advisor and does not necessarily represent the views of their respective employers or firms. The information in this report has been obtained from reliable sources, but neither its accuracy and completeness, nor the opinions based thereon, are guaranteed. If you have any questions relating to the contents of this publication, contact the editorial offices of the Inter-American Dialogue. Contents of this report may not be reproduced, stored in a retrieval system, or transmitted without prior written permission from the publisher.

References cut by editors in the published version:

Brazilian Public Ministry's recommendation to IBAMA (the environmental authority) on 9 Nov. 2010 and in its Civil Public Suit of 27 Jan. 2011 (both available at <http://www.xinguvivo.org.br/>)

An economic analysis estimates only a 28% chance of breaking even (Cabral & Sousa Júnior, *Water Alternatives* 3(2): 249-268. 2010).

Upstream dams that would flood vast areas of indigenous land and tropical rainforest (Fearnside, *Environmental Management* 38(1): 16-27. 2006).

See extensive material on Belo Monte at <http://philip.inpa.gov.br>