

Brazilian Study Shows Hydropower Pollutes 4 Times More than Fossil-Fuel

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Hydropower plants have long been a byword for clean energy. But researchers warn that tropical reservoirs might release more greenhouse gases than fossil-fuel power stations.

Philip Fearnside, a conservation biologist at the National Institute for Research in the Amazon in Manaus, Brazil, has shown that in the first ten years of operation, a typical reservoir will emit four times as much carbon as a fossil-fuel station.

The culprit is organic matter trapped when land is flooded to create a dam. As this decays, it releases significant amounts of carbon dioxide and methane.

It is a topic of vigorous debate, fueled by a lack of data for tropical dams and the implications for energy strategies in developing countries, reports Jim Giles in Nature magazine.

It calls into question the wisdom of promoting dam construction in developing countries, including a US\$ 5 billion project proposed for the Congo river. Another concern is the funding of hydropower projects through the Kyoto Protocol's Clean Development Mechanism.

These concerns are likely to influence discussions of greenhouse gas emissions at a UNESCO meeting in Paris, France, December 5 and 6, as well as future analyses by the Intergovernmental Panel on Climate Change.

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