climatmundi

Hydraulics in Brazil

This project is meant to upgrade the existing water power plant, in order to maximize the captured energy and therefore produce more electricity for the national grid.

This project generates renewable energy that replaces electricity from fossil fuels, while keeping its environmental impact unchanged. This project is registered by the United Nations Framework Convention on Climate Change (UNFCCC) as a CDM* project under the n°1232



Focus...

The project is located on the Rio Doce river, in the Baixo Guando municipality (state of Espirito Santo), south-east of Brazil. The fourth and last turbine, which is the object of this project, has a capacity of 49,5 MW and brings the total power plant capacity to near 180 MW. This turbine allows the generation of 200 000 MWh per year, and therefore an emission reduction of 50 000 tons of CO_2 per year, without modifying the size of the upstream reservoir nor the river flow.

The plant reduces a large amount of greenhouse gas emissions, as well as other toxic gases derived from the combustion of fossil fuels (NOx, for instance).

The project contributes to avoiding a waste of energy due to the reactive energy necessary to compensate a high voltage fluctuation. The municipality also benefits from an increased economic development with this project.

The emission reductions have been verified by Bureau Veritas Certification, independant entity accredited by the United Nations Framework Convention on Climate Change (UNFCCC). Emission reductions

50 000

Tons of CO₂ per year.



Standard





