



## **Brazil – Small Hydroelectric, Rondônia State**

**Overview: Small hydroelectric plant, displacing fossil-fuelled generation.**

The project is a small run-of-river hydropower plant, comprising two turbines with a combined installed capacity of 5 MW. The run-of-river configuration requires a minimum diversion dam to store water sufficient to generate electricity for short intervals when required, depending on seasonal river flows.



### **Benefits: Emissions reductions and sustainable development**

Greenhouse gas emissions are reduced by the project since its output displaces electricity would otherwise have been generated in the existing predominantly diesel fuelled power plants in the grid or by the addition of new generation. The assessment of emission reductions from the project are based on the approved small scale CDM methodology AMS-I.D (Version 13) “Grid connected renewable electricity generation” and the verification report confirms that around 0.94 tonnes CO<sub>2</sub> equivalent are achieved for each megawatt-hour of electricity exported to the grid

The plant is in a very remote location and, with minimal environmental impact, provides electricity to help develop the area both socially and economically. Other project benefits include modest local employment and technological support drawn from regional businesses, and the encouragement of similar run-of-river hydroelectric projects elsewhere in Brazil.

### **Project carbon credits**

During the verification period from 01 September 2007 to 15 March 2009, greenhouse gas reductions by this project totalled 48,258 tonnes of CO<sub>2</sub> equivalent. Carbon credits were verified to the Voluntary Carbon Standard (2007) in November 2009 by DNV. (Certificate available upon request). Carbon credits from March 2009 onwards are registered under the CDM programme.