



Indonesia – Hydroelectric power plant

Overview: Hydroelectric power plant generating renewable energy.

The project is a run-of-river hydroelectric plant with generating capacity of 210 MW. The plant uses a natural height difference of about 400 metres between the upper reaches of two rivers in Southern Sumatra, thus avoiding the need for a retaining dam and having no negative impact on local irrigation schemes.



Benefits: Emissions reductions and sustainable development

Greenhouse gas emissions are reduced by the project since its output displaces electricity that would otherwise have been generated in the existing fossil fuelled power plants in the grid. The assessment of emission reductions from the project are based on the approved CDM methodology ACM0002 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”, version 10.

In addition to the documented greenhouse gas emission reductions, the project has hired 32 permanent employees, as well as providing numerous contracted out and temporary jobs. Community benefits include new roads and bridges, waste management facilities, the donation of a computer to the village office and support to a local orphanage and the building of a Mosque. The project owner has set up a reforestation project in the catchment area and the plant has a program to remove an invasive plant species that harms water quality.

Project carbon credits

During the monitoring period from April 2009 to March 2010, greenhouse gas reductions totalled over 568,000 tonnes of CO₂ equivalent. Carbon credits were verified to the Voluntary Carbon Standard (2007) by RINA S.p.A (documentation available upon request). This project has also been certified to the Social Carbon Standard, which certifies emission reduction projects for their contributions to sustainable development, with particular reference to biodiversity and the impact on local communities.