



Musi River Hydro Indonesia

Renewable hydropower for the island of
Sumatra



Located in rural Sumatra, this run-of-river hydroelectricity project harnesses the flow of the Musi River to generate clean energy for the grid. The project supports local jobs, new income streams, and has funded infrastructure improvements – as well as a reforestation program.

The Context

Sumatra, Indonesia's largest island, is covered by dense tropical forests that are home to countless plant and animal species. Its fertile soil is ideal for growing rice and other commodities such as coffee, cacao, cinnamon and palm sure. Despite this, new economic opportunities are limited by rudimentary infrastructure and poor electricity access – and growing energy demands threaten Sumatra's unique natural ecosystems.

The Project

This grid-connected, run-of-river hydroelectricity plant is built on the upper banks of the Musi River near Sumatra's port city of Bengkulu. By harnessing the kinetic energy of powerful running water, the Musi River Hydro plant has a total-installed capacity of 210 MW and delivers over 765,000 MWh to Sumatra's grid every year.

The Benefits

This project addresses issues in rural Sumatra such as poor electricity access and the lack of quality employment opportunities – as well as fostering sustainable economic development. The Musi River Hydro plant has created quality jobs and upskilling opportunities for locals in what has been traditionally a farming community. A portion of project revenue is reinvested in the local community, building an orphanage, constructing new roads, bridges, and a traditional marketplace – giving local farmers better access to their rice paddies and the opportunity to pursue additional income. A reforestation program has also been established in the surrounding catchment area to safeguard the natural landscape.

The project engages with local communities, farmers and NGOs through annual stakeholder meetings – earning the project the coveted Social Carbon certification.



SOCIALCARBON®
For vintage 1 Apr 2009 - 31 Mar 2013



765,677 MWh

generated on average annually by the hydro plant, displacing fossil fuel-generated electricity and boosting Indonesia's renewables sector



50 Permanent Jobs

created in power plant operations, with part-time employment opportunities offered during the construction phase



2 Drawbridges

repaired, as well as new roads, trash basins, and financial support building a public transport terminal, mosque, and a traditional marketplace



Free training

for locals on composting and making organic fertiliser from invasive aquatic plants – providing free fertilisers to farmers to maintain healthy ecosystems



568,898 tCO₂e

reduced on average annually, contributing to climate change mitigation



± 20 ha of land

reforested in the project area as part of a dedicated programme to support a healthy, natural ecosystem

For more information on the UN Sustainable Development Goals, please visit: <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

Official name: 210 MW Musi Hydro Power Plant, Bengkulu | **VCS link:** http://www.vcsprojectdatabase.org/#/project_details/487 | **VCS ID:** 487