



MUARA HYDROPOWER PLANT BALI INDONESIA



Harnessing the renewable energy of flowing water to power Balinese communities

As the first mini hydropower plant operating in Bali, this milestone project supports the island's journey towards a clean and green energy future. Two turbines convert the energy of flowing water into electricity, which is fed into the local power grid. This lowers reliance on coal and diesel powerplants and therefore reducing harmful emissions while securing Bali's energy supply.

The Context

The provincial government must meet local energy demand and those of the tourist industry, which is booming thanks to the island's beautiful and unique natural assets. Due to an increasing awareness of the environmental degradation associated with fossil-fuel power plants, Bali is looking towards a clean, green energy future. A share of the island's energy is provided through an undersea link from Java, however, in the past, there have been difficulties sustaining the power supply, causing blackouts.

The Project

The project, implemented by Panji Muara Raya Company, is the first mini hydropower plant in operation in Bali. Two 1.15 MW turbine-generators produce electricity by harnessing the power of the river, which is then distributed by a 20kv transmission line.

The Benefits

The hydropower plant contributes to local sustainable development in several ways. The Muara project aims to become the icon for renewable energy in Bali, with the project providing an important source of reliable power to the grid. Clean renewable energy displaces other high-emitting methods of producing electricity thus reducing harmful greenhouse gases. With 90% of employees recruited from the local area, the community benefits from greater economic opportunities. Additionally showcasing environmental commitments is becoming increasingly important for tourists. The Panji Muara Raya company plants trees in a protected area and supports water resource management on the island.

The project aims to be the icon for the renewable energy industry in Bali

Commercial Operation Date

27 October 2016

Total capacity

2.3 MW

Grid

Jamali interconnected grid

Reportability

Meets GHG Protocol Scope 2 criteria, RE100, CDP

Registry link

<https://registry.irecservices.com/Public/ReportDevices/>

Registry ID

MUARA001



Water resource management

Panji Muara's Raya CSR programme includes advising on water distribution



10,200 MWh

of renewable electricity generated on average per year



27 jobs created

providing opportunities to the local community



Investment in sustainable industrialisation

which is a crucial driver of economic growth and development



8,800 tCO₂e

mitigated on average per year



1,000 trees planted

in a protected forest, as part of Panji Muara Raya's CSR

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

#forabettertomorrow Visit www.southpole.com/contacts to find your local office or call our Headquarters in Zurich on +41 43 501 35 50