Stable Power Supply Thanks to Hydropower in Indonesia



Reconstructing of the historical dam with local raw materials.

In Indonesia, a micro hydroelectric power plant is being renovated and recommissioned, and renewable power fed into the regional power supply system. Through the replacement of diesel-based power, greenhouse gas emissions are lowered.

An obsolete hydro power plant in need of renovation, whose current output of 75 kW lies clearly below its possible capacity, is being restored, expanded and connected to the regional power supply system in a 3-step process. For this, the existing infrastructure is to be used as far as possible. Nevertheless, the better part of the technical and electronic equipment has to be replaced with new components. The completed plant has a design capacity of 935 kW and will annually reduce up to 4,500 tonnes of CO₂.

In addition to the contribution to the protection of the climate, the project brings improvement of the economic, social and ecological situation in the region. Power failures due to insufficient capacity are extremely frequent in rural Indonesia. Through this project, the local population benefits from a more stable power supply system - a central requirement for the local economy. In addition, through the renovation and operation of the plant, new employment opportunities are created, and the environment benefits from the substitution of diesel-based energy. There is no additional contamination of the environment since the power plant is being built on an existing infrastructure.

The demand for power in Indonesia has been greatly increasing year after year, and the renewable energies - especially hydro power - show great potential in this country. Such projects are to contribute as pilot projects to making it possible that the large growth of energy demand can be covered as sustainably as possible.

The first restored turbine was put in operation in August 2007 and has

Project type: Hydro power

Project location: Salido Kecil, Indonesia

Project status: In operation, credits available

Annual CO₂ reduction: 3,716 t

Situation without project Regional electricity mix

Project standard



VER

Impressions



The aqueduct takes the water from the dam and its reservoir through the jungle to the pressure pipeline.



The kilometre long aqueduct was built at the beginning of the 20th century during the Dutch colonization, and runs through the jungle of western Sumatra.

been running since without problems. The commissioning of the second turbine took place in July 2009 and of the third turbine in July 2013.

This project contributes to 4 SDGs (as of end 2022):

Find out how myclimate reports these SDGs in our FAQ.

The following SDGs are verified by the Gold Standard:



54.2 GWh renewable energy produced.

8 DECENT WORK AND ECONOMIC GROWTH

12 long-term positions created



The project has avoided 36,500 tonnes of CO2 emissions.

These SDGs have been approved by myclimate:



62 people trained on different aspects of the project.



This historic and constantly guarded building is located at the end of the aqueduct. The water falls from here into the pressure pipeline.



The difference in altitude of the pressure pipeline results in electricity generation in the turbines further downstream.