

1,021,075
SAVED EMISSIONS
TONS CO2 EQ /YEAR



Asahan 1 Hydroelectric Power Plant 2 x 90 MW

 Indonesia

PROJECT-ID: 4118 FZ-ID: 2161



Asahan 1 Hydroelectric Power Plant 2 x 90 MW

Run-of-river power plant on the Asahan River near Lake Toba

The Asahan 1 Hydroelectric Power Plant 2 x 90 MW project, developed by PT Bajradaya Sentranusa, is a run-of-river power plant project in the province of North Sumatera in Indonesia.

The existing flow of the Asahan River is used to generate electricity. As it is a run-of-river power plant, the project does not require the construction of a large dam or reservoir. The natural lake with an area of 1,103 km² provides the project with an annual available water supply.

Geographically, the project is located downstream of Lake Toba and upstream of the existing Asahan 2 (Siguragura) hydropower plant, a large dam power

plant built in 1981. The project aims to supply zero-emission energy to the Sumatera grid, a grid with relatively carbon-intensive electricity supply located on Sumatera Island, which currently has no interconnection with the grid on other islands, e.g. Java and Kalimantan.

[For more information please click here.](#)

Overview of the project data:



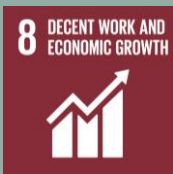
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The project contributes to the following sustainability goals:



Affordable and clean energy:

The project diversifies power generation sources, improving security of supply, which is important for meeting growing energy demand and moving away from diesel and coal-fired power generation.



Decent work and economic growth:

Jobs have been created, of which about 70 % are local people hired out of a total of at least 600 unskilled workers, while about 30 people from the local population are employed for the operational phase.



Climate action:

The operation of the project will save approximately 1,021,075 t CO₂e annually. It also reduces dependence on the use of fossil fuels in the energy sector and thus improves air quality.