## Solar system set up Tonga



#### What is solar power in Tonga?

The solar PV system is part of a 1.25 MW portfolio, where power will be sold to the island's villagers through pre-paid net metering. The Asian Development Bank, with the help of other institutions, is supporting the deployment of solar on the Pacific Ocean's small island nations. Tonga has a goal of 50% renewable energy by 2020 and 70% by 2030.

#### How does the Tonga solar plant work?

Once operational, the solar plant will sell its electricity to Tonga's power utility, Tonga Power Limited (TLP), through a subsidized tariff, which is assessed by the ADB for each project. The island's citizens purchase the electricity through prepaid metering.

#### How many solar PV plants will be built in Tonga?

The overall project comprises nineindividual solar PV plants that will have a cumulative capacity of 1.25 MW to be built on Tonga's remote islands. Some will feature additional storage systems, to power households, public facilities, and medical facilities.

Is Tonga ready for a solar mini-grid?

Tonga has a goal of 50% renewable energy by 2020 and 70% by 2030. Tonga's most remote island, Niuatoputapu, is all setfor the development of a new solar mini grid. The King of Tonga, Tupou VI, led a groundbreaking ceremony for the solar PV array which will connect to 210 homes.

How much money does the ADB give to Tonga?

In March,the ADB earmarked \$100 millionfor the Pacific Renewable Energy Program,to support Tonga,and another 13 other island nations in the Pacific. The Outer Islands Renewable Energy Project has received \$25 million of this funding. This content is protected by copyright and may not be reused.

The system includes a 350kW solar plant and a 1003kW/1856kWh battery energy storage system, which will enable TPL to integrate renewable energy into its electricity grid and provide reliable power to customers. Her Excellency Rachael Moore, the Australian High Commissioner to the Kingdom of Tonga, was present as the guest of honour at the event.

Solar power has emerged as a particularly viable renewable energy source in Tonga, thanks to its sun-soaked climate and mostly flat landscape. The Tongan government has taken initiative by ...

Tonga Power Limited is continuously expanding its Renewable Energy Portfolio, through the introduction of solar generation and most recently Tonga''s first ever large scaled wind generation system in Niutoua.

"In Tonga, we have taken the decision of building of renewable capacity by 70% by 2030 and solar will be a



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key driver for achieving our targets. The role of ISA will be crucial in helping the countries strengthen their NDCs and to chart a roadmap for achieving their climate action targets," Hon Tei said.

Comprising three interconnected 2.3MWp ground mounted solar arrays in western Tongatapu, the construction phase successfully met the extreme challenges presented by the 2022 Hunga Tonga-Hunga Ha"apai volcanic eruption and resulting tsunami, as well as the COVID-19 pandemic.

The solar and battery energy storage system was constructed by Infratec, a leading renewable energy company, with the support of local contractors JH Electrical and Clay Energy. Despite the challenges posed by the COVID-19 pandemic and the countrywide lockdown, the project was completed successfully, thanks to the dedication and hard work of ...

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The Tonga Outer Island Renewable Energy Project (OIREP) will construct Solar Photovoltaic (PV) power plants on 8 outer islands. The "on-grid" portion will be allocated to Ha"apai and "Eua, while the "off-grid" portion will incorporate "Uiha, Nomuka, Ha"ano, ...

The commissioning of the Niuatoputapu Solar Hybrid System & Mini Grid is a significant milestone for Tonga. It brings the country's total electricity accessibility to around 99%. The project will also help to reduce Tonga's reliance on imported fossil fuels, which will benefit ...

"Ohonua, "Eua Tonga (02nd March 2023) -- Tonga Power Limited (TPL) has commissioned a new solar and battery energy storage system in Eua, Tonga, with the financial support of the Government of Australia and the Asian Development Bank. The system includes a 350kW solar plant and a 1003kW/1856kWh battery energy storage system, which will ...

The commissioning of the Niuatoputapu Solar Hybrid System & Mini Grid is a significant milestone for Tonga. It brings the country's total electricity accessibility to around 99%. The project will also help to reduce Tonga's reliance on imported fossil fuels, which will benefit the environment and the economy.

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