

A small solar power plant – though big in the context of its location – is powered by REC panels. Kiritimati Island in the Republic of Kiribati has converted $2,100 \text{ m}^2$ of undeveloped land into a source of clean energy, reducing their reliance on diesel.



A REMOTE ISLAND IN THE CENTRAL PACIFIC, famous for the greatest land area of any coral atoll in the world (388 km²) is now

also home to 480 REC Peak Energy 72 Series solar panels.

The grid-connected $150\,\mathrm{kW}$ solar installation on Kiritimati Island (also known as Christmas Island) covers an area of $2,100\,\mathrm{m^2}$ and will generate $280,000\,\mathrm{kWh}$ of clean, green electricity each year, while also offsetting $215,000\,\mathrm{kg}$ of harmful carbon emissions.

The island's remote location makes it quite dependant on diesel as a source of energy. To reduce their diesel use, the island is going solar. The electricity produced by the REC panels is supplied to the Kiritimati Island medium voltage network for transmission and distribution. Electricity on the island is needed mainly for lighting, small appliances, offices, and retail businesses, who are all now "greener" in their operations.



This system is part of a wider project jointly funded by the European Union Economic Development Fund and the New Zealand Ministry of Foreign Affairs and Trade.

New Zealand-based Infratec was the EPC for the project, and needed just six weeks to build and install the system at the undeveloped lagoon frontage. At completion, the system was the largest on Kiritimati Island and was commissioned on time despite the challenges of its remote location.

"REC panels meet the project's technical requirements and were also from an eligible country of origin," said Luke van Zeller, General Manager at Infratec. He adds: "Reputable REC panels ensure the long service life of the installation, with minimal maintenance in a marine environment." All REC panels are 100% P.I.D. free, ensuring they maintain their peak performance in areas with high temperatures and high humidity.

PROJECT OVERVIEW

KIRITIMATI RENEWABLE ENERGY PROGRAM

POWER PLANT INSTALLATION

Owner:

Government of Kiribati

Location:

Kiritimati Island, Kiribati

Type of Installation:

Ground-mounted power plant

System Size:

L50 kW

Solar Panel Type:

REC 315PE 72

Number of Solar Panels Installed:

480

Annual Capacity:

280,000 kWh

Completion Date:

February 2018

EPC:

Infratec

Founded in Norway in 1996, REC is a leading vertically integrated solar energy company. Through integrated manufacturing from silicon to wafers, cells, high-quality panels and extending to solar solutions, REC provides the world with a reliable source of clean energy. REC's renowned product quality is supported by the lowest warranty claims rate in the industry. REC is a Bluestar Elkem company with headquarters in Norway and operational headquarters in Singapore. REC employs more than 2,000 employees worldwide, producing 1.4 GW solar panels annually.



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