

Can a solar array power Tokelau?

Solar Array's seen on the three tiny islands of Tokelau to completely produce solar power energy. The renewable energy system comprising of solar panels, storage batteries and generators running on biofuel derived from coconut will generate enough electricity to meet 150% of the islands' power demand.

How much electricity does a solar system provide in Tokelau?

Each system alone is among the largest off-grid solar power systems in the world, and together they are capable of providing 150% of current electricity demand in Tokelau, a much higher amount than the 90% that was originally planned for.

Could Tokelau be the world's first renewable nation?

Solar power plants and coconut biofuel-powered generators switched on in Tokelau has made the islands the world's first truly renewable nation.' Imagine a place where the only energy to be found is clean, reliable solar power. Solar Array's seen on the three tiny islands of Tokelau to completely produce solar power energy.

How many people live in Tokelau?

Tokelau is made up of three small atolls, Atafu, Nukunonu and Fakaofu, has an area of around 10km<sup>2</sup>; and is populated by 1,411 New Zealand citizens, all of whom now have their energy needs met by solar electricity systems. "Each system alone is among the largest off-grid solar power systems in the world."

Why did Tokelau switch to solar?

Yet despite the challenges involved in installing comprehensive solar systems in such a remote location, switching to solar was absolutely crucial for the tiny collection of islands. "Tokelau's atolls are low-lying and especially susceptible to the adverse effects of climate change," Mayhew stressed.

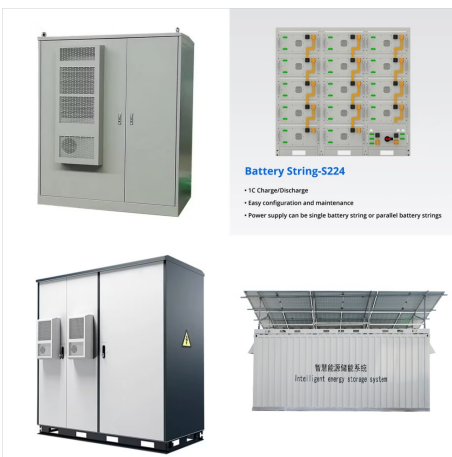
Why is electricity so expensive in Tokelau?

Before the PowerSmart systems were installed on the nation's three atolls, Tokelau was highly dependent on imported fossil fuels to meet its energy needs and therefore vulnerable to international price fluctuations and increasing fuel costs, making electricity extremely expensive for both households and businesses.

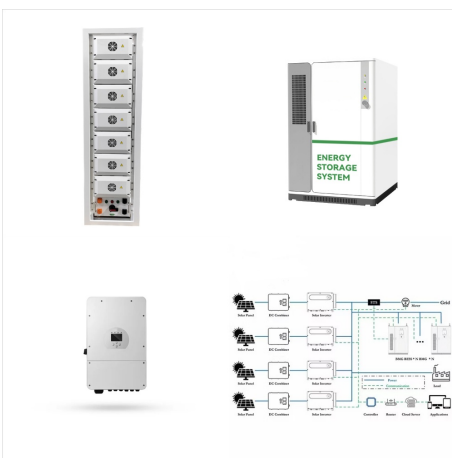
# TOKELAU SOLAR PANEL TACLOBAN



To date, RLC has completed solar installations in 21 malls for a total of approximately 25,941 kWp (25.941 MWp) of solar panels installed. This is equivalent to about 270,268 trees planted and 16,345 tons of carbon dioxide ???



The RE-Charge Tacloban facility uses a 9.75-kilowatt hybrid off-grid solar photovoltaic system with battery backup and grid-tie capability that is connected to the geothermal-powered Leyte grid. The system uses 39 250 ???



RES: 1MW off-grid solar energy system across three main atolls of Tokelau. The project includes : 4032 solar modules, 196 string inverters, 112 DC charge controllers, 84 battery inverters and 1344 batteries in 48V banks. ???

# TOKELAU SOLAR PANEL TACLOBAN



The South Pacific nation of Tokelau became the first country in the world to have all of its electricity needs met by solar power. Designed by Powersmart Solar in partnership with ITP Renewables, construction of the combined 1 MW of stand ???



Solar Panel: 15V 36W, Polycrystalline. Battery Type: Lithium-Ion 11.1V 30AH. Charging time: 6-8hours. Discharging time: 10 Shop in Tacloban City. The Company has been in the Tacloban market since 1996 Store Hours: Monday ???