



# Solar electric kit Tokelau

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.

Does Tokelau have a solar power system?

Foreign Affairs Minister Murray McCully today welcomed the completion of a third New Zealand-funded solar power system in Tokelau- meaning almost 100 per cent of the territory's electricity needs are met through solar generation. "The Tokelau Renewable Energy Project is a world first.

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.

How much does a diesel generator cost in Tokelau?

Indeed, until recently, diesel generators were burning around 200 litres of fuel daily on each atoll, meaning more than 2,000 barrels of diesel were used to generate electricity in Tokelau each year, costing more than \$1m NZD.

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met by solar power. Designed by Powersmart Solar in partnership with ITP Renewables, construction of the combined 1 MW of stand-alone PV spread across the three atolls was completed in October 2012.

Tokelau - the world's first solar power sufficient nation. Tokelau, an island nation in the South Pacific, is now completely able to support itself with solar energy. Elly Earls met Joseph Mayhew of the New Zealand Aid Programme to find out how this tiny collection of atolls has become almost 100% self-sufficient in less than 12 months.

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In 2012, Tokelau switched from using 100 per cent diesel-generated power to 100 per cent solar electricity, using a design appropriate for their difficult tropical marine environment. Tokelau's draft energy roadmap for 2015-25 highlights their commitment to being fully reliant on renewable energy.

The islands of the Tokelau territory "now have enough solar capacity, on average, to meet electricity needs," said New Zealand Foreign Affairs Minister Murray McCully.

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