

Will Niue build a solar farm?

Niue is seeking about US\$18 million to build a solar farm as part of the island nation's plans to reduce its heavy reliance on fossil fuels. The minister for infrastructure, Dalton Tagelagi says Niue's strategic energy road map sets the ambitious goal of having 80 percent of its power generation coming from renewable energy sources by 2025.

Does Niue use solar energy?

Over the last 5 months the total integrated system has resulted in 28.6% of Niue's electricity coming from solar renewable sources, saving over 130,000 litres of diesel. Find out more about Vector Powersmart

How did the Niue solar project work?

Working on the existing solar plants to establish communication with the Niue Central Power Station. Installing 600kW of solar to increase the islands overall solar capacity to 1.1MW of solar generation. The solar array was installed well inland on high ground to avoid any potential damage from cyclones in the future.

What will New Zealand do with the Niue ocean wide trust?

The project will bring Niue's renewable generation to 80 percent. New Zealand will also commit \$2 million to the Niue Ocean Wide Trust, which aims to develop a blue economy and ensure long-term ocean conservation and climate resilience.

Did China influence Niue's relationship with New Zealand?

Asked about the growing influence of China in the region, Tagelagi said New Zealand was Niue's traditional partner. China was a friend like many other countries in the region, he said, but could not come between the relationship with New Zealand.

"Ideally, we are following our Strategic Plan, increasing the renewable components from solar up to 80% by 2025," said Chapman. The project will install additional solar farms to boost the solar generation capacity and meet those targets.

New Zealand plans to invest \$20.5 million into a new, large-scale, renewable energy project in Niue, reducing the island nation's reliance on diesel. The project will bring Niue's renewable generation to 80 percent.

? To promote sustainable energy options for power generation including solar, wind and biomass energy resource. ? Assess and promote the natural resource potential and improve the technical capacity to meet Niue's energy needs.

Onshore wind: Potential wind power density (W/m²) is shown in the seven classes used by NREL, measured at a height of 100m. The bar chart shows the distribution of the country's land area in each of these classes

compared to the global distribution of wind resources. Areas in the third class or above are considered to be a good wind resource.

Similarly, Niue's largest solar array (near the hospital) requires some inverters to be replaced. These are on-island, and replacement work will be carried out in the next few weeks. At this point, we will be able to bring a sizeable portion of solar back on the grid and reduce diesel consumption from running the generators full time.

Installing 0.80MW / 3.15MWh Tesla Powerpack 2 (BESS) at the Niue Power Station to maximise the use of solar on the island and eliminate the need to curtail solar to maintain grid stability. Installing Vector PowerSmarts bespoke Energy Management System (EMS) to manage Niue's electricity grid by balancing the new and existing solar generation ...

With the upcoming reintegration of the BESS and solar farms by December, Niue is poised to move closer to its goal of 80% renewable energy production by the end of 2025. The Ministry now has both old and new power stations available to ensure consistent energy delivery to all communities.

Niue has the potential to exploit some renewable energy sources such as solar, wind, wave energy, ocean thermal energy conversion, biomass and biogas. There is no significant tidal, geothermal or hydro energy resources.

Today, the Deputy Prime Minister of New Zealand, Rt Hon. Winston Peters is here to break ground on what will become a cornerstone of Niue's renewable energy infrastructure. The new power station, funded through contributions from both Australia and New Zealand, is slated for completion and commissioning by mid-September.

