

## SolarInnovate Energy Solutions

# Nauru solar power and wind power complementation



## Overview

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Will Nauru install a solar power plant?

Nauru has embarked on an ambitious project to install a grid-connected solar power plant with a capacity of 6 megawatts (MW) of alternating current. This initiative is part of the Solar Power Development Project, which aims to diversify the energy mix and reduce reliance on diesel.

Can solar photovoltaics be used as an energy source on Nauru?

While Nauru is currently 100% electrified by grid-distributed power, the government has considered and continues to explore the use of solar photovoltaics as an energy source. This interest was first indicated at the 1995 South Pacific Forum Meeting.

How does Nauru generate electricity?

Nauru currently relies heavily on imported diesel for power generation, which poses challenges due to fuel price fluctuations and supply interruptions. About 3% of its electricity comes from solar photovoltaic installations. What key renewable energy projects are underway in Nauru?

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Is Nauru a good place for solar power?

"There is a lot of sunshine here and it's good for solar power. I believe electricity supply here will be much better when the project is completed," Scott told Xinhua. On top of building the power project, China Harbour Engineering Company Ltd is also undertaking the redevelopment of Nauru's largest harbor, Aiwo Harbor.

Why is there limited interest in solar applications on Nauru?

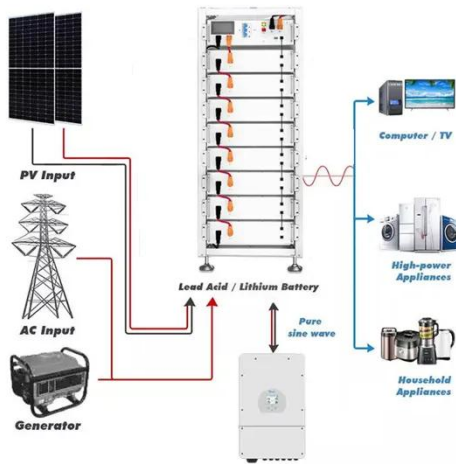
As all energy on Nauru is provided from predominantly fossil fuels (electricity generation), there has only been a limited interest shown in solar applications.

Nauru being located nearly on the equator limits the need for hot water for domestic applications.

Does Nauru need government subsidies?

The high cost of power generation in Nauru, often exceeding \$0.40 per kilowatt-hour, has historically required government subsidies to keep electricity affordable for residents. However, recent efforts, including support from the Asian Development Bank (ADB), have aimed to improve the financial sustainability of the energy sector.

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### Capacity configuration optimization of wind-solar combined power

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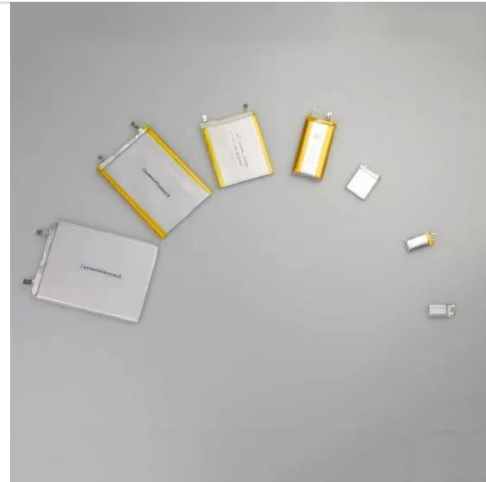
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