



# Samoa's energy storage photovoltaic power generation capacity

Why should American Samoa invest in solar energy?

Positioned less than 1,000 miles south of the equator, American Samoa is uniquely positioned to harness its abundant solar energy resources. BESS projects will be critical for American Samoa to achieve its renewable energy goals by maximizing solar utilization, reducing dependence on imported fuels, and ensuring a safe, reliable grid.

What is a solar project in Samoa & Tutuila?

The three projects, deployed on American Samoa islands of Tutuila and Aunu'u, will have installed capacities of 4 MW/8 MWh, 5 MW/10 MWh, and 1 MW/2 MWh. All three projects will support ramp rate control to smooth and limit fluctuations in solar photovoltaic (PV) power output, ensuring reliable renewable integration and grid stability.

Which land is available for solar energy in Samoa?

For power, spaces in front near and the rear end of the thermal station is available for RE. Total land area from Samoa Land Corporation is 15.5 acres. Land was designated for Solar Energy. Lease Property is legally leased to EPC from Samoa La

What is Samoa's energy mandate?

The mandate also includes addressing critical environmental, social, and gender considerations to ensure the project's sustainability and inclusiveness. Samoa currently relies on imported fossil fuels for approximately 69% of its electricity generation, leaving the country vulnerable to volatile oil prices.

Does American Samoa use fossil fuels?

ASPA is a development-oriented public utility providing electricity, water, wastewater, and solid waste services to about 50,000 residents. American Samoa uses imported fossil fuels for almost all of the territory's energy needs, including transportation, drinking and wastewater treatment, and most of its electric power generation.

How does Samoa's energy system work?

Accelerated integration of innovative distributed energy solutions across its service territory. Currently, Samoa's energy portion of the tariff sees its highest cost kWhs coming from energy supplied through its diesel resources. The Samoan Government has an established goal of 70% renewable energy generation.

Solar energy also plays a significant role, generating around 13%, while biofuels account for approximately 7%. These figures highlight a substantial, yet incomplete, transition towards low ...

In 2021, solar power accounted for about 11% of American Samoa's electricity generating capacity and 3% of its electricity generation.<sup>3</sup> The territory possesses substantial solar energy ...



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Solar PV ASPA's Total installed PV capacity to date is 1.75 MW. There is also an additional 0.70 MW of privately owned PV capacity. Combined these installations generate approximately ...

The information developed through this EOI will be used to evaluate the market interest for IPP-led development of renewable energy generation and storage for Samoa, to be procured by EPC.

Energy Storage Configuration Considering Battery Characteristics for Photovoltaic Power Station The development of photovoltaic (PV) technology has led to an increasing share of ...

The project is expected to increase the share of renewable energy power generation to more than 50%, significantly reducing the island's reliance on fossil fuels and bringing it in line with ...

The territory possesses substantial solar resources and wind and biomass resource potential. Planned renewable power projects include utility-scale solar photovoltaic (PV) and wind ...

The solar-plus-storage projects, developed in partnership with Eastern Power Solutions, will provide 10 MW/20 MWh of critical clean capacity for the American Samoa grid.

Constructed by Eastern Power Solutions, the solar-plus-storage projects will provide 10 MW / 20 MWh of critical clean capacity for the American Samoa grid. MONTR&#201;AL, ...

We expect 63 gigawatts (GW) of new utility-scale electric-generating capacity to be added to the U.S. power grid in 2025 in our latest Preliminary Monthly Electric Generator ...

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