Palau island microgrids

Palau island microgrids

E& E News provides essential energy and environment news for professionals.

Tiny Island Nation to Host World’s Largest Microgrid

If you're enjoying this article, consider supporting our award-winning journalism by subscribing. By purchasing a subscription you are helping to ensure the future of impactful stories about the discoveries and ideas shaping our world today.

Scientific American is part of Springer Nature, which owns or has commercial relations with thousands of scientific publications (many of them can be found at). Scientific American maintains a strict policy of editorial independence in reporting developments in science to our readers.

The tiny Pacific island nation of Palau announced last week that it will soon become the home of the world"s largest microgrid, a development that could help it ramp up to 70 percent renewable energy over the next three decades.

ENGIE EPS recently launched what the company bills as the world"s largest microgrid project -- a 100-MW solar-storage platform* that will be capable of meeting all of the Micronesian island of Palau"s power needs.

It isn"t surprising that the company chose Palau for the project. Island states struggle more than others to deal with the threat of rising sea levels.

Pacific island nations in particular have been at the forefront of global initiatives to reduce greenhouse emissions as they face rising temperatures and sea levels. The American Samoa island of T"au meets 100 percent of its power needs, and does so in zero- or low-carbon emissions fashion -- using a Tesla-built microgrid.

Dubbed Armonia (Harmony), the Palau microgrid will feature dispatchable, solar photovoltaic (PV) and lithium-ion battery energy storage -- 35 MW of solar PV and 45 MWh of energy storage. It will be integrated with 28 MW-peak of existing diesel-fueled generation, which will be called on for the residual portion of the load, according to an investor call presentation by the company October 15.

The microgrid"s solar capacity should meet more than 45 percent of Palau"s total demand for electricity, significantly reducing the island-state"s imports of diesel fuel for electricity and the associated greenhouse gas emissions. ENGIE EPS will build, own and operate the microgrid, selling the power to Palau"s utility distribution grid operator at competitive rates fixed as per the terms and conditions of a 30-year power purchase agreement (PPA).

Palau island microgrids

Palau will become 45 percent renewable when it completes the project in 2019, according to ENGIE EPS, the new brand that emerged as a result of the acquisition earlier this year of Electro Power Systems (EPS) by global energy giant ENGIE.

A nation of just over 20,000 residents, Palau expects to generate substantial energy generation cost savings as a result of the PPA tariff, and further savings as a result of optimization of residual diesel generation, according to ENGIE EPS.

Contact us for free full report

Web: https://www.kary.com.pl/contact-us/
Email: energystorage2000@gmail.com
WhatsApp: 8613816583346