



American Samoa solar zone

Is American Samoa a renewable country?

American Samoa's energy sector relies almost entirely on imported fossil fuels, although renewables represent a small but growing power system contribution. The territory possesses substantial solar energy resources, as well as wind and biomass resource potential.

Does American Samoa have energy issues?

Although energy burdens pose a real challenge in American Samoa, the territory is working to advance energy justice. For example, the Territorial Energy Office provides home energy efficiency programs to help reduce energy costs for low-income households.

How much solar power does American Samoa have?

Of the 5 MW of ASPA's grid-connected solar PV capacity, 4.1 MW is utility scale and 900 kW is distributed across rooftops. American Samoa's smaller islands are moving toward a combination of solar, batteries, and diesel generators.

Does American Samoa have a geothermal energy plan?

The 2016 American Samoa Energy Action Plan identifies some geothermal resources, but none of these are viable for commercial electricity generation. The 2016 plan instead emphasizes the development of wind and solar power (Ness, Haase, and Conrad 2016). American Samoa is exploring opportunities for both offshore and onshore wind power generation.

How does American Samoa generate electricity?

Some of its islands generate electricity from solar energy. 5,6 Pago Pago, one of the deepest natural harbors in the South Pacific, is among the territory's most important assets. It receives the imported petroleum products that American Samoa depends on to meet almost all of its energy needs. 7,8

How much does electricity cost in Samoa?

Average U.S. and American Samoa Electricity Prices (2022) ASPA rates are down slightly as of January 2024--approximately \$0.41/kWh for residential and commercial customers and \$0.38/kWh for industrial customers. ASPA's total energy rates include a renewable energy flat rate charged at \$0.002/kWh across all service types (ASPA 2024).

Now, the island runs on a completely renewable microgrid that meets 100% of residents' energy needs through solar power and battery storage. In 2016, the founders of Maui, Hawaii-based company Mana Pacific helped ...

Solar PV: Solar resource potential has been divided into seven classes, each representing a range of annual PV output per unit of capacity (kWh/kWp/yr). The bar chart shows the proportion of a country's land area in each



American Samoa solar zone

of these classes and the global distribution of land area across the classes (for comparison).

American Samoa is less than 1,000 miles south of the equator and has abundant solar energy resources. 63,64 In 2021, solar power accounted for about 11% of American Samoa's electricity generating capacity and about 3% of its electricity generation. 65,66 In 2016, ASPA completed conversion from diesel-powered to solar photovoltaic (PV ...

solar system to allow the Manu'a islands to reach their self-sufficient 100% renewable energy goal. What are the environmental & health benefits? This solar-storage electricity generation ...

The island of Ta'u in American Samoa, more than 4,000 miles from the United States' West Coast, now hosts a solar power and battery storage-enabled microgrid that can supply nearly 100 per ...

further clean energy advancements in American Samoa. Goals and visions overlap between ASREC and American Samoa governmental entities, which can now work together to revisit pre-COVID objectives and missions in the energy sector.

In 2022, the average electricity price for residential customers in American Samoa was approximately 45 cents/kilowatt-hour (kWh)--almost three times the U.S. average of 15 cents/kWh. 2 Renewable energy represents a small but growing power system contribution, although American Samoa relies almost entirely

Now, the island runs on a completely renewable microgrid that meets 100% of residents' energy needs through solar power and battery storage. In 2016, the founders of Maui, Hawaii-based company Mana Pacific helped design and implement Ta'u's solar-energy microgrid composed of over 5,300 solar panels.

solar system to allow the Manu'a islands to reach their self-sufficient 100% renewable energy goal. What are the environmental & health benefits? This solar-storage electricity generation system will reduce annual emissions of NO_x by 18.44 tons, fine particulate matter by 3.27 tons, hydrocarbons by 0.52

The island of Ta'u in American Samoa, located more than 4,000 miles from the West Coast of the United States, now hosts a solar power and battery storage-enabled microgrid that can supply nearly 100 percent of the island's power needs from renewable energy.

The American Samoa Observatory (SMO) is located in the middle of the South Pacific, about midway between Hawaii and New Zealand. ... This observatory has the distinction of obtaining 30% of its daytime power from solar panels. The ...

