

ETERNAL NEW ENERGY ANTIGUA AND BARBUDA



Will Antigua and Barbuda have a 100% renewable power system? The current power system of Antigua and Barbuda was used to calibrate the model in HOMER, and subsequently various scenarios were considered to provide the Government with the least-cost pathway for a 100% renewable energy power system by 2030. The study has considered the following five main scenarios:



How much does electricity cost in Antigua and Barbuda? This profile provides a snapshot of the energy landscape of Antigua and Barbuda, an independent nation in the Leeward Islands in the eastern Caribbean Sea. Antigua and Barbuda's utility rates are approximately \$0.37 U.S. dollars (USD) per kilowatt-hour (kWh), which is above the Caribbean regional average of \$0.33 USD/kWh.



Can Antigua and Barbuda achieve a fully decarbonised power system? As analysed in the roadmap, the deployment of solar PV and battery systems for the residential sector of Antigua and Barbuda will be an important element, as planned by the Government, for achieving a fully decarbonised power system by 2030.



Will Antigua and Barbuda increase its share of renewables? The current power system is widely dominated by fossil fuel generation, and with the plans in place as of 2020, the renewable share would merely increase to 9%. To significantly increase its share of renewables, Antigua and Barbuda should follow the pathway of the optimal system scenario outlined in the Roadmap.



Which energy source is most dominant in Antigua and Barbuda? From the figure, it is also clear that the HOMER optimisation has estimated solar energy to be the more dominant source of electricity in Antigua and Barbuda to serve most of the load. The dominance of solar PV in meeting most of the total load in this scenario is clearer when observing the installed capacity by technology in Figure 21.

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Who owns the power in Antigua & Barbuda? Under the terms of the deal, the Antigua government will retain a 51% share in WIOC. 10 Antigua and Barbuda's generation resources are owned primarily by APUA, with the remainder owned by the sole independent power producer (IPP) currently in operation Antigua Power Company Limited (APC); other IPPs are allowed but none exist to date.



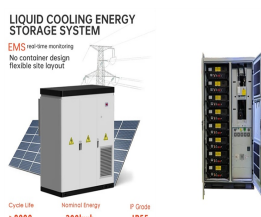
IRENA report shows renewable generation, green hydrogen and EVs are the most cost-effective energy strategy for the Caribbean island. Abu Dhabi, United Arab Emirates, 9 February 2021 Antigua and Barbuda can



The hybrid solar, batteries, and back-up diesel project is already helping to support the twin-island nation's objective of meeting 86 percent of its electricity sources from renewable energy by 2030. The Green Barbuda

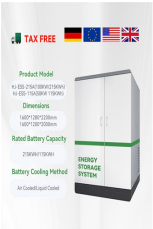


Antigua and Barbuda is a three-island nation located in the eastern Caribbean Sea on the boundary with the Atlantic Ocean. The area of Antigua and Barbuda is 171 square miles (442 square kilometers), two and a half times the size of



Antigua and Barbuda generates 93% of its electricity from diesel-fueled generators and has set targets of becoming a net-zero nation by 2040 and having 86% renewable energy generation in the

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The Roadmap charts a path for the Government of Antigua and Barbuda, providing options for achieving a 100% renewable energy share in both the power and transport sectors by 2030 and 2040, respectively.