



Project Highlight

Kūpono Solar O'ahu, HI

AMERESCO 

Largest Solar and BESS on O'ahu
Designed to Deliver Clean, Reliable
Energy to ~10,000 Local Homes

Technology Type:

Solar PV | Battery Energy Storage System (BESS) |
Power Purchase Agreement (PPA)

Solar PV

42 MW

Battery Energy Storage Systems

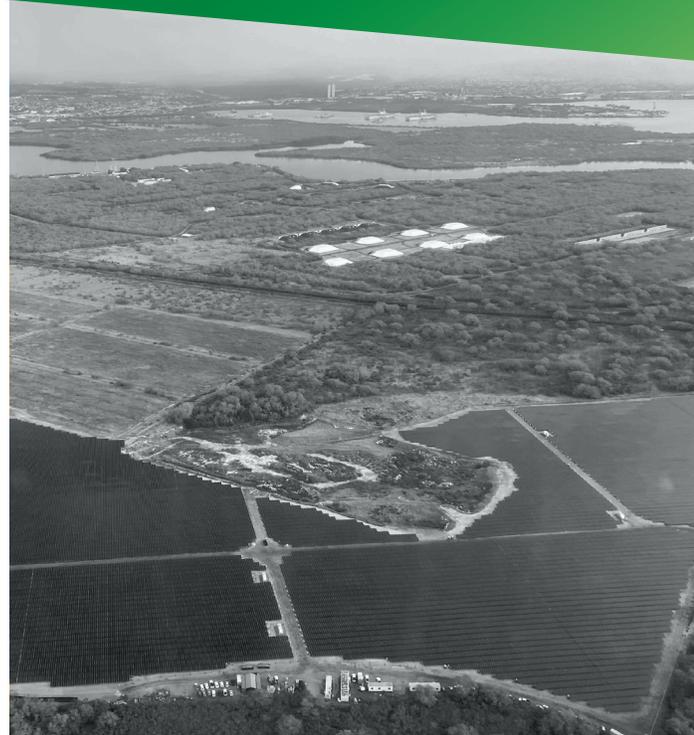
42 MW / 168 MWh

Project Site

~131 acres of underutilized Navy land

Estimated CO₂ Emissions Reduction

50,000 metric tons/year



Summary

To address the growing need for energy security on the island of O'ahu, Ameresco partnered with Hawaiian Electric (HECO), the U.S. Navy, and the O'ahu community to develop the Kūpono Solar Project. As the largest solar and BESS facility on the island, Kūpono Solar is designed to deliver 42 MW of clean, renewable energy to the local grid. Ameresco owns and operates the facility, sited on approximately 131 acres of land at Joint Base Pearl Harbor-Hickam, in a 37-year land lease with the U.S. Navy.



Solution

Ameresco developed, constructed, owns and operates the large scale solar and battery energy storage system facility on O’ahu designed to deliver reliable, renewable energy to HECO’s grid. Kūpono Solar is expected to power approximately 10,000 homes on O’ahu and puts land to long-term, sustainable use.



- 42 MW solar array
- 42 MW / 168 MWh BESS (four-hour duration)
- Battery storage enables renewable energy to be dispatched after sunset, when it’s needed the most during peak evening hours
- Integrated system generates, stores, and delivers reliable clean energy to the local grid



This enables us to put 131 acres of underutilized land to long-term, sustainable use for Hawai’i at a time when the cost and reliability of worldwide energy supplies is of great concern. The project reflects the Navy’s core commitment to energy security and resiliency for America.



Capt. Randall E. Harmeyer
Public Works Officer, Joint Base Pearl Harbor-Hickam



Benefits

In addition to providing local residents with clean, renewable energy during both the day and night, Kūpono Solar helps address the growing need for energy resilience, reliability and affordability on the island. The project is designed to deliver the following benefits:

- Reduce dependence on fossil fuels and create a pathway to increased energy independence
- Provide energy security and stabilize cost of energy for HECO customers
- Reduce 50,000+ tons of CO₂ annually from Hawaii’s environment —the equivalent to offsetting emissions from 12,000 cars every year
- Align with city, county, and HI state goals of 100% renewable energy and carbon neutral by 2045
- Support DoD’s long-term energy security initiative
- Provide philanthropic support of community through organizations, charities and education
- Create local construction jobs and boost economy through purchase of local materials
- Environmental stewardship:
 - Discovered and relocated 500,000+ bees for pollination and honey production
 - Use of 200 sheep to graze on the Kūpono Solar land



Ameresco’s team of energy experts can assist you in identifying the solution that fits your needs.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please call **1-866-AMERESCO** or visit **ameresco.com**.