



Navy in Hawaii Energy Goals

Overview

Navy Region Hawaii and MIDPAC energy goals are aligned with SECNAV, CNO and CNIC energy security goals:

- Ensure energy security as a strategic imperative
- Reduce energy consumption by 50% by 2020
- Achieve 50% renewable energy by 2020
- Comply with federal mandates and executive orders

Enablers

- Leadership: Energy Conservation Board
- Culture Change: 1,500+ building energy monitors; energy awareness training
- Technology: advanced metering, power grid infrastructure improvements, storage and renewable RDT&E
- Partnerships: community, utilities and industry
- "Know Loads": Advocates assisting service members and families who are part of the Resident Energy Conservation Program

Innovative Technology

Now:

- Energy Management System at PMRF: Successfully completed demonstration and activated Bldg 384 PV system with no issues of grid stability or feedback; 200 kW of PV generation
- Office Plug Load Control: Successfully completed expanded deployment of additional ~3,200 advanced power strips for more than 18 buildings at JBPHH; 28% savings in plug load
- Variable Speed Roof Top Unit Retrofit (RTU): Successfully completed demonstration and expanded installation of 30 variable speed drive and controller retrofit of rooftop a/c units on buildings at JBPHH; 15% energy savings/RTU
- High Efficiency RTU Replacement: Successfully completed replacement of old RTU with new highest efficiency unit available for Bldg 550 at JBPHH; 35% energy savings/RTU
- Incentivizing energy conservation and use of renewables

Future:

- More renewable generation across Region, including 50-100MW ground-mounted PV farms at West Loch/Pearl City
- Partner with PPV Housing to increase PV power generation in housing
- Explore feasibility of a liquefied natural gas terminal in Pearl Harbor
- Use of more alternative fuel for transportation, including hydrogen fuel-cell technology vehicles
- Support Honolulu Rail Transit project near JBPHH and use of more public transportation on base
- Low Pressure Air Satellite Plant (awarded Feb 2014)
- More energy use monitoring apps



Energy security is a strategic imperative for the Navy in Hawaii – both afloat and ashore.

We will reduce energy consumption by 50 percent by 2020, and will have 50% of our energy use from renewable sources by 2020

When we save money by saving energy we are better able to provide mission-essential operations, training and quality services for warfighters and their families.

We are on our way to achieving greater energy security on the waterfront, in our work spaces, in residences and throughout our installations.

We will use Science, Technology, Math and Engineering – as well as creative, innovative ways of thinking – to achieve greater energy security.

We will continue to partner with leaders in education, including experts from University of Hawaii and Naval Post-graduate School, to show us how we can reach our goals.

Expanding the use of renewable energy and reducing energy consumption saves money and saves lives. We owe it to our veterans, to service members in uniform today, and to men and women who will serve in the future.