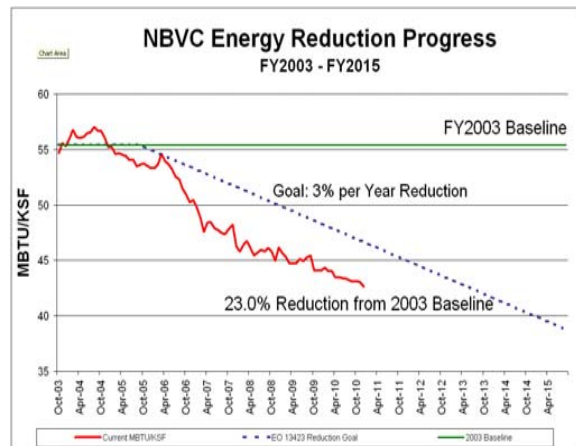


ENERGY INITIATIVES:

- NBVC has shaped an aggressive and effective energy and water program designed to drive down the consumption of utilities on the shore, helping establish the Navy as a Global Force for Green.
- NBVC is continually focused on its energy and water reduction goals and is currently meeting and exceeding the Executive Order 13423 goal for its reportable energy and water usage. This goal demands a 30% reduction in energy intensity by 2015 and a 2% reduction in annual water usage.

BUILDING IMPROVEMENTS:

- The NBVC energy team, and supporting staff is continually conducting facility energy audits to locate operational and technology based inefficiencies. The team aims to audit twenty-five percent of NBVC facilities annually, as required under US Energy Independence Security Act (EISA) of 2007, in order to generate low payback energy projects.
- Facility energy and water projects are continually occurring at NBVC through a number of funding avenues. The main technologies for effective energy and water reduction projects include; high efficiency interior and exterior lighting, equipment and lighting controls, low-flow plumbing fixtures, remote-controlled evapotranspiration (ET) irrigation controllers, renewable energy systems, and high efficiency mechanical equipment.



RECENT ACHIEVEMENTS:

- **2010** Secretary of the Navy Energy and Water Management Platinum Level of Achievement Award (won seven out of last nine years since 2001)
- **2008** Secretary of the Navy Large Shore Energy and Water Management Award
- **2008** Federal Energy Management Program (FEMP) Water Conservation Award
- **2006** White House *Closing of the Circle* Award for Sustainable Design and Green Buildings
- **2004** Received LEED® *Gold Level* Certification for New Construction from *US Green Building Council* (Bldg. 850)



NBVC ENERGY WEBSITE:

<https://www.cnic.navy.mil/Ventura/OperationsAndManagement/PublicWorks/EnergyConservation/index.htm>

NAVAL BASE VENTURA COUNTY

West Coast Energy Showcase Base



**Renewable Energy
Energy Efficiency
Conservation Efforts
Energy Initiatives
Recent Achievements**



RENEWABLE ENERGY:

WIND:

- In 2010, NBVC awarded a contract to install wind turbine generators on San Nicolas Island. This project will greatly offset the cost and emissions of fuel which is used to generate electricity on the island. This project also incorporates a Zinc Bromide battery storage system (NFESC funded) and a synchronous condenser. The goal of this project is to install up to nine 100-kW wind turbine generators on the island.



SOLAR THERMAL:

- In late 2010, NBVC finished the installation of solar thermal water heating systems at both Port Hueneme and Point Mugu pools. These systems will use the sun's energy to heat the pools water, saving an estimated 7,000 MBTU or \$60,000 in annual gas usage.



SOLAR PHOTOVOLTAIC:

- As of January 2011, NBVC has installed 850 kilowatts (nameplate rating) of solar photovoltaic systems on seven facility roofs at Port Hueneme. These systems will generate, roughly, 1,400 MWH per year saving the Navy nearly \$200,000 in annual electricity costs (see photo on back of this leaflet).

ENERGY EFFICIENCY:

LIGHT EMITTING DIODE (LED) LIGHTING:

- NBVC has embraced advanced lighting technology and has completed the installation of high efficiency indoor and outdoor LED lighting all around Port Hueneme and Point Mugu. Some of the areas where LED lighting has replaced incumbent technologies include:
 - Roadways (including residential)
 - Parking Lots
 - Building Exterior Wall Packs (BQs)
 - Interior Lobby (Bldg. PH1000)
 - NEX Gas Station Canopies



ENERGY EFFICIENT INTERIOR LIGHTING:

- NBVC realizes that interior facility lighting presents one of the largest avenues for energy savings. This is why there is a constant focus on developing energy projects that utilize the latest and most efficient lighting systems for offices, warehouses, hangars, and workshops. NBVC has undergone multiple base-wide facility energy improvement projects that replaces incumbent lighting technologies with new efficient systems that include advanced lighting controls including occupancy sensors, photocells, dimming control, and timers.



CONSERVATION EFFORTS:

DEMAND RESPONSE PROGRAM:

- NBVC proudly participates in Southern California Edison's Demand Response Program where incentives are given to reduce electrical load on the utility grid during peak times. Not only does this save the Navy lots of money in rebates, but is also critical in avoiding blackouts and reducing greenhouse gas emissions. Please do your part to help reduce your electricity usage when you see these events advertised at NBVC.

ENERGY SHOWCASE PROGRAM:

- Naval Base Ventura County, Port Hueneme was established as one of two Navy Energy Showcase facilities in 1995, with Point Mugu added to the program in 1998. The purpose of this program is to demonstrate NBVC's leadership in energy efficiency by exceeding the objectives of Executive Order 13423 (30% energy reduction by 2015 as compared with 2003 baseline) through efficient design practices and aggressive energy management.



- The Navy's Energy and Sustainable Design Demonstration Facility (Bldg. 850, Port Hueneme) is the centerpiece of the NBVC Showcase program. This facility highlights the Navy's leadership in the energy field, demonstrates "state of the shelf" technology, serves as a teaching and learning center, and demonstrates innovative and environmentally responsible design practices. Renewable technologies featured in this building include natural daylighting, photo-controlled dimmable T8 fluorescent lighting to supplement day lighting as needed, photovoltaic's, solar hot water and a Direct Digital Control system. One of the main aspects of the showcase program is to test new and emerging technologies and share results and "lessons learned" throughout the Navy.