

Navy's Energy and Sustainable Design Demonstration Facility

Navy Energy Showcase Base

Naval Base Ventura County

Showcase Program

- NBVC Port Hueneme was established as one of two Navy Energy Showcase facilities in 1995. Point Mugu was added to the showcase program in 1998
- NBVC has provided leadership in energy efficiency by exceeding the objectives of Executive Order 13123 (35% reduction by 2010 as compared with the 1985 baseline) through efficient design practices, and aggressive energy management. Projects included:
 - Steam plant decentralization (saved 58,000 MBTU and \$343,000 annually)
 - Basewide lighting retrofit (saved 4,519,000 MBTU and \$360,000 annually)

Navy's Energy and Sustainable Design Demonstration Facility

Goal:

- Envisioned as the centerpiece of the showcase program, the Navy's Energy and Sustainable Design Demonstration Facility (Building 850) was conceived to:
 - Highlight the Navy's leadership in the energy field
 - Demonstrate "state of the shelf" technology
 - Serve as a teaching and learning center (as well as working engineering and administration facility)
 - Demonstrate innovative and environmentally responsible design practices

Features:

- Renewable Technologies:
 - Natural daylighting
 - 31KVA of photovoltaics (NAWC China Lake Sponsored)
 - Solar hot water for domestic use and space heating (NFESC Sponsored)
- Energy Efficient Technologies:
 - T-8 lamps, dimmable electronic ballasts controlled by photocells (supplement to daylighting only as needed)
 - Displacement ventilation system
 - VAV system
 - Direct Digital Control system
- Environmentally Sustainable Features:
 - Use of recycled materials
 - Zero VOC paint
 - Evergreen Leasing
 - Sustainable Landscaping

Awards:

- 2008, Received Energy Star® Label for Office Facility, *US Environmental Protection Agency*
- 2006, Received the White House "Closing the Circle" Award for Leadership in Federal Environmental Stewardship
- 2004, Received LEED® Gold Level certification for New Construction from *US Green Building Council*.
- 2002, Selected as "One of the Top Ten Green Projects". American Institute of Architects (AIA), Coalition for the Environment (COTE).
- 2001, Federal Energy and Water Management Award for "Innovative New Technology"

On-going Efforts:

- Energy website under development
- Integration into CECOS courses for CEC officers and civilian energy managers
- Integrate lessons learned into Navy awareness program through NFESC

