



LEED* for Existing Buildings: Operations & Maintenance

Guidelines for Coast Guard Facilities

LEED-EB: O&M Assists With Federal Mandates

Energy Policy Act of 2005

- All federal agencies are required to specify Energy Star equipment.
- Federal agencies shall meter electricity use in all federal buildings by Oct. 1, 2012 using advanced meters that provide data at least daily.

Executive Order Jan 2007

- Beginning in FY 2008, reduce water consumption by 2% annually or by 16% total by FY 2015. *(2007 water consumption is the baseline).*

DHS Renewable Energy Policy

- Energy from renewable energy resources will supply 7.5% of DHS's annual energy requirements by FY 2010.
- Energy from renewable energy resources will supply 15% of DHS's annual energy requirements by FY 2015.

Rating System Overview

LEED for Existing Buildings: Operations & Maintenance (LEED-EB: O&M) is intended to help building operators reduce the amount of energy, water and other resources they use — and achieve recognition for their efforts.

While other LEED rating systems focus on new buildings, LEED-EB: O&M is available to almost any building in operation.

This set of performance standards provides useful guidelines to help Coast Guard facilities achieve a number of goals including: reducing operating costs, meeting federal mandates, improving occupant health, and reducing the impact of operations on the environment.

LEED-EB: O&M provides a menu of credits that address building exterior and site maintenance programs, efficient and optimized use of energy and water, the purchase of environmentally-preferred products and food, waste stream management and ongoing indoor environmental quality.

More information about
specific strategies is
provided on the reverse.

Benefits

Reduced Operating Costs

As the cost of utilities continues to rise, there are many things facility managers can do to reduce the cost of operating and maintaining their buildings. The critical first step is to monitor electricity, water, natural gas, and any other utility servicing the building. It is impossible to prove a reduction in use without this tracking.

Healthier Work Environments

Indoor pollutant levels can be anywhere from two to 100 times the amount found outdoors. Respiratory irritation, allergies, and illnesses can be reduced or prevented by improving the quality of indoor environments. The best effect is achieved with a whole system approach, but even small steps are important.

Ongoing High Performance

Buildings that achieve initial LEED-EB: O&M certification must recertify, at minimum, every five years to maintain their status. This ongoing certification proves that a building continues to be operated and maintained efficiently.

The LEED-EB: O&M rating system is reviewed on a regular basis by the USGBC* to ensure rigor and relevance. The latest update happened in early 2009.

* LEED stands for Leadership in Energy and Environmental Design and is a program of the US Green Building Council (USGBC).

Categories and Credits

LEED-EB: O&M is made up of categories which contain many optional credits and a few required prerequisites. Most credits are worth 1 point, but some are worth more.

Sustainable Sites

The credits in this category reward buildings that are minimizing their impact on the surrounding environment. Sample strategies include:

- Use Integrated Pest Management (IPM) techniques instead of relying only on pesticides
- Reduce light pollution by installing fixtures that don't spread light (and waste energy) into the night sky
- Encourage alternative methods of transportation including mass transit, biking, or alternative fuel vehicles

Water Efficiency

Increased water efficiency can be achieved both indoors and outdoors at most facilities. Sample strategies in LEED-EB: O&M include:

- Plant water-efficient landscaping
- Install more efficient plumbing fixtures

Energy & Atmosphere

There are many points available in this category for facilities that use less energy compared to other buildings of similar type. Strategies include:

- Optimize energy performance through recommissioning or system upgrades
- Purchase renewable energy credits or generating energy on-site
- Calculate the greenhouse gas emissions of the facility
- Meter and track all utilities for the individual building being certified

Materials & Resources

The materials category is made up of many plans and policies to reduce the impact of the buildings operations. Sample strategies include:

- Audit the waste generated in a building to find ways to increase recycling and reduce solid waste
- Create sustainable purchasing policies for office supplies, food, furniture, and other consumable and durable goods

Indoor Environmental Quality

Improved IEQ has been shown to have many benefits for building occupants including higher productivity and fewer sick days. Sample strategies include:

- Implement a green cleaning policy to reduce the amount of toxic chemicals
- Survey occupants to determine their level of comfort with respect to heat, light levels, acoustics, air quality, and other issues
- Create an ongoing system for monitoring and managing indoor air quality

Innovation in Operations

This is the place where buildings can earn bonus points for excellent work. Credits include:

- Create an education plan to share strategies with others
- Go above-and-beyond the requirements of a credit in any previous category
- Document the costs and savings of the building to contribute to a set of national data

Getting Certified

Get recognition for your efforts by earning the official LEED-EB: O&M certification.

Eligibility

A building must have individual metering for all of its utilities and it must have been fully operational for at least 12 months.

Evaluation

Next, evaluate your current operational practices and see how close you are to achieving certification. Determine how many of the prerequisites you have met, and how many points you could earn. Create a plan for which credits to pursue to meet the desired level of certification.

Doing the Work

Change out your light bulbs, plant drought-tolerant landscaping, calculate your carbon footprint, or pursue other credits. For those that require plans or policies, you must write a plan and implement it during a 3 month performance period before you are eligible for certification.

Documentation

The final step is to submit all of the required documentation to the USGBC. You'll need to provide copies of the policies you've implemented, evidence of your efficient use of electricity and water, and other information related to the credits you chose to pursue.

For More Information

A professional LEED consultant can help you with any part of the certification process. Learn more about the detailed requirements for LEED EB: O&M certification, on the USGBC's web site:

www.usgbc.org