

LEED EB O&M Existing Buildings With No Previous LEED® Certification

A Synergy Consulting Engineers White Paper
Understanding the Basics of LEED EB O&M

Overview:

The LEED for Existing Buildings: O&M Rating System is a set of voluntary performance standards for the sustainable ongoing operation of buildings not undergoing major renovations. It provides sustainability guidelines for building operations, periodic upgrades of building systems, minor space-use changes, and building processes. It is intended to provide existing buildings an entry point into the LEED certification process.

LEED for Existing Buildings: O&M certification is based on actual building operating performance, not design expectations. The certification application must provide data demonstrating that the building's operations meet the LEED for Existing Buildings: O&M prerequisites and attempted credits. The performance of the entire building must be included in measurements and calculations; tenant spaces may not be excluded.

LEED for Existing Buildings: O&M addresses 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. In addition, LEED EB O&M provides sustainability guidelines for whole-building cleaning and maintenance, recycling programs and systems upgrades to improve building energy performance, water consumption, indoor environmental quality and material use.

LEED® for Existing Buildings (LEED-EB) is a new benchmark from the USGBC for sustainable actions in existing buildings. Once your organization is committed to LEED-EB Certification, you need to develop a strategy for implementing changes to your facility and operation procedures.

With over 98% of all buildings not being new construction, LEED EB addresses the need for standards that document and measure building performance. It is a management tool building owners use to maximize operational efficiency while minimizing environmental impacts. LEED EB address all areas of the building including Green Cleaning, Recycling Programs, Renovations, Systems Upgrades. Similar to an ISO 9000, LEED EB is intended as a continuous improvement tool and help building owners improve building performance and help reduce various fixed costs related to energy use by implementing sustainable practices over the lifecycle of their building.

The LEED EB certification path depends on the level of improvements planned. Owners seeking certification will need to consider various sustainable improvements to building operations, cleaning processes, aggressive recycling, controlled use of energy, and better management and maintenance of grounds.

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Steps Toward Certification

Step 1: Conducting An Initial Building Audit

For many LEED-EB projects, a first step in managing LEED-EB implementation involves conducting a building audit, with your engineering firm, to assess how well the facility currently meets LEED-EB Rating System standards. This initial assessment helps you identify green starting points, which are sustainable practices and building features that are already in place or could be easily modified to meet LEED-EB requirements. These starting points provide the foundation onto which additional sustainability measures can be added.

Step 2: Determining Eligibility

Energy Star Rating is the base line for measuring existing building systems performance as it relates to LEED E-B Rating Systems Standards. Your engineer will assess the building systems during the initial walk through, evaluate current energy use based on utility usage documents, and provide an outline that will serve as a guide for developing an implementation plan.

Step 3: Determining Cost

The previous steps will help you get a sense of the total project budget need to obtain certification, the types of people you will need to include on your project team, and the timeline for implementation. With the help of your engineering firm, estimates on required system upgrades can be provided. The total cost of LEED E-B is determined by building size, system complexity, and the level of certification the owner is pursuing.

Why Implement LEED E-B

In addition to reduced energy and other various fixed costs, employee performance is a direct benefit of LEED E-B Certified Buildings. With cleaner environments, improved lighting and air quality, employees are responding with greater productivity. LEED E-B Certified Buildings offer numerous values that are both measureable and sustainable.

Resources:

LEED-EB Rating System

The LEED-EB web site provides a list of LEED-EB Prerequisites and Credits and their intent, requirements, strategies and technologies, and the accompanying submittals needed for your LEED-EB certification application.

http://www.usgbc.org/LEED/existing/leed_existing.asp

LEED-EB Reference Guide

The LEED-EB Green Building Reference Guide™ is a supporting document to the LEED-EB Green Building Rating System™. The Reference Guide is intended to assist project teams in understanding LEED-EB criteria and the benefits of complying with each criterion. For information about obtaining a copy of the Reference Guide, please visit the Publications section of the LEED web site.

www.usgbc.org/LEED/publications.asp.

LEED-EB Full Report Case Studies

Case studies featuring LEED-EB certified buildings are being developed on an ongoing basis. This resource outlines the approach that others have taken for meeting LEED-EB requirements. To request a copy, send an email to leed-eb@usgbc.org.

LEED-EB Credit by Credit Financial Analysis

The USGBC has compiled information about certified buildings so new projects can benefit from the experience of earlier projects. This resource ranks each credit based on the average ratio of cost-to-benefit experience by certified projects, which will help you identify cost effective credits to pursue in your building. To request a copy, send an email to leed-eb@usgbc.org.