

The LEED Green Building Certification Program: Spurring Growth in Sustainable Building, Design and Construction in the USA and Across the Globe

MYTHS versus FACTS concerning LEED

Myth: Stacking up LEED certification points is easy.

Fact: LEED provides a framework that gives project teams the ability in many instances to choose low-cost solutions that contribute to aggregate environmental progress. Many small parts working together can have big impacts. One of the USGBC's biggest challenges is creating a voluntary rating system that encourages buildings to do better, but does not add significant cost. The goal is to strike the right balance between accessible, and stretch goals for the market to keep reaching higher. Green building measures that were once deemed exceptional are now industry standard, which is why the USGBC continually raises the bar.

For example, Low Volatile Organic Compound (VOC) paints and materials take harmful chemicals out of the supply chain, thus having a tangible impact on the health of building's indoor air quality, improving the conditions inside for occupants. This was a difficult credit to achieve when LEED was introduced into the market in 2001. As more projects have been certified, manufactures have responded to the demand by increasing the supply of low-VOC paints and materials.

The USGBC may be the only organization that has created a program that is made more difficult to use over time. LEED is now in its third version and continues to get harder and harder.

Myth: LEED certification is only based on projections and operating performance doesn't matter.

Fact: LEED measures operating performance through the LEED for Existing Buildings: Operations & Maintenance (O&M) Rating System which provides a roadmap for property managers, portfolio owners and service providers who wish to drive down operating costs while increasing occupants' productivity in an environmentally responsible manner. An important development in the 12-year history of LEED, this rating system was launched in 2004 and significantly revised in 2008 to focus on measured building performance and operational best management practices. While LEED did begin with a Design and Construction rating reflecting its roots within the architecture and construction industries, it quickly expanded its scope to cover operational performance. Green buildings provide immediate and measurable results for building managers and occupants. LEED enables a project to benchmark energy and water, which is a critical tactic that is saving companies and government millions of dollars, year over year, simply by reducing costs through saved energy, water and other resources.

Myth: LEED buildings don't perform.

Fact: Many independent studies that show LEED buildings perform. LEED is an open, transparent standard subject to unmatched academic engagement.

- In 2011, the Department of Energy found GSA LEED Certified buildings to have 25% lower energy use compared to the national average. These high-performing buildings reduced operational costs by 19% compared to the national average. LEED Gold buildings were singled out as being particularly high performers.
- The Office of Management and Budget recently noted that investments in energy efficiency over the last four years are expected to save as much as \$18 billion in energy costs over the life of the projects.
- In 2012, the USGBC provided the National Academies of Sciences a literature review encompassing more than 280 documents from leading academic institutions, multi-national real estate firms, industry trade associations, government agencies, and major investment banking firms, amongst many others. The research included 55 publications addressing the costs and benefit of green buildings from both project-based and population-based perspectives. This robust literature set also included issue-specific papers ranging from the benefits of commissioning buildings to the increased consumer benefits due to the existence of building ratings in general.
- A recent study of PNC's bank branches by the University of Notre Dame found that the annual utilities cost per employee in their LEED facilities was \$675.26 lower than in non-green facilities:

Myth: LEED's projected energy use is purely speculative and only model-based.

Fact: Measuring performance is a critical and mandatory component of LEED for Existing Buildings. The dominant rating system is LEED for Existing Buildings: Operations & Maintenance, where certification occurs post-occupancy and is based on real energy data. This includes measurements on the following:

- Measured and benchmarked energy performance (not just raw energy consumption but actual performance using comparative benchmark targets).
- Metered water use.
- Measured rate of occupant use of transit/alternative commuting.
- Measured percentage of waste recycled.
- Measured fresh air delivery.
- Mandatory policies that require green operational practices including required green cleaning and sustainable site management.

All versions of LEED use Energy Star as a prerequisite to LEED Certification. This means that every LEED Certified project must meet a baseline minimum of energy performance. The average Energy Star score of LEED buildings is 85 for our biggest rating system by square footage. Using EPA's national benchmarking scale for energy performance, we can see LEED for Existing Building projects are high performers -- 35% are in the top 10% nationally, and more than 60% are in the top 15% nationally.

Myth: LEED is used by developers for promotional purposes only.

Fact: The vast majority of LEED projects are in the private sector and receive no incentive to pursue LEED, yet they choose to do so repeatedly because LEED saves money and results in better buildings. Developers are choosing to build better buildings because the LEED process demonstrates leadership, innovation, environmental stewardship and social responsibility. LEED provides building owners and operators the tools they need to immediately impact their building's performance and bottom line, while providing healthy indoor spaces for a building's occupants.

Myth: The LEED AP professional credential is unnecessary.

Fact: Experienced project teams produce better buildings than non-experienced project teams. The LEED credential has led to 180,000 people affirming their greater understanding of green building in general and LEED specifically, arming them with additional knowledge with which to produce better outcomes. The USGBC supports an informed and engaged workforce that can contribute to the delivery of LEED buildings. The 180,000 people across the globe have this credential and can help building owners deliver more efficient and sustainable buildings -- LEED, or otherwise.

Myth: Points for energy and water efficiency are the lowest hanging fruit in the LEED system and end up being the most often attained points.

Fact: Energy and water efficiency credits offer tremendous benefits not only to building occupants but also to the environment. One of the most frequently achieved LEED credits is using recycled content. Buildings are finding a useful way to reuse materials as opposed to unnecessarily ending up in a landfill, which is a great low-cost decision that has a positive environmental outcome. Another popular LEED credit is awarded for sourcing local building materials. Roughly 90% of LEED projects source materials from a 500-mile radius. By using materials from nearby, project teams are supporting local and regional economies while saving on unnecessary transportation costs.

In addition, low-flow water fixtures and waterless urinals sales have increased significantly, which was directly spurred by LEED, water conservation-related rebates and facilities interested in green. Adopters of this water-saving technology include high-profile facilities such as New York's Bank of America Tower, Los Angeles-based Staples Center and Nokia Theater, as well as the San Diego Zoo. They are also being used by fast-food chains, government and institutional buildings, as well as school districts seeking to earn water-conservation points that are required for a facility to achieve LEED Certification.

Myth: Business and environmentalism cannot coexist

Fact: By embracing free enterprise and using market-based approaches, the USGBC has proven that a healthy environment and a strong economy can go hand and hand. The USGBC is moving the green-building industry forward in a way that has never before been seen.

Through LEED and the USGBC's other programs, USGBC members are driving the construction industry's green transformation. LEED buildings save energy, water and precious resources, reduce waste and carbon emissions, create jobs, save money, drive innovation, and provide healthier, more comfortable spaces to live, work and learn.

The building products, materials, systems and services that are developed in the marketplace and utilized in LEED buildings are successful because they are created with environmental stewardship goals in mind. It is encouraging when companies develop products and services that support better buildings and communities. If they succeed, we all succeed because the construction is greener and more sustainable.

The adage "doing well by doing good" is the foundation on which the USGBC was built. Members join the USGBC to be part of the process, share what they know and collaborate with others to help raise the bar and broaden positive impact. LEED reflects the collective expertise and design intelligence of the tens of thousands of environmental advocates and building industry professionals who have helped to create it.

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