# LEED (LEADERDSHIP IN ENERGY & ENVIRONMENTAL DESIGN)

## WHY LEED

LEED, or Leadership in Energy & Environmental Design, is the most widely used green building rating system in the world and an international symbol of excellence. The rating system was piloted by USGBC in 1998 with the first projects certifying in 2000. LEED buildings and communities save money, improve efficiency, lower carbon emissions and create healthier places for people. They are a critical part of addressing climate change and meeting ESG goals, enhancing resilience and supporting more equitable communities.

## HOW LEED WORKS

LEED is used to transform the design, construction and operations of buildings, homes, cities and communities. It is available for virtually all project types, including new construction, interior fit outs, core and shell, operations and maintenance of existing buildings, net zero buildings, neighborhoods and more.

To achieve LEED certification, a project earns points by adhering to prerequisites and credits that address everything from carbon, energy, water and waste to transportation, materials, health and indoor environmental quality. Projects go through a rigorous verification and review process by GBCI and are awarded points that correspond to a level of LEED certification: Certified (40-49 points), Silver (50-59 points), Gold (60-79 points) and Platinum (80+ points).

LEED certification demonstrates accountability and is a cost-effective way to show a project is meeting green building best practices and prioritizing sustainable decisions that improve health and wellness, enhance resilience and reflect social equity principles.

LEED is a holistic system that doesn't simply focus on one element of a building such as energy, water or health, rather it looks at the big picture factoring in all of the critical elements that work together to create the best building possible. 35% of the LEED system focuses on climate change mitigation, 20% on human health impacts, 15% on water resources, 10% on biodiversity, 10% on items related to the green economy, 5% on local community impact and 5% on natural resources. In LEED v4.1, a majority of the LEED credits are related to operational and embodied carbon. Learn more.

## THE FUTURE OF LEED

Over the years, LEED has evolved to meet the demands of the marketplace, capitalizing on new technologies and ideas. The latest version, LEED v4.1, represents the next generation in green building. It is a performance-driven standard focused on using data to verify progress. It enables building owners, managers and tenants to continue tracking performance beyond certification and more easily recertify as improvements are made to confirm it's meeting the latest standards.

LEED's development process ensures it remains flexible and adaptable to market changes. Most recently, to assist building teams during the COVID-19 pandemic, USGBC introduced LEED Safety First guidance to further address critical building operations and planning across cities and communities. Continuous improvement is a hallmark of LEED, and its volunteer committees are constantly exploring new strategies and seeking market feedback, so it remains the predominant leadership standard.

The future of green building is about a regenerative future, transitioning away from strategies that reduce harm and instead promoting those that cause no harm and help heal.

## THE CASE FOR LEED

Buildings are a valuable asset and significant part of every company, organization and government's infrastructure. In the U.S., there are an estimated 5.6 million commercial buildings and greening these spaces and others around the world is an opportunity to improve efficiency, increase asset value, support ESG goals, reduce carbon emissions and prioritize both environmental and human health.

LEED saves building owners and tenants money. An estimate from LEED-certified buildings from 2015-2018 revealed $1.2 billion in energy savings, $149.5 million in water savings, $715.3 million in maintenance savings and $54.2 million in waste savings.

LEED supports people's health and wellness. A 2018 USGBC survey revealed employees are happier, healthier and more productive in LEED green buildings. Health and wellness are priorities in LEED and currently more than two-thirds of the credits in the rating system directly or indirectly address health.

A 2021 report from USGBC member Cushman and Wakefield, "Green Is Good: Sustainable Office Outperforms in Class A Urban Markets," shares that LEED-certified office buildings are increasingly valuable to investors focused on properties that meet ESG goals.

- By analyzing LEED-certified buildings delivered between 2010 and 2020, the real estate firm found that these properties were consistently more profitable than noncertified spaces in terms of rent (11% higher during the most recent five years) and reduced vacancy.
- The study finds that the COVID-19 pandemic created an increase in tenant demand for spaces that met ESG goals, and LEED-certified assets have had lower vacancy rates than their conventional counterparts since the pandemic began. The 10-year time span of buildings covered in the study also suggested to the analysts that LEED spaces are more resilient overall during periods of market downturn or following a recession.
- During the past three years, LEED-certified assets had a 21.4% higher average market sales price per square foot than noncertified buildings.
- According to Cushman and Wakefield, LEED-certified space makes up just under a third of all Class A urban office space, and LEED-certified buildings have accounted for 46% of deliveries in the past 10 years. The report also suggests an opportunity for investors to convert and upgrade non-LEED-certified building stock still in the market to enhance the ESG value of their portfolios.
- The market resilience of LEED-certified office buildings in the post-pandemic era can be encouraging to real estate investors keyed into the needs of the triple bottom line.

## LEED AND CLIMATE CHANGE

Climate change is among the biggest challenges of our time. While buildings are responsible for almost 40% of global CO2 emissions, that means they can also be 40% of the solution. LEED enables green buildings to prove their enormous potential to mitigate climate change through a holistic focus on efficiency and sustainability—and beyond merely cutting down on energy and resources, LEED rewards projects that get to net zero, or even generate positive energy returns to the grid.

LEED-certified buildings contribute to climate mitigation in several ways:

1. **Use less energy and water**: When building projects are rewarded for deeper energy and water efficiency retrofits, there is an opportunity to reduce the consumption of fossil fuel and electricity. Similarly, LEED rewards reductions in water use and the "embodied carbon" used to produce, move and treat that water.
2. **Consider life cycle impacts**: LEED encourages life cycle assessment (LCA) of building materials and products, and, in turn, whole buildings. Assessing alternatives based on life cycle GHG is a critical first step to selecting lower-impact approaches and providing market feedback.
3. **Support sustainable strategies**: Green buildings provide mechanisms to actively influence inhabitants in ways that support the climate. For example, buildings can create opportunities for more composting and reduced landfill waste and for alternative transportation.
4. **Shrink carbon footprint**: LEED rewards thoughtful decisions about building location with credits that encourage connection with transit and amenities, as well as retention and creation of natural vegetated land areas and roofs.

According to a 2018 assessment by the U.S. General Services Administration, its portfolio of high-performing buildings—many of them LEED-certified—used 23% less energy and 28% less water, and they generated 9% less landfill waste than GSA's legacy stock buildings. Each of these resources has associated GHG emissions, so reducing their use can shrink a building's total operational GHG footprint.

A study from the University of California at Berkeley for the California Air Resources Board quantified the GHG reductions from non-energy categories for LEED-certified existing buildings in California. The study found that buildings certified under LEED for Operations and Maintenance were associated with 50% less GHG emissions from water use, 48% less GHGs from solid waste and 5% less GHGs from transportation

## LEARN MORE

Explore LEED projects in the U.S. and around the world in USGBC's Project Directory.