

THE HIGH PERFORMANCE PORTFOLIO:

GREEN BUILDING RATING SYSTEMS



BETTERBRICKS
Bottom line thinking on energy.

SUMMARY:

Rating and certification systems help define green buildings in the market. They inform how environmentally sound a building is, providing clarity to what extent green components have been incorporated and which sustainable principles and practices have been employed. Many different rating systems exist, and each has pros and cons depending on the specifics of your building.

IN DEPTH:

The definition of a “green” building is often in the eye of the beholder. Rating or certifying a green building helps to remove that subjectivity. Rating a green building informs tenants and the public about the environmental benefits of a property, and discloses the additional innovation and effort the owner has invested to achieve a high performance building.

Green buildings are considered high performance buildings if implemented properly. Strategically integrated mechanical, electrical, and materials systems often create substantial efficiencies, the complexity of which is not always transparent. Rating a green building identifies those differences objectively, and quantifies their contribution to energy and resource efficiency. The rating then allows for better communication of what those high performance features are, and helps differentiate the building in the market.

In addition, rating buildings can reduce implied risks. Since rating systems often require independent third-party testing of the various elements, there is less risk that the systems will not perform as predicted. Further, if a building is formally rated (or certified), there is less risk that the project has been “green washed”—or marketed to create the perception that a property is green, when in fact no real effort or expense has been invested achieve that goal.

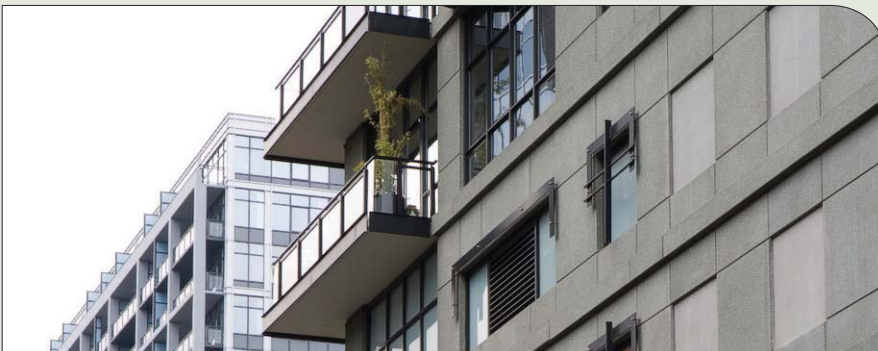
Rating a green building informs tenants and the public about the environmental benefits of a property, and discloses the additional innovation and effort the owner has invested to achieve a high performance building.



Owners, investors, tenants, and managers have different expectations for a building that has been certified “green”...

- **Tenants:**
 - Potential for reduced utility costs
 - More appealing work environment, leading to an enhanced ability to recruit and attract talent
 - Greater productivity due to health and environmental benefits
 - Reflection of tenant’s sustainability goals and corporate image
- **Owners:**
 - Potentially expedited permitting for new construction and major renovation
 - Maximized results on investments through reduced operating costs
 - Through commissioning, greater certainty that a building will perform as expected
 - Extended equipment life due to “right-sizing” and improved operations
- **Investors:**
 - Improved long-term value through reduced performance risk
 - Objective, third-party evaluation of properties, comparable across a portfolio
- **Property managers:**
 - Management advantages gained through a high-performance building, yielding improved comfort, increased tenant retention, and reduced operating costs
 - Fewer tenant and owner complaints
 - Potential for greater building marketability

Energy and resource conservation are generally the backbone of a green building project...



Features related to energy and resource conservation are generally the backbone of a green building project. Rating systems reflect the importance of these factors by assigning them greater weights in the scoring process. Depending on the specifics of your business, consider the way each system recognizes improvements in energy efficiency when adopting one for your portfolio. Several examples of rating systems are outlined below:

LEED®: (Leadership in Energy and Environmental Design) LEED is a product of the US Green Building Council, and is the most well-known rating system for commercial buildings. The LEED framework consists of several rating categories, applicable to different points in a building's lifecycle. For example, LEED NC rates new construction, while LEED EB is applicable to existing buildings. Each category is comparatively rigorous and can add cost to the project—depending on the level of certification sought and the experience level of the team.

However, there appears to be growing market acceptance of LEED standards, and the costs of certification are normalizing. The typical expense for a LEED NC project can actually be less than expected (see chart below.) Numerous municipalities and government departments, including the General Services Administration (GSA)—and an increasing number of private investors and owners—have instituted policies requiring LEED certification for new construction projects.

The "Energy and Atmosphere" category of the LEED framework comprises the highest percentage of points available for certification. Depending on the project, energy related practices will contribute approximately 20-30% of all available LEED points. Recent revisions to the LEED system are further increasing the number of mandatory energy-related points required for basic certification.

Green Globes™: Green Globes is an interactive, web-based commercial green building assessment protocol offered by the Green Buildings Institute (GBI), generally intended as a do-it-yourself certification. It offers immediate feedback on the building's strengths and weaknesses and automatically generates links to engineering, design and product sources. Green Globes evaluates buildings in seven areas, with energy accounting for 37% of the possible points.

Green Globes emphasizes life cycle assessment (LCA) to evaluate the total project value over its life rather than initial costs. This focus on LCA provides improved information on the impacts of technology and energy efficiency, and helps establish key

REAL VS. PERCEIVED COSTS OF LEED NC CERTIFICATION

Perceived cost premium: 13–18%

Actual cost premiums:

LEED Certification	0.8%
LEED Silver	3.5%
LEED Gold	4.5%
LEED Platinum	11.5%

*Source: Morrison Hershfield, Sept. 2005

benchmarks along the way. Green Globes certification is less widely used than LEED, but it is less expensive—so it may appeal to projects with smaller budgets. Certification is free for GBI members, but still requires third-party verification if a building's score is to be published.

ENERGY STAR®: ENERGY STAR is a joint program of the Environmental Protection Agency (EPA) and the US Department of Energy. Designed for existing buildings, the ENERGY STAR program's Energy Performance Rating System is a free, online tool that focuses on energy performance; it does not evaluate the impact of other factors such as materials, indoor air quality, or recycling. The system compares the energy performance of a particular building to that of a national stock of similar buildings.

Data entered into the ENERGY STAR Portfolio Manager tool will model energy consumption based on building size, occupancy, climate, and space type. With a minimum of one year of utility information, it then assigns the property a rating from 1–100. Buildings that achieve a score of 75 or higher can apply and receive the ENERGY STAR label. To maintain a real-time indicator of building performance, future utility consumption can be entered monthly.

OTHER SYSTEMS: Worldwide, there are many other green building rating and certification systems. Most are not yet available in the US, but can be influential in the emerging green building industry. Examples include BREEAM in the UK, Green Star in Australia, BOMA Go Green Plus in Canada, and the SB Tool in Canada and the UK.

THE BOTTOM LINE:

- Certification offers tenants and ownership third-party, objective insight into the environmental features of a building
- Rating a property outlines a clear, definable set of features incorporated into a sustainable building
- Participating in a certification system can add cost to the project
- Risk exists in selecting a rating system that may not emerge as a market or industry standard
- Achieving a "green" designation does not automatically translate to higher energy efficiency
- Used properly, rating systems can give visibility and prominence to buildings with superior energy performance

USEFUL LINKS:

The High Performance Portfolio Framework
www.betterbricks.com/office/framework

US Green Building Council (USGBC)
WWW.USGBC.ORG

ENERGY STAR
www.energystar.gov

Green Globes
www.thegbi.org/greenglobes



BETTERBRICKS
Bottom line thinking on energy.