

Green Globes and LEED – Do They Compare?

Architects and builders have many tools at their disposal to improve the environmental performance of commercial buildings, including green building rating and certification systems. Two such systems that are being widely promoted in the United States are the LEED (Leadership in Energy and Environmental Design) Green Building Rating System® developed by the U.S. Green Building Council (USGBC) and Green Globes™, a web-based tool being advanced by the Green Building Institute (GBI).

A team of researchers at the University of Minnesota recently analyzed and compared the two rating systems. The report by Tim Smith et al (Sep. 2006), "*Green Building Systems: A Comparison of the LEED and Green Globes Systems in the US,*" provides a detailed comparison of the how the systems operate as well as their respective strengths and weaknesses.

According to the report:

- Both systems include rated design elements that contribute to the environmental performance of buildings.
- Nearly 80% of the available points in Green Globes are addressed in LEED 2.2 and over 85% of points specified in LEED 2.2 are addressed in the Green Globes system.
- Point allocations in the two systems differ in their emphases. For example, the point allocation in Green Globes gives a stronger emphasis on energy use, while LEED allocates comparatively more points to material selection.
- Green Globes and LEED performed similarly in the areas of indoor environmental quality, resources, and site ecology.
- A case study reviewed in the report received more points for energy under Green Globes' than it did under LEED, yet LEED gave the project more points than Green Globes did for water conservation.
- A major aspect of material usage where the two programs diverge relates to wood certified to sustainability standards. LEED excludes the Sustainable Forestry Initiative® program and the American Tree Farm System, where Green Globes specifically includes them. While the authors note that this study makes no judgment on the sustainability aspects of the forest certification systems, they report that the FSC certification appears to be among the most costly of all LEED credits to achieve.
- According to the report, neither system adequately addresses life cycle considerations, although Green Globes more closely reflects life-cycle thinking, particularly with respect to building materials.

In reviewing Green Globes specifically, the report states:

"...the Green Globes system appears to be doing a fairly good job in improving upon the delivery mechanisms employed by LEED which are so often criticized. The on-line approach to assessment not only improves efficiency and reduces costs, but also provides opportunities to influence the design and planning processes of the project through immediate feedback not available from a primarily paper-based system. Second, Green Globes better integrates life-cycle thinking into its rating system, specifically through sourcing of materials and the durability and adaptability of the structure itself. This appears to be a potential source of competitive advantage over LEED as both systems seek to better include LCA methodologies into future versions – however, it remains unclear whether the same LCA-based thinking will be applied to the overall category and/or priority setting mechanisms of either system. Finally, GBI being named as an accredited standards developer under the American National Standards Institute (ANSI), and the consensus-based process associated with creating an official ANSI standard for green building practices, will undoubtedly enhance Green Globes presence in the marketplace."

To download the complete study, visit <http://labormanagementcommittee.org/newsdesk.html>.