GREEN BUILDING RATING SYSTEMS

Comparison and Contrast Between LEED and Green Globes

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WHAT IS "GREEN" BUILDING ?

Design and construction practices that significantly reduce or eliminate the negative impact of buildings on the environment and occupants

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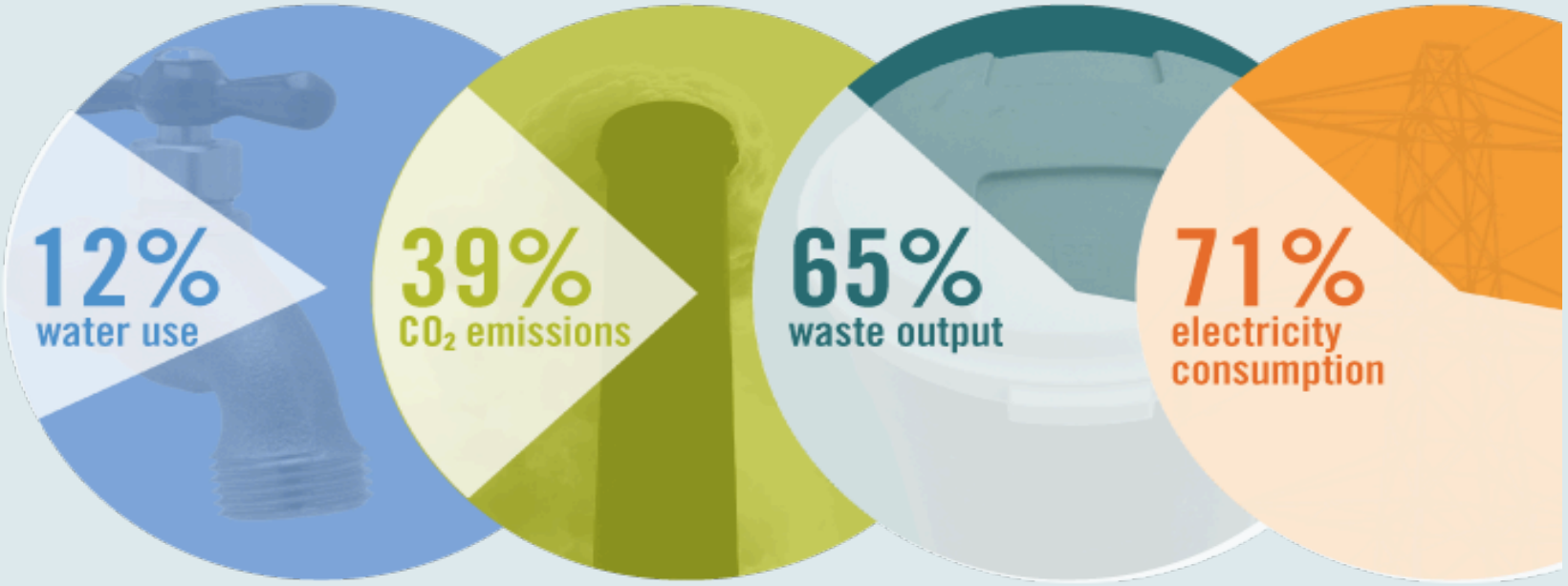
U.S. Building Impacts:



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Energy Efficiency Act of 2007

Title 48, Chapter 52, Sections 800-860

- This act applies to all Major Facility Projects that receive approval of the State Budget and Control Board on or after August 2007.

- All Major Facility Projects in this State, must be designed, constructed, and at least certified as receiving ***two globes using the Green Globes Rating System*** or receiving the ***LEED Silver standard.***

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‘Major Facility Project’ means:

- A new construction project in which the building to be constructed is larger than ten thousand (10,000) gross square feet (conditioned space);
- A renovation project in which the project involves more than fifty percent (50%) of the replacement value of the facility or a change in occupancy; or
- A commercial interior tenant fit-out project that is larger than seven thousand five hundred (7,500) square feet of leasable area.

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LEED and Green Globes

LEED (Leadership in Energy and Environmental Design) is the market leader.

- 8,600 certified buildings in US
- 131 in South Carolina

Green Globes is the challenger.

- 400 Certified Buildings in US
- 0 in South Carolina

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LEED and Green Globes

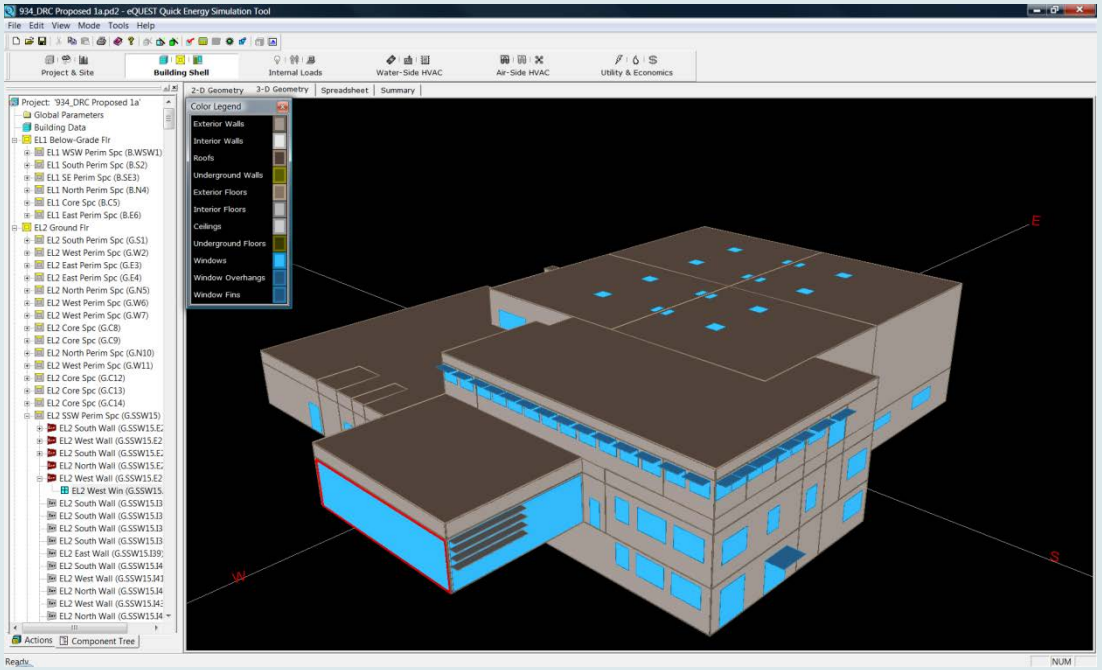
- Two systems both derived from BREEAM (Building Research Establishment's Environmental Assessment Method), the UK-based building rating system.

- 80%-85% overlap between LEED & Green Globes credits/available points

–Univ. of Minn., 2006

LEED and Green Globes

LEED requires, and Green Globes promotes Energy Modeling.



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LEED and Green Globes

LEED requires, and Green Globes promotes Building Commissioning.

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LEED and Green Globes

USGBC (United States Green Building Council) and the GBI (Green Building Initiative) both offer Training and Professional Certifications.

GREEN GLOBES® PROFESSIONAL ⟷ LEED AP™

GREEN GLOBES® ASSESSOR ⟷ **LEED Design Review Team**

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LEED and Green Globes

Point Systems

	LEED-NC	Green Globes
Levels of Certification	4	4
Total Points Available	110	500-1,000
Minimum Points Required for Certification	40 points, plus mandatory prerequisites	35% of points applicable to the project
Point Minimums per Category?	No	Yes

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LEED and Green Globes

Scoring

Rating System	Points/Percentages Required			
LEED – Based on a max 110 points 	CERTIFIED 40-49 Pts	SILVER 50-59 Pts	GOLD 60-79 Pts	PLATINUM 80 & above
Green Globes – Based on a 1,000 point system 	1 GLOBE 35-54%	2 GLOBES 55-69%	3 GLOBES 70-84%	4 GLOBES 85-100%

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LEED and Green Globes

Category Types Considered in Rating Building Performance

	LEED-NC	Green Globes
Site Selection and Development	✓	✓
Energy Efficiency	✓	✓
Water Conservation	✓	✓
Material and Resource Efficiency	✓	✓
Indoor Environmental Quality	✓	✓
Additional Categories	Innovation in Design; Regional Priority	Project Management; Emissions

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LEED and Green Globes

Scoring Points with Wood

Acres Certified in North America	Millions of Acres	Recognized by LEED	Recognized by Green Globes
Canadian Standards Association	179.3		✓
Sustainable Forestry Initiative	131.6		✓
Forest Stewardship Council	56.8	✓	✓
American Tree Farm System	24.4		✓

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LEED and Green Globes

Fee Structure for a new 100,000 SF Green Office Building

Activity	LEED-NC	Green Globes
Registration	$900	$500
Certification	$4,500	N/A
Stage I Assessment	N/A	$4,000
Stage II Assessment	N/A	$4,000
Consultant Fee for Administration	$30,000	$12,000
Consultant Fee for Energy Model	$14,000*	N/A ($14,000*)
Consultant Fee for Commissioning	$45,000*	N/A ($45,000*)
Totals	$95,000	$20,500 ($79,500*)

*NOTE: Since Green Globes promotes both Energy Modeling and Commissioning, these fees should be included under Green Globes to give a more equitable comparison.

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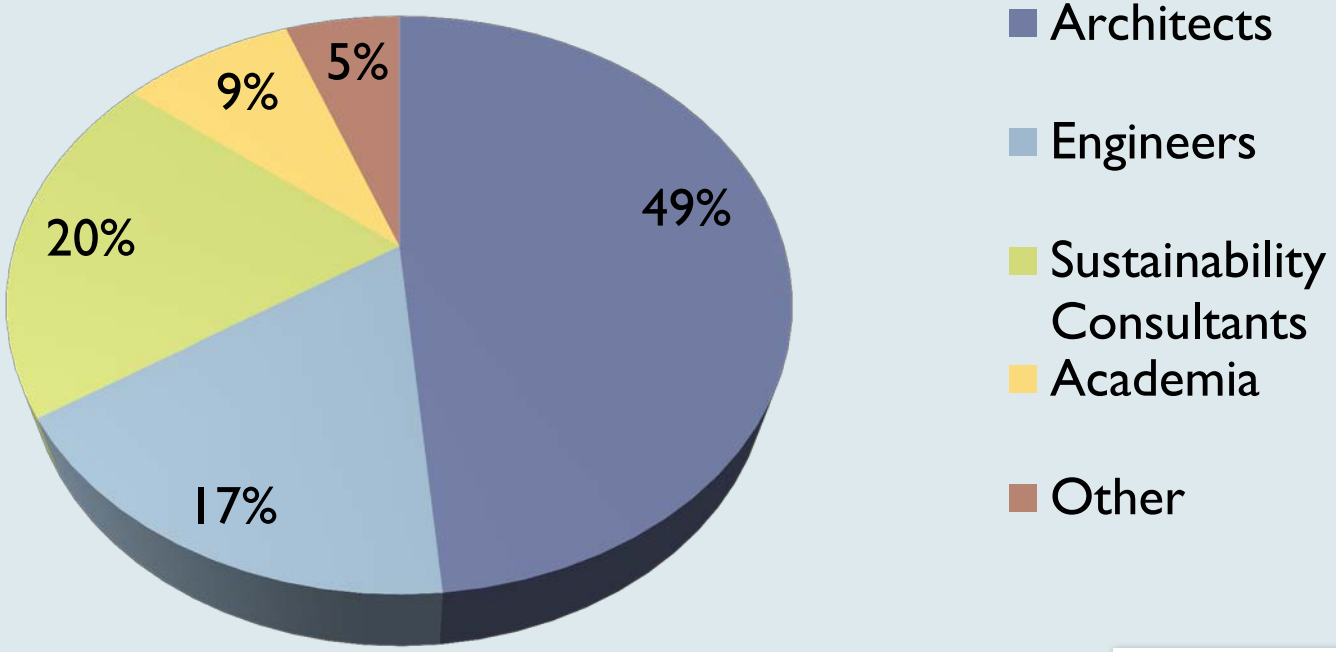
LEED and Green Globes

Makeup of USGBC Steering Committees

May, 2011



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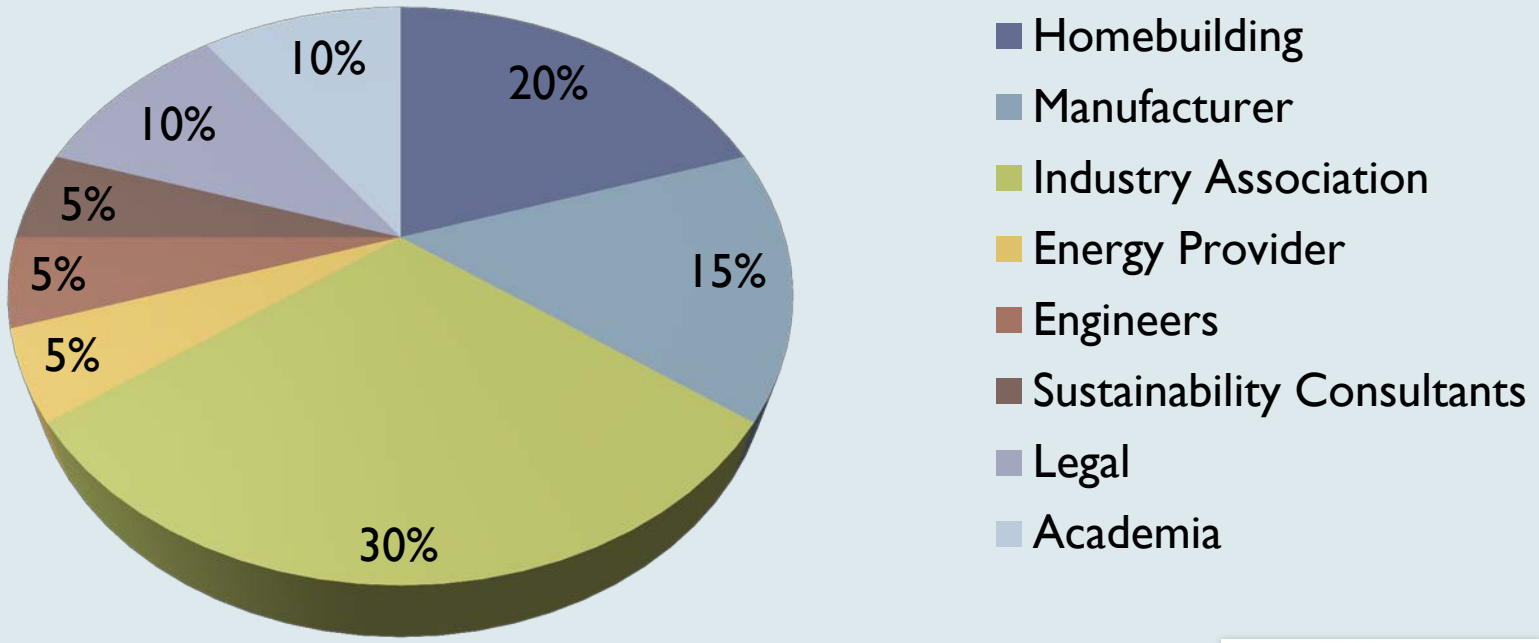
LEED and Green Globes

Makeup of GBI Board

May, 2011



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LEED and Green Globes

Criticisms of LEED

- Perceived as a bureaucracy
- No membership opportunities for trade associations
- Compliance adds 1% -4% to total cost of building project
- The credit system unevenly recognizes energy conservation
- A low percentage of projects ultimately get certified
- The web-based interface is difficult
- No carbon footprints and greenhouse gas considerations included in LEED

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LEED and Green Globes

Criticisms of Green Globes

- It does not require a minimum performance level
- Perceived as lesser standard of care; the GG tool lacks rigor
- Green Globes requires minimal documentation
- Initial funding came from the forest industry; perception of bias in Forest Certifications
- Industry representation on the GBI Board puts industry before the environment
- Lack of transparency in development of the online tool
- Lack of legibility in scoring in the online tool

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LEED and Green Globes

WHICH ONE IS RIGHT FOR YOUR PROJECT ?

usgbc.org

greenglobes.com

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LEED and Green Globes

Most Important – go forward with something green for your next project for the following reasons:

- Return On Investment (ROI)
- Occupant Comfort
- Environmental Sensitivity
- It's the LAW!!

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QUESTIONS ?

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