DTZ Barnicke

Global Green Rating Systems
Overview

Table 1

Green rating systems and key details

Rating system	Provider(s)	Country	Year of launch	Latest update
BEAM	HK BEAM Society	Hong Kong SAR	1996	2009
BREEAM	Building Research Establishment	UK	1990	2009
CASBEE	Japan Green Building Council / Japan Sustainable Building Consortium	Japan	2001	2008
DGNB	German Sustainable Building Council	Germany	2008	2009
ECB	Building Living-Dialogue Programme	Sweden	2009	2010
Estidama	Abu Dhabi Urban Planning Council	UAE	2008	2009
Green Rating©	Bureau Veritas	Europe	2008	n/a
Green Star	Green Building Council of Australia	Australia / New Zealand / South Africa	2002 (Australia)	2009
	New Zealand Green Building Council			
	Green Building Council of South Africa			
Green Globes	Green Building Initiative	USA	2004	
GRIHA	Tata Energy Research Institute	India	2008	n/a
HQE	Association pour la Haute Qualité Environnementale (ASSOHQE)	France	1996	n/a
BOMA BEst*	BOMA *Formerly called BOMA Go Green*	Canada	2005	2009
LEED	US Green Building Council	USA	1998	2009
	Canada Green Building Council	Canada	2003	2009
	Green Building Council Brazil	Brazil	2008	n/a
	Indian Green Building Council	India	2000	n/a
NABERS	Developed by the Australian Government in consultation with the property industry. Managed by the NSW Government, Department of Environment, Climate Change and Water	Australia	2000	2010
Three Star	Ministry of Construction / Ministry of Housing and Urban-Rural Development	China	2006	n/a

Global Green Rating Systems

Green rating systems are essential tools for decisions in development, investment and leasing of real estate around the globe. As sustainability rises in priority in business decisions, expect green building assessments and certifications to become a requirement in global real estate markets.

Results from the 2008 Global Green Building Trends report by McGraw Hill Construction and World Green Building Council Green found:

- By 2013, 53% of responding firms expect to be largely dedicated to green building (on over 60% of projects), up from 30% today.
- "The right thing to do" is the top business reason driving green building around the world.
- The fastest growing regional green building market is Asia, where the number of firms largely dedicated to green building is expected to jump from 36% today to 73% in 2013.
- Within the next four years, 94% of responding firms plan to build green on at least 16% of their projects with more than half dedicated to building green on more than 60% of projects.
- By 2013, 78% of all respondents expect they will be using solar power and 62% of North American respondents expect to be using wind power.

Rating systems were created in response to a wave of political policy implemented to reduce greenhouse gases, conserve energy, improve indoor environmental quality, as well as, a greater demand for environmental transparency and as a means to benchmark financial decisions when it comes to making green investments in a building. Green ratings also provide a transparent method of measuring and assessing the performance of a building. Likewise, they help set standards and targets for developers, owners and tenants of real estate, and provide property professionals with a way to measure market supply and demand for "green" buildings.

We compiled a list of the top 15 green global rating systems (Table 1) and evaluated each rating system based on what each measures (Table 2). Also included is a chart outlining and defining the 15 criteria most commonly used in green rating systems to evaluate building projects in order for readers to familiarize themselves with certification topics covered. (Table 3)

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Global Green Building Rating System Analysis

Table 2

Criteria overview							
	BEAM	BREEAM	CASBEE	DGNB	ECB	Estidama	Green Rating©
Energy Use	✓	✓	✓	✓	✓	✓	✓
Indoor environment/well-being	✓	✓	✓	✓	✓	✓	✓
Water	✓	✓	✓	✓	✓	✓	✓
Materials	✓	✓	✓	✓	✓	✓	x
Transport	✓	✓	x	✓	x	✓	✓
Construction management/process	✓	✓	✓	✓	x	x	x
Site selection	x	x	x	x	x	x	x
External environment	✓	✓	✓	✓	x	✓	x
Ecology	✓	✓	✓	✓	x	✓	x
Pollution/ CO2 emissions	✓	✓	✓	x	✓	✓	✓
Community	x	x	x	✓	x	✓	x
Innovation	✓	✓	x	x	x	✓	x
Waste	✓	✓	✓	x	x	x	✓
Economic value	x	x	x	✓	x	✓	x
Regional context	✓	x	✓	x	x	x	x

Criteria overview								
	Green Star	Green Globes	GRIHA	BOMA BEst	HQE	LEED	NABERS	Three Star
Energy Use	✓	✓	✓	✓	✓	✓	✓	✓
Indoor environment/well-being	✓	✓	✓	✓	✓	✓	✓	✓
Water	✓	✓	✓	✓	✓	✓	✓	✓
Materials	✓	✓	✓	✓	✓	✓	x	✓
Transport	✓	✓	x	x	x	✓	✓	x
Construction management/process	✓	x	✓	✓	✓	✓	x	x
Site selection	x	✓	x	x	x	✓	x	x
External environment	✓	✓	✓	x	✓	✓	x	✓
Ecology	✓	✓	✓	x	x	x	x	✓
Pollution/ CO2 emissions	✓	✓	✓	✓	x	✓	✓	x
Community	x	x	x	x	x	✓	x	x
Innovation	✓	x	✓	x	x	✓	x	x
Waste	✓	✓	✓	✓	✓	✓	✓	x
Economic value	x	x	x	x	x	x	x	x
Regional context	✓	✓	✓	x	x	✓	x	x

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Global Green Building Rating System Analysis

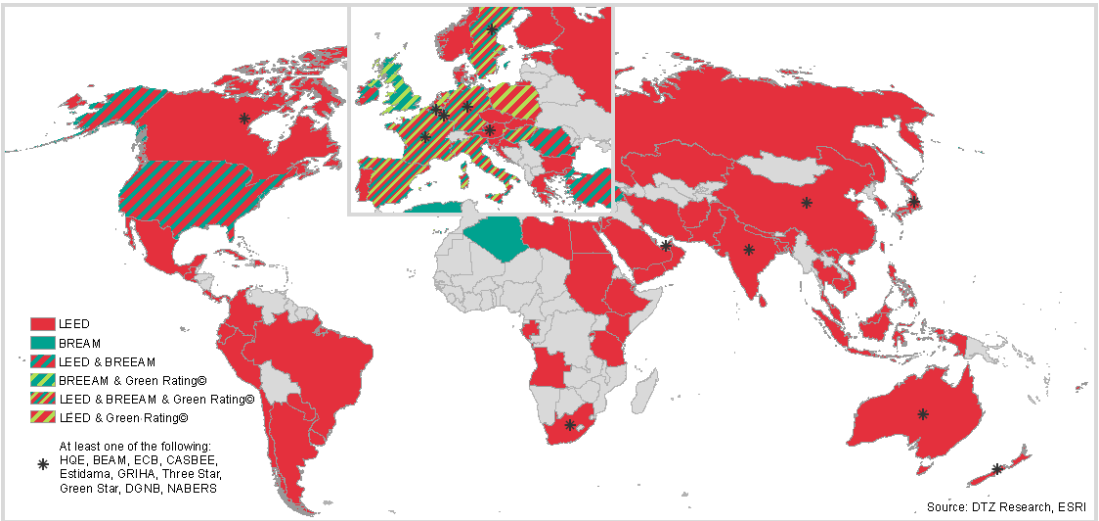
Table 3

Criteria characteristics

Criterion	Description
Energy use	This includes energy management/metering and performance, energy source and use of renewables
Indoor environment/well-being	Various issues relating to tenant comfort, including lighting/day lighting, ventilation, thermal comfort, noise, indoor community space, access and Health & Safety issues
Water	Water management/metering, water generation and drinking water
Materials	Use of recyclable, renewable, or low-carbon intensity materials, especially if sourced locally from a certified or environmentally responsible supplier
Transport	Consideration of local transport issues including access to public transport, walkability and provision of bike facilities
Construction management/ process	Focus on early stages of development and technical issues including planning, construction, commissioning and implementation of environmental management systems
Site selection/external environment	Selection and assessment of location based on proximity to farmland or other buildings, risk of flooding, contribution to global warming, and regional and global environmental impact
Ecology	Ecological impact, including soil and animal populations
Pollution and carbon dioxide emissions	Focus on greenhouse gas management and reduction of use of refrigerants and other chemical substances
Community	Impact on neighbouring communities and creation of neighbourhood space
Innovation	Exceptional and novel practice employed in various stages of building construction and operation
Waste	Waste management in construction and operational phases of building life cycle, including sewage management
Economic value	Indication of life cycle costing and value stability
Regional context	Special consideration for local sustainability issues

Resources and Links

BEAM
BREEAM
CASBEE
DGNB
ECB
Estidama
Green Rating
Green Star



Green Globes
GRIHA
HQE
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