

Green Globes Building Certification



What is Green Globes

Green Globes is an online green building rating and certification tool that is used primarily in North America.

There are Green Globes modules for:
New Construction/Significant Renovations
Existing Buildings
Commercial Interiors (i.e. Office Fit-ups)

These modules can be used for a wide range of commercial, institutional and multi-residential building types including offices, school, hospitals, hotels, academic and industrial facilities, warehouses, laboratories, sports facilities and multi-residential buildings.

History

The Origin of Green Globes, similar to LEED and many other systems around the world was BREEAM, developed in the UK in the late 1980's.

Based on the 1996 CSA publication of BREEAM Canada,

Green Globes for Existing Buildings was developed in 2000 by ECD Energy and Environmental Canada.

Green Globes for New Buildings Canada followed shortly thereafter.

In 2004, the system was adapted for the USA, where it is administered by the GBI, standards developer through the American National Standards Institute (ANSI).

GBI acquired the Global Rights to Green Globes in 2017.

Characteristics of Green Globes

- Green Globes is structured as a self-assessment to be done in-house using a project manager and design team.
 - The system is questionnaire-based with pop-up tips, which show the applicable technical tables that are needed to reply to the questions.
 - An online manual is also available.
 - Users can see how points are being awarded and how they are scoring.
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- Submittal requirements consist of documents that are normally produced.
 - construction drawings,
 - specifications,
 - energy modelling,
 - life cycle analysis,
 - records of meetings,
 - "green" plans developed –i.e. storm-water management, landscaping, and commissioning.

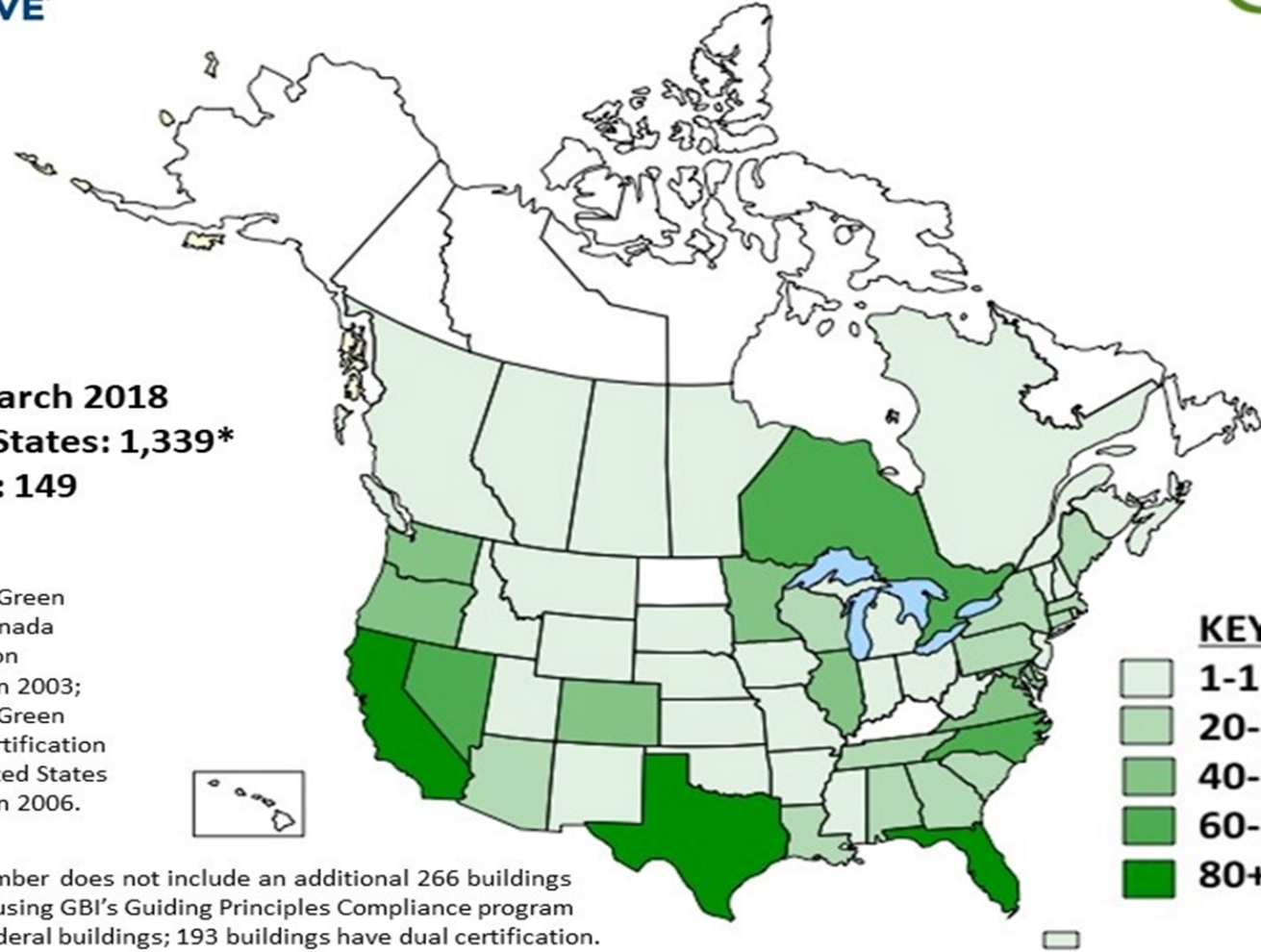
Technical Basis

- Based primarily ASHRAE and on the *ANSI/GBI 01-2010: Green Building Assessment Protocol for Commercial Buildings* (<http://www.thegbi.org/about-gbi/ANSI-GBI-standards-document.shtml>)
 - updating to produce a 2018 standard that will soon be available
- uses "plain language" undergone review by Consensus Body.
 - 5 groups: Government, Testing & Standards Organizations, Producers, Users, and General Interest
- Federal government and numerous states endorse Green Globes.
- In 2013, the U.S. General Services Administration (GSA) recommended Green Globes and LEED as the two certification options for federal government construction projects.

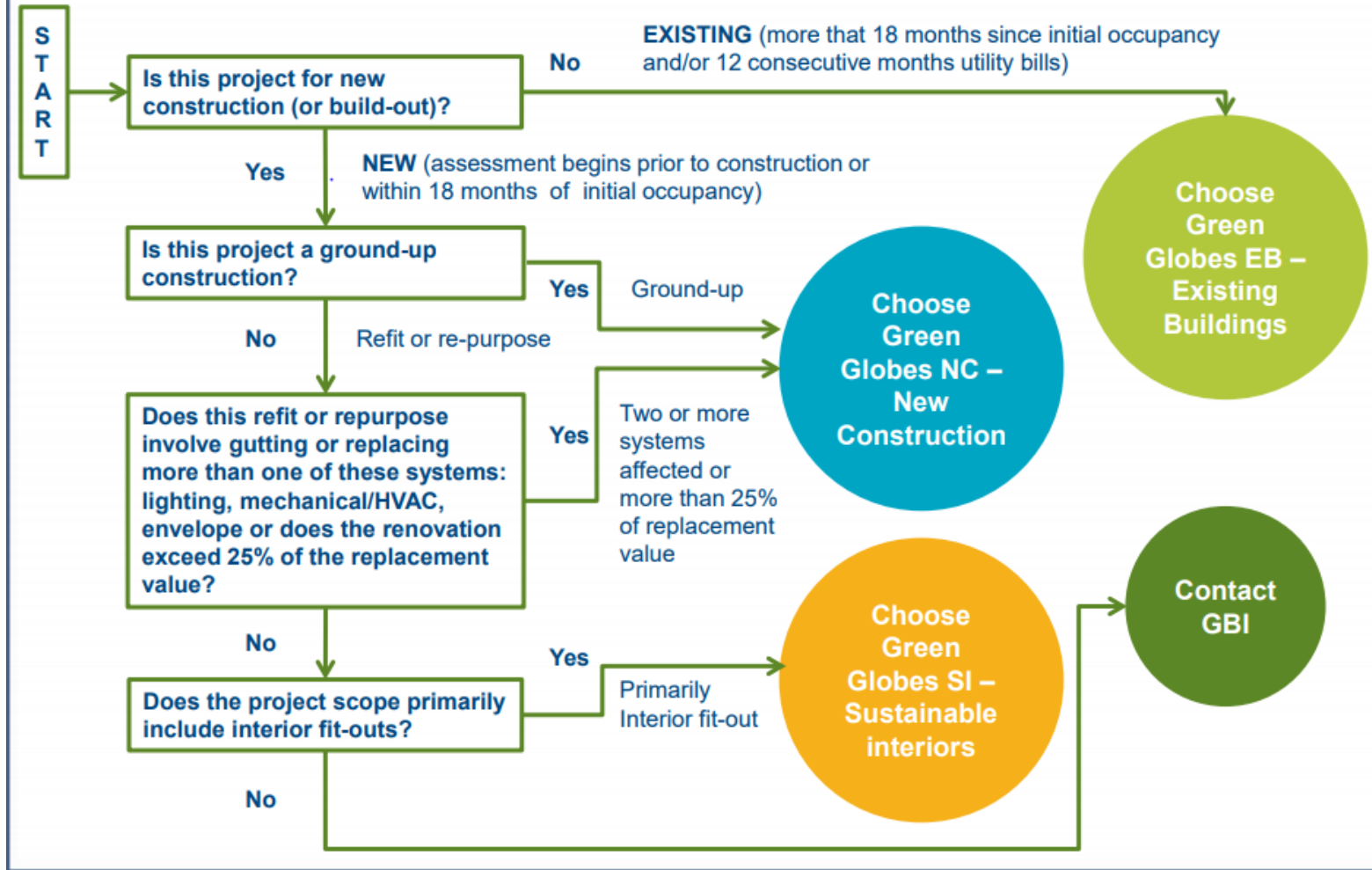
As of March 2018
United States: 1,339*
Canada: 149

*The first Green Globes Canada certification occurred in 2003; GBI's first Green Globes certification in the United States occurred in 2006.

**This number does not include an additional 266 buildings assessed using GBI's Guiding Principles Compliance program for U.S. federal buildings; 193 buildings have dual certification.



Green Globes for New Construction Eligibility Decision Chart

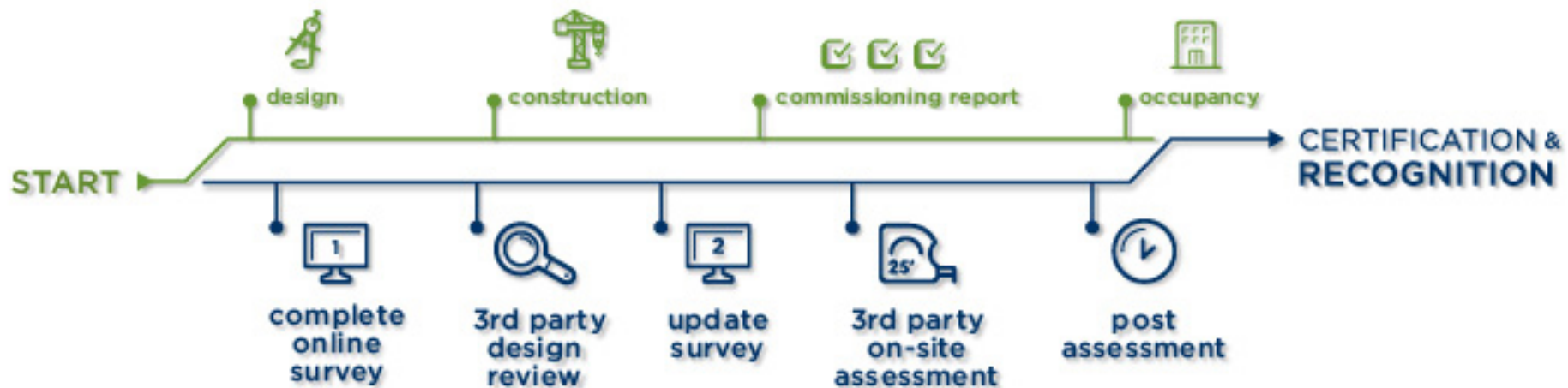


Green Globes® for New Construction
 Course Number:
 GBIGGNCFeb16

Project Lifecycle

RATING AND CERTIFICATION PROCESS

GREEN GLOBES FOR NEW CONSTRUCTION



Project Management	50	Integrated Design Process, Meetings, Performance Goals, Environmental Management, Commissioning
Site	115	Development Area, Ecological Impacts, Stormwater Management, Landscaping, Exterior Light Pollution
Energy	390	Performance, Demand, Metering, Measurement and Verification, Building Opaque Envelope, Lighting, HVAC Systems and Controls, Efficient Equipment, Renewable Energy, Energy-Efficient Transportation
Water	110	Consumption, Cooling Towers, Boilers & Water Heaters, Water-Intensive Applications, Treatment, Alternate Sources, Metering, Irrigation
Materials & Resources	125	Building Assembly, Interior Fit-outs, Re-use, Waste, Building Service Life Plan, Resource Conservation, Building Envelope
Emissions	50	Heating, Ozone-Depleting Potential, Global Warming Potential
Indoor Environment	160	Ventilation, Source Control and Measurement, Lighting Design and Systems, Thermal Comfort, Acoustic Comfort
Total Points	1,000	

- “Non-applicable” provision

3.4.3.1 Do boilers and/or water heaters have the following features:		
3.4.3.1.1 • Boilers and water heating systems of 50 bhp and above have a boiler feed makeup meter?	<input type="radio"/> Yes <input type="radio"/> No	<input checked="" type="radio"/> NA
3.4.3.1.2 • Boiler systems with over 50 bhp have condensate return systems?	<input type="radio"/> Yes <input type="radio"/> No	<input checked="" type="radio"/> NA
3.4.3.1.3 • Boilers have conductivity controllers?	<input type="radio"/> Yes <input type="radio"/> No	<input checked="" type="radio"/> NA
3.4.3.1.4 • Steam boilers have conductivity meters?	<input type="radio"/> Yes <input type="radio"/> No	<input checked="" type="radio"/> NA





- Thresholds for incremental recognition

3.7.4.1.3 Do open circulation areas such as open offices and healthcare general patient areas have thermal control zones that are 1,000 ft. ² (93 m ²) or less?	<input type="radio"/> 500 ft ² (46 m ²) or less <input checked="" type="radio"/> 1,000 ft ² (93 m ²) or less <input type="radio"/> More than 1,000 ft ² (93 m ²) <input type="radio"/> NA	3	2
3.7.4.1.4 Do smaller functional areas such as offices, meeting rooms, and hospital/hotel rooms have thermal control zones that are 1,200 ft. ² (111 m ²) or less?	<input type="radio"/> 750 ft ² (70 m ²) or less <input checked="" type="radio"/> 1,200 ft ² (111 m ²) or less <input type="radio"/> More than 1,200 ft ² (111 m ²) <input type="radio"/> NA	3	2

Partial Credit Can be given and Not applicable is an option

If something is Not Applicable it is removed from the scoring.

Certification is Based on Percent's

GREEN GLOBES RATING SCALE		
Buildings that achieve 35% or more of the points possible in the Green Globes rating system are eligible for a certification of one, two, three, or four Green Globes.		
85-100%		Demonstrates national leadership and excellence in the practice of energy, water, and environmental efficiency to reduce environmental impacts.
70-84%		Demonstrates leadership in applying best practices regarding energy, water, and environmental efficiency.
55-69%		Demonstrates excellent progress in the reduction of environmental impacts and use of environmental efficiency practices.
35-54%		Demonstrates a commitment to environmental efficiency practices.

COST

Depends upon the building size and characteristics as well as the type of certification and assessment services chosen.

The fees can be divided into the following areas:

Project Registration - Registering your project gives you access to the Green Globes online system,. You will complete these surveys throughout the course of your project, and your answers will be reviewed and verified by a Green Globes Assessor.

Assessor Services - a Green Globes Assessor will perform between one and three assessments review the responses provided within your online surveys, verify them against the project documentation, and create comprehensive reports detailing your achievements and offering recommendations for improvement.

Assessment & Certification - The GBI carefully reviews and approves each assessment report submitted by Green Globes Assessors prior to issuing project certification.

Recognition Items - people need to know about it.

Drakes Experience

This was a good option for us to get certification of our Green Initiatives

Would have built to this standard anyway

25% cheaper than projected Costs going through LEED- before LEED scope Changes are added in

9.5% of Construction Costs

6.8% of Budget

Significantly Reduced instances of “Buying Points”

Ended up with two new Buildings each with two Green Globes