

Advancing Net Zero Snapshot: Brazil



Context

The Brazilian government is driving action on climate change through the INDCs (Intended Nationally Determined Contributions): Government Programs and Policies; and has committed to reduce greenhouse gas emissions 37% below 2005 levels by 2025, and 43% by 2030. The creation of the new Zero Energy Standard by GBC Brasil supports the delivery of the country's climate change goals through promoting the construction, renovation and operations of low carbon buildings and renewable energy generation.



1. Measure and Disclose Carbon

Demonstrate a net zero energy balance over a period of at least one year

Verification of net zero energy balance undertaken annually

Full re-submission required after five years



2. Reduce Energy Demand

Where all energy use generated onsite, no specific energy efficiency requirements

Where offsite renewable energy procured, minimum energy efficiency requirements based on improvements over ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) dependent on certification route such as LEED, CASA etc or local code levels



3. Generate Balance from Renewables

Purchase of Renewable Energy Certificates (RECs) through Power Purchase Agreements (PPAs) are limited to 10% total annual energy consumption of commercial buildings, unless being used to offset emissions from onsite fossil fuel sources

No limitation for purchase of RECs for residential buildings



4. Improve Verification and Rigour

Future revision to include embodied carbon

Methodology and Verification

- The GBC Brasil Zero Energy Standard can be applied to new construction projects, fit out projects and existing buildings in operation
- In order to maintain certification, the building must record total annual consumption and energy generation data, and submit to GBC Brazil annually, along with monthly energy bills and renewable energy supply contracts, to validate the results and prove an annual net zero balance

Additional Information

- Condominium certification: Only available where all buildings and common areas achieve Zero Energy Standard
- Criteria for the Zero Energy Standard, as developed by technical committee, provides options to demonstrate compliance for each element based on particular scenarios, to provide flexibility and encourage participation

Find out more

- [GBC Brasil Zero Energy Standard](#)
- [WorldGBC's Advancing Net Zero global project](#)

Advancing Net Zero

WorldGBC's global project to accelerate uptake of net zero carbon buildings to 100% by 2050. These snapshots outline specific GBC action, and how it relates to the project framework, including the four key principles shown left.

Pathway: Certification

Launch date: August 2017

The Standard is designed to complement existing certification schemes, such as LEED, BREEAM and local rating tools.

GBC Brasil's Net Zero Energy Precertification is an optional pathway available to those presenting strategies committed to reach annual onsite net zero energy consumption through high energy efficiency and renewable energy generation, demonstrated via modelling.

Certified and registered projects are located across five states as shown here:



Pilot Projects

2

Certified*

*as of March 2018

10

Registered*

GBC Definition

A building which demonstrates that the site energy consumption on an annual basis is zero due to a combination of high energy efficiency and energy generation by renewable sources