



GREEN BUILDINGS MARKET INTELLIGENCE BRAZIL COUNTRY PROFILE



Creating Markets, Creating Opportunities



BRAZIL: COUNTRY SUMMARY

MARKET GROWTH



Market through 2025

Commercial

Residential

Residential units

Total market

USD 47.5

USD 328

4,590,000

Green market

USD 3.9B

USD 34B

450,000



OTHER FACTORS

In 2009, the Brazilian Ministry of Environment announced plans to reduce deforestation in Brazil by 80% by 2020.

Despite current political dynamics, Brazil is experiencing urbanization and increasing global integration.

Mortgages are new to many first-generation residential home buyers.



GREEN BUILDING PROGRAMS

Mature green market in commercial with opportunity in residential.

Advocacy and awareness is provided by two institutions: Green Building Council and the Chamber of Construction.



CLIMATE POLICIES (NDCS)

Brazil has pledged to reduce its green house gas emissions by 66% below baseline by 2025 and by 75% below baseline by 2030



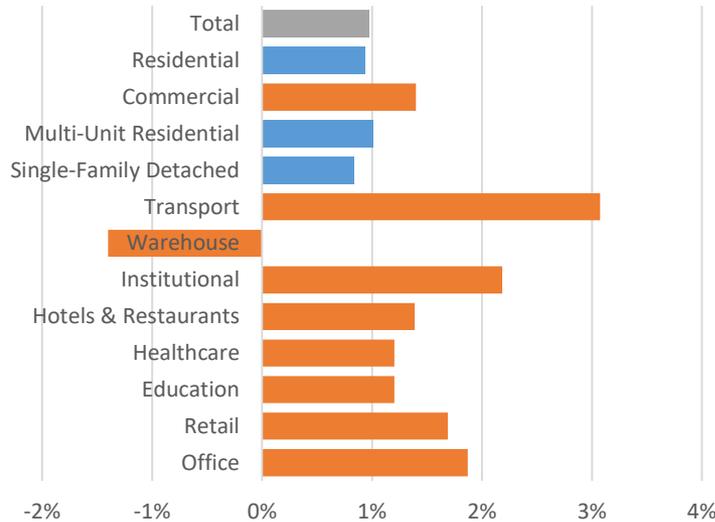
MARKET STATUS

Brazil is South America's largest green-certified building market with over 1,400 green buildings and projects.



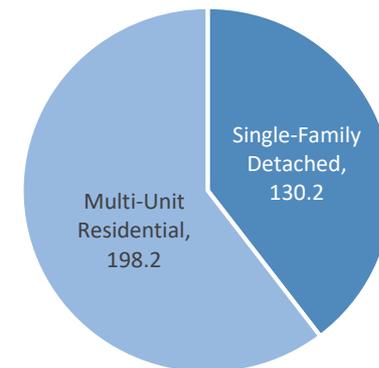
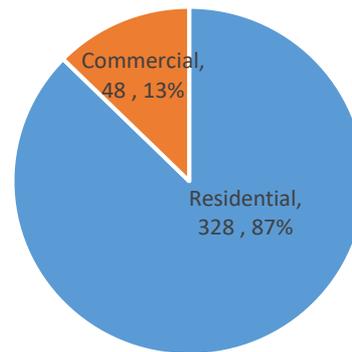
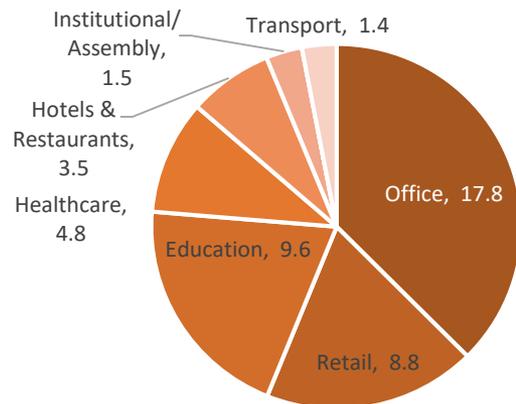
MODERATE GROWTH IS EXPECTED AHEAD

MARKET GROWTH BY SUB-SECTOR (CAGR)



- Brazil experienced a period of fast growth, with a boom in major projects which peaked in 2012 and then dropped off through the end of the preparation for the Olympics in 2014.
- From 2014-2016, Brazil experienced a recession from which the country is now emerging.
- Growth is accelerating, albeit from a negative baseline. The overall new build expected continues to be very large.
- Large housing needs mean that the residential market will lead, while high urbanization rates mean multi-unit residential will be larger.

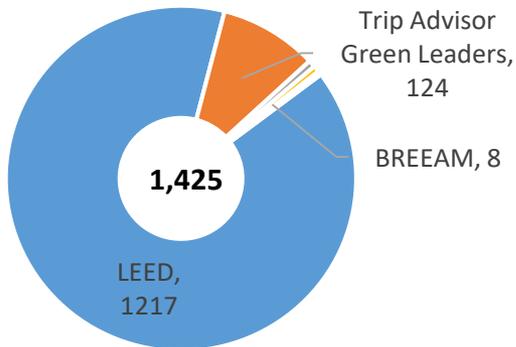
TOTAL MARKET SIZE 2018-25 (USD BILLIONS)





BRAZIL IS AN ESTABLISHED GREEN BUILDING MARKET

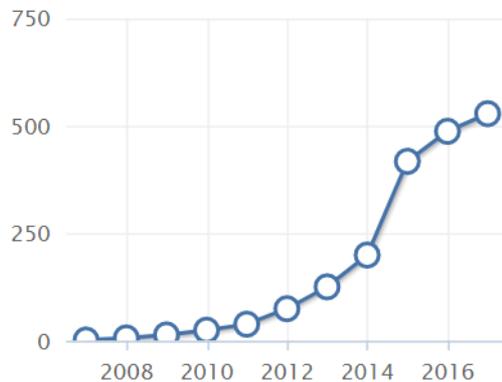
In 2017, Brazil counted 1,425 published green building activities, including certifications and registrations.



Certified and registered buildings are located throughout Brazil with the highest density occurring in the country's largest cities of São Paulo and Rio de Janeiro.



Cumulative activity count, by year:



Recent projects include:

Type	Name	Location	Investor
Office	Parque Cidade Corporate Torre B, Torre C	Brasília	Centro Empresarial Parque Cidade
Public Assembly	Arena Corinthians	São Paulo	Arena Fundo De Investimento Imobiliario
Office	BVEP Nigri Plaza	Rio de Janeiro	BVEP Empreendimentos Imobiliarios
Non-Profit	Hospital HCOR 130	São Paulo	Associação do Sanatorio Sirio
Office	Vista Guanabara	Rio de Janeiro	Autonomy GTIS
Warehouse and Distribution	D. Pedro Business Park	Jarinu	BVEP Empreendimentos Imobiliarios



LOCAL CERTIFICATION SCHEMES COMPLEMENT INTERNATIONAL PROGRAMS



The AQUA-HQE Process is an international certification of sustainable construction developed from the French certification Démarche HQE (Haute Qualité Environnementale) and applied in Brazil exclusively by the Vanzolini Foundation.

<https://vanzolini.org.br/aqua/>



PBE is a labeling program composed of 38 Conformity Assessment Programs, ranging from the labeling of white goods such as stoves, refrigerators and air conditioners to vehicles and buildings.

<http://pbeedifica.com.br/>



**CONSTRUINDO UM
FUTURO SUSTENTÁVEL**

GBC Brasil Casa® and Condomínio® Certifications is a residential certification program launched by the Green Building Council of Brazil. The certifications demonstrate leadership, innovation, environmental management and social responsibility in residences.

<http://gbcbrasil.org.br/projeto-piloto-condominio.php>



HIGH EXPECTATIONS FOR GREEN MARKET GROWTH

- Brazil is expected to experience steady growth with green buildings over the next few years.
- This forecast is based on the fast rise of green certifications which has led to a fairly mature market, as well as the introduction of international and local certification schemes which can serve the different needs of the market.
- Offices and retail – which are leading the market in current certifications – will continue leading the green space in a quick rise of green through 2025, reaching 20% penetration or higher.
- Due to certification schemes specifically geared to the residential sector, the commercial sector will be quickly followed by the residential market.
- Overall, IFC forecasts overall green penetration of 20% or even higher.



Photo: Canopus – EDGE certified project in Belo Horizonte



GOVERNMENT IS SUPPORTING AFFORDABLE HOUSING

Minha Casa Minha Vida, or “My Home, My Life” is an initiative of the Federal Government that offers attractive conditions for the financing of housing for low-income families.

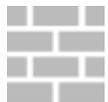


**Minha Casa
Minha Vida**



LOWER INTEREST RATE

The Federal Government Program offers payment conditions and interest rates according to the income of the family.



FINANCING OF HOUSING IN URBAN OR RURAL AREAS

Buyers can finance the purchase of new property in urban area or the construction and renovation of housing in urban and rural areas.



SPECIALIZED SERVICE

Specific service locations, according to each type of financing.

<http://www.caixa.gov.br/voce/habitacao/minha-casa-minha-vida/Paginas/default.aspx>



ADVOCACY AND AWARENESS PROVIDED BY TWO INSTITUTIONS

- Brazil Green Building Council (GBC) is also known as “Construindo um Futuro Sustentável”.
 - With over 150 member organizations, the council has significant ties to the development community.
 - The organization hosts sustainability courses, including: integrated energy solutions, residential green construction, LEED certification training, and both new green construction and green retrofitting.
 - The Brazil GBC hosted “Greenbuilding Brazil International Conference and Expo,” its largest annual event, in August 2017.
- IFC also has a relationship with CBIC, the Brazilian Chamber of the Construction Industry.
 - CBIC recently celebrated its 60th anniversary.
 - The organization gathers 85 unions and associations in the construction sector, works to represent the industry, and provides thought leadership through technical committees.



Visit the Brazil Green Building Council at
www.gbcbrazil.org.br



Visit the Chamber of Construction at
www.cbic.org.br



LEARN ABOUT EDGE CERTIFIED BUILDINGS IN THE REGION



CONSTELAÇÃO RESIDENCE

Belo Horizonte, Brazil

Predicted Savings of EDGE Certification:

-  22% Energy Savings
-  21% Water Savings
-  54% Less Embodied Energy in Materials



CITY EXPRESS HOTELS SANTA FE

Mexico City, Mexico

Predicted Savings of EDGE Certification:

-  51% Energy Savings
-  32% Water Savings
-  44% Less Embodied Energy in Materials

Access more case studies at <https://www.edgebuildings.com/projects/>



PROJECTS CAN CHOOSE BETWEEN TWO EDGE CERTIFIERS FOR FAST, EASY, AND AFFORDABLE CERTIFICATION



CERTIFICATION	PRICE (PER M ² , EXCLUDING PARKING)	MINIMUM
0-25,000 FLOOR AREA (SQM)	\$0.27	\$2,250
25,000-50,000 FLOOR AREA (SQM)	\$0.22	\$6,750
50,000-75,000 FLOOR AREA (SQM)	\$0.17	\$11,000

*Price per m²; Project appoints an auditor



PROJECT TYPE	CERTIFICATION	DESIGN AUDIT	FINAL AUDIT	TOTAL
Residential (one unit type)	\$1,500	\$3,650	\$4,320	\$9,470
<i>Residential (per additional unit type)</i>	<i>\$490</i>	<i>\$890</i>	<i>\$460</i>	
Commercial (single end use)	\$1,550	\$4,005	\$4,710	\$10,265
<i>Mixed-Use Buildings (per additional end use)</i>	<i>\$990</i>	<i>\$2,670</i>	<i>\$1,560</i>	

*Price per type of project; Auditor fee is included

Details and registration forms can be found on the EDGE program website:
<https://www.edgebuildings.com/certify/other-countries/>



RESEARCH METHODOLOGY

COUNTRY LIST

- IFC chose countries that correspond to the [Climate Investment Opportunity Report](#) (CIO Report) as well as countries of strategic interest for IFC.
- IFC plans to release additional country analysis, pending resources.

TOTAL MARKET OVERVIEW

- Building stock was sourced from the [Global Building Stock Database](#) and confirmed by country experts, if possible.
- The research team found local prices for capital construction expenses, or used global proxies otherwise.
- Market sizing was executed for new construction and did not focus on retrofits.

SNAPSHOT OF THE CURRENT GREEN MARKET

- Main source of information was the [Green Building Information Gateway](#), confirmed by local green building council reports, if such existed.
- The research team focused on properties certified as green.

GOVERNMENT POLICIES

- Main information was sourced from the [World Bank NDC Database](#).
- Additional information was found using various searches as well as government websites.

PROJECTIONS FOR GREEN PENETRATION

- Based on the total market growth, snapshot of the current green market, and the enabling environment of government policies, the research team projected green penetration per each of the sub-sectors.
- Weighted average of combined sector data produced the final penetration number.
- The analysis focused only on new construction, and focused only on certified properties.
- As tools for retrofits take off in the market (including IFC's EDGE product), analysis may be amended to include the retrofit market.
- Market potential may be different from numbers reported in the CIO Report, as a more conservative estimate was used for business planning purposes.

OTHER

- Information for green building councils was sourced from [World GBC website](#).
- Case studies were presented only for IFC's EDGE green building software and certification system.
- However, lists of all green certified projects in a given country can be found through the [Green Building Information Gateway](#).
- Finally, pricing for EDGE certification was included to illustrate that green certification is affordable and achievable in emerging markets.



ACKNOWLEDGEMENTS

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