



Creating Markets, Creating Opportunities

Green Building Market Snapshots 2022/2023 Baseline

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Synthesis Report

BRAZIL

Certified Green Building market status (2022): Underdeveloped Market but Strengthening



Developers

Approximately 8M sqm of new or existing space were certified green between 2017 and 2020, mainly offices, warehouses, and multifamily.



Financial Institutions

Brazilian financial markets have shown a trend towards sustainable finance. As of 2021, several state-owned and private financial institutions in Brazil offered Green Building finance, including BNDES, Caixa, DesenvolveSP, BNB, Santander Brazil, Itaú, and Sicredi.

Public Sector

Relevant regulation includes the National Policy on Climate Change (Federal Law No. 12187/2009) and the City Statute (Federal Law No. 10,257/2001). As of 2021 approximately 55 municipalities offered technical and financial incentives for adopting sustainable practices (e.g., through tax (IPTU) discounts of between 5% to 20%).

Country landscape (2022):

- Residential is 80% of the building construction industry, with social housing (typically multifamily) representing approx. 40% of the market
- It is not uncommon for Brazilian developers to also operate a construction arm
- The housing credit market has two main operating systems, SFH and SFI, which account for 90% and 10% of issuance, respectively

EGYPT

Certified Green Building market status (2023): Early Signs of Transformation

Developers

The market penetration of GBs is still limited, with an estimated 1,084,483 sqm in new and existing floor space as of November 2023.



Tarsheed



Financial Institutions

As of 2022 no GB finance products had been offered by Egyptian FIs. However, in 2017 the GCF and EBRD created the Green Economy Financing Facility (GEFF), a credit line for green projects across several sectors. In November 2023 IFC introduced the MAGC program to FIs in Egypt, starting with CIB, following by HSBC Bank Egypt.

Public Sector

Relevant regulations include the Egyptian Energy Efficiency RBC(482/2005), the Egyptian Energy Efficiency CBC (190/2009), the Waste Management Regulation Law (202/2020), and the Egyptian Code for Smart Cities (767/2020).



Country landscape (2023):

- 58% of electricity consumption attributed to building sector in 2021
- Residential building sector expected to grow at an average rate of 9.10% over next 5 years
- Mortgage finance activities are regulated, and the Central Bank of Egypt offers installment plans of up to 30 years to low and middle-income homebuyers



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Synthesis Report

COLOMBIA

Certified Green Building market status (2019): Moderately Developed Market



Developers

8% market penetration (all GBs combined) as of 2019; one of the fastest growing certified Green Building markets



Financial Institutions

Several green bonds have been earmarked to buildings and the majority of the top banks in Colombia are providing preferential financing packages for green loans

Public Sector




LEY 1715 (2014) It is the legal framework that gave rise to Res. 463 to exclude VAT for certain eco-technologies and reduce income tax for certified projects; DECRETO 1285 (2015) and RES. 549 (2015) set forth parameters and guidelines for sustainable construction; other relevant regulations are RES 1283, RES 585 (2017), RES 463 (2018)

Country landscape (2019):

- 37% of electricity consumption attributed to buildings in 2019
- High-growth building sector
- Rapid urbanization with 20% informal construction
- Residential market equally split between large, medium and small developers
- Significant expansion of mortgage market but still relatively small

MEXICO

Certified Green Building market status (2020): Underdeveloped Market but Strengthening

Developers	5% market penetration (all GBs combined) as of 2020, with a focus on non-residential sector   
Financial Institutions	Ecocasa and INFONAVIT green mortgage programs supported the development of Green Building with their sustainability requirements, but these programs did not necessarily comply with international certification standards
Public Sector	Mexico policies supporting sustainable buildings and Green Building programs included NOM-008-ENER-2001, NOM-020-ENER-2011



Country landscape (2020):

- Buildings consumed around 20% of the total energy generated
- Real estate sector growth slowed down by pandemic
- Majority of developers are national
- Self-built housing comprises around 55% of residential buildings
- Highly concentrated construction and mortgage financing markets

PERU

Certified Green Building market status (2019): Underdeveloped Market but Strengthening

Developers 5% market penetration (all GBs combined) as of 2019



Financial Institutions Fondo Mivivienda (FMV)'s eco-friendly subsidized mortgage targets affordable housing, based on its own certification system, Bono Verde

Public Sector Regulation of Territorial Conditioning and Sustainable Urban Development (RATDUS) (Supreme Decree No. 022-2016-HOUSING) is the technical - normative instrument that guides and regulates the territorial management and sustainable urban development of the metropolitan areas



Country landscape (2019):

- Buildings consumed around 45% of the total energy generated in 2019
- High incidence of informal building (approx. 65% in area terms)
- Predominance of small and domestic developers in the residential market
- Highly concentrated mortgage and construction finance market

GHANA

Certified Green Building market status (2020): Nascent Market



Developers

1% market penetration (all GBs combined) as of 2020, with a focus on high-end commercial buildings



Financial Institutions

As of 2019 there was no significant Green Building finance in Ghana, although some financial institutions offered energy efficiency loans for equipment with competitive terms for homeowners and businesses

Public Sector

Ghana's National Energy Policy (2010) recognized the need to improve end-use energy efficiency, and Ghana Building Code 2018 (Part 14 Energy Efficiency and Sustainability) sets out requirements and recommendations for energy efficiency for mechanical ventilations systems, refrigeration equipment, hot water systems and lighting systems

Country landscape (2020):

- Around 46% of electricity consumed by residential sector in 2020
- Large housing deficit, predominance of informally built housing
- Low mortgage debt as a proportion of overall household debt
- Small formal construction market and number of developers

KENYA

Certified Green Building market status (2020): Underdeveloped Market



Developers

3% market penetration (all GBs combined) as of 2020, with a focus on office and high-income housing



Financial Institutions

Presence of Real Estate Investment Trusts (REITs), but no Green Building construction loans or mortgage products in the market as of 2020

Public Sector

Green economy strategy (2016) with Green Building targets; ordinance on construction of affordable houses according to EDGE standards; green fiscal incentives policy framework being implemented as of 2020

Country landscape (2020):

- Buildings used 47% of available electricity generation capacity in 2020
- Large demand and undersupply of formal affordable housing
- Savings and Credit Cooperatives (SACCOs) are estimated to provide majority of housing finance
- Market dominated by local developers, with recent influx of foreign developers

SOUTH AFRICA

Certified Green Building market status (2020): Moderately Developed Market



Developers

30% market penetration (all GBs combined) as of 2020, with a focus on higher-end commercial offices and residential buildings



Financial Institutions

Green Building finance typically limited to specific projects and developers; climate finance loans of the top three banks in South Africa accounted for 2.1% of total lending in 2020

Public Sector

South Africa National Standard (SANS) 204 is the voluntary national standard for energy efficiency in buildings, published in 2008 and updated in 2010; SANS 10400 PART XA is the standard for energy usage in buildings, launched in 2011; SANS Part XB (in development as of 2020) intended to regulate water efficiency in buildings

Country landscape (2020):

- Large reliance on fossil fuels for electricity generation as of 2020
- High levels of water stress
- Construction industry characterized by high number of MSMEs but also large developers
- Financial sector characterized by high concentration

CHINA

Certified Green Building market status (2020): Moderately Developed Market



Developers

67% market penetration (all GBs combined) as of 2020



Financial Institutions

While several green bonds had been issued and a few big banks supported Green Building projects, as of 2020 Green Building finance products were not common

Public Sector

The Ministry of Housing and Urban-Rural Development's 12th and 13th 5-year development plans, Green Buildings and Eco-City Development (2011–2015) and the Building Energy Conservation and GB Development (2016–2020), set target standards for building energy efficiency; local provinces have also issued their own standards and regulations

Country landscape (2020):

- China accounted for 24% of global energy consumption in 2018
- CO2 produced by the construction industry in China accounted for about 30% of total emissions
- Largest construction market in the world with approx. 100,000 developers
- >90% residential ownership rate, with low reliance on mortgages

INDIA

Certified Green Building market status (2020): Underdeveloped Market



Developers

2% market penetration (all GBs combined) as of 2020, focused on commercial and high-end residential buildings



Financial Institutions

Green finance constitutes a sliver of India's financial institution portfolios and is generally not reported separately

Public Sector

Bureau of Energy Efficiency mandatory building energy codes not yet adopted by all states. National Building Code 2017 and Model Building Bye Law 2015 also referred to sustainable buildings. At National Level, Ministry of Environment, Forest and Climate Change provided fast track environmental clearance for Green Buildings. Many states in India had announced fiscal and other incentives for Green Building construction.

Country landscape (2020):

- Commercial, public, and residential sectors consumed approx. 33% of electricity as of 2020
- High-growth construction market focused on residential buildings
- More than 12,500 active developers across 60 cities
- Rapidly growing mortgage market

INDONESIA

Certified Green Building market status (2019): Underdeveloped Market but Strengthening

Developers

2% market penetration (all GBs combined) as of 2019, with a majority of certified buildings in the office sector



Financial Institutions

Eleven banks provided financing for Green Buildings in 2019, but at a limited scale

Public Sector

Indonesian Financial Services Authority (OJK) pioneered green finance road map in 2014 , and a policy to develop green financing in 2017




Country landscape (2019):

- Building sector responsible for 39% of electricity consumption in 2019
- Majority urban population
- Housing finance mainly raised from banks
- Around 70% of housing stock self-built
- Residential and commercial buildings mostly built by large developers

PHILIPPINES

Certified Green Building market status (2019) snapshot: Underdeveloped Market but Strengthening

Developers	3% market penetration (all GBs combined) as of 2019 
Financial Institutions	Several green bonds were issued with the use of proceeds for Green Buildings, and at least eight banks were providing loans for Green Buildings in 2019
Public Sector	Philippine Green Building Code launched in 2016 by IFC and DPWH Green building ordinances at city level: Mandaluyong, Quezon, Cebu



Country landscape (2019):

- Building energy consumption accounted for 15-20% of electric power consumption in 2019
- Among highest electricity prices in Asia
- Growing property sector, high concentration in property development market, strong demand for commercial real estate

VIETNAM

Certified Green Building market status (2019) snapshot: Early growth



Developers

Less than 2% market penetration (all GBs combined) as of 2019, with a focus on high-end commercial offices and upper middle income residential buildings



Financial Institutions

No Green Building finance products in 2019

Public Sector

The National Program on Energy Efficiency (280/QĐ-TT 2019) set a clear objective to increase energy efficiency from 5% to 7% of the total energy consumption in Vietnam from 2019 to 2025.

Country landscape (2019):

- 30% of Vietnam's electricity consumption attributed to residential and commercial buildings in 2019
- Around 90% of houses are self-built
- Predominance of small, local developers relying on local commercial bank financing
- Family and friends funding more common than mortgages for housing

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