



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%).



- 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





- 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









Green Building Market Snapshots 2019/2020 Baseline

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Synthesis Report

COLOMBIA

Certified Green Building market status (2019):

Moderately Developed Market



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)



- 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

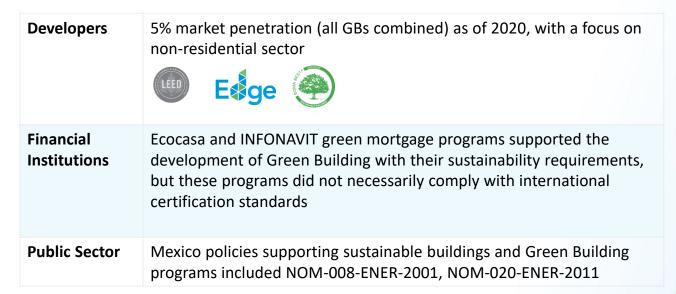




MEXICO

Certified Green Building market status (2020):

Underdeveloped Market but Strengthening





- 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





- 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





- 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 E ge ge greenstar
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



- 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 Type Star E ge
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



- 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





- 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





- 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

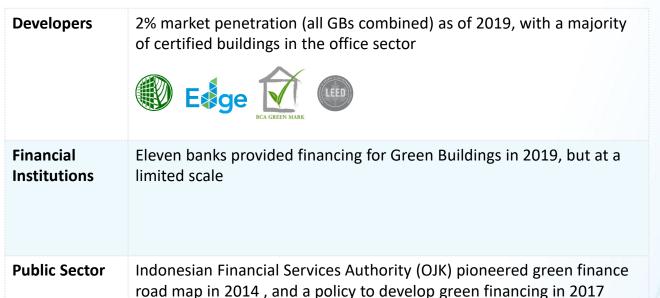




INDONESIA

Certified Green Building market status (2019):

Underdeveloped Market but Strengthening





- 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 Egge RELENCE FOR STATE OF THE PROPERTY OF
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



- 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/QD-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.



- 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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