





CERTIFIED GREEN BUILDING MARKET STATUS: UNDERDEVELOPED MARKET BUT STRENGTHENING

As of 2019, the Philippines were an underdeveloped but dynamic Green Building market. The certified Green Building market penetration was about 3% in 2019. In the green finance space, several green bonds were issued, with the use of proceeds for Green Buildings, and at lest eight banks were providing loans for Green Buildings in 2019. Introduction of green policies in the construction and finance sectors reflect the country's determination to pursue sustainable development.



COUNTRY LANDSCAPE

• Energy Consumption: Building energy consumption accounts for 15-20% of electric power consumption.² Philippines has one of the highest electricity prices in Asia, with one study indicating that Manila has the second highest overall residential electricity tariff after Tokyo.³

• **Construction Market:** The property sector growth has been strong, 9.5% in 2016-17 and 8.7% in 2017-18.⁴ Over the past few years, the demand for commercial real estate space has been continuous by business process outsourcing industry and offshore gaming operators. Overall demand for construction is expected to continue to increase in the short and medium term.

Developers: The development of properties is highly concentrated and dominated by large developers, with the top developers holding 70-100% of the market shares in the major markets. The majority of future residential, retail, and office builds are expected to be built by the top ten developers in these markets through 2022.

Finance: Credits to real estate comprised 18% of total loans outstanding in the country, the largest share among sectors, as of 2018. Apart from Banks, the Social Security System, Pag-IBIG Fund, and State Pension Fund also offer housing loans. National Home Mortgage Finance Corporation (NHMFC), a major government home mortgage institution, buys mortgages originated by private financial institutions. It has a partnership with IFC for EDGE-certified housing.





1. GREEN BUILDING POLICIES AND REGULATIONS

Is there a national definition of Green Building?

Green Building is the practice of adopting measures that promote resource management efficiency and site sustainability while minimizing the negative impact of buildings on human health and the environment.

This practice complements the conventional building design concerns of economy, durability, serviceability, and comfort.⁶

Is Green Building part of the country's Nationally Determined Contributions (NDC)? Building sector is not explicitly mentioned in the NDC of Philippines.⁷ However, the country's Energy Efficiency roadmap commits to reducing energy consumption in commercial buildings by 25% and in residential buildings by 20%, against a 2014 baseline, by 2040.⁸

Is there a national Green Building strategy/action plan? No.

Public Policy and Regulations

The Philippine Green Building Code (2016)

Is a referral code to the National Building Code of the Philippines under Presidential Decree 1096 to decrease the impacts of buildings to health and environment through resource management efficiency. The code is mandatory for buildings with certain gross floor area. These standards intend to deliver improved energy efficiency, water and wastewater management, materials sustainability, solid waste management, site sustainability, and indoor environmental quality.

- ▶ Makati City has an umbrella program bringing the city's green initiatives together. It aims to upgrade its physical environment and infrastructure, specifically the enhancement of urban design and cityscape, rehabilitation of environmentally sensitive areas, and upgrading infrastructure, facilities, and services to improve environmental quality.
- ▶ **Quezon City** building code requires the planning, design, construction, operation, and maintenance, including the retrofitting, of building projects that strictly adhere to energy efficiency, cost effectiveness, and impact mitigation of environmental degradation.
- ▶ Mandaluyong City issued its Green Building regulations in 2014. It requires new buildings to adopt high energy and water efficiency practices, such as rainwater harvesting, energy-efficient air conditioning, daylight-controlled lighting, and other Green Building standards. It applies to residential buildings, schools, offices, hotels, hospitals, and commercial and government buildings. In 2018, the city passed the second ordinance (City Ordinance 709 S-2018), which updated its 2014 Green Building regulations. In 2020, the City launched its online Green Building Efficiency and Self-Assessment Tool (GBEST), a pre-assessment platform to aid professional building designers and developers with the clearance requirements. The tool is used to determine if 80% of the applicable mandatory measures are complied with, allowing the designers or developers to proceed with securing a Green Building certificate or permit.

Other Relevant Policies:

2016: Development of The Green Jobs Assessment and Certification System and Guidelines

2017: Development of a National Framework and Plan of Action for Philippine Climate Smart Hospitals

(2020 Update): Development of Standards for Climate Smart Buildings (under development)

 $\blacktriangleright \ \, \text{Some fiscal incentives, generally tax credits, provided by Local Governments for green constructions.}$

(2020 Update): The Bangko Sentral ng Pilipinas Sustainable Finance Framework (Circular 1085):8

It aims to help financial institutions identify, assess, and manage environmental and social risk exposures. The development of the guidelines and manual of regulations for Banks are ongoing.





2. GREEN BUILDING MARKET SIZE

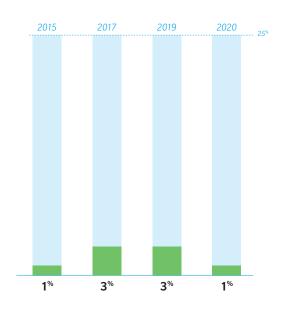
New and existing floor space certified green in 2019: 1 million square meters



Share of green building developers among major developers^{10,11}



Share of certified new green buildings among all new developments (based on square meters)



3. CERTIFICATIONS AND STANDARDS

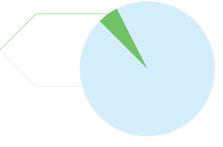
National Green Building Rating Systems The BERDE Program was established by the Philippine Green Building Council (PHILGBC) in 2009 and recognized by the Philippine Government through the Department of Energy as the National Voluntary Green Rating System of the country. BERDE has certified 12 buildings as of 2019. 12

International Green Building Rating Systems

- ▶ LEED certified approximately 4.1 million sqm as of 2019.
- ▶ EDGE was launched in 2015 and certified approximately 0.2 million sqm as of 2019.

Voluntary Green Building certification systems' market share by square meters certified (as of 2019).

- ► LEED is 95% of cumulative GB LEED residential 2%, non-residential or mixed-use 98%
- ► EDGE is 5% of cumulative GB EDGE residential 10%, non-residential 90%
- ▶ BERDE certified floor area is not available







4. GREEN BUILDING FINANCE

Financial Institutions offering Green Building finance (by public/private) and their products as of 2019¹⁴

- ▶ The Banks in Philippines either provide Green Building financing under umbrella Sustainable Development Finance Programs (BPI, BDO, DBP, LBP) or offer financing for Green Buildings without a differentiated product (Metrobank, RCBC, Unionbank, China Bank, PNB, Security Bank). 1516
- ▶ Several banks like BPI and BDO require Green Building certifications to provide Green Building loans¹⁷

Green bonds or other capital market instruments earmarked for Green Building finance between 2015 and 2019.

- ▶ BDO Unibank issued \$150 million green bonds, with 30% of proceeds allocated for Green Buildings in 2018
- ► China Bank issued \$150 million green bonds, with 10% of proceeds allocated for Green Buildings in 2018.
- ▶ BPI issued \$ 300 million and \$100 million green bonds, with \$160 million allocated for Green Building projects in 2019.
- ▶ RCBC issued \$287 million green bonds, with \$70 million allocated for Green Buildings in 2019.
- ▶ (2020 Update): Arthaland, a property developer, issued \$59 million green bonds for Green Buildings. 18
- ► Ayala Land had several bond issuances for property development¹⁹

Financial institution lending to Green Buildings as a % of total lending to building sector (Climate financing as a % of total bank credit)

▶ IFC estimates that Green Building finance comprises 1-2% of the total real estate loan portfolio.²⁰ Based on the sustainability reports of selected banks, around 10% the total loan portfolio of the banking system as of 2019 was disbursed in loans to finance sustainability projects.²¹

Financial Incentives

▶ DBP and LBP provide longer loan tenure of up to 15 years, preferential interest rates, and flexible collateral requirements.





5. COST OF UTILITIES

Share of cost of utilities (Electricity and Water) for an average income: 7%²²



6. EDUCATION AND SKILLS

Number of Universities offering Green Building programs The University of the Philippines Diliman in Quezon City²³





ENDNOTES

- IFC's calculations consider the formal construction sector. The rate covers EDGE post-design and LEED certified floor area divided by estimated new build for the formal sector, for calendar year 2019.
 - LEED numbers are estimated by IFC based on information retrieved from USGBC website (https://www.usgbc.org/projects) on October 19, 2021
 - EDGE numbers were retrieved from EDGE App data as of September 30, 2021
 Green certification numbers do not differentiate buildings certified with more than one certification system or product (that is, each certification is counted as unique) and may include certifications for existing buildings. BERDE certified floor area is not available.
 Estimated new build is based on the Philippines Statistics Authority: https://psa.gov.ph/construction/pcs-id/163346
- Department of Energy. 2017. https://www.doe.gov.ph/guidelines-energy-conserving-designbuildings-and-utility-systems
- 3. Energy Pricing in Philippines and its Effect on Economic Growth, Franes Irene Uy, March 2016
- 4. https://psa.gov.ph/nap-press-release/sector/Real%20Estate,%20Renting%20&%20 Business%20Activity
- 5. IMF Country Report No. 20/37
- The Philippines Green Building Code. A Referral Code of the NATIONAL BUILDING CODE OF THE PHILIPPINES (P.D. 1096)
- https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Philippines%20First/ Philippines%20-%20NDC.pdf
- https://www.doe.gov.ph/sites/default/files/pdf/energy_efficiency/ee_roadmap_ book_2017-2040.pdf
- 9. https://www.bsp.gov.ph/Regulations/Issuances/2020/c1085.pdf
- 10. It is important to note that small/boutique developers also build certified Green Buildings in the
- 11. Calculated based on the number of developers that have at least one green certified building out of the top ten developers in Philippines.
- 12. IFC does not have certified floor area numbers for BERDE.
- 13. IFC's estimate is based on LEED publicly available data.

- 14. Ten banks responded to IFC's survey request and four of these bank identified they require certification of buildings to extend green loans.
- 15. Please note that these banks were identified as a result of IFC's survey of several big Banks. The complete list is likely larger.
- 16. https://www.bpi.com.ph/about/investor-relations/integrated-reports https://www.bpi.com.ph/governance/overview/about/sustainability

https://www.bdo.com.ph/company-disclosures

https://www.bdo.com.ph/.../files/pdf/BDO-Sustainable-Finance-Framework...

 $https://www.dbp.ph/wp-content/uploads/2019/10/DBP-SPO-Update_Fi...\cdot PDF file$

https://www.dbp.ph/publication/2018-annual-report/

https://metrobank.com.ph/about-us

https://www.rcbc.com/uploads/media/RCBC-Sustainability-Bonds-Impact-

Report_2020-5.pdf

https://www.unionbankph.com/sustainability/sustainable-finance

https://www.unionbankph.com/sustainability/full-report

https://www.chinabank.ph/corgov.aspx?title=Sustainabilit

 $https://www.chinabank.ph/pdf/2019_Annual_Report.pdf$

https://www.pnb.com.ph/wp-content/uploads/docs/2019-Annual Report.pdf

- https://www.bpiexpressonline.com/media/uploads/5ee07249bb7c0_BPI_Sustainability_ Funding_Framework.pdf
- 18. https://www.arthaland.com/in-the-know/arthaland-successfully-lists-p3b-asean-green-bonds-first-non-bank-issuer-philippines
- 19. The specific amount for Green Building is not known.
- 20. Share of Real Estate loans (~2,166 billion pesos) in total loan portfolio was around 20% in 2019 (https://www.bsp.gov.ph/SitePages/Statistics/BSLoanAccounts.aspx?Tabld=3#).
- https://business.inquirer.net/306082/more-ph-banks-subscribing-to-bsps-green-financeprinciples#ixzz77nYdtBEm
- Calculated based on the Economist Intelligence Unit Database for country utility data in major cities (2019) and the World Bank GNI per capita 2019
- 23.https://www.mdpi.com/2071-1050/8/3/290

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