

SOUTH AFRICA GREEN BUILDING MARKET SNAPSHOT 2020¹

This Green Building Market Snapshot provides a summary of key market indicators based on IFC's research on policy environment, building construction, and Green Building certification and finance. The year of the snapshot coincides with the launch of the UK-IFC Market Accelerator for Green Construction (MAGC) program in the country. Additionally, most recent Green Building developments in the market are included where available. IFC welcomes readers' comments.



CERTIFIED GREEN BUILDING MARKET STATUS: MODERATELY DEVELOPED

As of 2020, South Africa's Green Building market was moderately developed. Most of the certified buildings consisted of large scale higher-end commercial offices and residential buildings. The country's certified floor space was relatively high, around 30% in 2020.² Green Building finance was limited to specific projects and developers. National /sub-national regulations can be improved to further develop the market. (2022 Update): By the end of 2021, four major retail banks were offering Green Building finance products.



COUNTRY LANDSCAPE



- Energy Consumption:** Energy consumption from the residential, business, and industrial sectors relies largely on electricity generated from fossil fuels, with 90% of South Africa's electricity generated from coal. The country is the largest fossil fuel emitter in Africa.³ Water is also a major concern — electricity shortages and droughts are frequent.
- Construction Market:** Residential sector growth has remained flat since 2010, with an average of 40,000 units being delivered annually through private sector funding.⁴ South Africa has four large metropolitan cities — Johannesburg, Cape Town, Durban, and Pretoria. Johannesburg has the largest development figures across these cities and is the economic hub of the country. The primary focus of developments in the region is commercial office and residential, whereas there is a stronger focus on light industry and warehousing in the Cape Town and Durban regions.
- Developers:** The South African construction industry is largely characterized by micro, small, and medium enterprises, which contribute 70%, towards employment in the industry. Larger enterprises generally contribute more than 50% of total income of the construction industry.
- Finance:** The financial sector is highly concentrated. The top five banks in the country represent over 90% of the banking sector's assets.⁵ Climate finance loans of the top three banks in South Africa accounted for 2.1% of the total lending in 2020.

1. GREEN BUILDING POLICIES AND REGULATIONS

Is there a national definition of Green Building?

The concepts of Green Buildings, sustainable buildings, or sustainable construction are broad. It is generally viewed as the building structure and the construction process that is environmentally responsible and resource-efficient throughout the life-cycle of the building.⁶

Is Green Building part of the country's Nationally Determined Contributions (NDC)?

South Africa's absolute emission reduction is expected be 398 and 614 MtCO₂eq by 2025 and 2030, with building sector not being a focus sector.⁷

Is there a national Green Building strategy/action plan?

South African government adopted a National Framework for Green Building in South Africa (NFGBSA) in November 2011. A key strategy of the NFGBSA is to develop Green Building regulations and standards.⁸

Public Policy and Regulations

South Africa National Standard (SANS) 204:

It is the voluntary National Standard for Energy Efficiency in Buildings, published in 2008 and updated in 2010. It defines the minimum requirements to achieve a 3-star Green Building rating. It is the energy efficiency regulation for all new buildings in South Africa.

SANS 10400 PART XA:

It is the standard for Energy Usage in Buildings, launched in 2011, that looks at hot water supply, building use, and design. It made the provision of energy efficiency measures compulsory for all buildings, including all homes.

SANS Part XB:

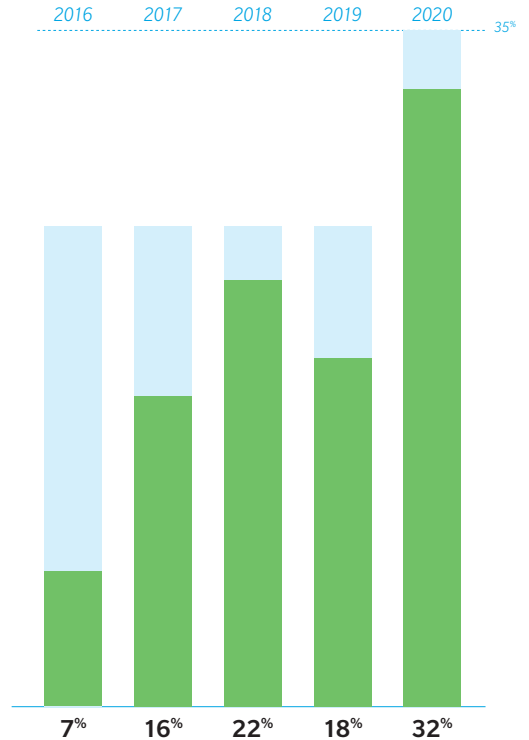
SANS Part XB is in development and will regulate water efficiency in buildings. It is expected to be implemented in 2021.

2. GREEN BUILDING MARKET SIZE

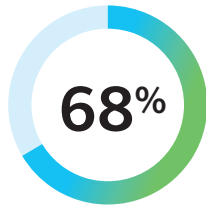
New and existing floor space certified green in 2020: 2.1 million square meters



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



Share of Green Building developers among major developers⁹



3. CERTIFICATIONS AND STANDARDS

National Green Building Rating Systems

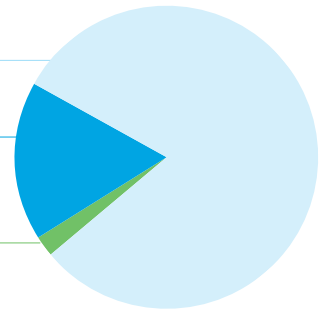
Green Star South Africa is a measurement tool for Green Buildings with a focus on energy. Building owners must submit relevant building data to the Green Building Council South Africa (GBCSA). Afterwards, an independent assessor evaluates and rates the building and its green measures.¹⁰ Green Star SA was established in 2007 and has certified over 7.7 million sqm (as of 2020).

International Green Building Rating Systems

- ▶ EDGE was introduced in 2015 and has certified 1.6 million sqm in South Africa as of 2020.
- ▶ LEED was introduced in 2010 and has certified 0.2 million sqm in South Africa as of 2020.

Voluntary Green Building certification systems' market share by square meters certified (as of 2020).

- ▶ GREEN STAR is 81% of cumulative GB
GREEN STAR residential 0.1%, non-residential 99.9%
- ▶ EDGE is 17% of cumulative GB
EDGE residential 95%, non-residential 5%
- ▶ LEED is 2% of cumulative GB
*LEED non-residential or mixed-use 100%*¹¹



4. GREEN BUILDING FINANCE

Financial Institutions offering Green Building finance (by public/private) and their products as of 2020¹²

- ▶ Nedbank Green Home Loans: The bank provided funding of over \$138 million for the construction of buildings that conform to Green Building standards in 2020, bringing the amount of funding provided to this sector to more than \$757 million.¹³
- ▶ ABSA Eco Home Loans: In 2020, Balwin Properties and ABSA Bank launched South Africa's first green home mortgage program.
- ▶ FNB Eco Energy loan: First National Bank provides green loans for business who wants to improve energy efficiency of their premises.
- ▶ Standard Bank launched their green mortgage mid-2020.
- ▶ (2021 Update): FNB started to offer a green mortgage program with preferential interest rates.
- ▶ (2021 Update): IFC extended a \$42 million loan to BPL to support the extension of its existing business activities to Green Building development and Green Building financing for SMEs in June 2021. It is the first Green Building finance product focused on SMEs.

Green bonds or other capital market instruments earmarked for Green Building finance between 2015 and 2020.

- ▶ In 2012, Industrial Development Corporation issued \$651 million green bonds, with 100% of proceeds allocated for Green Buildings.¹⁴
- ▶ In 2014, the City of Johannesburg million issued \$136.4 green bond, with \$27.2 million of proceeds allocated for Green Buildings.¹⁵
- ▶ In 2018, Growthpoint (REIT) issued a \$93 million green bond, with 100% of proceeds allocated to Green Buildings.¹⁶
- ▶ In 2020, Standard Bank listed its first offshore green bond in South Africa in the London Stock exchange for \$200 million; part of its proceeds will be used to finance green buildings.¹⁷

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

- ▶ Overall climate financing is still limited, representing approximately 2% of total lending for the top three banks assessed by IFC.¹⁸ Nedbank.¹⁹ and Absa.²⁰ eco home loans would make a minuscule share of total real estate loans in the country.

Financial Incentives

- ▶ BSA Bank, FNB and Nedbank offer preferential rates for customers who buy certified green homes.²¹

5. COST OF UTILITIES

Share of cost of utilities (Electricity and Water) for an average income: 6%²²



6. EDUCATION AND SKILLS

Number of Universities offering Green Building programs²³

- ▶ University of Cape Town
- ▶ University of Johannesburg

ENDNOTES

1. If not footnoted, the source of information is the report prepared by JLL "State of the Real Estate market in South Africa" commissioned by IFC in 2019.
2. In 2020, the new building construction shrank significantly in the country, while the certification numbers were less effected. There may be a delay between the certification and the completion of a building.
IFC's calculations only consider the formal construction sector. The rate covers EDGE post-design, LEED and Green Star certified floor area divided by estimated new build for the formal sector, for calendar year 2019.
Green Star numbers are from GBCSA.
LEED numbers were retrieved from USGBC website (<https://www.usgbc.org/projects>)
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 include certifications for existing buildings (IFC estimates that around 70% of Green Star certifications cover existing buildings). IFC estimates the Voluntary Green Building certification systems' market share by square meters certified to be around 7% without Green Star Existing Building certifications.
Estimated new build is from Statistics South Africa (<http://www.statssa.gov.za/>) for private sector and IFC's estimate for social housing.
3. <http://www.globalcarbonatlas.org/en/CO2-emissions>
4. ABSA, Residential building statistics.
5. IMF. 2014. "Financial Systems Stability Assessment": www.imf.org/external/pubs/ft/scr/2014/cr14340.pdf
6. https://www.ecsa.co.za/news/News%20Articles/181113_DPW_Green_Building_Policy.pdf
7. <http://spappssecext.worldbank.org/sites/indc/Pages/Mitigation.aspx>
8. https://www.ecsa.co.za/news/News%20Articles/181113_DPW_Green_Building_Policy.pdf
9. 13 out of 19 top developers invested in Green Buildings. World Green Building Trends Report 2018 confirmed that 41% of the country's building industry is Green Building-related.
10. <https://gbcso.org.za/certify/green-star-sa/>
11. IFC's estimate based on LEED publicly available data.
12. In 2021, Nedbank issued the first green residential development bond in South Africa, with IFC as the anchor investor.
13. Nedbank Sustainability Report
14. Ibid.
15. IFC, Climate Bonds Initiative
16. IFC, Climate Bonds Initiative
17. <https://pressroom.ifc.org/all/pages/PressDetail.aspx?ID=16888>
18. The three banks assessed account for a majority of overall bank lending in South Africa's highly concentrated banking market. Source: IFC's study: "Streamlining_AIMM_Assessments_FIG_Climate_Finance_Pilot_Final 2021."
19. 2020 Nedbank Group integrated report, p. 88.
20. 2020 ABSA climate-related financial disclosures report, p. 3.
21. IFC does not have detailed information on the preferential rates.
22. Calculated based on the Economist Intelligence Unit Database for country utility data in major cities (2020) and the World Bank GNI per capita 2019.
23. The source of this information is IFC's own analysis.

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