



GREEN BUILDINGS MARKET INTELLIGENCE

KENYA COUNTRY PROFILE

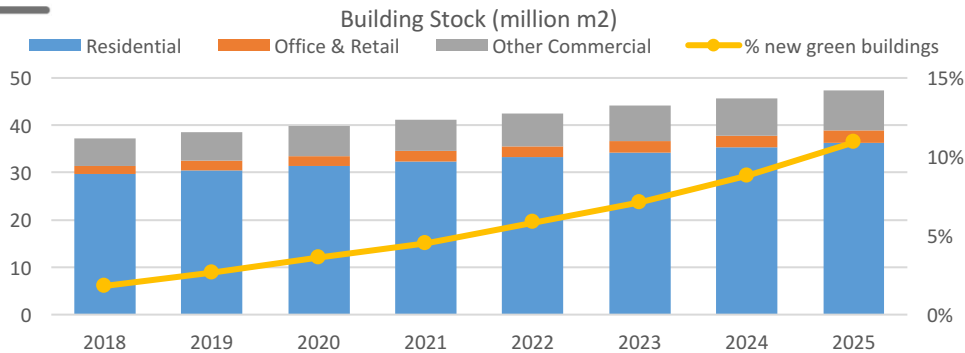


Creating Markets, Creating Opportunities

KENYA: COUNTRY SUMMARY



MARKET GROWTH



Market through 2025

Commercial

Residential

Residential units

Total market

USD 2.6 B

USD 5.5 B

150,000

Green market

USD 0.4 B

USD 0.5 B

50,000



OTHER FACTORS

- 2017 projections show GDP growth to be approx. 6.4%. With a 4.3% urbanization rate, demand for affordable housing will remain strong.
- There are 51 banks providing financial services with mortgage rates at 17% over 10-years and at least 10% upfront.
- 3rd most improved country in the WBG's *Doing Business* rankings to 108.



CLIMATE POLICIES (NDCS)

- Enacted Climate Change Act in 2016.
- Green Economy Strategy Implementation Plan and Vision 2030 Medium Term Plan include Green Buildings.
- Kenya Green Bond Program of \$600,000 over next three years.
- KGBS is assisting Nairobi with Green Building Principles.



MARKET STATUS

- Regarded as East Africa's business and investment hub.
- First REIT (Fahari I-REIT) was listed in 2015.
- Digitization of land registry completed in Nairobi.



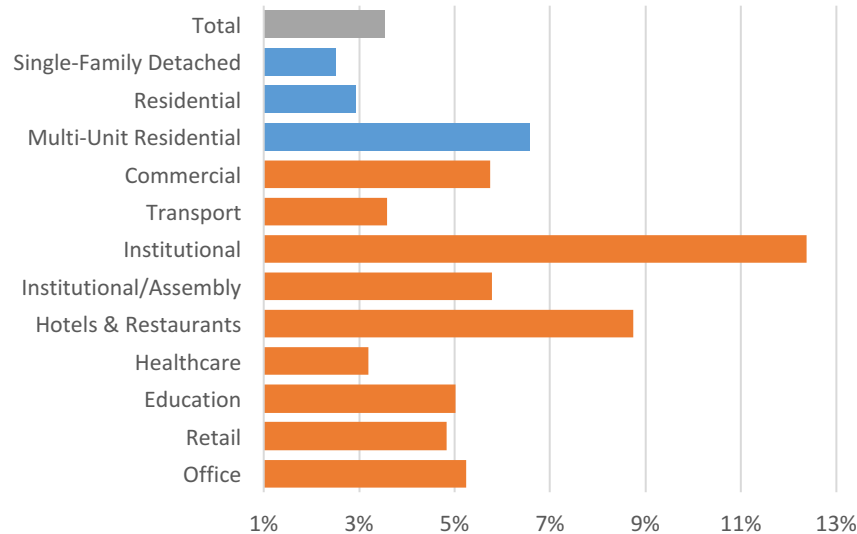
GREEN BUILDING PROGRAMS

- Advocacy and awareness by Kenya Green Building Society (KGBS) and international partners, such as UN and WB.
- Hosted Africa GB forum in March 2017.
- IFC signed agreement with KGBS to promote EDGE to industry partners.
- IFC's program is supported by regional coordinator.
- KGBS organized on-site training at the SPACE Conference in Nairobi (June 2017).



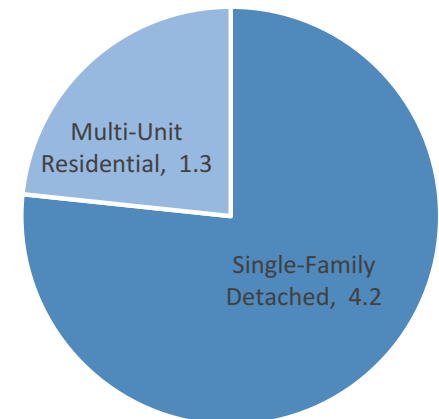
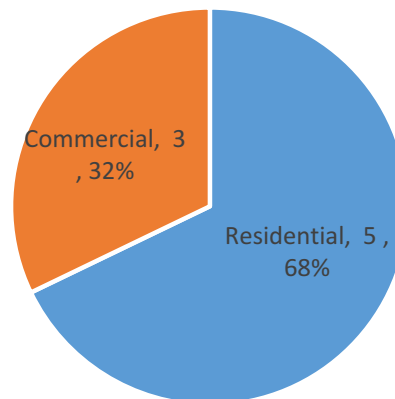
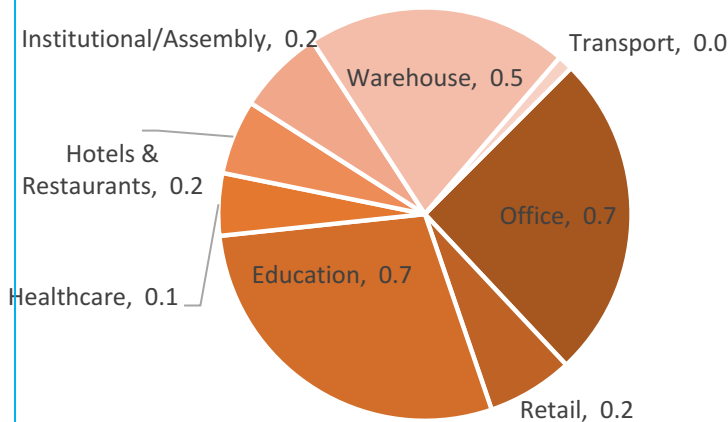
GROWTH WILL BE DRIVEN BY INSTITUTIONS & HOTELS

MARKET GROWTH BY SUB-SECTOR (CAGR)



- Kenya's overall CAGR since 2018 is 3.5%.
- Retail & Office growth is expected to be ~5%.
- Upsurge of shopping centers in Nairobi but continued interest from global retailers.
- Office market is relatively stable.
- Residential will be driven by multi-units, growing at ~6.5%, though single-family is still the largest portion of the market.
- Hospitality industry expected to lead on construction.

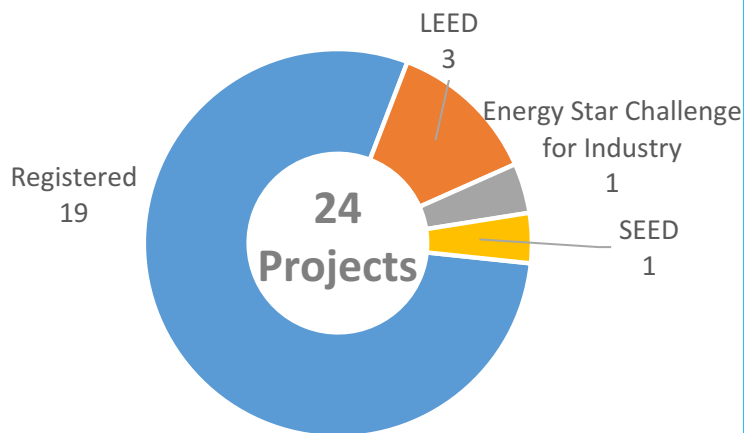
TOTAL MARKET SIZE 2018-25 (USD BILLIONS)



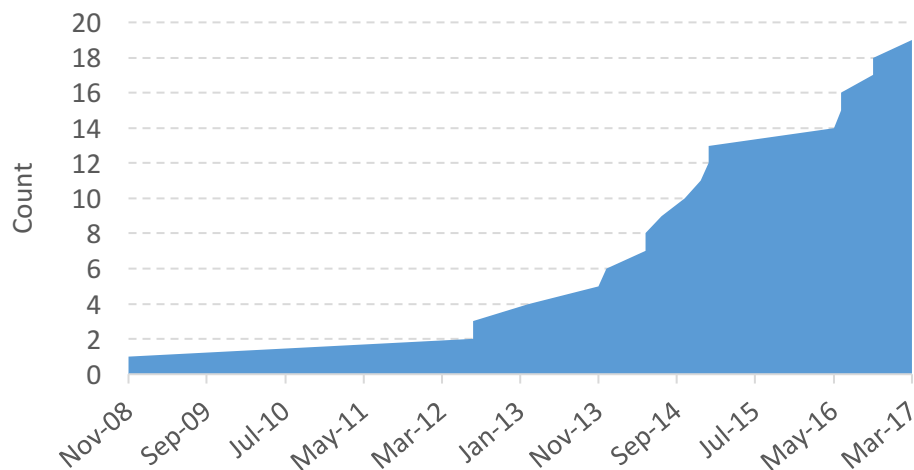


NASCENT BUT PROMISING GREEN MARKET

GREEN BUILDINGS IN KENYA

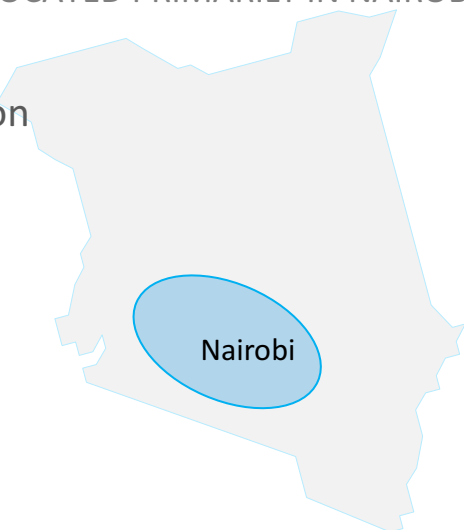


CUMULATIVE REGISTRATIONS



PROJECTS LOCATED PRIMARILY IN NAIROBI

Urban
Population
11.8
Million



RECENT PROJECTS INCLUDE:



**WBG-Delta Ctr.
Citibank**

Nairobi, WORLD BANK, Office / 218,175 sq ft
Nairobi, Citi NA KE, Office / 4,682 sq ft



Eaton Place

Nairobi, Imaran Group, Office / 107,510 sq ft



GM Assembly Plant

Nairobi, na

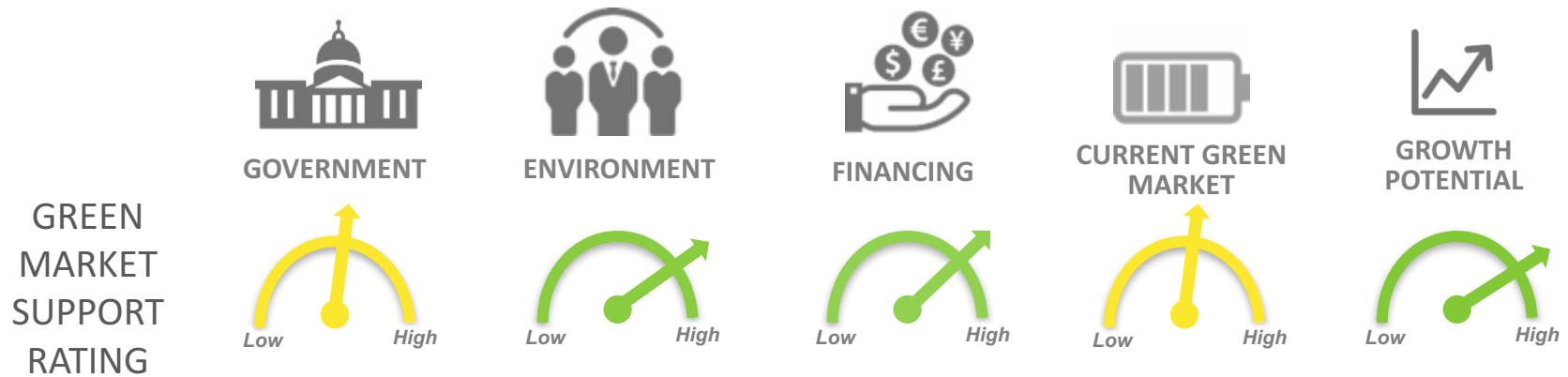
SEED AWARD FOR EXCELLENCE IN PUBLIC INTEREST DESIGN

Maa-Bara

Nairobi, na



TOURISM WILL LEAD THE GREEN MARKET



- Kenya has a tremendous potential, as many factor are aligned to get green buildings to succeed.
- IFC forecasts that the commercial market will lead in the beginning, though the residential market can quickly follow.
- In the commercial market, especially in tourism, the business case is well articulated, and projects can enjoy operational savings.
- In the residential market, projects such as green bonds and other types of awareness for the business case will help green take off.



COMMERCIAL GREEN LENDING IS LIMITED BUT EMERGING

- CFC Stanbic and Cooperative Bank is providing **\$33 million green credit lines** for energy and resource-efficiency projects.
- Housing Finance's is providing **green mortgage credit line of \$20 million**.
 - Green lending also occurs as part of mainstream lending.



Other emerging areas of product development include financing for:

- Climate-change mitigation
- Climate-change adaptation
- Green infrastructure
- Micro-lending
- Lending to small-scale farmers
- Lending to small businesses

- The largest banks have participated in sustainable initiatives but primarily through charitable contributions or their corporate social responsibility budget



Barclays Bank of Kenya spent \$260,000 in 2014 on moving more than 100,000 to solar energy projects.

OPPORTUNITY THROUGH KENYA'S GREEN BOND PROGRAM.



THE GOVERNMENT, NGOS AND TRADE ASSOCIATIONS ARE COMMITTED TO GREEN BUILDINGS

GOVERNMENT & POLICY SUPPORT

- National Construction Authority to regulate construction firms became operational in 2015
- Ministry of Environment and Natural Resources
- National Environment Management Authority
- Energy Management Regulations



NGO & TRADE ASSOCIATION SUPPORT



NOTABLE EVENTS

Climate Bonds INITIATIVE

Kenya Green Bond Programme Kicks-off with Strong Backing from Banking Industry and Development Finance Community

Posted: Mar 31, 2017 by Sean Kidney

Nairobi launch marks start of three year program to build green bond capability in Kenya and East Africa

“Green Building Councils in Africa are working to scale building solutions that celebrate the rich geographic, cultural and historic traditions of Africa”



GBC

Kenya Green Building Society

Country

Kenya

Region

Africa

Membership

Emerging

Website

<http://kenyagreenbuildingsociety.co.ke>

NCA and KGBS sign MOU to Promote Sustainable Construction

Jan 27, 2017





KENYA'S GREEN BUILDING SOCIETY IS LEADING THE CHANGE

Website: www.kenyagreenbuildingsociety.co.ke
Registered: January 2014 **WGBC Membership:** March 2017
Board: 8 Members
Rating Tools: Green Star SA & Edge
Mission: Promote and improve the awareness of green building design practices, programs, technologies and operations.



EVENTS & WORKSHOPS



SPACE
*Efficient properties.
Maximising investments.*

GREEN BUILDING TRAINING GREENSTAR™ AP

NOTABLE PROJECTS

1st green star
Rating in Kenya,
awarded by KGBS



Strategic Affiliates



Learn more about the IFC-Edge & KGBS partnership: <https://www.edgebuildings.com/certify/kenya>



IFC'S GREEN BUILDING INVESTMENT CASE STUDY

IFC COMMITTED \$8.2 MILLION IN 2014 TO THE FIRST MIXED-USE DEVELOPMENT IN EAST AFRICA TO GAIN LEED'S GREEN CERTIFICATION.



GARDEN
CITY

Location: Nairobi, Kenya

Client:

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Certification LEED CS 2009

Sector: Retail

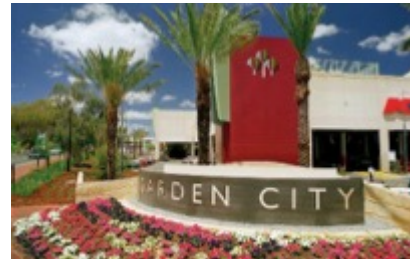
Size GLA: 33,500m²

No. of Vendors: 120

Recycled Materials: 15%

Annual Solar Power: 1,256 MWh

Annual Carbon
Reduction: 750 tones



GARDEN CITY MALL

Opened phase I in September 2015, Garden City Mall is part of a 32-acre, \$540 million integrated residential, retail park, hotel and office property. Upon entire completion the site will extend to 47 acres.

Garden City incorporates multiple environmental measures under LEED Sustainability Principles and home to the largest solar paneled carport in Africa generating 1,256 MWh of solar electricity annually.

In 2016, nominated for The Financial Times and IFC award for Achievement in Low-Carbon Urban Transformation.



LEARN ABOUT EDGE CERTIFIED PROJECTS IN AFRICA



RADISSON BLU HOTEL – THE EXCHANGE

Location:	Accra, Ghana
Client:	Mabani Holdings, CDC, Actis, Radisson Blu
Architects:	HOK
Sector:	Mixed use
Size:	98,000m²
No. of Units:	200 rooms

Predicted Savings of EDGE Certification:



22% Energy Savings



24% Water Savings



22% Less Embodied Energy in Materials



RAVENSWOOD RESIDENTIAL DEVELOPMENT

Location:	Johannesburg, South Africa
Client:	RPP Developments
Owners:	International Housing Solutions
Sector:	Residential
Size :	10,180m²
No. of Units:	188 two-bedroom homes

Predicted Savings of EDGE Certification:



32% Energy Savings



27% Water Savings



48% Less Embodied Energy in Materials

Case studies from other countries: <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

DONOR ACKNOWLEDGEMENT

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COLLABORATION ACKNOWLEDGEMENT

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