GREEN BUILDINGS MARKET INTELLIGENCE
NIGERIA COUNTRY PROFILE
NIGERIA: COUNTRY SUMMARY

MARKET GROWTH

Building Green still a new concept in Nigeria, and green is taking hold at a very slow pace, perception of green buildings and inefficient energy and waste management systems contributing to slow adoption.

“Bottom Up” approach to Green Building in Nigeria GBCN, addressing power, housing, and sanitation crisis being faced.

OTHER FACTORS

- Perception of Green Buildings as expensive play a huge part in lack of adoption of GB practices.
- Lack of Green Building materials.
- Transportation: Poor state of infrastructure and lack of impactful investments hence a lack of efficient transportation systems.
- The government is yet to introduce policies and champion the implementation of green buildings in Nigeria.

CLIMATE POLICIES (NDCS)

- Lack of current policies but NDC includes mention of Climate Smart Cities and future building standards.
- Target for 45% emissions reduction by 2030.

GREEN BUILDING PROGRAMS

- High expectations of EDGE launch with training and awareness forthcoming.
- “Small But Mighty” Nigerian housing initiative to fill current housing deficit with green housing units sourced from local material.

Source: Navigant Research, IFC staff, World Bank NDC Database
GROWTH EXPECTED PARTICULARLY IN HOUSING

- Overall CAGR is 3.8%.
- Due to poor infrastructure, logistics sub-sector (warehousing and transport) lead the market growth.
- Due to urbanization, multi-unit residential is growing much faster than single-family, but single-family residential still dominates with large footprint.

MARKET GROWTH BY SUB-SECTOR (CAGR)

TOTAL MARKET SIZE 2018-25 (USD BILLIONS)

Source: Navigant Research Global Building Stock Database
NIGERIAN GREEN BUILDING MARKET IS STILL NASCENT

ONLY A FEW GREEN PROJECTS ARE TRACKED, CONCENTRATED IN THE TWO MAJOR URBAN AREAS.

GEOGRAPHIC SPREAD

RECENT PROJECTS

- Nestoil Tower
- P&G Nigeria MDO Warehouse
- NOX - Abuja Nigeria
- No4-Bourdilon Street

Source: Green Building Information Gateway
HIGH EXPECTATIONS FOR GREEN DUE TO EDGE PROGRAM

- IFC launched the EDGE program in Nigeria with consortium partner of SGS-thinkstep.
- The ease of use of EDGE software and availability of local staff for marketing and business development is expecting to significantly boost the green uptake.
- EDGE is targeting 20% of new build in select sub-sectors to be certified as green by 2023.
- Penetration in single-family detached residential is lower because most buildings will be informal construction. As a result, the weighted average penetration is 13% in 2025.

<table>
<thead>
<tr>
<th>Sub-Sector</th>
<th>Green penetration projected in 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>25%</td>
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<tr>
<td>Retail</td>
<td>25%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>3%</td>
</tr>
<tr>
<td>Hotels &amp; Restaurants</td>
<td>25%</td>
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<tr>
<td>Institutional</td>
<td>25%</td>
</tr>
<tr>
<td>Warehouse</td>
<td>25%</td>
</tr>
<tr>
<td>Single-Family Detached</td>
<td>8%</td>
</tr>
<tr>
<td>Multi-Unit Residential</td>
<td>25%</td>
</tr>
</tbody>
</table>

Green Buildings as % of Total Floor Space

Source: IFC, SGS and thinkstep
GOVERNMENT POLICIES ARE NASCENT ONLY

NDC

- Chapter on climate smart cities
- Need for affordable housing
- Need for innovative financial products catering to families underserved by banks
- Recognizes need for new housing standards
- Focus on adaptation and risk mitigation with vulnerable communities

OTHER INITIATIVES

- National Centre for Energy Efficiency and Conservation at University of Lagos
- National Building Code of 2006 did not include energy efficiency

Hindrances to Green

<table>
<thead>
<tr>
<th>S/N</th>
<th>Hindrances to GB Developments</th>
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<tbody>
<tr>
<td>1</td>
<td>GB Technical Know How (GB requisite knowledge among the Built environment Professionals &amp; the scarcity of GB certified professionals)</td>
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<tr>
<td>2</td>
<td>Lack of GB cost data and other performance related Data</td>
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<td>3</td>
<td>The Perception of GB as Expensive Concept (Perceived Increased cost for incorporating GB features etc.)</td>
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<td>4</td>
<td>GB as a new change (which comes with its associated risks)</td>
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<td>5</td>
<td>Cultural, Economic, Social and Technological (CEST) barriers.</td>
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<tr>
<td>6</td>
<td>Divergent interests and views of success factors and success criteria of GB developments among stakeholders</td>
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<tr>
<td>7</td>
<td>GBs awareness</td>
</tr>
<tr>
<td>8</td>
<td>Lack of data for using GB assessment systems</td>
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<td>9</td>
<td>Lack of Locally or a single unified/standard GB assessment system</td>
</tr>
<tr>
<td>10</td>
<td>In-availability of local GB material and other components and High cost of Imported GB materials</td>
</tr>
</tbody>
</table>

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/
**EDGE CERTIFICATION IS FAST, EASY, AND AFFORDABLE**

**REGISTRATION**

| Per Project Site: $360 |

**PROJECT TYPE** | **CERTIFICATION** | **DESIGN AUDIT** | **FINAL AUDIT** | **TOTAL** |
---|---|---|---|---|
Residential (one unit type) | $1,480 | $3,600 | $3,650 | $8,730 |
*Residential (per additional unit type, up to three types)* | $490 | $390 | $390 | |
Commercial (single end use) | $1,480 | $3,600 | $3,650 | $8,730 |
*Mixed-Use Buildings (per additional end use)* | $990 | $2,670 | $1,560 | |

*Discounts are available for projects where the client has hired an EDGE Expert as well as for consecutive project registrations. For multi-use buildings, residential buildings with more than three unit types, or complex projects with multiple buildings, contact SGS for custom pricing.*

Details are registration forms can be found on the EDGE program website: [https://www.edgebuildings.com/certify/nigeria](https://www.edgebuildings.com/certify/nigeria)
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.
DONOR ACKNOWLEDGEMENT

IFC thanks the following national donors for their generous support of the EDGE program: the State Secretariat for Economic Affairs of Switzerland (SECO); the European Union; the Ministry of Finance of Japan; the Hungarian Export Import Bank; the Canada Climate Change Program and the Department of Foreign Affairs, Trade and Development Canada; the Royal Ministry of Foreign Affairs of Denmark and the Danish Green Growth Fund; the Federal Ministry of Finance of Austria; and the Ministry of Foreign Affairs of Finland.

In addition, IFC thanks contributors to the GEF-IFC Earth Fund Platform, and the Energy Sector Management Assistance Program (ESMAP) of the World Bank whose support helped seed EDGE.

COLLABORATION ACKNOWLEDGEMENT

IFC thanks the Georgetown University McDonough School of Business for collaborating on developing the market intelligence reports.