

GREEN BUILDINGS MARKET INTELLIGENCE COTE D' IVOIRE COUNTRY PROFILE



Creating Markets, Creating Opportunities

COTE D'IVOIRE: COUNTRY SUMMARY





OTHER FACTORS

- Decimated by political turmoil and civil war, until peaceful elections in 2015.
- Demand for power increases 10% annually.
- Current green initiatives more geared toward the country's burgeoning cocoa industry.
- More emphasis on low cost housing by external stakeholders.



CLIMATE POLICIES (NDCS)

- Government implementing NDC to reform energy, waste, infrastructure, and transport issues.
- Targeting 28% emissions reduction by 2030.



MARKET STATUS

- Peaceful elections in 2015 presents great opportunity for green building entrance.
- Country is experiencing high population growth, strong momentum in income growth, and demand for higher living standards.
- Now Africa's fastest growing economy in 2016, with growth rate of 8.5%



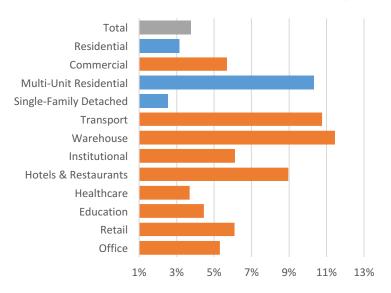
GREEN BUILDING PROGRAMS

- Nascent green market.
- Implementation of NDC should increase speed of green building implementation.
- IFC has invested about USD 8 million on green buildings based in the country's hotels industry.



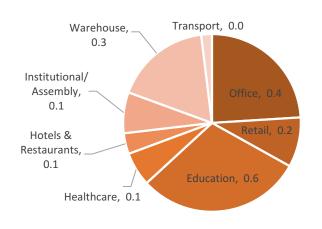
GROWTH EXPECTED IN LOGISTICS AND RESIDENTIAL

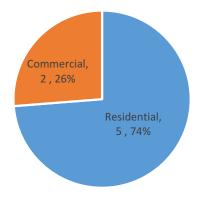
MARKET GROWTH BY SUB-SECTOR (CAGR)

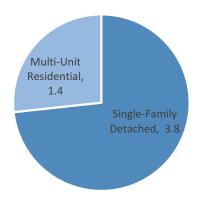


- Highest growth rates are expected in area connected to logistics: transport and warehousing.
- In commercial, hotels are also expecting high growth.
- Due to urbanization, growth in multiunit residential surpasses single-family homes, but the informal construction in single-family homes still dominates the market.

TOTAL MARKET SIZE 2018-25 (USD BILLIONS)









GREEN UPTAKE WILL BE **SLOW** IN THE NEXT FEW YEARS











GREEN MARKET SUPPORT RATING













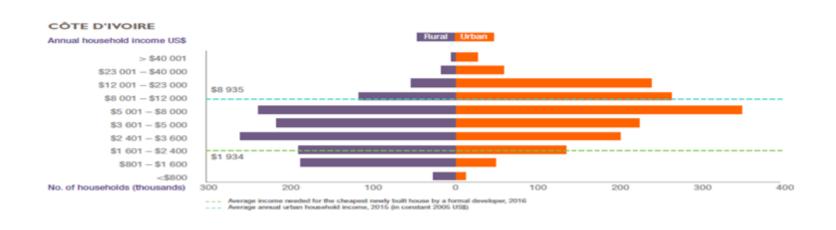
- Green market development is expected to be very slow as there are not yet active programs by international institutions.
- Green uptake could be accelerated by climate policies implementation.



CLIMATE POLICIES ARE FOCUSED ON ENERGY AND ADAPTATION BUT HOUSING NEEDS REMAIN

Support for low cost housing presents entry opportunity for building sustainability

- 400K low-cost housing units needed to keep up with economic demand.
- Many domestic and international developers are currently constructing low-cost housing, allowing for green building implementation.



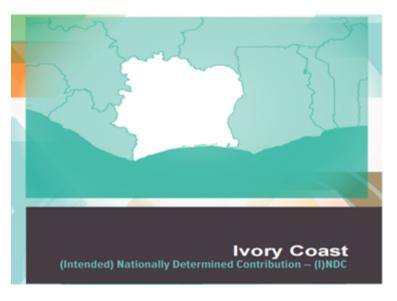
Source: World Bank NDC Database

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IMPLEMENTING NDCS

- Côte d'Ivoire is securing technical assistance for NDC implementation.
- High population growth, strong momentum in income growth, and demand for higher living standards in Côte d'Ivoire present major investment opportunities for building upgrades, transport, and waste management.
- Côte d'Ivoire's NDC also highlights policy priorities for transport, including upgrading and expanding public transportation infrastructure, improving the efficiency of freight transportation.





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: **98,000m**²

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:

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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 M², 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
Residential (per additional unit type)	\$490	\$890	\$460	
Commercial (single end use)	\$1,550	\$4,005	\$4,710	\$10,265
Mixed-Use Buildings (per additional end use)	\$990	\$2,670	\$1,560	

^{*}Price per type of project; Auditor fee is included

Details are 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 <u>Climate</u> <u>Investment Opportunity Report</u> (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 <u>Global Building</u> <u>Stock Database</u> 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 <u>Green Building</u> <u>Information Gateway</u>, 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 <u>Green Building</u> <u>Information Gateway</u>.
- Finally, pricing for EDGE certification was included to illustrate that green certification is affordable and achievable in emerging markets.



ACKNOWLEDGEMENTS

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