



# GREEN BUILDINGS MARKET INTELLIGENCE

## EGYPT COUNTRY PROFILE



*Creating Markets, Creating Opportunities*

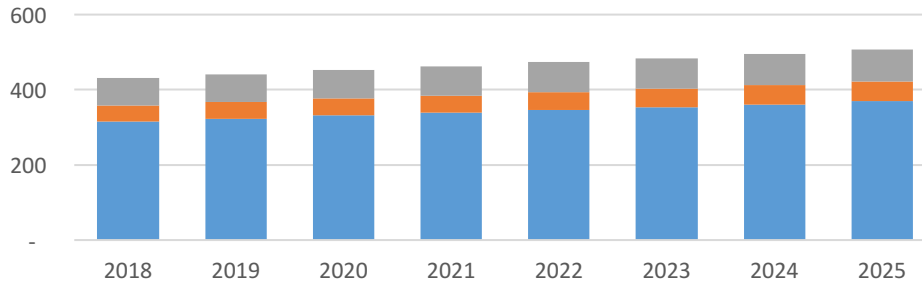
# EGYPT: COUNTRY SUMMARY

## MARKET GROWTH



Building Stock (million m2)

■ Residential ■ Office & Retail ■ Other Commercial



### Market through 2025

### Total market

### Green market

Commercial

USD 21.3 B

nascent

Residential

USD 59.9 B

nascent

Total Residential Units

730,000

nascent

## OTHER FACTORS



- Frequent electricity blackouts.
- Growing Population.
- Country will need to focus on demand side management to solve energy crisis.

## GREEN BUILDING PROGRAMS



- Egypt Green Building Council is a prospective member of the World GBC.
- LEED has a large footprint, with 36 certified buildings and over 400 registered projects.
- EDGE can be an answer for the residential sector, due to its simplicity and affordability of certification.

## CLIMATE POLICIES (NDCS)



- Identified EE improvements in buildings as one of the target policies. EE is 'cornerstone' of policy, allowing decoupling of economic growth and energy needs.

## MARKET STATUS



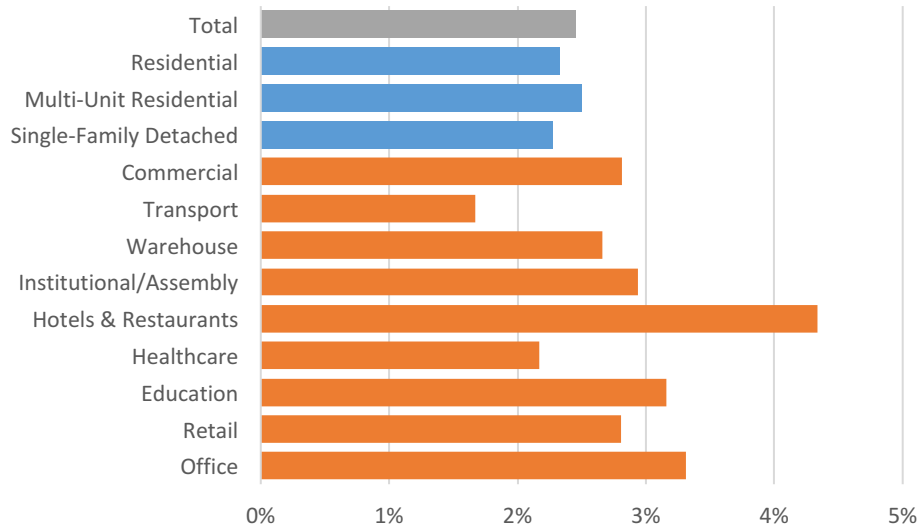
- Government pledged 1 million new housing totaling 20 billion USD over the next five years.
- In 2015, GIZ allocated 50 million dollars for Green buildings.
- Receiving funding from Saudi Arabia to implement 300 projects totaling 50 million US dollars.
- The Housing and Building National Research Center (HBRC) is responsible for the design and planning of the Eco-Village.

Sources: Navigant Research Global Building Stock Database, Green Building Information Gateway, World Bank NDC Database



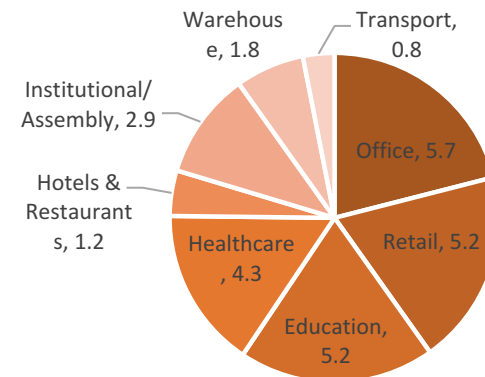
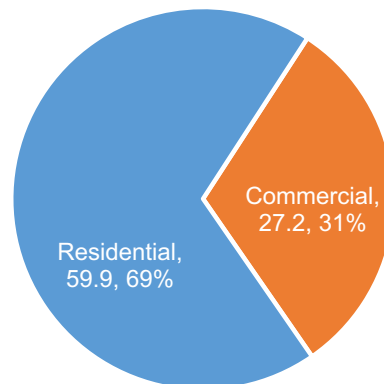
## STEADY GROWTH EXPECTED ACROSS THE INDUSTRY

MARKET GROWTH BY SUB-SECTOR (CAGR)



- Egypt has a steady growth rate in all sectors.
- Hotels & Restaurants are expected to grow at the rate of 4.3%, two times the growth rate of all other sectors.
- 69% of the total floor space will in Egypt will be residential with an area of 60 million m<sup>2</sup>.
- In the Commercial sector, office, retail and education are the fastest growing segments.
- The green market will have a slow uptake through resource efficiency needs may boost uptake with the right government policies.

TOTAL MARKET SIZE 2018-25 (USD BILLIONS)



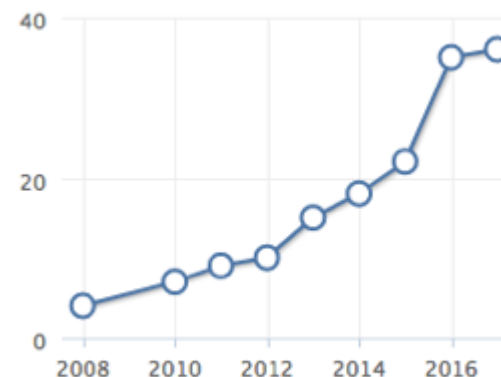


# NASCENT GREEN MARKET IS TAKING OFF

LEED is the only certification tracked in Egypt. While 36 projects are certified, over 400 are in registration stage.



Cumulative activity count, by year:



Green projects are clustered in the major urban areas.



Notable projects include:

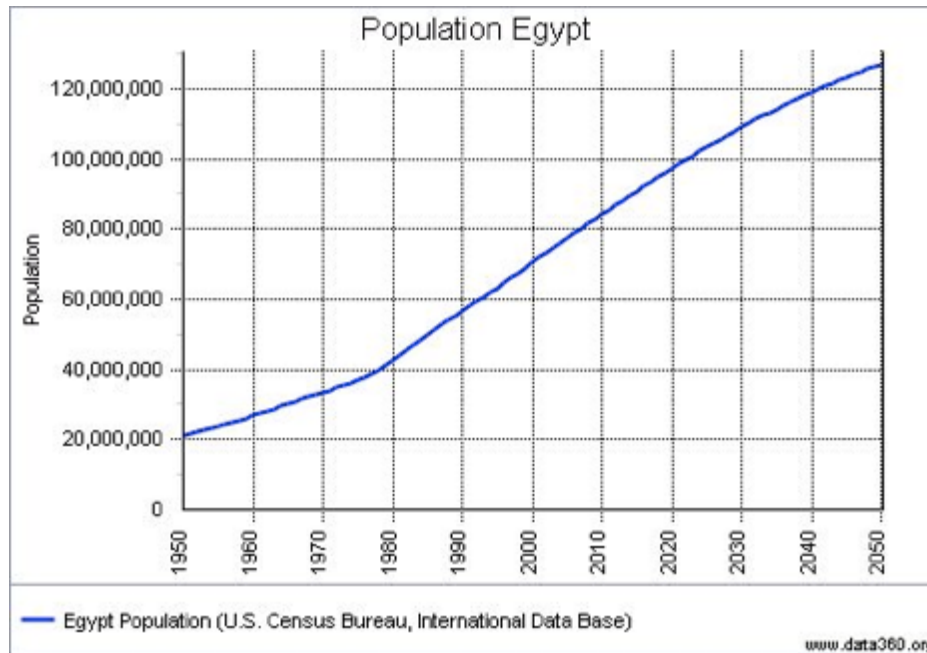
- Bureau 175
- Aramex Burg El-Arab
- ROC Office Building
- Credit Agricole Egypt Headquarters
- Galleria 40
- VINTE homes
- Mars Egypt Site Development
- Outsourcing Service Building MB4



# GROWING DEMAND FOR ENERGY AND WATER IS DRIVING THE NEED FOR GREEN BUILDINGS IN EGYPT

## NEED FOR GREEN BUILDINGS

- Population is projected to exceed 120 million by 2050
- Increase in demand for energy, water, and food
- Nile Delta is the home to 95% of Egypt's population, rising sea level have negative effect on the region







# EGYPT MEGA PROJECT TO BUILD THE BIGGEST SMART CITY

## CAIRO

- Cairo is one of world's most crowded cities.
- Population is expected to grow from 18 million to 40 million people by 2050.
- Rebuild city to relieve congestion.
- HBRC is in-charge of planning.



## SMART CITY

- New Administration Capital for Urban Development in charge of the project.
- Major companies involved with the project include Orascom, Hassan Allam, Petrojet, Concord, Talaat Mustafa, Arab Contractors, and Wadi El Nile.
- Consist of residential districts, artificial lakes, educational institutions, hospitals and clinics, mosques, 40,000 hotel rooms, a major theme park, 91 square kilometers of solar energy farms, an electric railway link with Cairo, and a new international airport.



# GOVERNMENT IS BUILDING 1 MILLION NEW HOUSING UNITS

## SOCIAL HOUSING PROJECT

- 200,000 houses to be build each year, 1 million by 2020.
- Upgrade informal settlements and bring water to all homes.
- Upgrade includes 240 areas with 150,000 families.
- Government is trying to find solution to poorly lit and poorly ventilated rows.

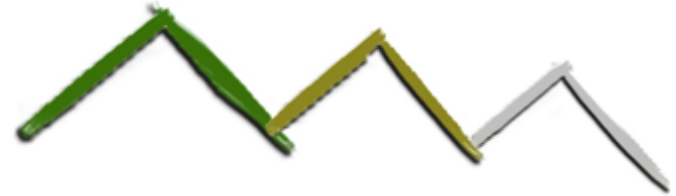




# EGYPT GREEN BUILDING COUNCIL

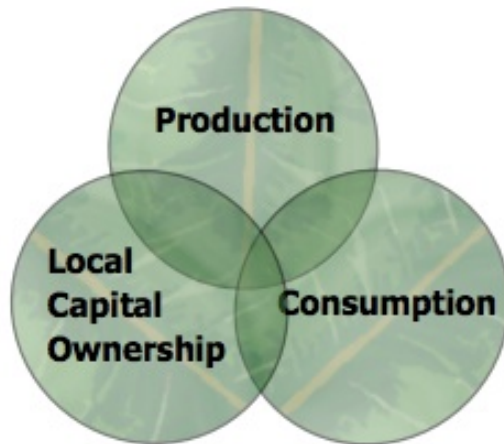
## OVERVIEW

- Egypt GBC was established in 2009
- Green Pyramid Rating System(GPRS) is the rating system used in Egypt to certify green buildings
- GPRS considers the ecological, industrial, and social challenges facing EGYPT



Pyramid rating System

1. Certified
2. Silver Pyramid
3. Golden Pyramid
4. Green Pyramid



## ECO-VILLAGE

- EGBC was able to get the proposal for building the first Eco-Village in Egypt approved by the Minister of Housing, Utilities, and Urban Communities
- Located South of Cairo
- The new eco village will try to integrate production, consumption, and ownership to provide sustainable standards of living

Access more Information at <http://egypt-gbc.org>





## LEARN MORE ABOUT EDGE CERTIFIED PROJECTS



### KESERWAN MEDICAL CENTER

Ghazir, Lebanon

Predicted Savings of EDGE Certification:



21% Energy Savings



25% Water Savings



26% Less Embodied Energy in Materials



### KESAR CITY

Gujarat, India

Predicted Savings of EDGE Certification:



23% Energy Savings



24% Water Savings



71% Less Embodied Energy in Materials

Access more case studies at <https://www.edgebuildings.com/projects/>



## PROJECTS CAN CHOOSE BETWEEN TWO EDGE CERTIFIERS FOR **FAST, EASY, AND AFFORDABLE** CERTIFICATION



CERTIFICATION	PRICE (PER M <sup>2</sup> , 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 m<sup>2</sup>; Project appoints an auditor



PROJECT TYPE	CERTIFICATION	DESIGN AUDIT	FINAL AUDIT	TOTAL
Residential (one unit type)	\$1,500	\$3,650	\$4,320	<b>\$9,470</b>
<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	<b>\$10,265</b>
<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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