



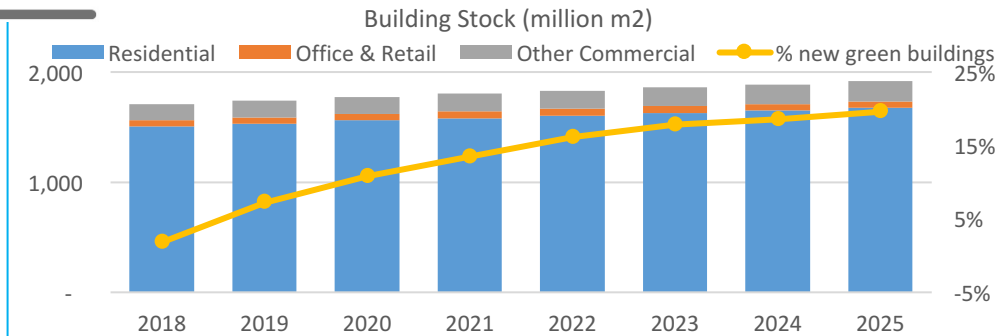
# GREEN BUILDINGS MARKET INTELLIGENCE INDONESIA PROFILE



*Creating Markets, Creating Opportunities*

# INDONESIA: COUNTRY SUMMARY

## MARKET GROWTH



Market through 2025

Total market

Green market

Commercial

USD 48 B

USD 4 B

Residential

USD 210 B

USD 30 B

Residential units

2.3 M

350,000

## OTHER FACTORS



- Government passed stricter legislation to increase environment quality of buildings and encourage green buildings.
- Construction industry accounts for roughly 10% of GDP (as May 2016).

## GREEN BUILDING PROGRAMS



- Green Building Council Indonesia is emerging member of WGBC.
- IFC partnered with GBCI in 2015 to launch EDGE certification program.
- IFC's program is supported by in-country officer and regional manager as well as technical staff.
- 10 EDGE Experts certified.
- 23 registered green projects through EDGE and other green labels.
- IFC provided a 20% guarantee for a 500B Rupiah (approximately \$44M) to provide first partial credit guarantee for local bond issue in domestic capital markets.

## CLIMATE POLICIES (NDCS)



- Indonesia has committed to reduce its green house emissions by 26% (41% with international support) below BAU by 2020.
- Mitigation strategy by GOI since 2009.

## MARKET STATUS



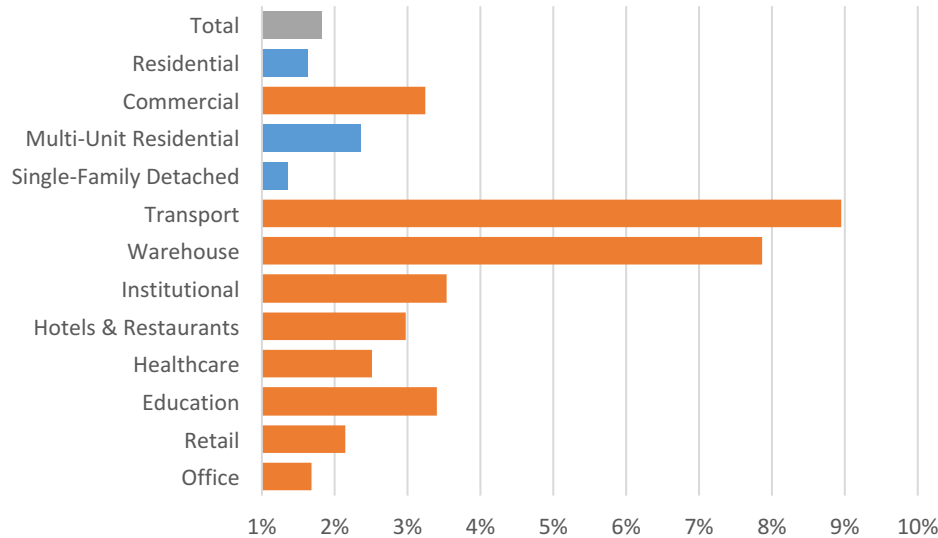
- Unmet housing demand was estimated at up to 15%.
- Government to start building 1 million housing units.
- Partnered with PT Ciputra, one of leading residential developers, to provide green mortgage in Indonesia.
- In 2016, PT Ciputra was granted \$30M loan to help cut housing deficit and promote green buildings.
- 140 buildings to receive GREENSHIP building certification (as of Oct 2015).

Source: Navigant Research Global Building Stock Database



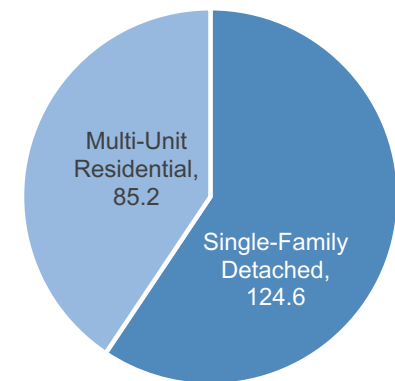
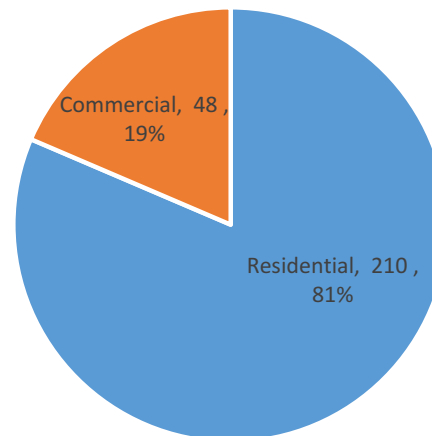
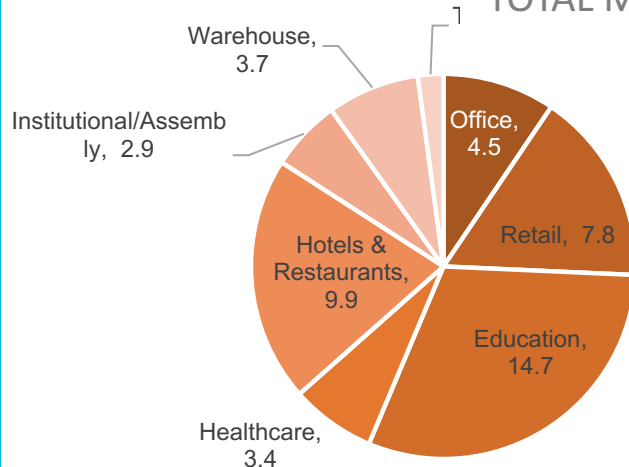
# HEALTHY GROWTH IS EXPECTED ACROSS ALL THE SUB-SECTORS

MARKET GROWTH BY SUB-SECTOR (CAGR)



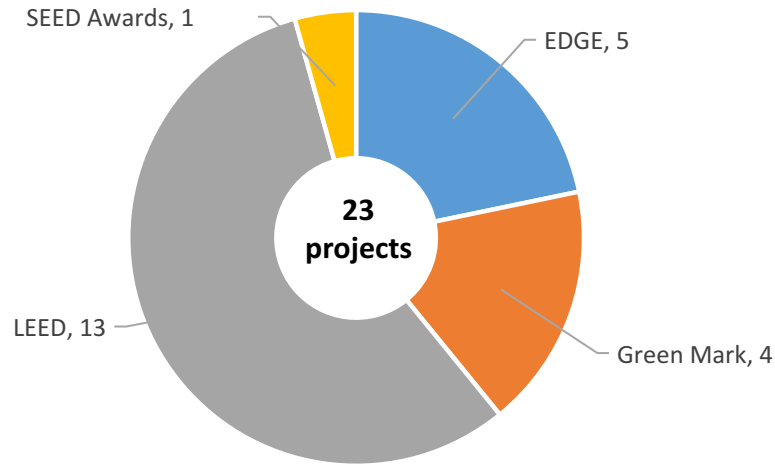
- Indonesia is experiencing healthy growth across all the sub-sectors.
- Commercial is growing faster than residential, but the residential stock is still the largest portion of the country's footprint.
- Indonesia currently has substantial unmet housing needs. An estimated 820-920,000 new units are needed each year to respond to annual demand from population growth.
- Government of Indonesia (GOI) has planned projects to solve this problem, one of which is to start building 1 million housing units over the next 5 years.

TOTAL MARKET SIZE 2018-25 (USD BILLIONS)

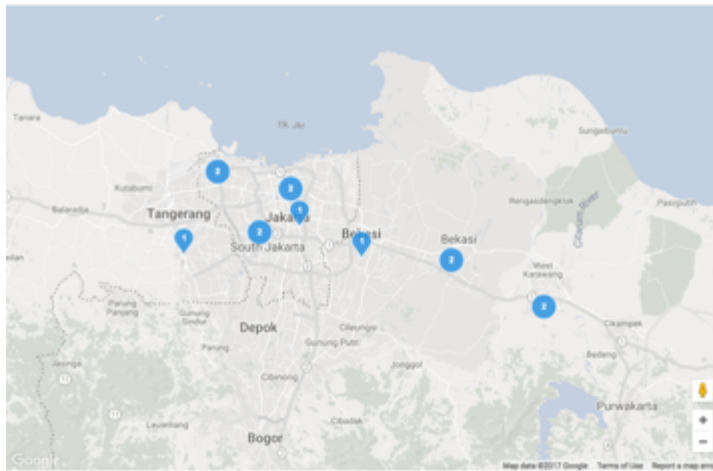
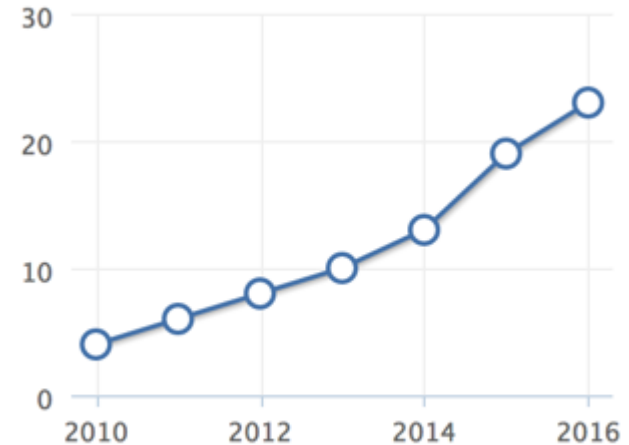




# INDONESIA IS UNDERGOING **GROWTH** IN GREEN BUILDINGS



Cumulative activity count, by year:



Projects are largely in the Jakarta Metro area.

Recent projects include:

- P&G SDC Karawang
- PT. Unilever Indonesia, Tbk Savory Factory
- P&G Jakarta Fabric Care
- Rajawali Project Phase 2
- P&G Aurora Hair Care
- Citra Lake Suites
- Schlumberger Jakarta Integrated Base
- IFF HVAS Demolition and Rebuild
- Citra Plaza Apartments
- Citra Tower Kemayoran
- Taekwang Green Office



## HIGH EXPECTATIONS FOR THE GREEN MARKET

- Green buildings can reach as high as 20-25% of the market in 2025 due to combination of policy support, tax benefits, educational and awareness programs, and realized savings from energy efficiency.
- IFC projects that the overall percentage of new green building is expected to increase by 2% to 5% steadily every year, at least until 2030.
- This is in part due to IFC's own EDGE program, combined with other international and local rating tools.



Photo: Daan Mogot Baru Office Park, EDGE certified building





# GOVERNMENT IS ENCOURAGING GREEN BUILDINGS

## GREENSHIP RATING TOOL



*GREENSHIP is a rating tool developed by GBCI to benchmark green building in Indonesia.*

*GREENSHIP contains six categories:*

1. Appropriate Site Development (ASD)
2. Energy Efficiency & Conservation (EEC)
3. Water Conservation (WAC)
4. Materials & Resources Cycle (MRC)
5. Air Quality & Leisure Air (Water Indoor Health & Comfort / IHC)
6. Building & Environment Management (BEM)

There are 5 Type of GREENSHIP :

1. GREENSHIP New Building
2. GREENSHIP Existing Building
3. GREENSHIP Interior Space
4. GREENSHIP Homes
5. GREENSHIP Neighborhood

## GOVERNMENT POLICIES AND SUPPORT

- Law No. 32 year 2009 about Environmental Protection and Management
- Ministry of Public Works No. 05/PRT/M/2008 on Guidelines of Supply and Open Green Space Used
- Instruction President No.13 year 2011 on Saving Water and Energy
- Governor Rule DKI Jakarta No.38 year 2012 on Green Building (GBCI, 2012)

## GREENSHIP CERTIFIED BUILDING EXAMPLES



United Tractor Head Office



Dusaspun Gunung Putri

More policies can be found on:  
<http://www.gbcindonesia.org/rules-and-regulations>

\*Source: <http://www.gbcindonesia.org/greenship>



## POLICIES SUPPORT GREEN INVESTMENT



- Kampoeng BNI, BNI Go Green, and Partnership Program
  - BNI (Bank Negara Indonesia) programs to facilitate soft loans to small and micro business owners to increase productivity, to help rehabilitate the environment, and to stimulate economic welfare.
- Environment and Forestry Ministry provide soft loans for green investment (around 5% point below average loan rate), subject to approval from Finance Ministry and Financial Service Authority.
- Government provides tax allowance for business areas that can contribute to environmental preservation (for example: clean water reservoir, waste management industry, eco-tourism, etc).
- Ministry also proposed to exempt taxes on import of equipment that can reduce pollution.

Government targeted green investment from foreigners to reach \$56 billion by 2019 and local green investment to reach Rp 448 trillion.



## INDONESIA GREEN BUILDING COUNCIL IS COORDINATING ADVOCACY



- Established in 2009 by professionals in the design and buildings construction sector that have a passion for green buildings.
- GBC Indonesia aims to transform the market through advocacy, awareness, and green rating tools.

Contact at <http://gbcindonesia.org/>





# IN-COUNTRY **EDGE EXPERTS** CAN HELP PROJECTS NAVIGATE THE CERTIFICATION PROCESS

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Full list available from:  
[https://www.edgebuildings.com/  
edge-experts/edge-experts-  
around-the-world](https://www.edgebuildings.com/edge-experts/edge-experts-around-the-world)



## LEARN MORE ABOUT EDGE CERTIFIED PROJECTS



### CITRA TOWER KEMAYORAN

<https://www.edgebuildings.com/projects/citra-towers-kemayoran/>  
Mix-use complex

Predicted Savings of EDGE Certification:



27% Energy Savings



65% Water Savings



37% Less Embodied Energy in Materials



### SAVEMAX SUPER GROSIR CIBUBUR

<https://www.edgebuildings.com/projects/savemax-super-grosir-cibubur/>  
Retail

Predicted Savings of EDGE Certification:



29% Energy Savings



49% Water Savings



36% Less Embodied Energy in Materials

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



## EDGE CERTIFICATION IS FAST, EASY, AND AFFORDABLE

EDGE certification services in Indonesia are provided exclusively by GBCI:



Costs	Commercial Price per Type	Residential Price per Type (for 1-2 types)	Residential Price per Type (for more than 2 types)
Registration	Rp. 2.500.000,-	Rp. 2.500.000,-	Rp. 2.500.000,-
Certification	Rp. 25.000.000,-	Rp. 25.000.000,-	Rp. 20.000.000,-
TOTAL	Rp. 27.500.000,-	Rp. 27.500.000,-	Rp. 22.500.000,-

- Taxes and auditor fees excluded.
- **Note:** hiring an auditor is required.

**MORE DETAILS AND REGISTRATION FORMS:**  
<https://www.edgebuildings.com/countries/indonesia>



# 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

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