



GREEN BUILDINGS MARKET INTELLIGENCE VIETNAM PROFILE



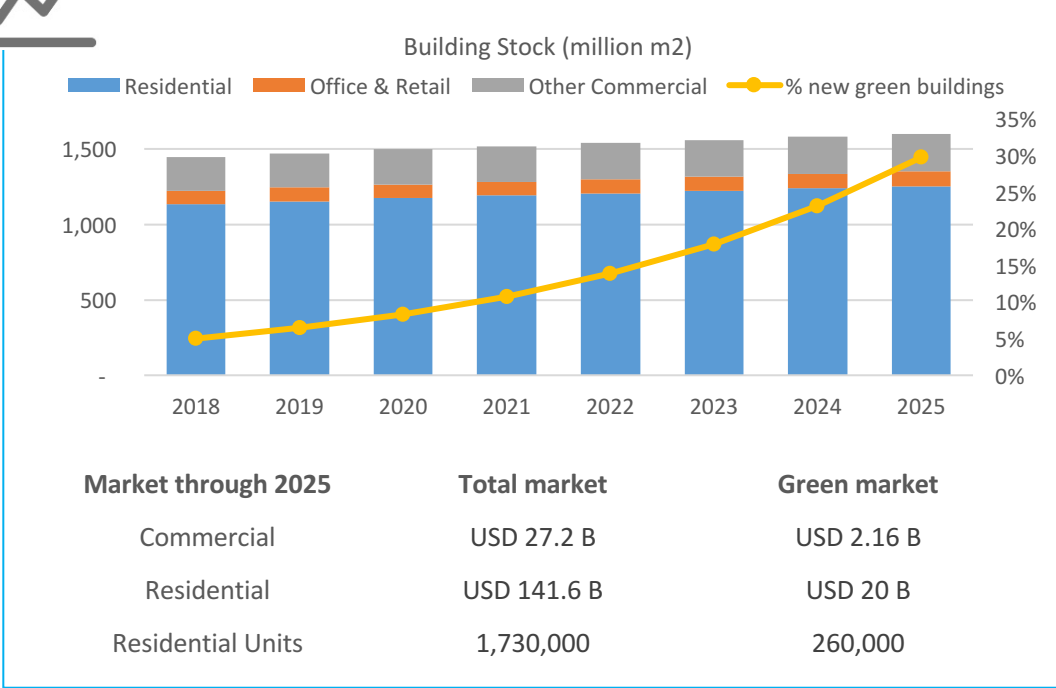
Creating Markets, Creating Opportunities



VIETNAM: COUNTRY SUMMARY



MARKET GROWTH



OTHER FACTORS

- Electricity prices are increasing.
- Solid growth in the construction sector.



CLIMATE POLICIES (NDCS)

- Vietnam has pledged to reduce its GHG emissions by 8% below baseline by 2030 (25% with international support).
- Government support in form of green building codes.



MARKET STATUS

- According to BCI Asia and CBRE Group Inc. the number of green building projects under construction is 381, and is projected to increase to 582 by 2030.
- Construction sector grew at a rate of 9.1% in 2016.
- Government is planning to construct 1 million affordable housing by 2020.



GREEN BUILDING PROGRAMS

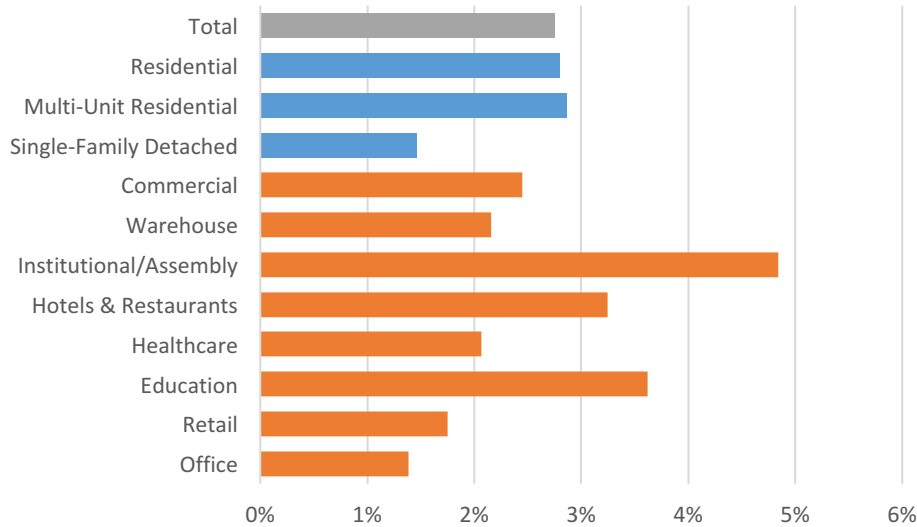
- Vietnam was the first market in East Asia to introduce the EDGE Program.
- 20% of new construction projects expected to earn EDGE certification.
- 42 projects tracked through EDGE and other green certifications.

Source: Navigant Research Global Building Stock Database, Green Building Information Gateway



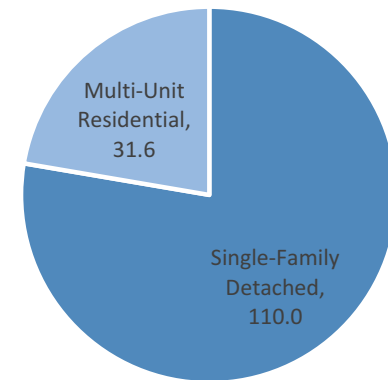
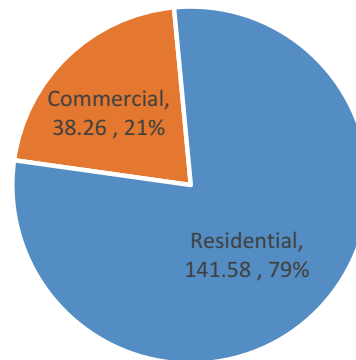
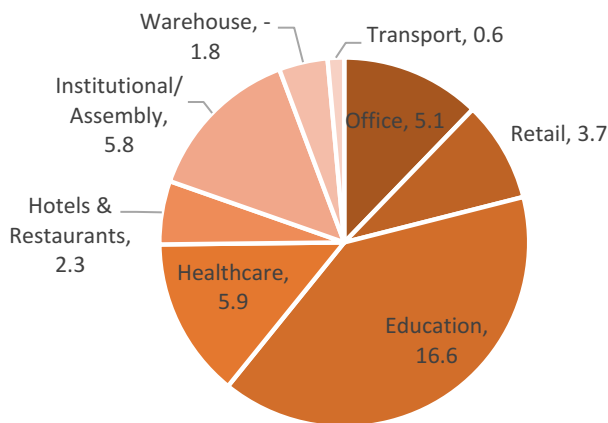
STEADY GROWTH EXPECTED ACROSS ALL THE SECTORS

MARKET GROWTH BY SUB-SECTOR (CAGR)



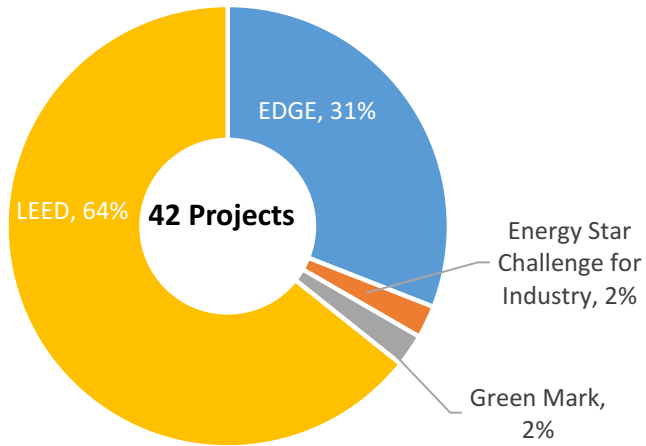
- Steady growth rates for both the residential and commercial sector, though residential dominates by overall floor space.
- The commercial sector will have a overall floor space of 38.3 million m², while the residential sector will have a cumulative area of 141.6 million m².
- Single-family detached dominates the residential market.

TOTAL MARKET SIZE 2018-25 (USD BILLIONS)

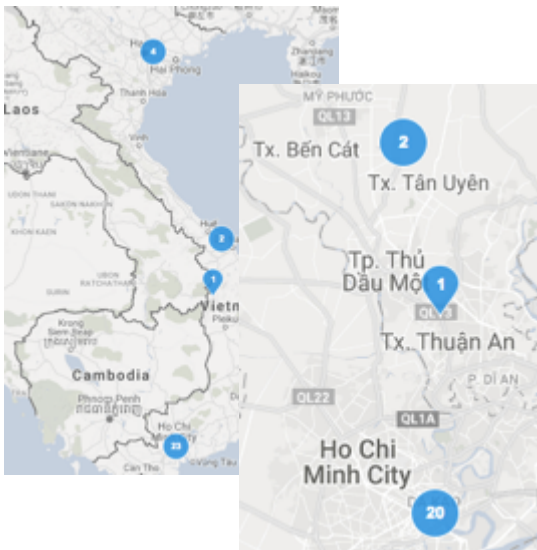
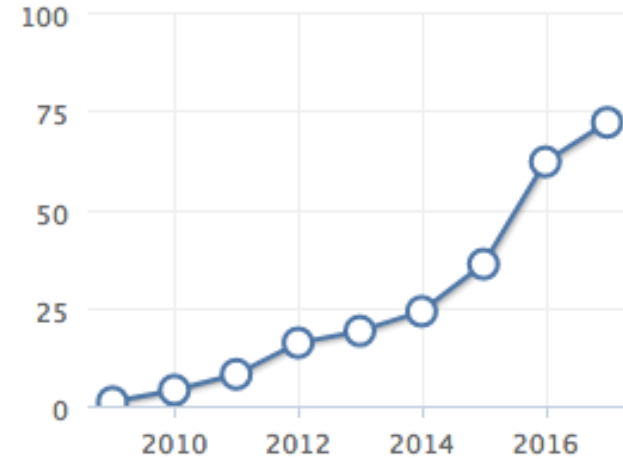




GREEN MARKET HAS BEEN STEADILY DEVELOPING



Cumulative activity count, by year:



Projects are located largely in Ho Chi Minh City and a few other metropolitan areas.

Recent projects include:

- TAL - Vietnam Garment Manufacturing Ltd
- PITCO Food Factory
- Metro 5 Building
- Roche Vietnam HCMC Office
- Worldon Viet Nam Company Limited
- Saitex International
- Fashion Garments 2 Co. Ltd- Unit 2
- Deutsche Bekleidungswerke Ltd
- EPIC Designers Vietnam Limited
- Johnson & Johnson Ho Chi Minh Office
- Blades and Razor Expansion - P&G Bencat



GREEN WILL CONTINUE TO TAKE OFF QUICKLY

- Green buildings can be up to 30% of the market by 2025. IFC is supporting the market transformation program in the country.
- Green penetration is especially high in the commercial sector.
- Green has lower penetration in single-family residential where green certification can be difficult. As the middle class continues to grow in Vietnam, the residential sector will have the most opportunities for green buildings.
- Government policies can significantly boost the green market development.

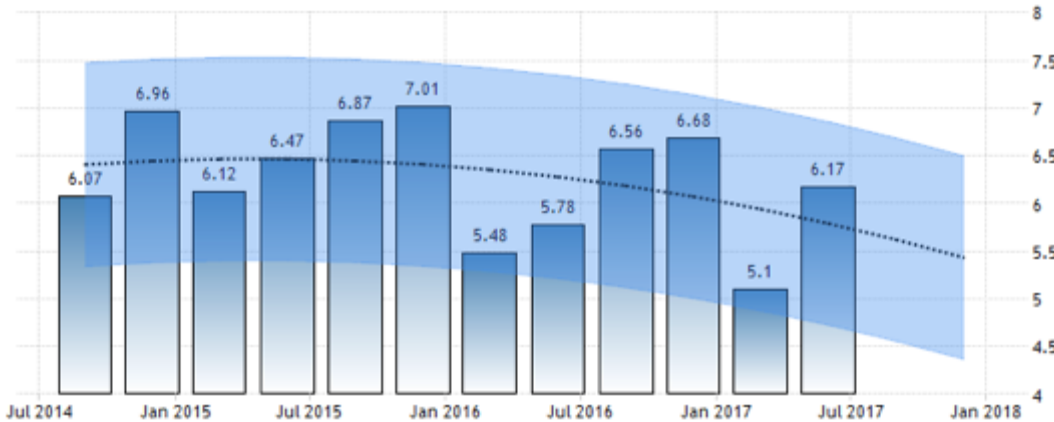


Photo: Forest in the Sky EDGE certified residential project in Vietnam



VIETNAM MUST FOCUS ON DEMAND-SIDE MANAGEMENT TO IMPROVE ENERGY DEMAND AND AIR QUALITY

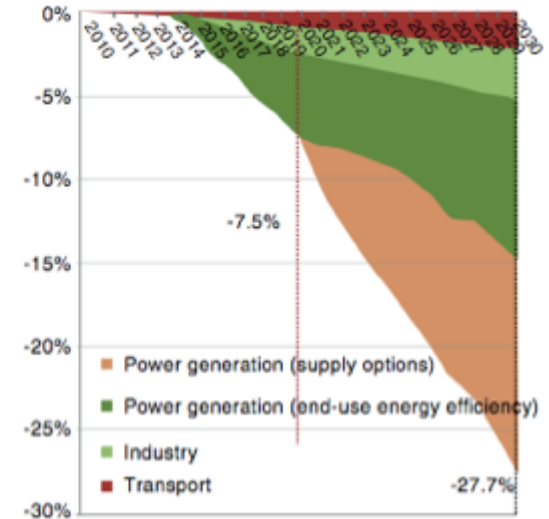
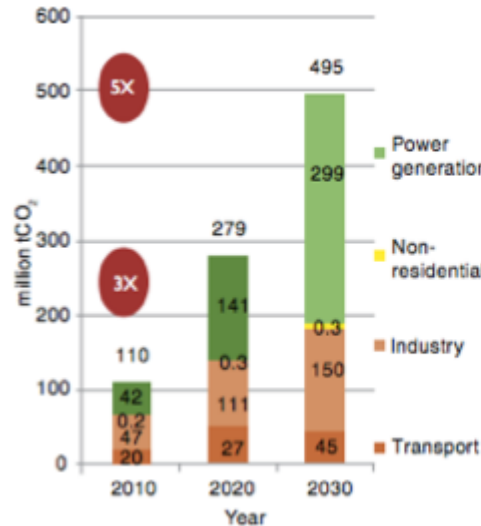
VIETNAM GDP ANNUAL GROWTH RATE



SOURCE: TRADINGECONOMICS.COM | GENERAL STATISTICS OFFICE OF VIETNAM

- Vietnam has an average annual growth rate of 6.1%
- As growth increases, so does the requirement for energy

- Since 1993, GHG Emissions in Vietnam have grown more than 200%
- At the current rate Emissions will increase by five-fold by 2030





GOVERNMENT IS COMMITTED TO GREEN POLICIES

GOVERNMENT POLICIES AND SUPPORT

- Government adopted Vietnam National Green Growth Strategy (VNGGS) in 2012.
- USAID's Vietnam Clean Energy-Energy Efficiency Program(VCEP) and Government of Vietnam Partnership to update green building code.
- MPI-USAID-UNDP partnership to 4-year 4.128 million dollars for Green Growth.
- IFC and Danish government promoting the training.



CLEAN ENERGY PROJECTS

- Vietnam is ranked number four in the world for the number of projects
- Total amount of carbon reductions about 137.4 million tons
- High Performance buildings are 30-50% more efficient than current which could reduce emissions by 19 million tonnes by 2040



EDGE EXPERTS CAN HELP PROJECTS NAVIGATE THE CERTIFICATION PROCESS

VIETNAM

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Full list available from:
<https://www.edgebuildings.com/edge-experts/edge-experts-around-the-world>



LEARN MORE ABOUT EDGE CERTIFIED PROJECTS IN VIETNAM



CIPUTRA

<https://www.edgebuildings.com/projects/ciputra/>
Building Category: Residential

Predicted Savings of EDGE Certification:



21% Energy Savings



24% Water Savings



24% Less Embodied Energy in Materials

FPT URBAN COMPLEX

<https://www.edgebuildings.com/projects/fpt-urban-company/>
Building Category: Mixed Use

Predicted Savings of EDGE Certification:



21% Energy Savings



32% Water Savings



20% Less Embodied Energy in Materials



To access these case studies and others, visit <https://www.edgebuildings.com/projects/>



EDGE CERTIFICATION IS FAST, EASY, AND AFFORDABLE

SGS

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

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



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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