



GREEN BUILDINGS MARKET INTELLIGENCE

MEXICO COUNTRY PROFILE



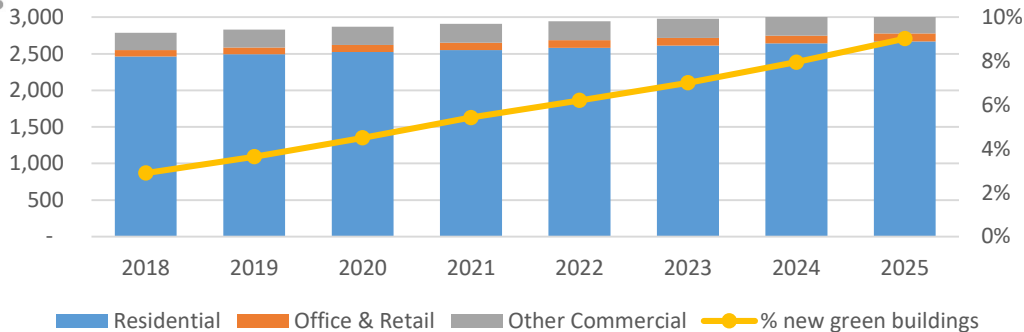
Creating Markets, Creating Opportunities

MEXICO: COUNTRY SUMMARY



MARKET GROWTH

Building Stock Expected Growth (million m2)



Market through 2025

Commercial

USD 46

Residential

USD 240

Residential units

2,640,000

Total market

Green market

USD 4B

USD 26B

170,000

OTHER FACTORS

Experiencing favorable demographic dynamics.

Growing workforce and urbanization.

GREEN BUILDING PROGRAMS

Rapid growth in green buildings with over 1,100 certified and registered projects.

SUME – Mexico's Green Building Council provides advocacy, training, and awareness.

Program through Infonavit for green mortgages and support from IADB, KFW, GIZ

CLIMATE POLICIES (NDCS)

Sophisticated policies for green buildings in effect for a number of years and expected to scale up – Mexico sees itself as a leader in the green homes space.

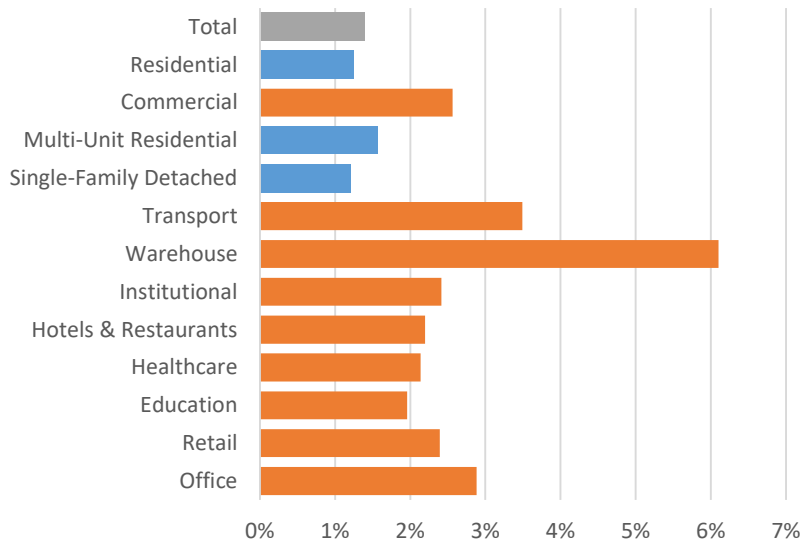
MARKET STATUS

Mature market where growth rates are slowing down somewhat, but commercial market is still strong. Sizeable market volumes are expected.



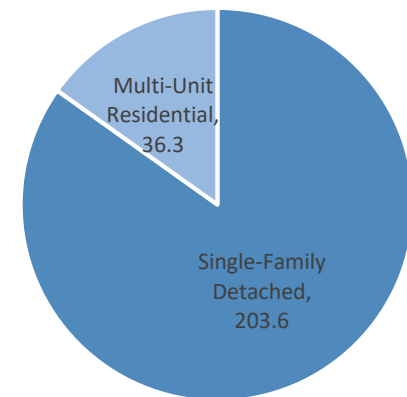
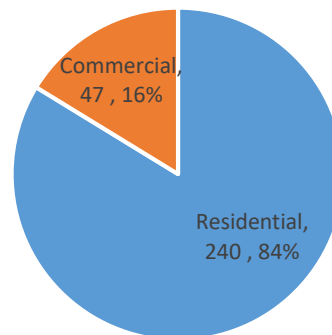
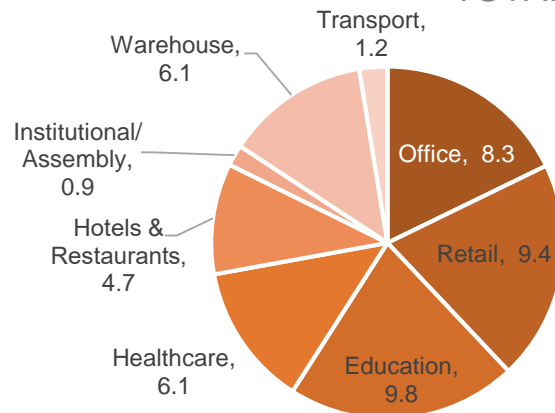
MEXICO IS EXPERIENCING MODERATE GROWTH

MARKET GROWTH BY SUB-SECTOR (CAGR)



- Mexico is a maturing market where growth rates are slowing down. Total market CAGR is 1.4%.
- Large footprint of buildings needed to be constructed still creates a sizeable market.
- Commercial market growth rates are high, but residential market will lead in overall space due to housing needs, primarily in the single-family market.
- Green market is expected to grow due to an already established green presence and coordinated efforts by several agencies.

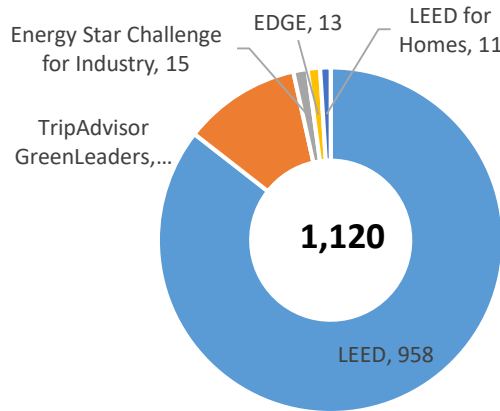
TOTAL MARKET SIZE 2018-25 (USD BILLIONS)



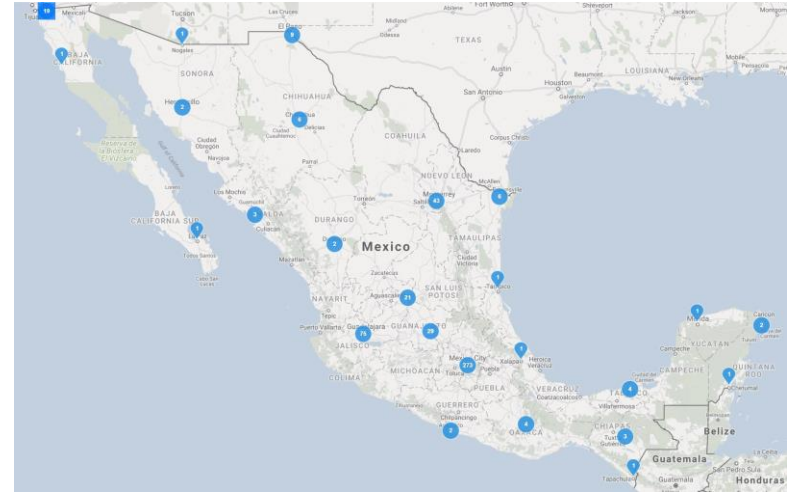


GREEN BUILDINGS ARE EXPERIENCING RAPID GROWTH

In 2017, Mexico counted 411 published green building activities, including certifications and registrations.



Certified and registered buildings are located throughout Mexico with the highest density occurring in Mexico City as well as other urban centers



Cumulative activity count, by year:



Notable projects include:

Type	Name	Location	Investor
Industrial Manufacturing	FINSA Santa Catarina Multi 2	Ciudad Santa Catarina	FINSA Ingenieria y Construccion
Office	Rotoplas	Ciudad de México	Rotoplas
Office	Torre Siglum	Ciudad de México	Grupo Surge
Lodging	Hotel City Express Los Mochis	Los Mochis	City Express
Office	Metropoli Patriotismo	Ciudad de México	Inmobiliaria Blancavall
Public Assembly	Arboleda Club House	San Luis Potosí	One Development Group



OVER TWO MILLION GREEN MORTGAGES HAVE BEEN ISSUED IN MEXICO

- In 2007, Mexico's Infonavit piloted green mortgages, which provided an extra-credit estimated at \$1,250 USD to home owners to invest in eco-technologies.
- Over time, the product became extremely popular and mainstream especially for low-income housing.
- By 2011, 75% of all originated home mortgages were green.
- In 2014, Infonavit decided to issue only green mortgages.
- Infonavit market share has also increased significantly (>12%) during the period.



[Infonavit](#)



Typical eco-technologies incorporated:

- Energy efficient lighting
- Solar water heaters
- Low-flow water fittings
- Energy efficient air-conditioning
- Reflective paint and insulation
- Waste management facilities

Infonavit has granted over two million Green Mortgage home loans, benefiting over three million people.



GOVERNMENT IS DEEPLY COMMITTED TO GREEN BUILDINGS PARTICULARLY IN HOUSING

Government Policies and Support

- NAMA Mexican Sustainable Housing
- NAMA Existing Housing
- Participation in Paris COP21 with case studies
- Design studies and guides

2014-2020 NAMA Facility Fund is implementing the NAMA New Housing in Mexico with CONAVI and SHF

NAMAs are National Appropriate Mitigation Actions, which are policy mechanisms designed to implement climate change programs

CONAVI



Program Examples

Comisión Nacional de Vivienda

La Política Nacional de Vivienda presenta un nuevo modelo enfocado a promover el desarrollo ordenado y sustentable del sector; a mejorar y regularizar la vivienda urbana, así como a construir y mejorar la vivienda rural.



Comisión Nacional de Vivienda

Misión

Disseñar, coordinar y promover políticas y programas de vivienda del país

Construye "Tu propia obra" con el INFONAVIT y el subsidio de la CONAVI

Los derechohabientes del INFONAVIT podrán acceder al subsidio de autoproducción asistida de la CONAVI.



Autoproducción Campeche

La Secretaría de Desarrollo Agrario, Territorial y Urbano (SEDATU), a través de la Comisión Nacional de Vivienda (CONAVI), otorgará subsidios del Programa de

Programa de Acceso al Financiamiento para Soluciones Habitacionales

Ofrece a la población de bajos ingresos diversos esquemas que les facilita adquirir una vivienda o contar con una solución habitacional para mejorar su calidad de vida.



Programa de Acceso al Financiamiento para Soluciones Habitacionales

La Secretaría de Desarrollo Agrario, Territorial y Urbano (SEDATU) y la Comisión Nacional de Vivienda (CONAVI), a través del Programa de Acceso al



Autor
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INTER-AMERICAN DEVELOPMENT BANK HAS A NUMBER OF INITIATIVES IN THE COUNTRY

HipotecaVerde

- green mortgage initiative with InfoNavit

Sistema de Evaluación de la Vivienda Verde (SISEViVe-Ecocasa)

- green housing assessment system

Mecanismos de Desarrollo Limpio (MDL)

- clean development mechanism program

NAMA de Vivienda Sustentable

- NAMA for sustainable housing

Ésta es tu Casa

- program for low income housing

Código de Edificación de Vivienda (CEV)

- housing development code

Desarrollos Urbanos Integrales Sustentables (DUIS)

- sustainable urban integrated development





MEXICO GREEN BUILDING COUNCIL

- The Sustentabilidad para México (SUMe) is a non-for-profit civil organization integrated by leading companies and public and private entities that strive to create a more sustainable building environment for Mexico.
- The organization maintains significant connections to both the local and global real estate and development community.
- The organization has a five directors and over seventy-five membership organizations.
- SUMe hosts sustainability courses for green building developers and practitioners throughout the year on many different green building subjects and certifications: Integrated energy solutions, residential green construction, LEED and BREEAM certification training, EDGE Expert and Auditor training, and both new green construction and green retrofitting.



Visit the Sustentabilidad para México at
<http://sume.org.mx>



EDGE EXPERTS - SPREAD THROUGHOUT THE COUNTRY - CAN HELP PROJECTS NAVIGATE THE CERTIFICATION PROCESS

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A full list of EDGE experts can be found on the EDGE program website:
<https://www.edgebuildings.com/edge-experts/edge-experts-around-the-world>



LEARN MORE ABOUT EDGE CERTIFIED PROJECTS IN MEXICO



CITY EXPRESS HOTELS

Mexico City, Mexico

Predicted Savings of EDGE Certification:



51% Energy Savings



32% Water Savings



44% Less Embodied Energy in Materials



REAL GRANADA

Tecamac, Mexico

Predicted Savings of EDGE Certification:



26% Energy Savings



21% Water Savings



22% 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 ² , 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 through an open market bid



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 for one-stop process

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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