



GREEN BUILDINGS MARKET INTELLIGENCE TURKEY COUNTRY PROFILE



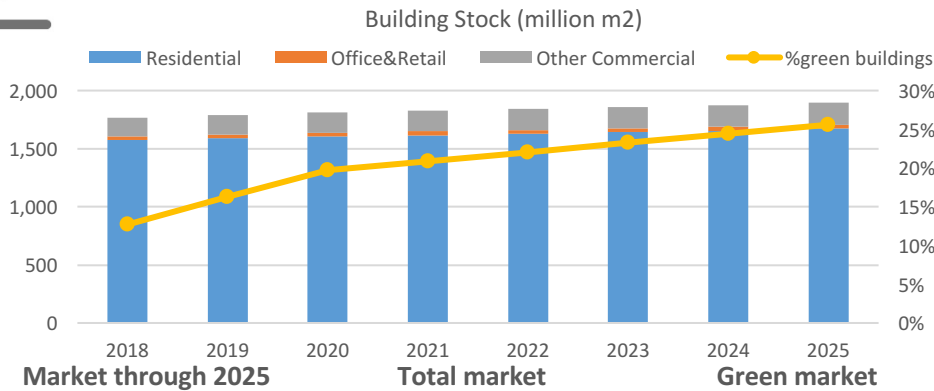
Creating Markets, Creating Opportunities



TURKEY: COUNTRY SUMMARY



MARKET GROWTH



	Market through 2025	Total market	Green market
Commercial	USD 20.4 B		USD 5.2 B
Residential	USD 118 B		USD 24.2 B
Residential units	1,420,000		300,000



OTHER FACTORS

- Only around 5% of the total energy demand is met by domestic resources and Turkey's building sector accounts for 42% of the country's net electricity consumption.
- Demand-side management is a large opportunity for energy security.



GREEN BUILDING PROGRAMS

- Turkish Green Building council is providing advocacy, awareness, and training.
- Mature market with over 390 certified and registered buildings.
- A 258% increase in gross square meters (GSM) of certified space from 2013 to 2014; Newly certified GSM in 2014 was more than that in 2011, 2012 and 2013 combined.
- EDGE trainings have been under way.



CLIMATE POLICIES (NDCS)

- Number of intended policies in 'Buildings and Urban Transformation' section of the NDC.

MARKET STATUS

- Turkey claims the No.9 spot on USGBC's annual ranking of Top 10 countries for LEED.
- Turkey's first mortgage covered bond is issued by Garanti Bank, providing \$150 million green mortgages for the purchase of energy-efficient housing.
- IFC made an \$81 million investment with Odeabank for green mortgages and green buildings. IFC has also supported various climate-smart projects through on-lending with commercial banks.



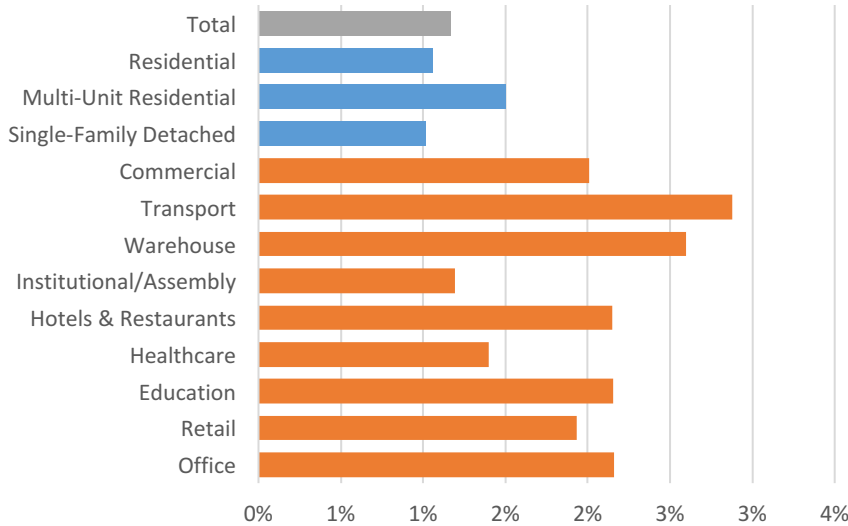
MODERATE GROWTH PROJECTIONS WILL DEPEND ON STABILITY

Market growth in the country will depend on overall regional stability.

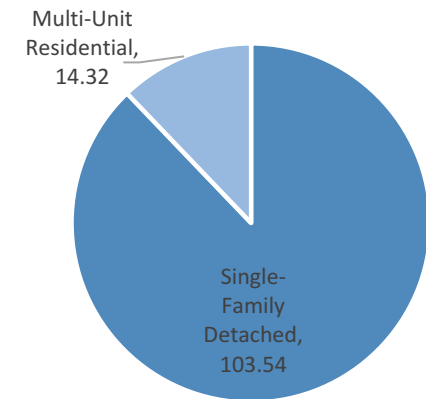
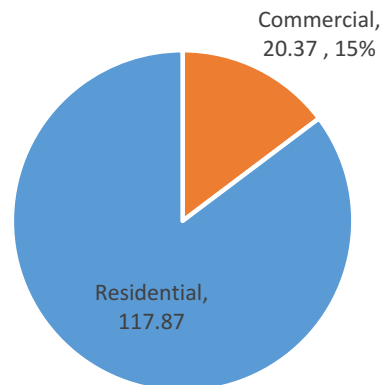
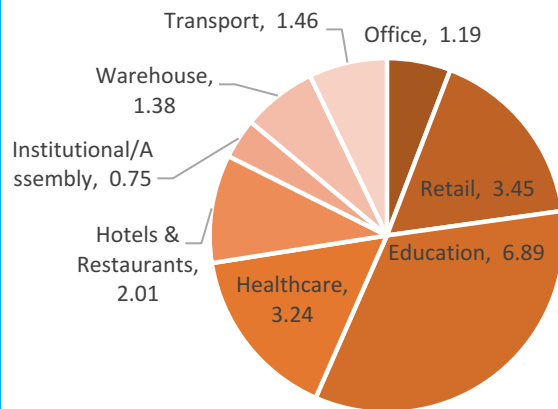
Turkish building market growth is projected to be 1.2%(CAGR) from 2018 to 2025.

- Residential market CAGR is estimated to be 1.1 %. The country has an urban renewal plan to demolish old buildings to build new ones.
- Commercial market CAGR is estimated to be 2.0% due to increasing demand for offices from international and domestic companies, new international retailers entering the market, and development of e-commerce and logistics real estate.

MARKET GROWTH BY SUB-SECTOR (CAGR)



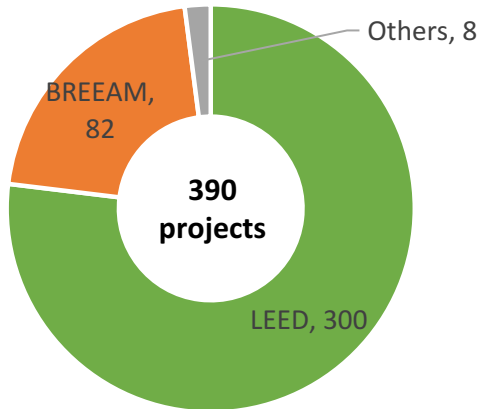
TOTAL MARKET SIZE 2018-25 (USD BILLIONS)



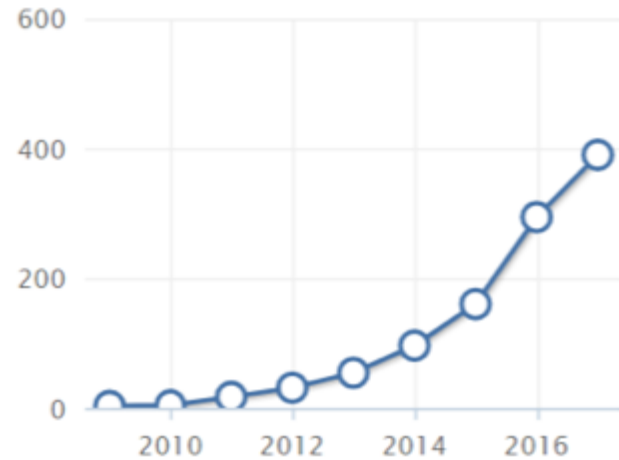


TURKEY IS AN ESTABLISHED GREEN BUILDINGS MARKET

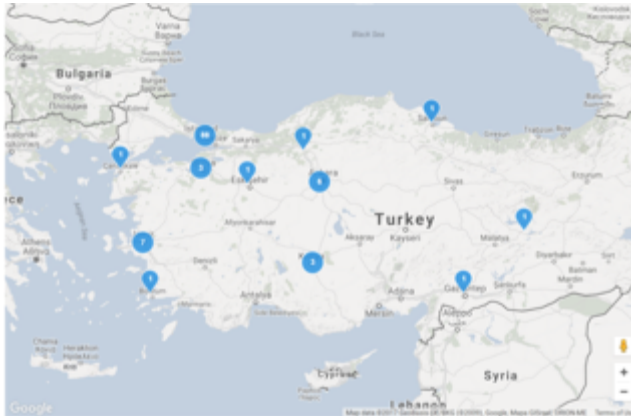
LEED and BREEAM are both well established in a mature market with 400 certifications.



Cumulative activity count, by year:



Projects are spread throughout the country.



Recent projects include:

- Unilever Vector
- Rings Office Suites
- RM/PM Warehouse,
- Turkcell Gebze
- Admin Building,
- Datacenter
- Liquid Production,
- Sunsetpark
- Powder Production
- Caddebostan
- GuneY Plaza
- JLL Turkey HQ
- Kagithane
- Hiton Garden Inn
- Premier Campus
- Izmir
- Yonetim Binasi
- Bureau Veritas CPS
- Worldwide Business
- Istanbul Office
- Center



GREEN FINANCIAL PRODUCTS ARE TAKING OFF



In 2015, IFC, invested \$65 million in Odeabank for green building construction and green mortgages.

In 2017, IFC invested \$150 million in Garanti bank's covered green bond.



Green Finance Products will boost the green buildings development by increasing the purchasing power of individual and helping cover developers' incremental cost.



GOVERNMENT IS DEEPLY COMMITTED TO GREEN BUILDINGS, PARTICULARLY IN RESIDENTIAL SECTOR

GOVERNMENT POLICIES AND SUPPORT

- 10th National Development Plan
- National Climate Change Action Plan (2011-23)
- National Climate Change Strategy (2010-20)
- National Energy Efficiency Action Plan
- Regulation on Building Energy Performance

PROGRAM EXAMPLES



Turkey Urban Renewal Project



Detailed tracking through
links to labeling institutions



This file photo shows several buildings constructed by TOKI as part of the giant urban renewal project in Istanbul's Esenler district. (Photo: Sabah / Furkan Kara)



NDC HAS A NUMBER OF INTENDED POLICIES IN BUILDINGS

BUILDINGS AND URBAN TRANSFORMATION

- Constructing new residential buildings and service buildings as energy efficient in accordance with the Energy Performance of Buildings Regulations
- Creating Energy Performance Certificates for new and existing buildings so as to control energy consumption and greenhouse gas emissions and to reduce energy consumption per square meter
- Reducing the consumption of primary energy sources of new and existing buildings by means of design, technological equipment, building materials, development of channels that promote the use of renewable energy sources (loans, tax reduction, etc.)
- Dissemination of Green Building, passive energy, zero-energy house design in order to minimize the energy demand and to ensure local production of energy



TURKISH GREEN BUILDING COUNCIL

ÇEDBİK



- 25 founding member and 130 members
- Plays an active role in green building activities in Turkey; also supports LEED activities in Turkey under its contract with USGBC.
- Provided EDGE training with IFC.
- Established ÇEDBİK-Konut , a certification system suited to the conditions of Turkey, to be implemented in new housing projects.

- It organizes trainings, panels, conferences and encourages the development and dissemination of model projects and work models for local governments, universities, public and private sectors in order to raise public awareness and encourage the construction industry to produce in the light of sustainable principles.
- ÇEDBİK has made important contributions to raising awareness of sustainable urban transformation, energy efficiency and green building issues in Turkey.



LOCAL EDGE EXPERTS CAN HELP PROJECTS NAVIGATE THE EDGE CERTIFICATION PROCESS

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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



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 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



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

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

IFC thanks the following national donors for their generous support of the EDGE program: the State Secretariat for Economic Affairs of Switzerland (SECO); the European Union; the Ministry of Finance of Japan; the Hungarian Export Import Bank; the Canada Climate Change Program and the Department of Foreign Affairs, Trade and Development Canada; the Royal Ministry of Foreign Affairs of Denmark and the Danish Green Growth Fund; the Federal Ministry of Finance of Austria; and the Ministry of Foreign Affairs of Finland.

In addition, IFC thanks contributors to the GEF-IFC Earth Fund Platform, and the Energy Sector Management Assistance Program (ESMAP) of the World Bank whose support helped seed EDGE.

COLLABORATION ACKNOWLEDGEMENT

IFC thanks the Georgetown University McDonough School of Business for collaborating on developing the market intelligence reports.

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