



GREEN BUILDINGS MARKET INTELLIGENCE

POLAND COUNTRY PROFILE



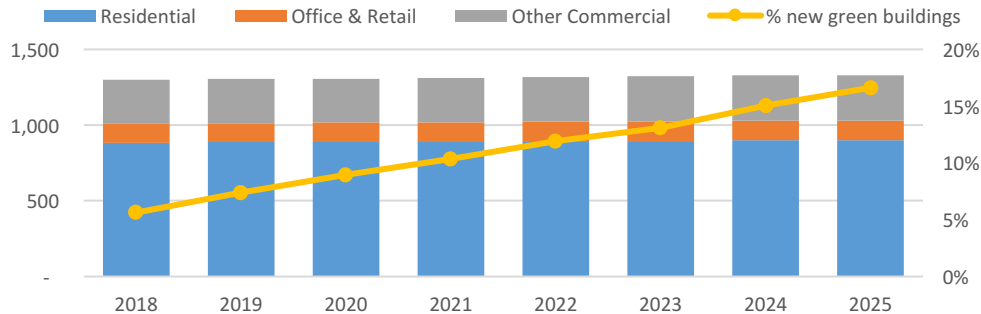
Creating Markets, Creating Opportunities

POLAND: COUNTRY SUMMARY

MARKET GROWTH



Building Stock (million m2)



Market through 2025

Commercial

Residential

Residential units

Total market

USD 11.6 B

USD 22.5 B

250,000

Green market

USD 2.9 B

USD 1.0 B

10,000



CLIMATE POLICIES (NDCS)

The National Fund for Environmental Protection includes subsidized loans for the construction of energy-efficient homes. NDC in line with EU goals.



MARKET STATUS

Slower growth than in other emerging markets. Residential market is shrinking, but opportunity may exist in retrofits.

Poland was awarded EUR 18.8 billion in European Structural and Investment Funds to support infrastructure, investments in the low-carbon economy and environmental protection.



OTHER FACTORS

Poland has the largest economy in Central Europe and GDP growth is expected to stabilize to 3.2% over the medium term.

In 2015, McKinsey and Company predicted that Poland would be Europe's new growth Engine.



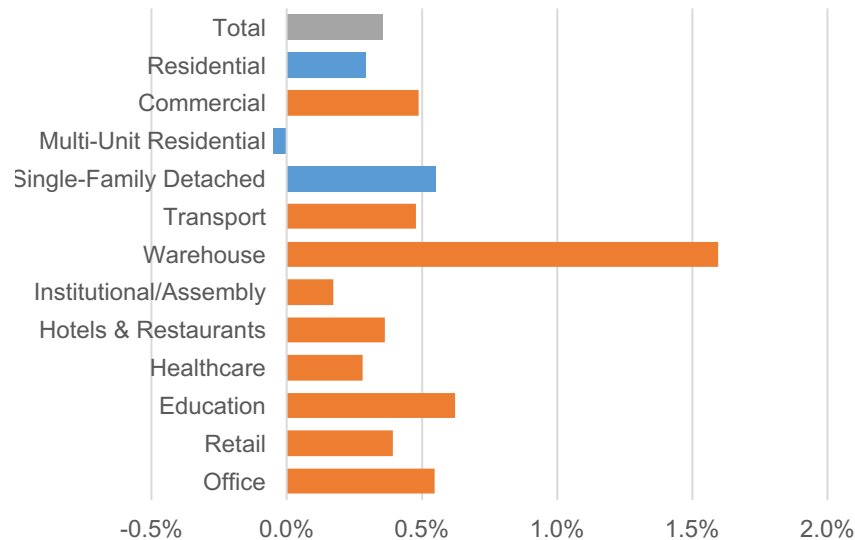
GREEN BUILDING PROGRAMS

- As of March 2017, more than 10 million square meters of floor space had been certified green under one of the four available schemes.
- Four international green building certification schemes are currently active in Poland: BREEAM, DGNB, HQE, and LEED.
- High penetration in commercial but low in residential sector.
- Active Green Building Council providing advocacy and awareness.



POLAND'S BUILDING SECTOR WILL SEE SLOW BUT STEADY GROWTH

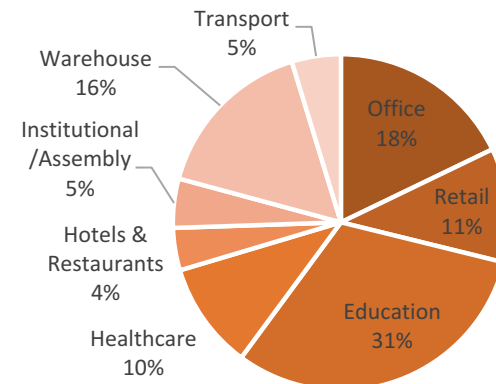
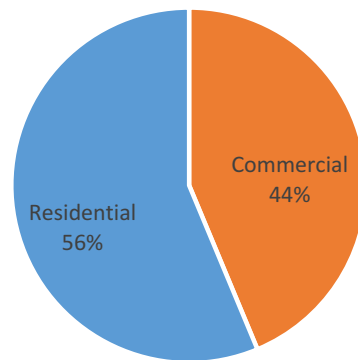
MARKET GROWTH BY SUB-SECTOR (CAGR)



Between 2018 and 2025, the building sector will grow slowly, increasing total floor space by an average of only 0.35% per year. The largest gains will be made in warehouse and education with annual average growth rates of 1.6% and 0.62%, respectively.

Single-family detached homes will account for growth in the residential sector while it is expected that the total floor space for multi-unit residential buildings will decrease over the seven year time-span.

TOTAL MARKET SIZE 2018-25 (USD BILLIONS)

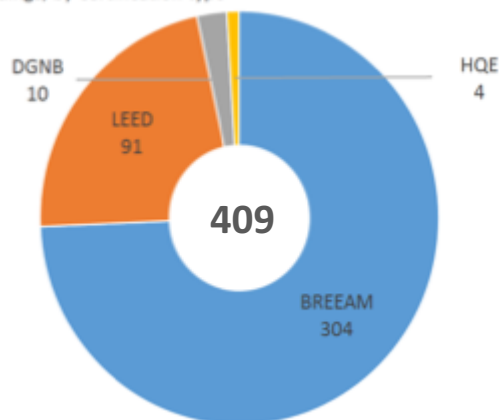




POLAND'S GREEN BUILDING SECTOR IS ROBUST

To date, 665 green building activities have been published in Poland. 409 buildings have been certified green. As in most of Europe, BREEAM is the dominant method of certification.

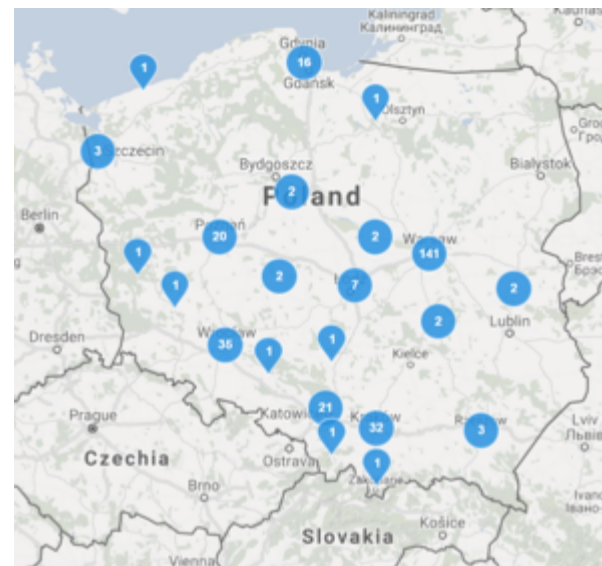
Green buildings, by certification type



[PLGBC](#)

Green building has been widely used in nearly every voivodeship in Poland with the highest occurrences in Warsaw, Wrocław, Kraków, and Poznań.

Penetration is very high in the commercial sector but lower in the residential sector.



Source: GBIG

Notable projects include:

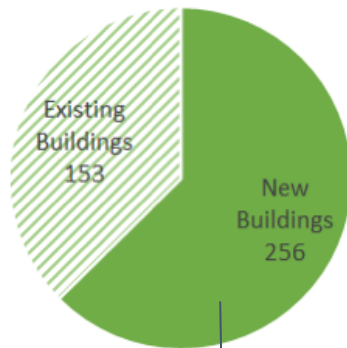
Type	Name	Location	Investor
Office	Axis	Krakow	Skanska Property Poland
Industrial Manufacturing	Pratt Whitney Kalisz	Kalisz	Pratt & Whitney Kalisz Sp. Z.O.o.
Retail	NFS PTAK Poland	Rzgów	Nike
Office	Eurocentrum BGD Office Complex	Warsaw	Grupa Capital Park- Dakota Investments
Warehouse and Distribution	LIDL Distribution Center	Bydgoszcz	Lidl Polska
Lodging	The Westin Warsaw	Warsaw	Skanska Property Poland
K-12	American School of Warsaw	Bielawa	American School of Warsaw

Source: GBIG



NEW CONSTRUCTION IS DRIVING THE GREEN BUILDING MOVEMENT

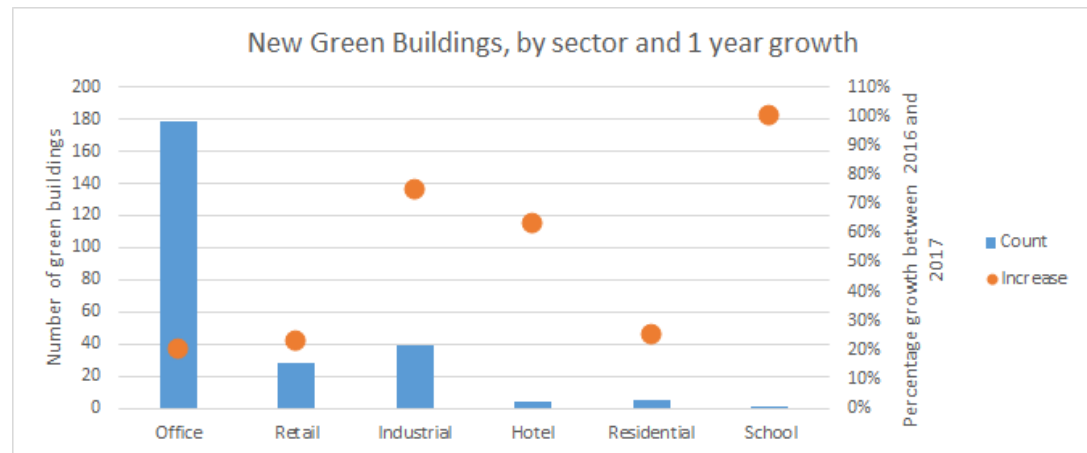
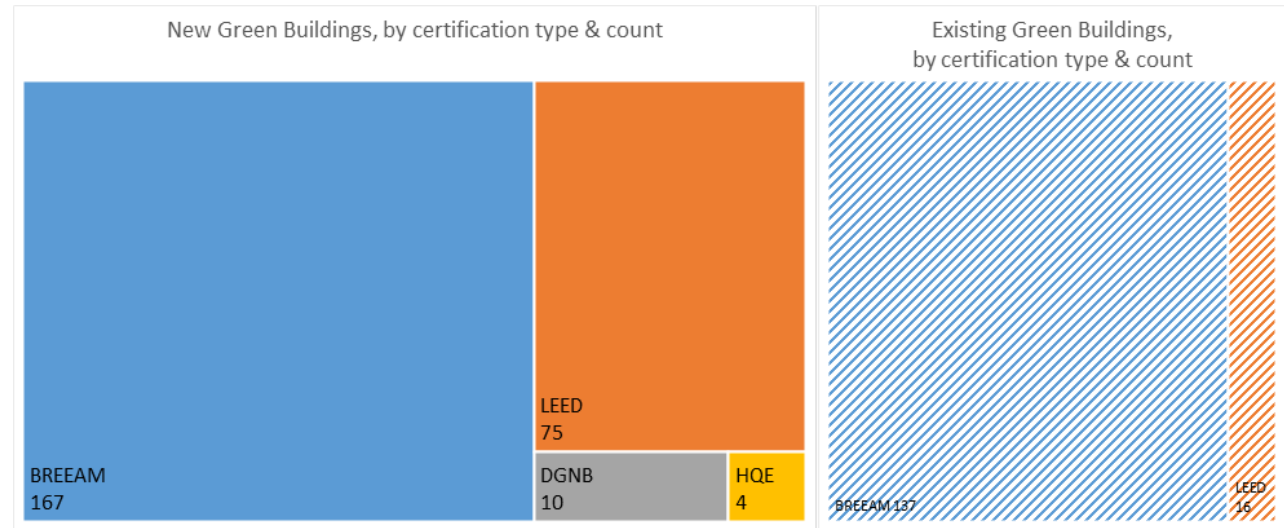
Of all certified buildings in Poland in 2017, 63% were new constructions while 37% were existing buildings.



Of the 256 new buildings, 229 were completed and 27 were still under construction as of March 2017.

Between March 2016 and March 2017, the number of new buildings increased by 22% while the number of existing certified buildings increased by 29%.

Offices have been the primary driver of new green building, but the hotel and industrial sectors show great potential.





GREEN IS TAKING OFF IN COMMERCIAL BUT LESS SO IN RESIDENTIAL

Sub-Sector	Green penetration projected in 2025
Office	70-75%
Retail	70-75%
Hotel	50%
Industrial	15%
Residential	15-20%

Based on very high penetration in the commercial sector, particularly offices, we are projecting the trend will continue upward until the vast majority of commercial spaces are certified green.

In residential, due to a slow growth and even shrinking, the penetration will be slower.

STIMULATING FURTHER GROWTH

An easy-to-use residential tool such as EDGE, especially with its refurbishment option, could further stimulate green buildings in Poland.

Given the proportion of the residential market to the overall market, further green penetration into residential will have a large impact on the overall penetration of green.

In Poland:

The top sector for expected green building projects is:
New Commercial Construction

The most popular green building benefits are:
**Lower operating costs
&
Market demands**

The most important environmental reason for building green is:
Reducing energy consumption

[Dodge Data & Analytics, 2016](#)



NATIONAL AND LOCAL POLICIES FAVOR SUSTAINABLE PRACTICES

As a European Union state, Poland shares in EU commitments to tackle climate change:

EU GOALS	Greenhouse gas emissions, compared with 1990	Energy consumption from renewables	Energy efficiency
By 2020	↓ 20%	20%	↑ 20%
By 2030	↓ 40%	>27%	↑ >27%
By 2050	↓ 80-90%		

[European Commission](#)

In 2013, more than 85% of Poland's electricity was generated in coal-fired power plants. Heavy reliance on this carbon-intensive fuel will pose a challenge to Poland in meeting European standards for environmental protection.

Financial support from the European Union will be a key driver in improving Poland's sustainable infrastructure.

[CS Monitor](#)

Poland has developed energy efficient measures for building and public institutions, including:

- The Thermo- modernization and Renovation Fund
- The Infrastructure and the Environment and Energy Saving and Promoting Renewable Energy Sources, operational programs
- The Green Investment Scheme and Energy Efficiency Improvement priority programs

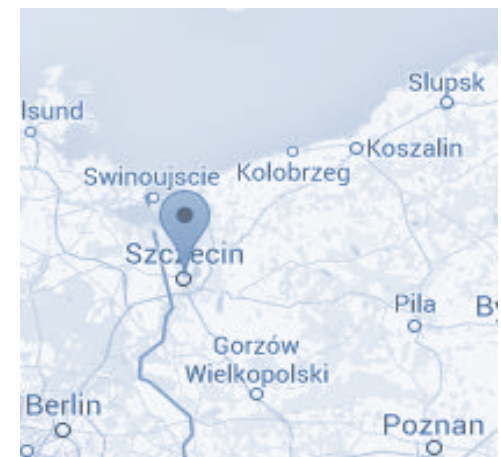
[GUS/KAPE](#)

As rapid urbanization threatens living standards, Polish cities are looking for efficient solutions to tackle challenges such as insufficient housing and growing energy consumption.

[Warsaw Business Journal](#)

Szczecin is the first city in Poland to introduce tax relief for the design of green buildings.

[Colliers International](#)





LEARN MORE ABOUT EDGE CERTIFIED PROJECTS IN EUROPE

The EDGE website provides a wealth of resources for developers and investors interested in learning more about the EDGE planning and certification process and calculating the approximate energy and water savings that can be obtained as a result of green construction.

EDGE has also documented construction projects from around the world in a series of case studies. The Kaufland project in Bulgaria is Europe's first case study:



KAUFLAND

Plovdiv, Bulgaria

Building Category: Retail

Predicted Savings of EDGE Certification:



37% Energy Savings



53% Water Savings



30% Less Embodied Energy in Materials

To access this case studies and others, visit <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

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COLLABORATION ACKNOWLEDGEMENT

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