



# GREEN BUILDINGS MARKET INTELLIGENCE

## SERBIA COUNTRY PROFILE



*Creating Markets, Creating Opportunities*

# SERBIA: COUNTRY SUMMARY



## MARKET GROWTH



## OTHER FACTORS

The European Bank for Reconstruction and Development (EBRD) has invested heavily in green projects in Serbia, including 65 million euro for small-scale improvements in energy efficiency.



## CLIMATE POLICIES (NDCS)

As a prospective EU country, Serbia will be looking to align its policies with EU directives.



## MARKET STATUS

Building stock is contracting, as new buildings are not replacing obsolescence. Some experts predict that more than 1.6 million square meters of floor space will be built each year nonetheless.

The green market is still very nascent.



## GREEN BUILDING PROGRAMS

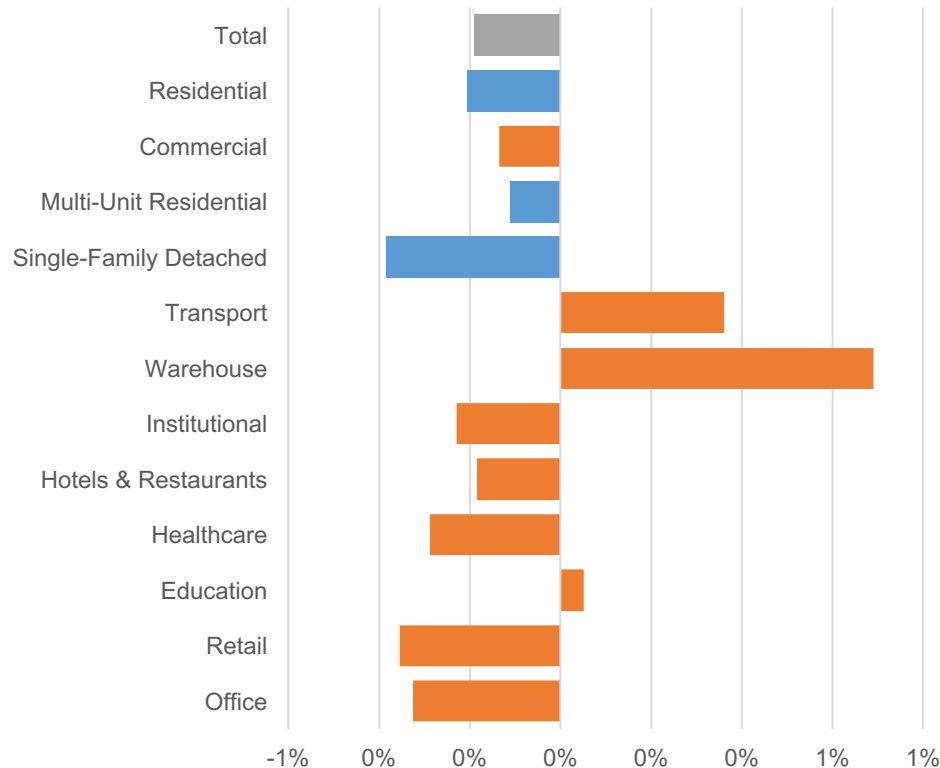
Serbia's Green Building Council is a prospective member of World GBC network.

34 green projects are certified or registered.

EDGE will soon be incorporated into Belgrade's Smart City strategy with the goal of making public buildings more energy efficient.



## BUILDING FLOOR SPACE IS CONTRACTING



Between 2018 and 2025, building stock is expected to contract in Serbia.

On average, Serbia will lose 0.16% of total floors pace annually as new building will not outpace obsolescence.

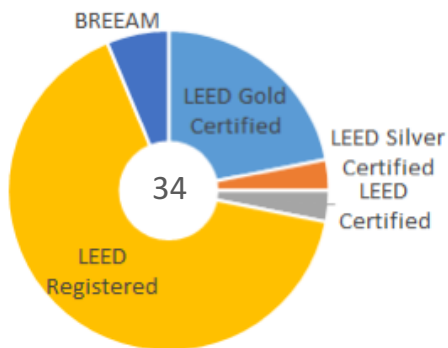
Despite these projections, some experts predict that more than 1.6 million square meters of floor space will be built each year.



## SERBIA'S GREEN BUILDING MARKET IS STILL NASCENT

As of June 2017, 34 activities, including certifications and registrations, had been published in Serbia.

Activities, by type



Certified and registered buildings are located throughout Serbia with the highest density occurring in the country's capital, Belgrade, and in the cities of Pancevo and Nova Pazova.

To date, LEED has dominated the green building landscape in Serbia.



Notable projects include:

Type	Name	Location	Investor
Office	Chinese Cultural Center	Belgrade	EMPIRET D.O.O.
Retail	ADA Mall	Belgrade	Commercial Developments D.O.O.
Lodging	BEKO Hotel	Pancevo	Lamda Development, Belgrade
Industrial Manufacturing	New Henkel Production Building Krusevac	Krusevac	Henkel Srbija Doo
Multi-Family Residential	CRNOTRAVSKA BUILDING A	Belgrade	KRUG D.O.O
K-12	Deciji vrtic Ulica Mihajla Petrovica	Pancevo	Direkcija Za Izgradnju I Uredjenje Pance
Office	Navigator Business Center	Belgrade	Balkan Real Estate



# GREEN BUILDING WILL **INCREASE** DESPITE FLOORSPACE LOSS

## **GREEN CAN TAKE OFF WITH THE RIGHT REFURBISHMENT INFRASTRUCTURE**

To date, green construction has captured only a small share of new building, but moderate growth is expected, particularly in building renovation.

Green floor space represents only 0.44% of total building space in Serbia. Based on expert insights, it is predicted that total green floor space will more than double in Serbia between 2018 and 2025. In 2025, 0.94% of total building space will be green.

However, with the right tools for refurbishments, green stock could increase as a portion of the total market.



Architectural diversity in Palilula, Belgrade. [[Jelena Mijić/Belgrade Raw](#)]





## INVESTMENT TRENDS IN SERBIA INCREASINGLY FAVOR GREEN

The **European Bank for Reconstruction and Development (EBRD)** has invested heavily in green projects in Serbia:

- In 2017, EBRD announced plans to lend 50 million euro to Serbian company Electrawinds K-Wind for the construction of a large-scale wind farm
- Between 2006-2016, EBRD invested 800 million euro
- In 2016, green investments accounted for 39% of EBRD's total business volume in Serbia
- Since 2009, EBRD provided 65 million euro for lending to small and medium businesses and households for renewable energy and energy efficiency.

The **International Finance Corporation (IFC)** has also invested in Serbia's green projects:

- IFC has invested \$24.12 million in climate related projects in Serbia
- \$19 million, or 78% of all climate investments, have been for green building projects

Currently, the IFC Serbia team is working to incorporate EDGE into the city of Belgrade's Smart City strategy. As part of this work, IFC consultants will be hired to perform energy audits to assess the building efficiency in public buildings in Belgrade. To the extent possible, consultants will be encouraged to use EDGE software to recommend energy efficient solutions to the city of Belgrade.

In the coming year, two public buildings will be audited to test for EDGE certification.

[See News](#)



## SERBIA'S POLICIES SIGNAL A PROACTIVE STANCE ON GREEN

Serbia was one of the first ten countries to submit an Intended Nationally Determined Contribution to the Paris Climate Agreement in June 2015. The Contribution outlines Serbia's pledge to **reduce the country's emissions 9.8% by 2030 compared to 1990 levels.**

[C2ES](#)

**The National Council on Climate Change**, established by the government of Serbia will monitor the status, development, and implementation of the national policy and suggest steps to coordinate and enhance the agenda.

[United Nations](#)

Serbia is actively developing its **Climate Change Strategy and Action Plan**. The plan will outline a strategic and legal framework for climate action in compliance with Serbia's commitments to greenhouse gas reduction, both for the Paris Agreement and EU accession. The plan will identify priority emissions reduction measures and define the institutions responsible for their implementation.

[Serbia Climate Strategy](#)

**President of the Republic of Serbia, Tomislav Nikolic** reiterated the urgency and importance of combating climate change and Serbia's commitment to the effort at the Paris Agreement Signing Ceremony on April 22, 2016:

*"If global warming continues unchecked, leading to droughts and desertification, typhoons and devastating floods - the tragic consequences of the latest Serbia experienced itself- it will be very difficult to eradicate famine and poverty, ensure full employment, the development of infrastructure and access to safe drinking water for all. In this context, Serbia is doing everything to raise awareness, educate and expand the capacity of local public, local self-governments in particular, to accelerate the necessary process."*

[United Nations](#)





## 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 <sup>2</sup> , 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 m<sup>2</sup>; Project appoints an auditor



PROJECT TYPE	CERTIFICATION	DESIGN AUDIT	FINAL AUDIT	TOTAL
Residential (one unit type)	\$1,500	\$3,650	\$4,320	<b>\$9,470</b>
<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	<b>\$10,265</b>
<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.

Visit [www.edgebuildings.com](http://www.edgebuildings.com) for more information