

OVERVIEW OF IFC IN ENERGY EFFICIENCY IN THE BUILT ENVIRONMENT ACROSS ECA REGION

27th ENERGY EFFICIENCY COORDINATION GROUP MEETING AND WORKSHOP



Creating Markets, Creating Opportunities

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IFC Energy Efficiency for Ukraine Program

17 November 2021

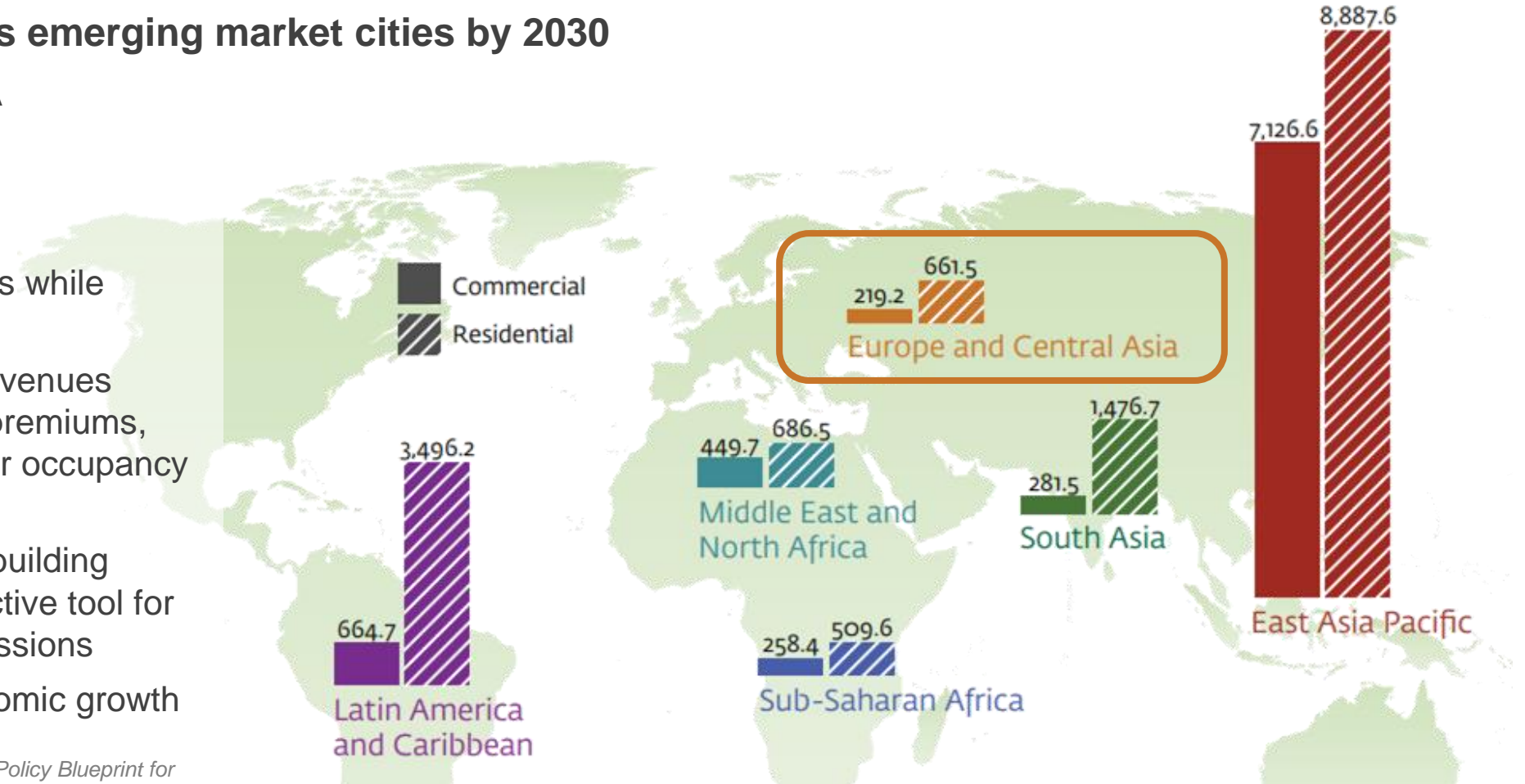
INVESTING IN GREEN BUILDINGS IS GOOD BUSINESS

Green Building is one of the biggest investment opportunities of the next decade

- \$24.7 trillion across emerging market cities by 2030
- \$881 billion in ECA

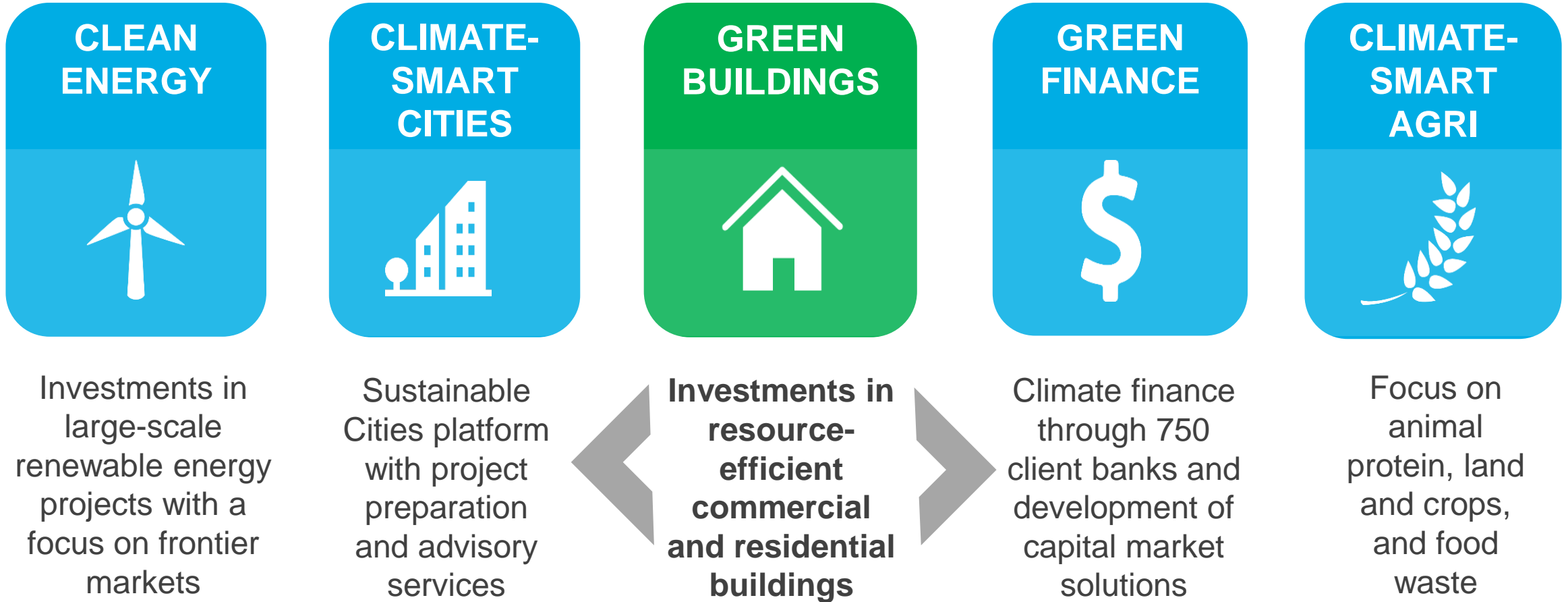
Green Buildings

- lower operational costs while earning profits
- potentially enhance revenues through higher sales premiums, faster sales and higher occupancy rates
- materially impact the building sector and be an effective tool for reaching net zero emissions
- spur low-carbon economic growth

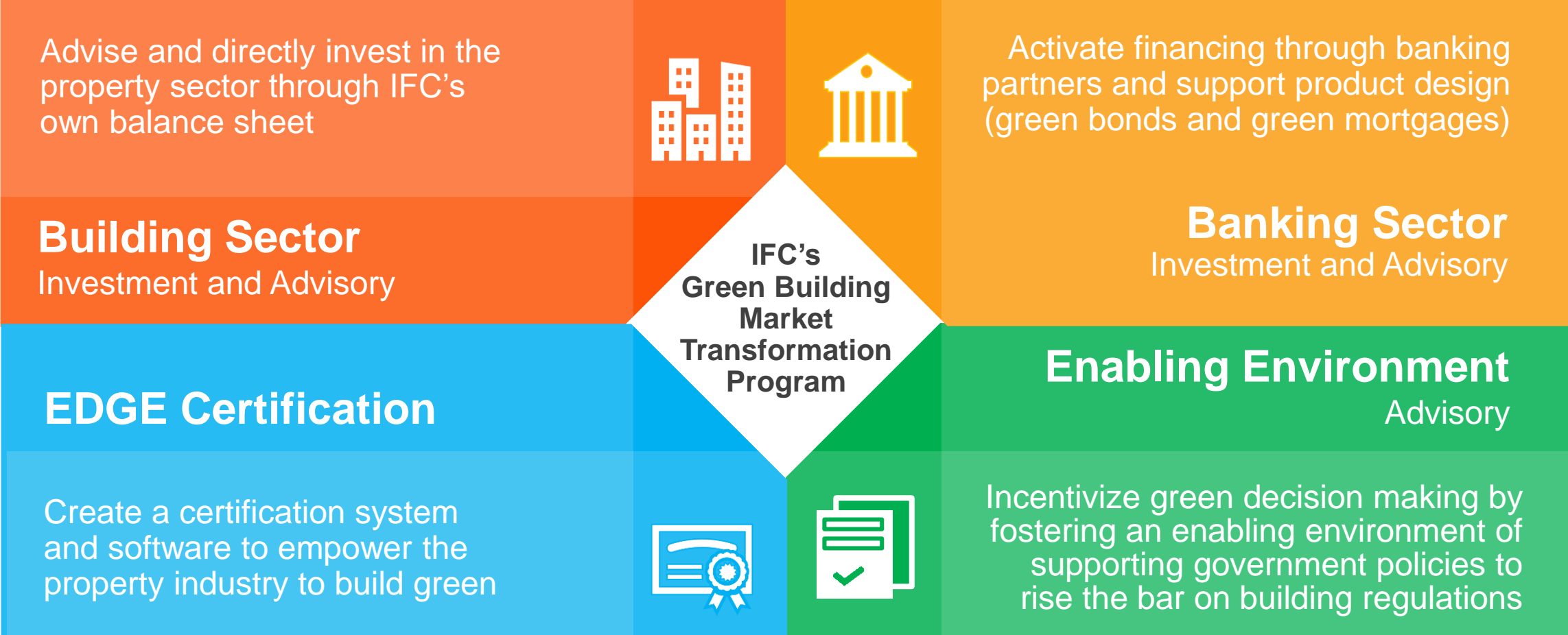


Source: Green Buildings: A Financial and Policy Blueprint for Emerging Markets, 2021 (www.ifc.org)

IFC FOCUS ON INVESTMENT AND ADVISORY IN CLIMATE BUSINESS



IFC HAS A FOUR-PART STRATEGY TO SUPPORT GREATER INVESTMENT IN GREEN BUILDINGS



IFC SOLUTIONS IN GREEN BUILDINGS: SELECTED PROJECTS IN ECA

IFC Solutions

Selected Project Examples

	Building Sector <i>Investment and Advisory</i>	<ul style="list-style-type: none">• Romania WDP• Romania CTP Green Bonds• Georgia Green Housing
	EDGE Certification	<ul style="list-style-type: none">• 14 certifications in the region• Turkey, Vertical Forest Greenox EDGE Certification
	Banking Sector <i>Investment and Advisory</i>	<ul style="list-style-type: none">• Romania Raiffeisen Bank Green Bonds
	Enabling Environment <i>Advisory</i>	<ul style="list-style-type: none">• Ukraine Energy Efficiency Fund Project• Ukraine Residential Energy Efficiency Project

GREEN BUILDINGS EXAMPLE



Romania WDP

IFC's first Green Loan to the semi-industrial property sector in ECA

€205 million investment

2020

- IFC's first-ever property-sector European green loan to build one million m² of resource-efficient warehouses and commercial properties in Romania
- It is expected to **save 12,083 tons of carbon dioxide every year**
- WDP benefited from **IFC's EDGE Green Building Certification** and worked closely with IFC to **set a clear target on carbon neutrality and formalize resource-efficiency measures**
- WDP has now **achieved EDGE certification for all its 48 warehouses in Romania** and become the first major warehouse owner in Romania with the highest number of green certified buildings, which will help improve the uptake by the sector in Romania



GREEN BONDS EXAMPLE



Romania CTP Green Bonds

In June 2021 IFC made its very first investment in a publicly issued Green Bond

- IFC invested €42.5 mn in a €500 mn, 8-year, senior, unsecured, Green, Eurobond issued by CTP
- The aim is to develop of **low carbon, Green-certified business enabling industrial & logistics infrastructure in Romania & Serbia.**
- IFC will also contribute to CTP's sustainability goal of achieving operational carbon neutrality by the end of 2023.
- IFC's investment is also in line with the WBG's efforts to **build climate capital markets:**
 - IFC's participation enabled CTP to meaningfully contribute to achieving benchmark-size (i.e. above €500 million) at launch for each of the Eurobond issues, thereby fostering liquidity in the secondary market.

€42.5 million investment

2021



GREEN HOUSING EXAMPLE



Georgia m2 Residential LLC

IFC Supports Affordable Green Housing in Georgia

- IFC funded fund green, low-to-middle-income housing in Tbilisi:
 - 1,800 apartments, efficiently using energy, water, and materials
 - to reduce negative impacts on health and the environment, and
 - to improve living standards for Georgian families
- IFC's loan includes \$11.5 million mobilized from the Green for Growth Fund, Southeast Europe (GGF)
- The housing projects of M2 Residential LLC achieve an **estimated 40% energy savings** compared to similar-sized new buildings in the Georgian market, demonstrating the demand for high quality, green buildings

\$23 million investment

2015



Photo credit: m2 Residential LLC

EDGE, AN INNOVATION OF IFC



EDGE Makes It Easy to Design and Certify Resource-Efficient and Zero Carbon Buildings



20%



IFC created a certification system and software to empower the property industry to build green in 170 countries

1,130,984

Energy Savings
MWh/year

34,271,098

Water Savings
m³/year

59,192,771

Embodied Energy
in Materials Savings
GJ

554,067

CO₂ Savings
tCO₂/year

29,851,804

Floor Space Certified
m²

THERE ARE THREE WAYS TO CERTIFY



Reach at least 20% savings in water and materials, then choose the energy savings



1. EDGE Certified

Achieve the minimum standard of 20% in energy, water and embodied energy in materials.

Resource: [EDGE Certification](#)



2. EDGE Advanced

Earn 40% or more energy savings for a higher level of recognition, with at least 20% savings in water and materials.



3. Zero Carbon

Go all the way to carbon neutral with 40% or more energy savings on-site, achieving 100% through renewables or topping off with carbon offsets.

EDGE is currently funded by the UK Government with original funding by Switzerland's State Secretariat for Economic Affairs (SECO). Additional support has been provided by Austria, Canada, Denmark, ESMAP, EU, Finland, GEF, Hungary and Japan.

EDGE CERTIFICATION: 14 PROJECTS IN ECA



Seven million square meters has been **EDGE** certified globally



WDP
Warehouses in
Romania



**Renault Bucharest
Connected**
Offices in Romania



**Vilnius Fabijoniskes
by Lidl**
Retail in Lithuania



**WINGS by Studium
Green**
Homes in Romania



**ProCredit Bank
Georgia Head Office**
Offices in Georgia



**ProCredit Bank
Bulgaria Head Office**
Offices in Bulgaria



Kaufland
Retail in Bulgaria



**Dr. Lutfi Kirdar
Kartal Training and
Research Hospital**
Hospitals in Turkey



**Greenox
Residence**
Homes in Turkey



MINT Caglayan
Homes in Turkey



MINT E-5
Homes in Turkey



**ProCredit Bank N.
Macedonia Head Office**
Offices in Macedonia



Hotel Sun
Hotels in Cyprus



**Citadines
Arnulfpark Munich**
Hotels in Germany

EDGE CERTIFICATION EXAMPLE



Turkey Vertical Forest Greenox

With 900 trees climbing up its geometric façade, Greenox is an urban landmark for the growing green building trend

\$23 million investment

2015

- Greenox is resource-efficient building **certified with EDGE**
- The building contains 170 residential units that conserve energy, water and embodied energy in materials
- Greenox has high-efficiency boilers for space heating and hot water, low-flow faucets in kitchens and bathrooms and concrete filler floor slabs.
- **The building saves up to 35% energy, 42% water and 41% embodied energy in materials compared to a conventional apartment building**
- Features like solar panels, gray water treatment and rainwater collection systems also contribute to its efficiency



GREEN BONDS EXAMPLE



Romania Raiffeisen Bank Green Bonds

Green bonds to help boost climate finance and enhance the resilience of the banking sector

- IFC invested in the **first green bond to be issued by a financial institution in Romania**, placed by Raiffeisen Bank S.A.
- This was also **IFC's first investment in bonds expected to qualify for the European Union's Minimum Requirement for own Funds and Eligible Liabilities (MREL)**
- While the bonds have been issued in compliance with RBRO's Green Bond Framework, 100% of the proceeds (incl. IFC's investment) will be used only for eligible climate finance projects in **5 key areas**:
 1. green buildings
 2. renewable energy
 3. energy efficiency
 4. clean transportation, and
 5. sustainable agriculture

\$20 million in bonds

2021



ADVISORY: UKRAINE RESIDENTIAL ENERGY EFFICIENCY PROJECT (UREEP 2010-2021)



Goal: to promote energy efficiency in the residential sector and drive housing reform in Ukraine

UREEP promotes energy efficiency in Ukraine's residential sector (2018–2021):



Creating a market of professional housing management service providers



Raising awareness of the rights and obligations of consumers and providers of housing management services



Empowering women: capacity building program stimulating employment opportunities for women on maternity leave and at pre-retirement age

UREEP contributed to housing reform in Ukraine by (2010–2017):



Developing financial instruments/programs to stimulate demand for EE modernization



Establishing a legal foundation that kick-started housing reform in Ukraine

Sets principles of the relations between producers/contractors/consumers, their rights and obligations

Law on housing and communal services

Law on ownership in multifamily buildings

Sets principles of decision-making and management of common property in multifamily building

Law on Energy Efficiency Fund

Stipulates rules and methods of metering of energy resources

Law on commercial metering

Law on energy efficiency in buildings

Stipulates rights and obligations of co-owners regarding energy consumption of buildings

RESULTS

\$286.4 million

facilitated for EE modernization of multifamily buildings

804,055 CO₂/year

greenhouses gases emissions reduced

2,929

multifamily buildings reduced energy consumption

99,612 people

received access to improved housing services

6,637 people

participated in project training (on EE modernization, housing management, business acumen)

of these **4,061** were women

In partnership with



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Швейцарська Конфедерація



Creating Markets, Creating Opportunities

ADVISORY: UKRAINE ENERGY EFFICIENCY FUND PROJECT (2019-2023)



Goal: \$330 million to be facilitated for EE modernization through private and state-owned business by 2025

Ukraine's outdated housing stock

- high energy consumption
- €3 billion or 7% of state budget is spent annually on utilities subsidies

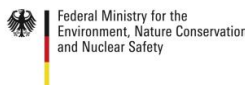
Project supports the GoU to create the Ukraine Energy Efficiency Fund, build up demand for EE retrofits in the residential sector and stimulate business environment around them



Applications for >830 EE renovation projects submitted for the total cost of \$252 m as of November 2021

- **Capacity building**
of 4 partner banks to lend to Homeowners Associations, participating in the program
- **Creating opportunities for private sector**
along the residential EE renovations supply chain: *banks, housing managers/companies, construction, equipment, materials producers, energy auditors, engineering, etc.*
- **Providing grants**
to Homeowners Associations for EE renovations

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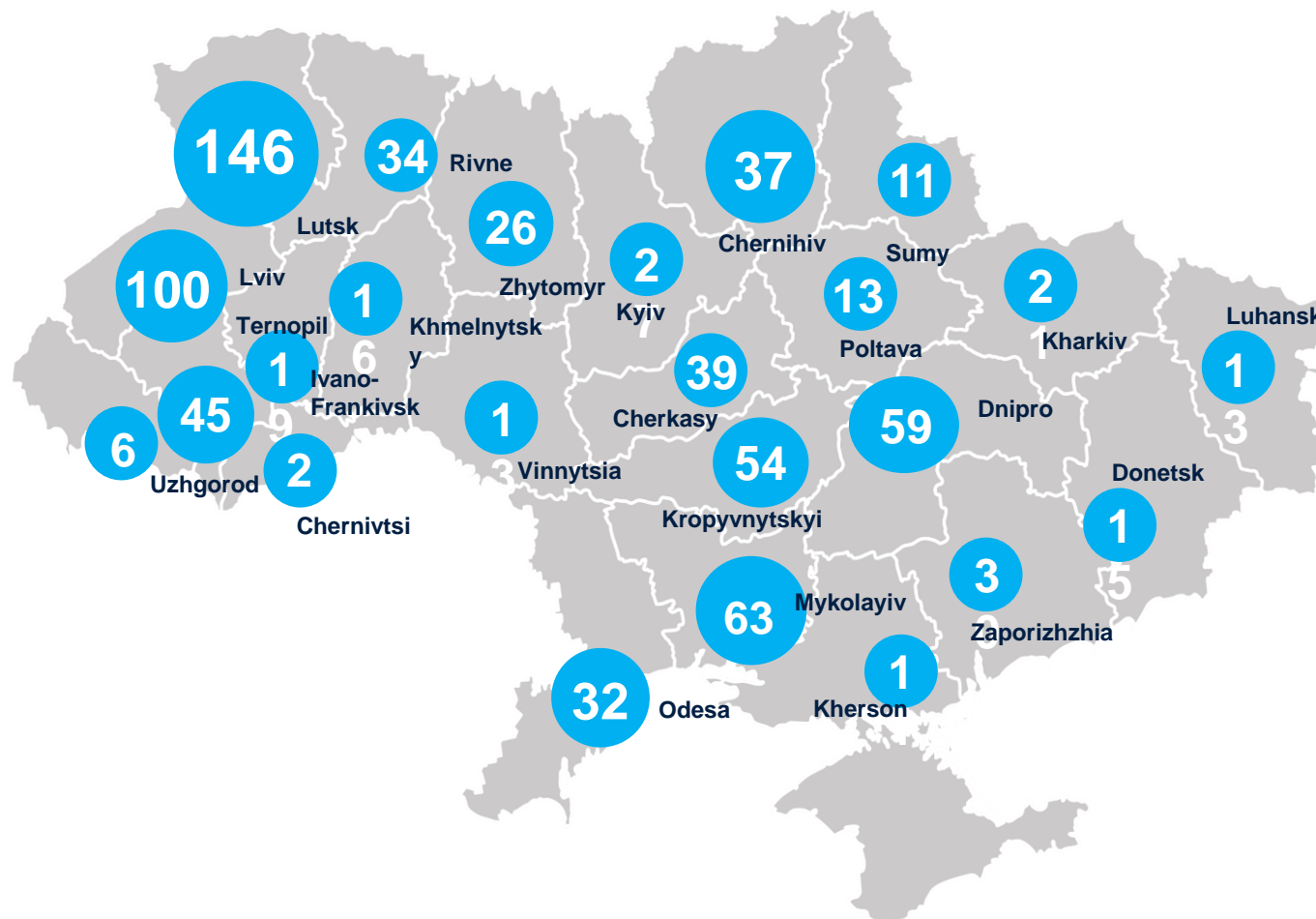
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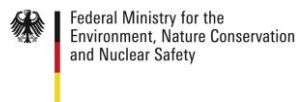


Project results

- 832 applications
- \$252 m - total cost of projects
- \$159 m - value of grants
- 76,538 families will benefit upon completion of their EE renovations
- 103 K tons' year – declared annual reduction of CO2 emissions
- 391 m kW*hour/year or \$19 m - energy savings



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THANK YOU

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IFC Energy Efficiency for Ukraine Program

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