



SMARTER4EU Life

Covenant of Mayors Investment Forum

Energy Efficiency Finance Marketplace

25th October 2023



European
Commission



Covenant of Mayors
for Climate & Energy

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Co-funded by
the European Union

The SMARTER4EU project has received funding from the European Union's LIFE Clean Energy Transition Programme under grant agreement no. 101121060



Can it be fast?



Can it be perfect?



Can it be affordable?

Brief History

2007

Pilot Test
Green Homes certifications
with Green Building Councils

May 2019 -
November 2021

Formation of consortium
SMARTER
project implementation



Funded by European Union
Horizon 2020 research &
innovation programme

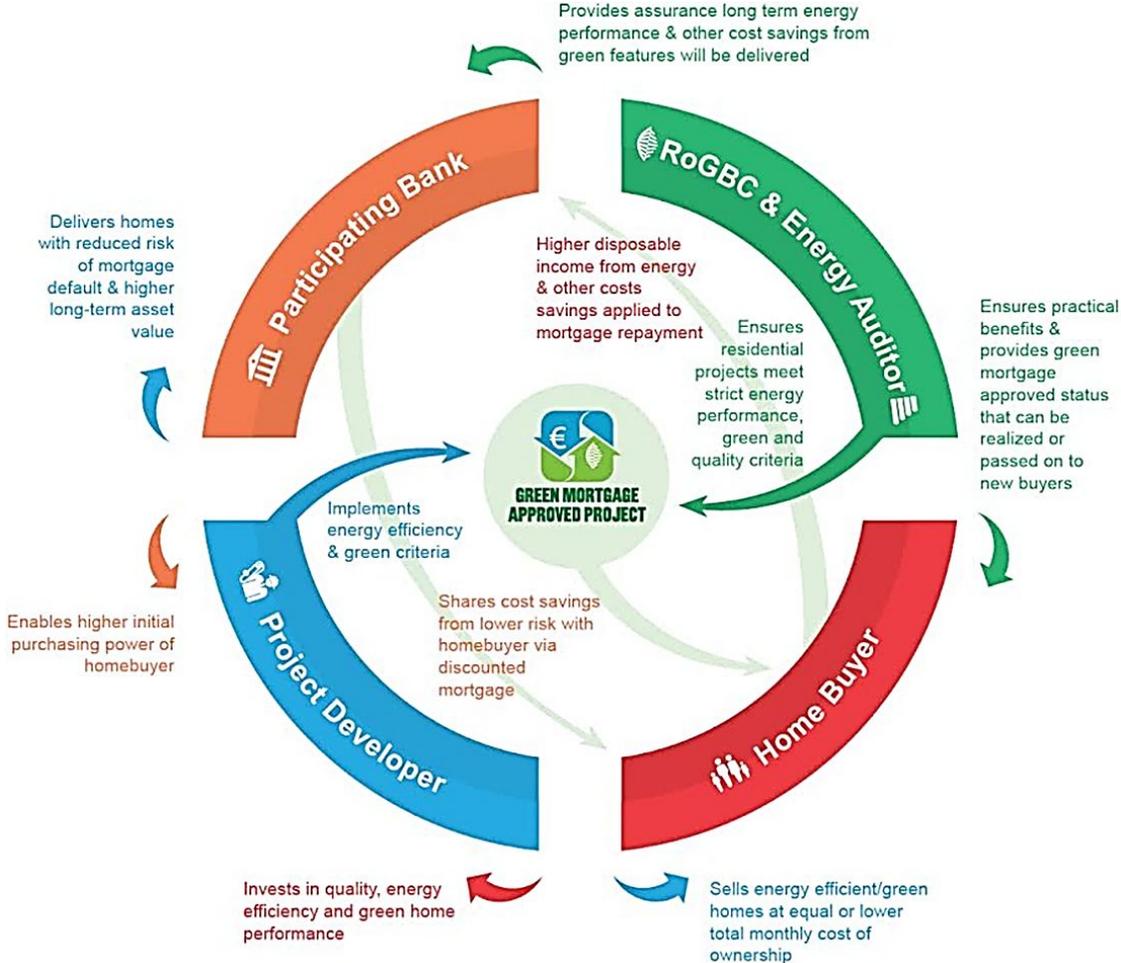
June 2023 -
May 2025

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What is a Green Mortgage?



Total Cost of Monthly ownership



+



+



Net Savings with Green Mortgages €

Costs & Savings	EPC “B”	Green Homes
Sales price of 70sqm apartment with Value Added Tax	98,000	105,000
Loan amount with 15% down payment	83,300	89,250
Monthly mortgage payment	632	665
Cost of energy /apartment /month	183	57
Total Cost of Monthly Ownership: Mortgage + Energy	815	722
Net monthly savings for certified Green Homes vs “B” apartment		126
Net annual savings for certified Green Homes vs “B” apartment		1512

In the case of a fixed rate for the first 5 years, over 25 years amortization period:

2.27 monthly mortgage payments covered by the energy savings resulted from comparing a Green Homes certified home vs a Class “B” home



CERTIFIED BY



Energy Efficiency & Green Energy

Construction Waste Mitigation/
Introduction of Circular Economy
principles

Construction Site &
Property Management

Indoor Air Quality /
Wellness

Sustainable &
Healthy Materials

Location -
Community

Bio-Climatic
Design

Other
Green
Design
Principles



New Build



SMARTER FINANCE for FAMILIES

2019-2021





17 Partners ▶ 22 Partners
 15 Countries ▶ 20 Countries

SMARTER Results & Future Actions

- 14 Green Homes & Green Mortgage programs launched
- €8,500,000,000 of residential project value in the program representing over 32,000 homes
- Extensive research and tools
 - Comprehensive toolkits
 - Mortgage risk analysis
 - EU Taxonomy, Level[s], CEN Standards
 - Green valuation



Bank Partners



GRUPE SOCIETE GENERALE



Net Savings with Green Mortgages [€]

Lessons learned	
Deliverables streamlined	Minimum Viable Product
Support each other's communications	Green Home Solution Providers
Challenges	
Raise the level of ambition	Renovations still difficult / especially deep renovations
End customers / citizens not fully aware of the financial and other benefits of green finance or green homes (high energy performance/ reduced energy costs, health, comfort, mental well-being)	Combat greenwashing



Introducing

SMARTER FINANCE for EU



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Agência para a Energia



9 Partners
7 Countries

SMARTER4EU Impacts

Hybrid Green Finance Solutions for Vulnerable People

Affordable, high quality, green homes across Europe

Creation of European Centre of Excellence

Hands on assistance for banks, investors, developers, green homes solution providers and citizens

Support for new and existing programmes

Energy and Green Data Collection providing inputs back to essential stakeholders to support green finance

Capacity Building

Training, research, documentation, events

Energy Security

Leveraging public investment and promoting rapid implementation of innovative green finance solutions

How will we reach 100,000,000,000€ ?

SMARTER Finance for Families	SMARTER4EU
2 Banks, small interest in green finance	14 Banks, intense interest in green finance
Basic research	Extensive research
Horizon 2020 support	LIFE Clean Energy Transition programme, Consortium, Other support
Few projects	32K+ Housing Units, 8.5 Billion Euros
No international communication	Extensive international communication
Basic collaboration	Help Desk, Self Service modules, Assistance, European Centre of Excellence
Frozen conflict in region	Monumental energy emergency and need for change in Europe

Launch of EU Taxonomy Aligned Residential Certification



- Meet or exceed EU Taxonomy building energy Requirements
- Use upgraded non-energy green criteria to meet the “Do No Significant Harm” mandate of the Taxonomy
- Utilize the Level(s) frame to evaluate the non-energy green Criteria
- October – December Certification Task Group review
- 15 January 2024 - Launch of aligned certification and criteria

Hybrid Funding - Blending of public and private investments





Capacity Building

ACTIVITIES

- Online education courses
- Consultations for concrete Pilot projects
- Expanded catalogue of EU based good practice examples
- *Let's build green* campaign deepens communication between public and private sector

PAST SUCCESSES

- 106 signatures from 14 countries in the Let's Build Green campaign
- 52 supported municipal staff members
- 40+ registered municipal course participants
- 27 municipal projects consulted





Problems in the energy efficiency of residential buildings sector of Ukraine before 24/02/2022

85% of residential buildings were built during the USSR (before 1991)

Energy consumption:

- built before 2007 – up to 300 kWh/m²
- 2008-2016 – up to 160 kWh/m²

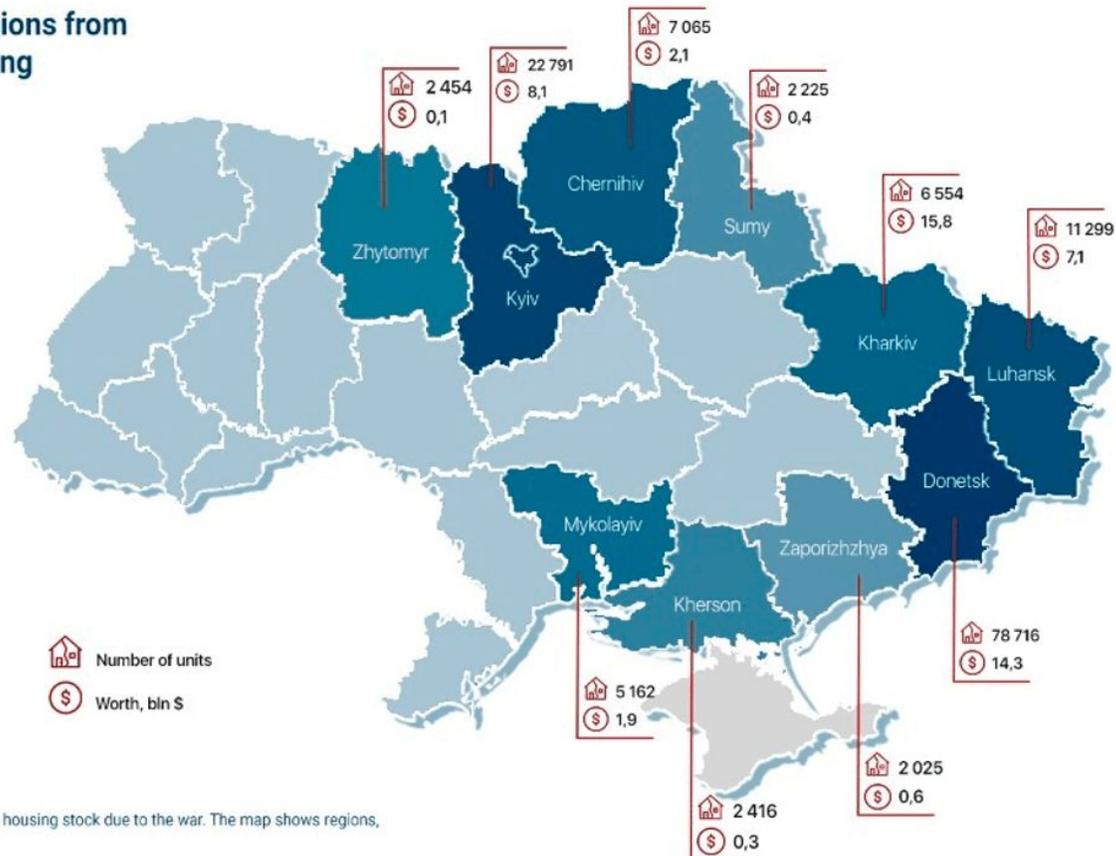
Current legislative norms for new buildings is 68-120 kW/hm²

In general, according to the latest estimates, the average energy consumption in the sector of residential buildings in Ukraine was 186 kWh/m² which is 2-3 times higher in compare with EU countries

Ukrainian post-war rebuilding: damages of the housing stock made up over EUR 50Bn



Map of the ten most affected regions from destruction and damage to housing stock, November 2022*



- Damages to the housing stock as of February 2023 – **EUR 50 billion valued at replacement cost (KSE report)**
- Residential housing stock accounts for **37%** of the total damages.
- **153.9 thousand** private houses and apartment buildings destroyed or damaged.
- **Top five regions** most affected by housing destruction: Donetsk, Kyiv, Luhansk, Chernihiv, and Kharkiv
- In the **capital** city, 348 residential buildings were destroyed or damaged, mainly multi-apartment buildings, valued at \$0.9 billion

*In total, 22 regions of Ukraine were affected by damage to the housing stock due to the war. The map shows regions, where at least 2,000 objects were destroyed or damaged.



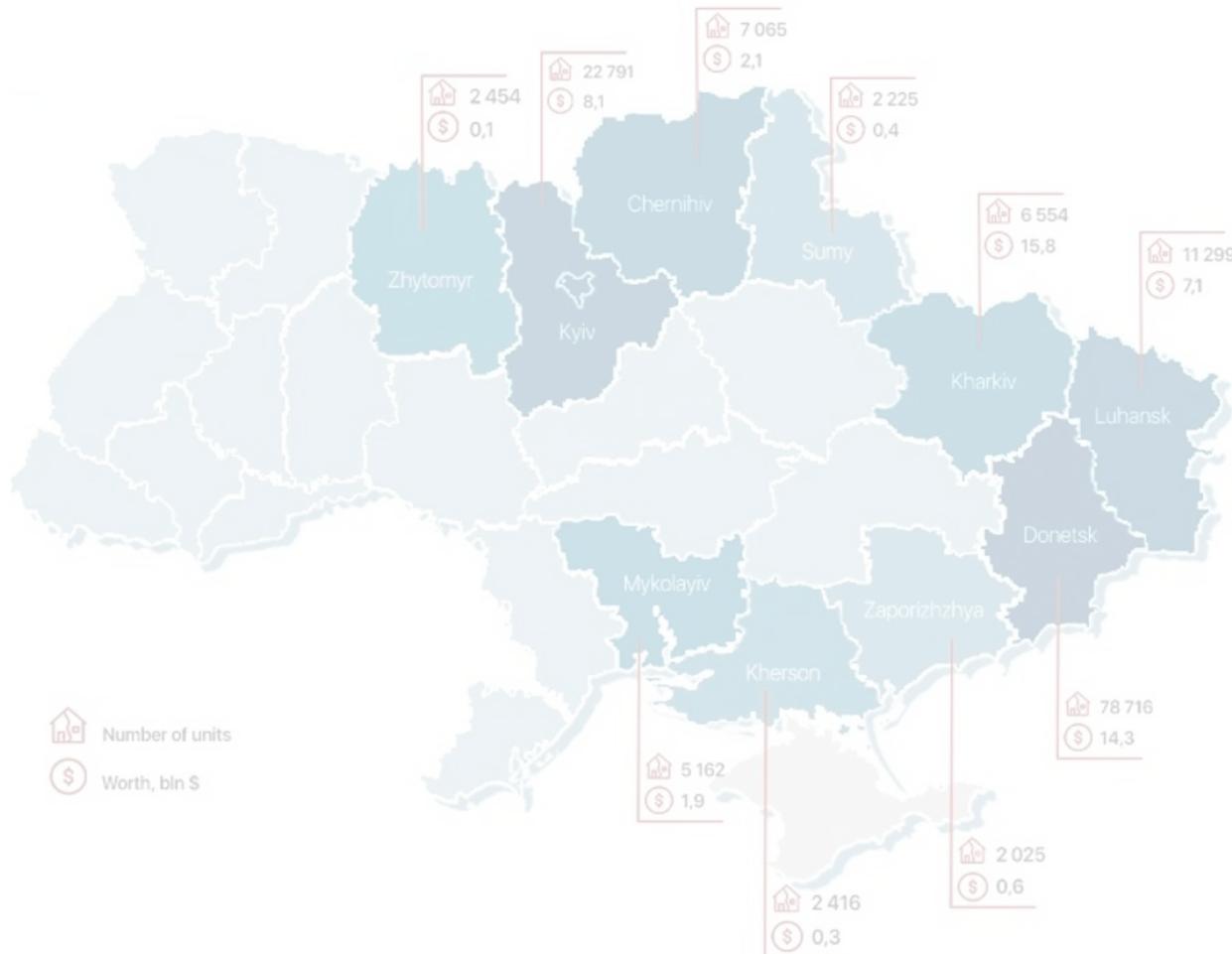
Post-war challenges

153.9 thousand houses destroyed, including more than 18 thousand multi-apartment buildings

4.9 million people are internally displaced from eastern and southern parts of Ukraine

More than 50% of these people will need new homes

Plan for Ukraine



Solutions needed immediately, that deliver **nZEB performance**, affordable for citizens, international donors and Ukrainian national and local governments

- Proposing the **SMARTER4EU** and related certification framework ready for immediate implementation tool to **achieve nZEB housing**
- Launching 2nd edition of **Let's Build Green campaign** for green finance capacity building in Ukraine and region's municipal sector 16 October 2023 with 40 participants enrolled
- Provide **hands-on support through SMARTER4EU help desk** and **European Centre of Excellence** to ensure residential projects can be designed and built to nZEB standards, quickly and with **low costs to governments, donors** and, most importantly, **citizens**

Energy Security



Residents

- The ability to consume less energy to provide comfort in homes, and as a result - lower energy bills



Municipal Level

- Prevention of energy poverty at the municipal level
- Possibility to develop self-sufficient municipal energy clusters



State Level

- General decrease of energy consumption level in the sector of residential buildings
- Reducing dependence on the supply of imported energy resources

Capacity Building

Building capacity of local authorities (municipalities) in implementation of "green construction" projects

Cooperation with higher educational institutions which train specialists in the fields of architecture and construction

Advocacy for the modernization of national legislation by municipalities and their associations



Thank you



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