



The PPPP of residential energy efficiency in Eastern Europe

Regional context

- Much of the existing housing stock dates back to 1960s
- Mostly pre-fabricated multi-story apartment buildings -in some countries representing 30% in some more than 70%
- After the privatization of 1990, 90%+ of dwellings are privately owned
- Residential heating accounts for more than 40 % of energy use
- Utilities are subsidized by the government
- Estimated energy savings potential of energy efficiency measures in residential buildings range between 20-40%





Habitat's EE portfolio in the Balkans and in Eastern Europe

- Armenia
- Bosnia and Hercegovina
- Macedonia
- Poland
- Bulgaria









There are multiple benefits to investing in energy efficiency. A particular cost effective investment is in the **common spaces of apartment buildings** such as facades, roofs, stairwells, basements etc.

Examples of benefits:

- Direct savings on the heating bill
- Beautification of the building or city image
- Increased comfort at home
- Real estate value increase
- Safer living environment
- Healthier living conditions
- Reduced green house gas emissions



Challenges

If the benefits are so many, why aren't we all investing in residential energy efficiency?

Typical challenges:

- Ownership structure: in many countries in Eastern Europe and Central Asia individual apartment ownership is > 90%
- History: home owners reluctant to take responsibility for common space maintenance
- Access to financing for HOA's or common space investments (guarantees)
- Trust: HO's ⇔ HOA's, HO's ⇔ HO's, Banks ⇔ HO's, Banks ⇔ HOA's



Expected outcomes

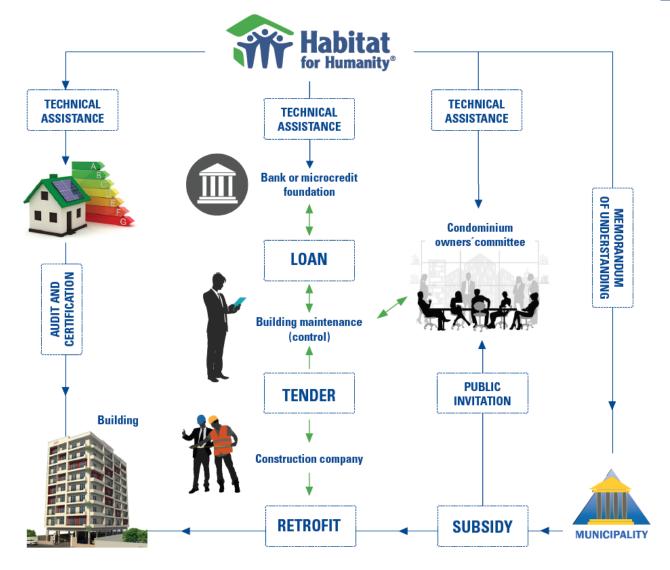
- •Overall outcome: reduce energy poverty in Eastern Europe
- 1 Convinced home-owners in Eastern Europe about EE and empowered home-owner associations (HOAs)
- 2: Mix of financing mechanisms (credit lines for HOAs and subsidies for vulnerable customers) are introduced on scale
- 3: Facilitation of stakeholders is acknowledged as critical and subsidising it becomes integral part of project financing







The PPPP process flow















REELIH project

Results:

- "Draft" models tested in Armenia and Bosnia & Herzegovina
- 3 buildings in Armenia and 4 in Bosnia & Herzegovina renovated
- Regional and national level research on REE institutional context
- Knowledge sharing platform
- Policy recommendations









- For investments in residential energy efficiency to become sustainable we need to understand the motivations of the individual home owners and the dynamics of their interaction in the home owners association.
- Providing financing alone is insufficient, be it subsidies or loan products, to initiate
 action by home owners or their associations.

Without the home owners reaching an agreement, <u>nothing</u> will happen in their common spaces. Therefore, we need to:

- Strengthen HOA self governance capacity
- Establish HOA's reputation as a trustworthy borrower
- Create a supportive institutional environment for HOA's to function

And we need on-going facilitation between stakeholders to make it a real PPPP!



Thank you!

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