CEE residential building renovation programs: what lessons can we learn?

Peter Robl
1 Lessons learnt at C4E events

C4E Forum in Balchik, Bulgaria, 2016
C4E Workshop in Prague, Czech Republic, 2017
C4E Forum in Poland, 2018

- C4E is a bi-annual community-building event
- Half-week interactive program – practical sessions, creative workshops, evening plenaries and plenty of informal networking opportunities
- All in one place – government, industry, NGOs, think-tanks, financial institutions, etc. from across CEE region
C4E Forum 2016

More than 250 participants from 30 countries

- West: 29%
- CEE: 71%

- 30% Government, Public Sector
- 22% Business
- 22% NGO, Civic Association
- 13% Trade Association
- 7% Others
- 6% Academia, Research
3 CEE specifics

■ General
  ■ Modernization deficit
  ■ Low income of households
  ■ Constrained public budgets
  ■ High energy dependency
  ■ Personal and expert capacities
  ■ Corruption
  ■ Public investment = EU Funds

■ Residential buildings stock
  ■ Occupant-owned
  ■ Low level of urbanization
  ■ Mass and relatively recent construction
  ■ Heating sources vary
  ■ Low level of energy efficiency
  ■ Reaching the limits of lifetime
  ■ DIY culture / grey economy
Key challenges

- Allocation of public budgets for incentive programs
- Create demand for EE renovation
- Availability of affordable funding
- EE regulation / general building codes
Multiple players & factors to address challenges

- Government & Municipalities
- Owners
- Banks
- Civil Engineers
- Contractors
- Legislation
Political challenges

- Fragmented decision making
- Multi-annual budgeting
- EE viewed as policy imposed by Brussels
- Public funding / private property
- .... NGO / business pressure needed, capacity and skills must come first
<table>
<thead>
<tr>
<th>Challenge</th>
<th>Solution</th>
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<tbody>
<tr>
<td>Lack of demand for renovation</td>
<td>Energy advisors / audits Campaigns Reduce transaction cost</td>
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<tr>
<td>Slow &amp; complicated application</td>
<td>Personal capacities Automation / online based tools</td>
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<tr>
<td>High cost / low income</td>
<td>Social policy vs energy efficiency High rates + higher for deep renovation Soft loans in addition</td>
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<tr>
<td>Effectiveness of programs</td>
<td>Quality checks of sample projects</td>
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<td>Fraud</td>
<td>Fixed amount of subsidies per application</td>
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# Financial challenges

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Solution</th>
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<tbody>
<tr>
<td>Low income households</td>
<td>Social policy</td>
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<tr>
<td></td>
<td>Subsidized energy tariffs</td>
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<tr>
<td>Risk assessment</td>
<td>Knowledge transfer</td>
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<td>Guarantees</td>
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<td>Loan aversion</td>
<td>Soft loans</td>
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<td>General HOA legislation</td>
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<td>Linking loan to building / apartment</td>
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<td>Project pipeline</td>
<td>Technical advisory / Energy advisors</td>
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<td></td>
<td>General HOA legislation (HOA obligatory, decision-making, payment procedures &amp; cost recuperation, repair funds, etc.)</td>
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<tr>
<td>Currency risk</td>
<td>Guarantees</td>
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(Good) practice
Feasible!!!

MAB in Bratislava – Deep Renovation 2016

- All envelope insulation
- All windows and pipelines
- Heat pumps and PV
- Ventilation / heat recovery

- Heating energy need reduced by 74.8% to 20 kWh/(m².a)

- 920 000 € (42 apartments)
- Monthly payments down by 13 €/app./month
Register at c4eforum.net

Thank you for the attention!