

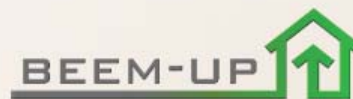
Rolf Bastiaanssen
Piotr Zietara

March 14th, Brussels

Preliminary results of a survey among
national housing associations

Energy refurbishment for sustainable SOCIAL, PUBLIC AND COOPERATIVE HOUSING

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Consulting Venturing

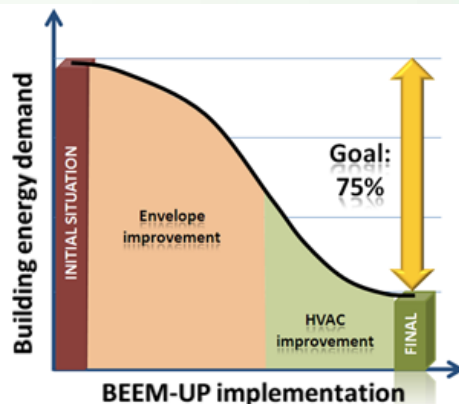


Bax & Willems Consulting Venturing

- **Research to Market**

- ✓ Open Innovation consultants specialised in **technology-driven innovation**
- ✓ Setting up **the strategy** and **financing** of renovation projects

- **BEEM-UP: Massive market uptake of deep retrofit solutions**



Energy refurbishment for sustainable social, public and cooperative housing
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Market insights to support policy & programme development

- Energy refurbishment is a major opportunity in energy demand reduction and job creation
- The social, public and cooperative (SPC) housing sector is a key actor of large-scale energy renovation
- **Limited / no data data available to support and target policies and programmes**
- This survey aims to provide some insight in long-term trends

Methodology

- **Questionnaire and telephone interviews of national SPC housing associations**
- **Covering 60% of EU-27**
- **Supported by data from the BEEM-UP project**

The survey reflects best estimates by experts at time of the interview, does not reflect the formal position of participating experts, nor organization they represent

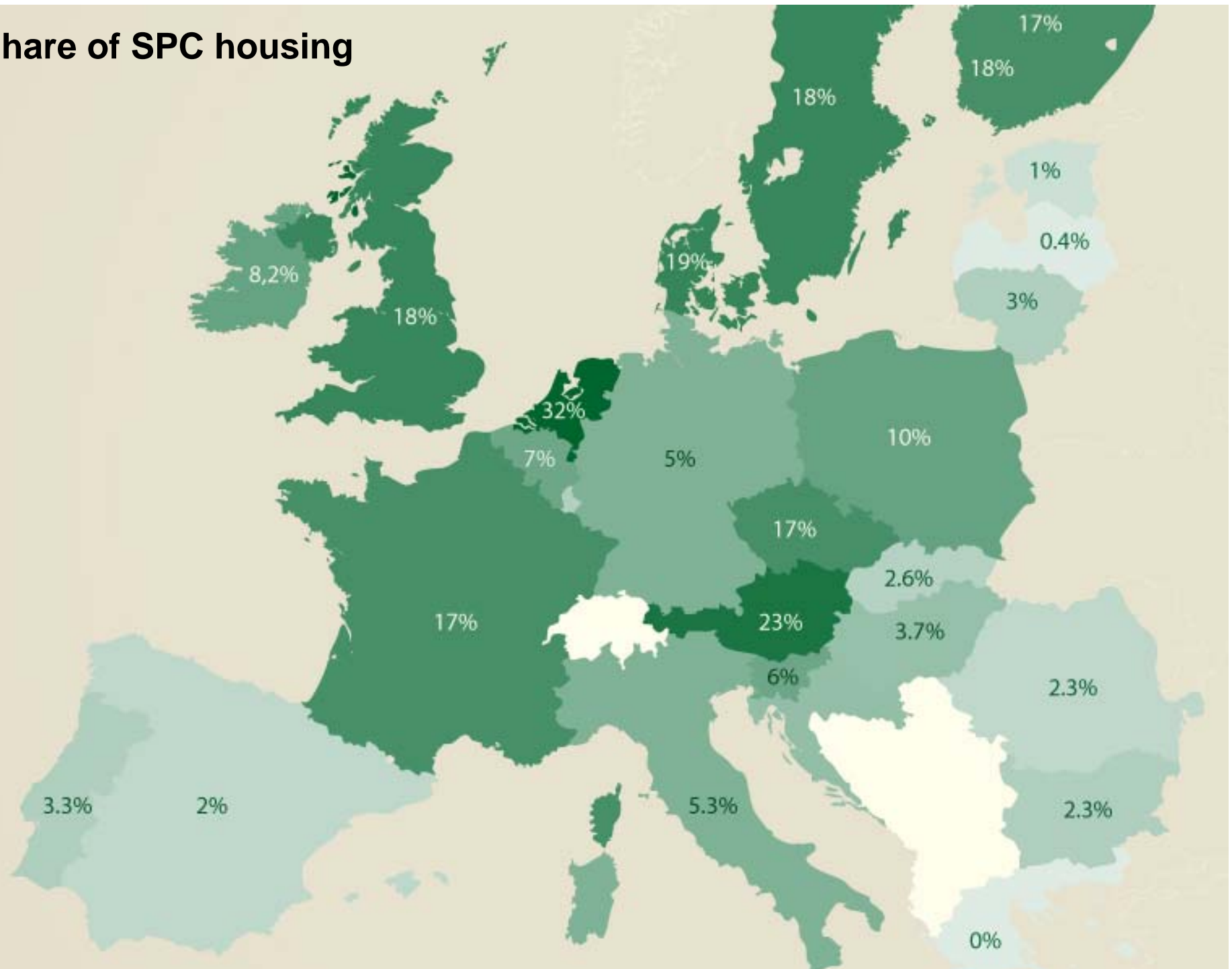
Unlocking potential for energy savings in SPC housing

- 80% of buildings in 2050 are already built
- 75% energy demand reduction can be reached cost-effectively*
- **SPC housing can drive transition of European buildings**
2-3% of all EU energy consumption is in SPC heating & cooling

Long term investment horizons, technical ability, socio - economic drive and scalability potential, 12% of all EU housing stock

* www.beem-up.eu

Share of SPC housing



Renovations 2013 - 2020

Investment per Dwelling

Current



Planned



Refurbishment Rate

Current



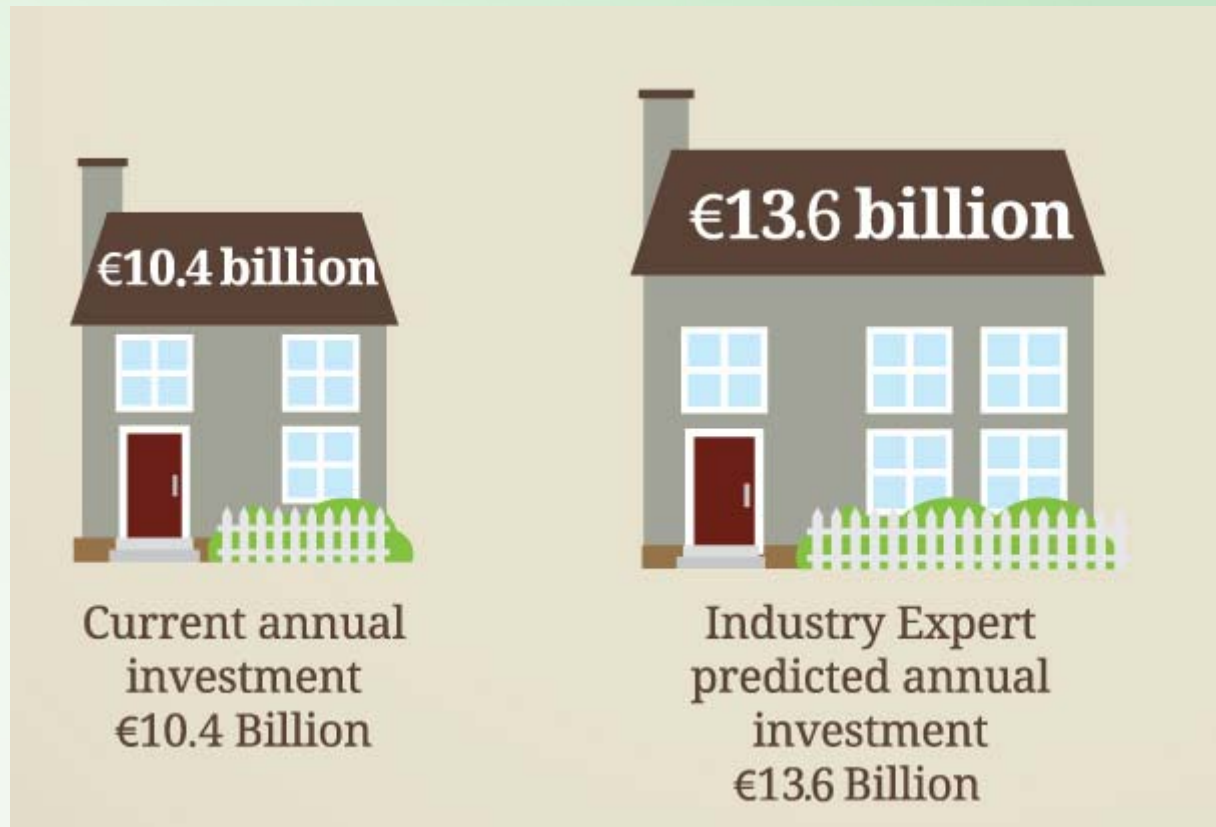
321,300 units

Planned



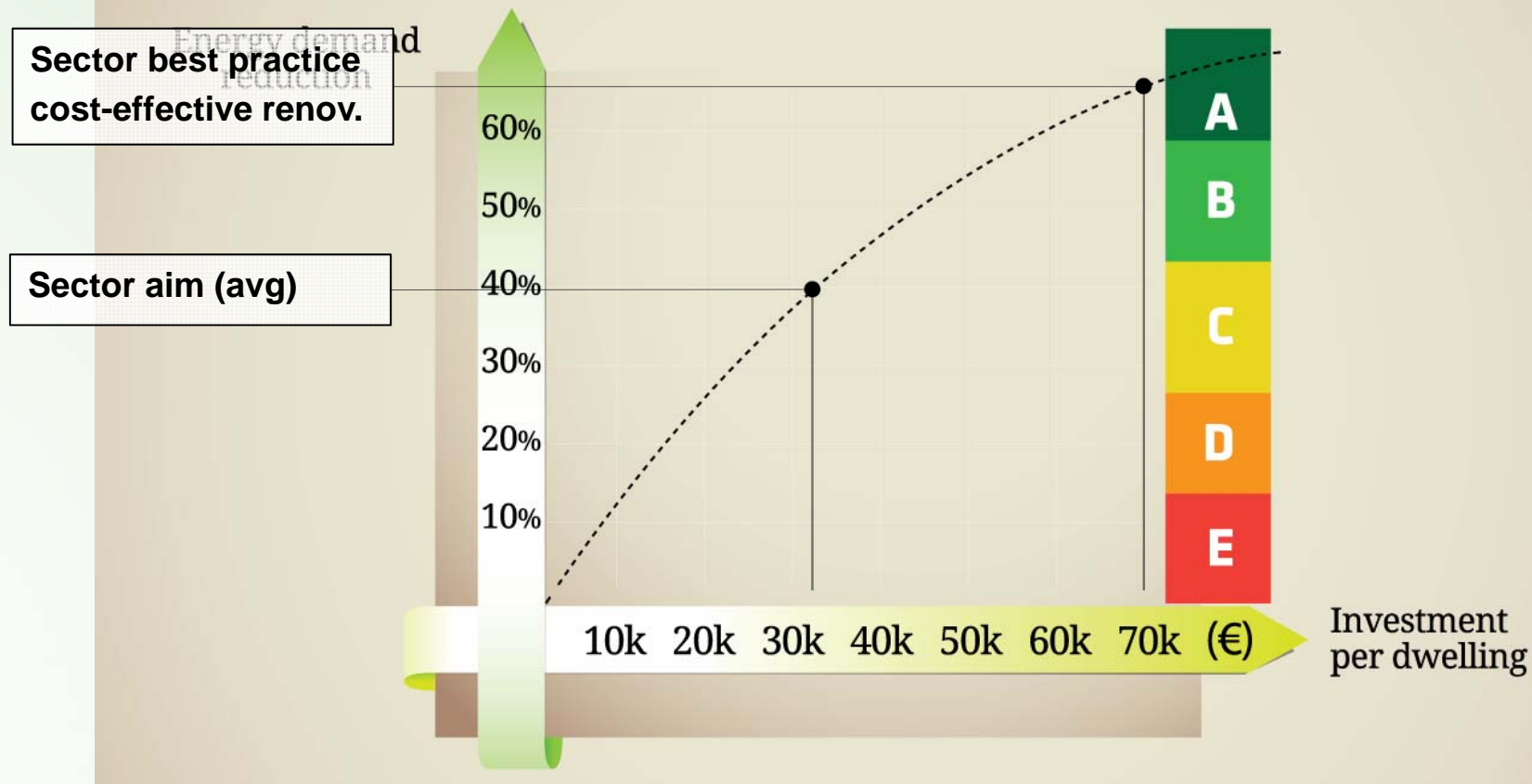
375,300 units

Annual investments 2013 - 2020



Energy demand reduction

What does an efficient building cost?



* B&W elaboration based on BEEM-UP

2020: Forecast vs. policy ambitions

- **SPC housing forecast**
 - 1,39% refurbished each year
 - Average reduction in energy demand of 40%
 - Invests €13,6B per year
- **Policy ambition: 20% energy reduction target by 2020**
 - 2% refurbished each year
 - Average reduction in energy demand of 65%
 - Requires est €37,8B per year



Financing gap

Investment required to reach EU 2020 targets
for energy demand reduction

(Billion €)



Impact of aiming for 2020 targets*

- **Cost-effective abatement of CO₂ emissions**

Additional 9.9 million ton of CO₂ reduction, or €163.3 million savings (EU Trading Scheme)

- **Higher employment**

Additional 668,841 permanent jobs (directly and indirectly)

- **Improved health**

Lower incidence of diseases, lower mortality rates, improved quality of live, higher productivity

* Based on standard indicators

Next steps?

- **Report to be finalised in April**
- **Relevant questions outstanding – ”room for improvement”**
 - Reach building owners, not associations, $n = >100$, coverage $>10\%$ of dwellings
 - Data quality (# buildings, energy label, planned v forecasted investment)
 - Scope: Current cost of capital, financing structures

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Policy recommendations

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What can be done?

- **European Housing Fund**
 - Facilitate low-cost, long-term financing of investments in retrofitting in housing
- **Reduce threshold to access financing**
 - Many SPC entities invest in €10-25M range
- **Continue ELENA grants for technical support**
 - Current technical capacity limited in SPC companies
 - ELENA successful in mobilising major and more ambitious renovations

Non-financing ideas

- **Appraisals of ´green investments´**
 - Green investments not properly valued; asset-backed investments limited
- **Training for housing professionals;**
 - financial engineering and retrofitting project management
- **Applied research**
 - Low-costs technologies for the improvement of energy efficiency and renewable energies in housing. Focus on prefabricated modules