Practical Approaches to the Building Renovation Challenge Workshop

Notes on Parallel Session 4: "Capacity building and decision support"

Subject of the Parallel Session

Decision making in building renovation is influenced by a number of non-technical stakeholders which need to be addressed for maximum rollout of building renovation solutions. We need to recognise who these stakeholders are, what drives them and what barriers for action they perceive.

In the session we sought to identify barriers adversely affecting those stakeholders that are supposed to influence or decide on energy efficiency investment; we also explored and discussed practical solutions for greater investment and wider implementation at building and neighbourhood scale.

Format of the discussion

The number of participants was much larger than expected, over 20. The group was sitting in a half circle of several rows. The majority of participants had an opportunity to introduce themselves and to name the most relevant stakeholder in their experience and with regard to their project(s). The format fostered a very intense and substantive discussion and an exchange of project approaches and results. It also provided an opportunity to establish ties for cooperating within new and ongoing projects.

The moderator was recording any common or agreed findings a flipchart while the rapporteur was asking questions and choosing speakers, with further assistance from the moderator referring back to the flip chart documentation.
Identification of Challenges

Morning Session: Stakeholders, challenges and barriers:

Stakeholder landscape:

Drawing from their experience with a great number of projects, the session participants (mainly project coordinators) listed the relevant stakeholders. The subsequent stakeholder landscape looked as follows (where recorded, individual projects are named):

- Authorities (national, regional, municipal [e.g. ZagEE – City of Zagreb], local, as building owners, as enablers/facilitators, as policymakers, as financers...)
- Building owners [e.g. RentalCal – IWU] (public/private, large/small, specific uses - hospitals, hotels [e.g. neZEH - Crete], schools [e.g. Renew School – Belgium] etc. -, landlords or owner – occupiers)
- Industry (suppliers, contractors, architects, ESCOs, maintenance or building managers)
- Professionals (architects, engineers or utility companies)
- Financing entities (public or private)
- Occupiers and end-users

Other projects represented in the discussion include: RELS – Catalunya; iNSPiRe – ACE; HERON – Italy; ZEBRA2020 – BPIE; LEAF – Changeworks UK; RePublic_ZEB – Italy; CERTuS – Italy; Build Upon – GBCe; COHERENO – Delft; NeZeR – Finland.

Challenges:

The morning session – as well as the afternoon session – identified and discussed the following barriers and challenges, thereby following the agenda.

Each stakeholder group faces specific challenges, some of them shared or even interdependent, some of them very specific. Process-related challenges are perceived as the most relevant. Challenges/barriers are aggravated when scaling up.

In general, there is a lack of interaction between stakeholders (silos in authorities, dispersion of decision making...) at all levels. Amongst owners and end users (private and public), the main challenges perceived are related to uncertainties, lack of trust in the information (technical and economic), an "excess of innovation" and "deepness" in the renovation schemes offered to them. Other challenges include high upfront costs, the extra costs associated with the need for increased knowledge, as well as time and effort to deal with these processes.

Lack of design freedom in some solutions is also perceived as a barrier for architects. Another challenge lies in the fragmentation of knowledge and regulations, and a lack of management capabilities to handle all aspects of the process (including multidisciplinary skills, e.g. communication). The disconnection between costs and benefits of renovation (split incentives/ landlord –tenant dilemma) was also an issue.

In certain contexts, the age structure is a strong barrier ("old owners, old houses"), as well as the "hassle factor" or intrusiveness of measures. More specific circumstances, such as cultural heritage, protected buildings or fragmented property schemes, add more difficulties to the process.
The limited time of a one hour session combined with the multitude of participants sharing their projects experiences did not allow for dealing with the planned question of “what drives and influences decision making for these stakeholders?”.  

**Identification of Solutions**  
**Afternoon Session:** Solutions

As looking for solution is closely related to identifying and avoiding obstacles, participants of the morning session already began to talk about solutions. These were discussed in further detail and expanded upon during the afternoon.

The following three main areas of work have been developed:

- **A broad look at the benefits, e.g. going beyond the saving potential of energy efficiency and reaching the climate goals:**
  
  Leverage from added benefits in the renovation processes. Environment quality, reduced noise, added value, added accessibility. Disconnect from the "kW/h" and "payback" rationale, towards the establishment of a broader perspective like appreciating a home, definition of home quality standards, addressing intellectual and emotional elements of the stakeholders.

- **Stakeholders' alliance [e.g. MORE-CONNECT, PROF-TRAC – The Netherlands]:**
  
  New, inclusive and empowering collaboration models at all levels: for authorities, to overcome silos in regulations and planning/execution; in the industry, with co-maker schemes that have the advantage of cooperation beyond single projects; and, finally, at the district scale, bringing together all relevant stakeholders (authorities, owners, contractors or financing entities) through actions that – under a shared, holistic approach throughout the whole process – provide security of investment, clearly define cooperation models and promote participation.

- **Raising awareness:**
  
  In this shared scenario, "learning by doing" schemes are explored that promote pilot actions which can serve as testbeds for further action, refinement of processes and awareness-raising mechanisms (word of mouth, visits, visualisation, going beyond information and figures by addressing emotional elements of the stakeholders).