SEEDS

Cost-effective and replicable RES-integrated electrified heating and cooling systems for improved energy efficiency and demand response.

EVENT: COLLECTIVE HEAT IN URBAN CONTEXT

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On Wednesday, September 4, the Belgian SEEDS partners (KU Leuven, Sweco Belgium, Mintus, Builtwins, and Daikin Europe) organized an event for local stakeholders: “Collective Heat in Bruges: Charm and Sustainability at the neighborhood level”. More than 60 participants took part in this interactive event. Local authorities, sector organizations, engineering firms, energy cooperatives, research institutions as well as individual citizens were present.

SEEDS is a Horizon Europe project, running from 2024 to 2027, that aims to promote the electrification of thermal systems in buildings through an integrated approach, leveraging energy-efficient renovations and smart HVAC systems. SEEDS' solutions focus on reducing the thermal energy demand of buildings and enabling energy flexibility to increase the share of renewable energy sources (especially locally produced ones), thereby improving grid stability in a cost-effective and environmentally friendly way. This strategy will now be tested in six different demonstration projects across Europe (Belgium, Denmark, Hungary, Slovenia, Greece). For more info: https://project-seeds.eu/

The event began with a site visit to De Schipjes, a group of almshouses managed by the social housing company Mintus. This cluster of homes serves as a testing ground for sustainable collective heating and cooling. The current microgrid will be hybridized to provide fully sustainable and robust heat demand, as well as offer sustainable cooling.

Attendees also visited a similar cluster of homes in the Stijn Streuvelstraat, where the lessons from De Schipjes will be applied to renovate the houses and install a microgrid (clean hybrid collective energy system) powered by heat pumps. These works will take place from 2025 to 2027.

After drinks and snacks, KU Leuven presented the innovations that SEEDS will bring to the two Belgian pilot projects: hybridization through renewable energy sources, model predictive control (MPC), and a hydraulic switch scheme to always turn on the most efficient heat source. The ultimate goal is to develop a fully sustainable, financially viable solution while ensuring occupant comfort.

Then it was time for action! All participants were invited to participate in a workshop, with the central question, “What barriers currently prevent the implementation of sustainable collective heating and cooling solutions?” The participants shared their experiences from different perspectives: How do we encourage citizens? How do we guarantee a positive business case? What are the legal and organizational constraints? During the SEEDS project, solutions to many of these issues will be sought.

We concluded the event with a fine reception. Thanks to all participants for their active attendance, and a special thanks to Mintus for hosting this exciting event.

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