HPT Annex 60

Retrofitting heat pump systems in large non-domestic buildings

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Objective

- Emissions from non-domestic buildings are difficult to tackle because they the stock is complex and varied in form, size and function.
- There are a wide variety of system options when considering a move to retrofitting a heat pump system in an existing building.
- There is a lack of simple, high level advice for decision makers who know they need to take action but don't know how.
- Our main objective is to gather experience from participating countries to help develop a simple on-line tool for decision makers.

Target audience

We have three principal target audiences, who have different perspectives on the issue and who will need guidance presented in different ways:

- Building owners and managers, who will need a general understanding of the options available to them.
- HVAC system designers, who will need more detailed information on system choice and design.
- Policy makers and their advisors, who will need information to assess the potential applicability, costs and likely outcomes of possible policy instruments

Participating countries

- Natural Resources Canada
- Austrian Institute of Technology
- Politecnico di Torino, Italy
- Ulster University, Northern Ireland, UK
- Dutch Heat Pump Association
- Department of Energy Security and Net Zero, UK

And most recently:

- University of Galway, Republic of Ireland

Progress to date

- The literature review showed that there is little published material on deployment practice, so we will be using cases studies as our main information base.
- User requirements are central so we are developing our understanding of how decisions are made in large non-domestic organisations.
- We have identified 30-40 potential case study organisations.
- We have begun developing the “logic model” for the guidance: mapping links between the building, the existing HVAC and user expectations/needs.
- We are working with the web team at RISE on how the guidance can be implemented within the HTP website platform.

Next steps

- We will be approaching potential case studies directly to help fill the gaps in our understanding. Monitoring data is a key requirement.
- We will continue to develop our understanding of how procurement decisions are made in large public and private organisations.
- As our understanding develops, and working with the HPT web team, we will prepare specification for the web development support we will need.
- We will continue to work with related Annexes and especially HPT Annex 62 and EBC Annex 81 (Data Driven Smart Buildings).
- Recruiting enough high quality case studies is a risk, so we will take a call in the first half of 2024 on whether we will need to extend the Annex.

Questions