Report Smart Heat Pump Roundtable

2 December 2021

To introduce the topic of smart heat pumps to DG Energy of the European Commission, EHPA organised a roundtable discussion on 2 December 2021 together with its members and industry stakeholders. During the event, several speakers gave presentations followed by an informal exchange of views regarding the state of play of smart heat pumps and the possible development of this flexible solution. All slides of the presentations are available here (only accessible for EHPA members).

Introduction

Thomas Nowak of EHPA opened the roundtable, highlighting how heat pumps are one of the fastest growing elements in the European energy landscape and how essential they can be in building electrification processes. As far as the development of smart heat pumps is concerned, the continuous research and development of new solutions to improve the relationship between controller and device is essential, and it is considered very important that the industry is now ready to move forward.

Industries presentations

Laure Meljac, Regional Manager for International Affairs, NIBE

Ms Meljac focused in her presentation on the flexibility potential of smart heat pumps. Low tariffs, smart price adaptation and smart consumption were highlighted as favourable points. She also pointed out that user comfort and one-sided communication can be barriers to the development of flexible systems. To support this thesis, a concrete example of a building in Strasbourg was given, which helped to understand how heat pumps have a high potential for flexibility due to certain indicators.

Stephan Kolb, Regulatory Affairs Director, Viessmann Group

Mr Kolb presented a project in cooperation with TenneT on TSO redispatch. The project is about testing the redispatch capacity and checking the control potential of Viessman's control centres on TenneT's dislocated heat pumps. The project aims to test how the market works by understanding the bilateral profit margin - on a case-by-case basis - in a redispatch system.

Morten Deding, Heat Pump Director IREF Europe, Johnson Controls

Mr Deding introduced three projects using smart heat pumps in an industrial environment. These projects showed very efficient solutions for the use of heat pumps in synergy with other energy production elements. In fact, the projects highlighted the efficient use of smart heat pump systems in the case of reusing the
waste heat from a production district and a more useful or postponed use of stored energy from solar systems in summer that then feeds the heat pump in winter. Mr Deding also presented the project with which they won the DecarBuilding award 2021.

Benjamin Bailly, Head of Markets & Innovation, Voltalis

Mr Bailly focused in his presentation on how their smart control system can best connect with heat pumps, so that remote control can be applied to the systems with which it is connected. The main benefits illustrated are to be able to balance energy production and consumption and the impact on the grid.

DG ENERGY presentations

Next to the company presentations, there was a contribution from two officials of DG Energy of the European Commission.

The first speaker was Eric Lecomte, who gave some examples of the application of heat pumps for the efficient functioning of buildings. He also gave an analysis of global competitiveness, pointing out that the market is currently dominated by the Asian pole of production. In this regard, he described as interesting - for an improvement of the European market - the data reported by NIBE on the benefits of the smart heat pumps and its development potential.

The second introduction came from Mark van Stiphout, who introduced DG Energy's general view of the various issues highlighted in the roundtable and then reported on the Commission's long-term objectives on the digitisation of these systems' infrastructures.

In addition, he introduced the 5 DeEAP areas, describing the Commission's project to create a European data sharing infrastructure. He also outlined the Commission's vision on the empowerment of consumers and the carbon footprint of new technologies, stating that these are two of the issues on which to have a constructive debate in the near future to create an efficient and inclusive system.

During the Q&A part of the roundtable, the following main points were discussed:

- The EU Data Act is beginning to take shape; more attention will be paid to the development of a data protection system.

- The limits to the development of flexibility systems are - according to the data available - due to a different need for flexible elements in the various Member States and because there is a need to improve the Clean Energy Act because it has not been well implemented.

- At the moment, DG Energy is not looking at a well-defined connection with the ecodesign rules – but this will happen at a later stage.

- **Next steps:** After the closure of the current consultation on the Digitalisation of the Energy Sector Action Plan (deadline 24 January 2022), DG Energy would like to have another discussion with the EHPA members to further discuss smart heat pumps and the outcome of the consultation.