HEAT PUMP READY | Department for Energy Security & Net Zero

Part of the Net Zero Innovation Portfolio

Catalyst
Accelerating the heat pump journey

CARBON TRUST

Project Lead: EDF

Partners: Daikin Airconditioning UK Ltd, SPEN, University of Sheffield

Funding:

£395,221

> This marks an exciting new chapter for heat pump deployment in the UK. This innovative project will accelerate the country's road to net zero, while providing customers with vital support as they decarbonise their heating in a cost-efficient way.
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> **Patrick Dupeyrat**
> EDF UK R&D Director

The problem: The complex heat pump installation journey

The existing heat pump installation journey can be time consuming, costly, and require multiple personnel. In all, it can take six months and can require up to four site visits to survey, design and install a heat pump system.

A digital platform has the potential to simplify and improve the efficiency of the heat pump installation process by supporting customers through the whole heat pump installation journey, including post-installation modelling and customer care.

The solution

The Catalyst project will deliver a one-stop heat pump app to streamline the heat pump installation process. The platform will consist of three modules: pre-survey assessment, survey and analysis, and post-installation modelling to deliver a single, accessible solution to support consumers through the heat pump installation process.

This end-to-end digital solution aims to simplify and accelerate the heat pump installation journey by reducing the time, cost and complexity for all parties along the supply chain.

Increasing participation and completion of heat pump installations

What are we going to do?

This project aims to develop an innovative digital solution that considerably improves the customer journey of homeowners looking to install a heat pump. Catalyst will:

- Integrate existing building surveying and energy calculation tools, methodologies and data points into one central platform
- Enhance end customers' knowledge of heat pump solutions allowing the process to be driven by fully engaged customers
- Bring some of the physical experiences online through a remote home assessment survey and using digital imagery to show what the heat pump would look like in place

Why is this an improvement on current solutions?

Installing a new heat pump is a mature process with an active supply chain. Yet, the existing process can be scattered, inefficient, and complex to follow for the end consumer. Several site visits can also be required to collect the necessary information.

The Catalyst solution will help further engage and include customers, improve connections between existing building survey and retrofit solutions and develop novel methods, including remote collection of information conventionally obtained during site visits. This will reduce the time needed for the pre-qualification work of installers, greatly improving their quotation and bidding process.

What would success look like?

A digital solution that reduces the time, cost and complexity of the heat pump installation journey, ultimately increasing the number of consumers participating and completing the heat pump installation journey, and also improving installer productivity.

How will this project help towards the target of installing 600,000 heat pumps per year by 2028?

The long and complex nature of the existing heat pump installation process results in a high consumer drop-out rate; EDF and Daikin have estimated an indicative fall-out rate of 72% between lead generation and home visits executed.

By simplifying and accelerating the process, project Catalyst aims to increase the productivity of the journey and the number of heat pumps installed following lead generation.

The Optimised solutions development stream of the Heat Pump Ready programme supports the development of innovative tools, technologies and processes to overcome specific barriers to heat pump deployment in the UK. This stream supports solutions aiming to reduce the life time cost and increase the performance of domestic heat pumps, minimise home disruption whilst providing high quality installations, develop and trial financial models to support heat pump deployment, improve the heat pump consumer journey and provide a smart and flexible home energy system.

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