



**HEAT
PUMP
READY**



Department for
Energy Security
& Net Zero

Part of the Net Zero Innovation Portfolio

Heat Pump Ready Programme: Supporting innovation in the heat pump sector

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Heat Pump Ready Programme

- The Heat Pump Ready programme (HPR) forms part of the UK Governments £1bn Net Zero Innovation Portfolio (NZIP) under the Built Innovation theme.
- Heat Pump Ready provides up to £60m of funding to projects supporting the aims of:



Reduce
lifetime
costs



Stimulate solutions
to mitigate the impact
of domestic heat pumps
on the electricity system



Develop approaches
to **engage with**
homeowners
and other key players



Inform future
heat pump
policy and regulation



Strengthen partnerships
within the UK's heat pump sector



Improve the consumer experience

Objectives of Heat Pump Ready



1) Develop innovative coordinated methodologies to achieve high-density heat pump deployment



2) Support innovative tools and technologies which overcome barriers to heat pump deployment



3) Foster collaboration and learning across the Heat Pump Ready programme and wide heat pump and associated sectors

Innovative coordinated methodologies to achieve high-density heat pump deployment

The **Solutions for High-Density Heat Pump Deployment Projects (Stream 1)** aim to support the design and trial of innovative, optimised solutions which deliver more cost-effective and high-density domestic heat pump roll out.

This stream focuses on:

- **Developing and trialling solutions** which take a 'joined up' approach to heat pump deployment, working across the heat pump landscape.
- **Developing an enhanced 'consumer journey'** as part of the solution – i.e. using the cluster projects to develop effective consumer engagement for all stages of roll out.
- **Understanding the network impacts of high-density heat pump deployment:** through the engagement with Distribution Network Operators (DNOs) in parallel to the high-density deployment provides the opportunity to understand the role of flexibility with multiple heat pump installations in their project location.

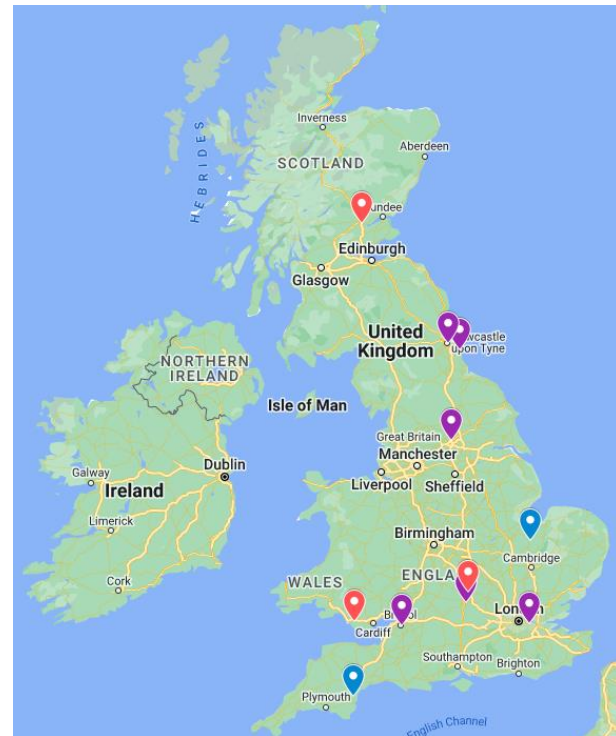


Innovative coordinated methodologies to achieve high-density heat pump deployment

Phase 1: Feasibility Study Locations

Urban	Rural	Urban with Rural
Newcastle	Teignbridge	Perth & Kinross
Sunderland	Fenland	Cherwell
Leeds		Bridgend
Oxford		
Greenwich		
Bristol		

Projects led



Innovative coordinated methodologies to achieve high-density heat pump deployment

Phase 2: Feasibility Study Locations

Urban	Rural	Urban with Rural
Oxford	Fenland	Cherwell
Bristol		

SAMSUNG



Learning #1: collaboration

Management
entity

Place based
entity

Engagement
coordinator

Local energy /
community
group

Housing stock
modeller

Distribution Network Operator
(DNO)

Technology provider

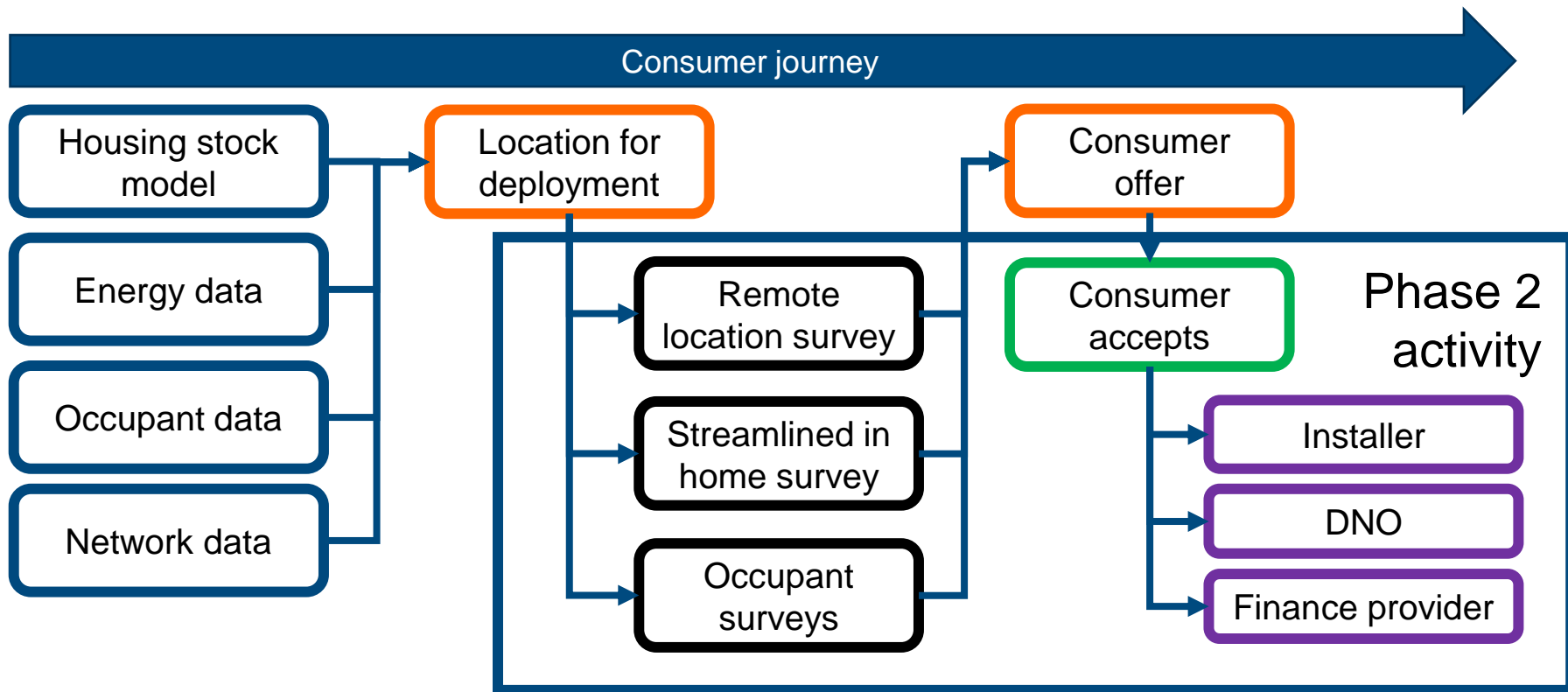
Energy supplier

Contracted services

Financial partner

Installation services

Learning #2: the role of data



Support innovative tools and technologies which overcome barriers to heat pump deployment

24 funded projects in Stream 2 to date, across the following 5 challenge areas:



1. Reduce lifetime cost and increasing performance of domestic heat pumps



2. Minimise home disruption whilst providing high quality installation



3. Financial models to support heat pump deployment



4. Improving the customer journey



5. Smart and flexible home energy system

Support innovative tools and technologies which overcome barriers to heat pump deployment

- 24 projects were successful in receiving funding through Heat Pump Ready.
- Projects are of varying duration, with all projects due to complete by March 2025



The Consumer Journey of Projects

0. Development
of heat pump
technologies

Manufacturing

ventive

ICAXTM
INTERSEASONAL HEAT TRANSFER

Increased Suitability

R.J. BARWICK
Net Zero Carbon Buildings

TCS

1. Finding an
installer &
obtaining
quotes

MCS

VIA
ANALYTICS

2. Heat pump
system design

BUILD
TEST
SOLUTIONS

q-bot

EDF
ENERGY

geo
smarter energy

heatly

hildebrand

HOARE LEA (H.)

3. Financing
the heat
pump
system

CITY SCIENCE
endless possibilities

GREEN
HOMEOWNER
LOAN
powered by Home Infrastructure Technology Ltd

Energie
Sprong

parity
projects

4. Heat pump
operation
and controls



Mixergy[®]

wondrwall[®]

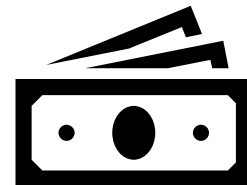
Kensa Heat Pumps
A KENSA GROUP COMPANY

switchee

5.
Maintenance
of the heat
pump
system

guru

OPEN FOR APPLICATIONS: £10m innovation funding



- Up to **£10m** of grant funding is available through a new Heat Pump Ready Programme Competition: Stream 2 – Wave 2
- To be allocated across four Challenge Categories:
 1. Improve the ease of heat pump deployment in homes that are '**complex to decarbonise**' by addressing physical, material, locational, technological, regulatory, or social challenges.
 2. Develop innovative solutions to enable heat pumps to be deployed in '**distress purchase**' situations when a new home heating system is required urgently.
 3. Improve performance and/or reduce costs of domestic heat pumps **with low-GWP refrigerants**.
 4. Reduce **the lifetime costs or improve the overall lifetime performance of** domestic heat pumps or improving the domestic consumer experience of using and living with a heat pump.
- We welcome applications for technology, tools, business models, and process innovation.
- Projects up to 12 months in duration from March 2024, with a grant value of £200k to £1.5m eligible
- All **project work must be carried out within the UK.**
- **Deadline for applications 8th January 2024**

Further details:

<https://www.gov.uk/government/publications/heat-pump-ready-programme-stream-2-wave-2-opportunities>

Find out more about Heat Pump Ready:



Website: www.heatpumpready.org.uk

Email: heatinnovation@beis.gov.uk



A screenshot of the Heat Pump Ready website. The header includes the 'HEAT PUMP READY' logo, the Department for Energy Security & Net Zero crest, and a navigation menu with links: 'About', 'Projects', 'Knowledge sharing', 'News & events', and 'Contact'. The Carbon Trust logo is in the top right corner. The main banner features a photograph of a row of brick houses with a city skyline in the background. An orange text box on the banner reads 'Accelerating the deployment of domestic heat pumps in the UK'. Below the banner, a paragraph states: 'Heat Pump Ready supports the development and deployment of solutions needed to accelerate high density, cost effective installation of domestic heat pumps.' At the bottom, there are two white boxes with orange titles. The first box is titled 'High density deployment projects' and contains the text 'Deploying heat pumps at scale in local areas using innovative methodologies to improve the customer journey.' The second box is titled 'Optimised solutions development projects' and contains the text 'Research and development of new tools, technologies and business models to overcome specific barriers to heat pump roll-out.' Each box has a small image at the bottom: a street scene for the first and a close-up of a heat pump unit for the second.