



**Scottish Enterprise Clean Heat Accelerator**  
Robin Parker, Nesta, 19 August 2024

## About Nesta

**We are the UK's innovation agency for social good. We design, test and scale new solutions to society's biggest problems, changing millions of lives for the better.**

For over 20 years, we have worked to support, encourage and inspire innovation that benefits society, a purpose that is more relevant now than ever.



**System Shaper  
Innovation Partner  
Venture Builder**

**A fairer start**

**Our mission is** to narrow the outcome gap between children growing up in disadvantage and the national average.



**A healthy life**

**Our mission is** to increase the average number of healthy years lived in the UK, particularly for those most affected by health inequalities.



**A sustainable future**

**Our mission is** to accelerate the decarbonisation of the UK's homes.

## Heat pump user survey key findings - over 2,500 heat pump owners in Dec 2022

- **81% of people** who had installed a heat pump into their own home were as satisfied or more satisfied with their heating system, in comparison to their previous one.
- People who were '**heat pump inheritors**' less likely to be satisfied with - ~60% as satisfied/more satisfied.
- Not identified any variation access building types
- More likely to be satisfied with **energy bills** than gas boiler owners
- 2/3rds of heat pump owners had **issues during installation**

### Recommendations:

- Make impartial information more accessible
- More advice on using heat pumps once installed
- Make the journey smoother for getting a heat pump

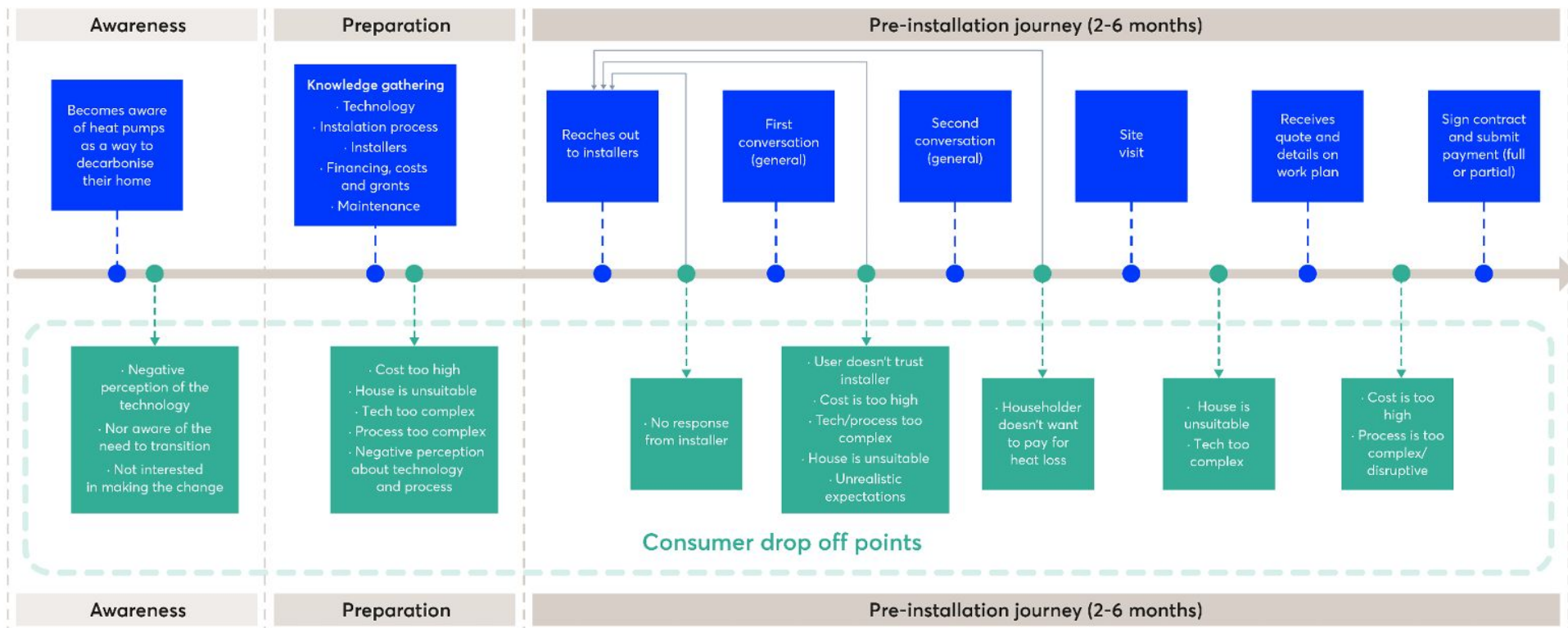


Figure 13. The current heat pump consumer journey

[More detailed version here](#), and for exploration/download [on Miro](#)

## Key consumer journey issues

1. **Uncertainty and lack of awareness around the transition:** consumers are still unclear about when fossil fuel heating systems will no longer be for sale, the need to transition to low-carbon heating and the role they need to play in making this happen.
2. **Mistrust in installers and green heating technologies:** historic issues in the supply chain, stop-start funding schemes and negative coverage of green technologies have eroded consumer trust. Combined with the high cost of the home retrofit, this makes many consumers risk averse.
3. **High friction retrofit customer journey:** the current process of retrofitting homes is often cumbersome and complex, involving multiple steps and considerable effort, meaning that consumers who are less motivated tend to drop off early

# The home tech, home improvement innovator.



## Context/Info

A retired engineer (55+), with an interest in technology. Living in a detached house in a small village. They're renovating their forever home to be as automated and low cost to run as possible. They already have solar PV and their next car will be an EV.

## Goals

- Future Proof Home
- Being a leader in tech amongst social group.
- Having "all the mod-cons"
- Being seen to be ahead of the curve with LCH
- Good return on investment.
- Low monthly bills

## Barriers

- Where to find information that can be trusted.
- Conflicting messages and advice
- Reliability concerns.
- Fear of making the wrong choice, backing the wrong tech.

# The finance driven, off-grid upgrader.



## Context/Info

45+ they own a detached house on the outskirts of a village. They're currently looking to upgrade the heating system and looking to switch from oil. They hope to reduce cost and remove the inconvenience of fuel deliveries. They're vaguely aware of options including HP's but have concerns from what they've read online. They're also worried about how they can afford the switch to alternate heating.

## Goals

- No longer need oil or wood deliveries.
- Improve thermal comfort
- Lower cost of bills and heating.
- Taking advantage of government subsidies.
- Being part of decarbonisation
- Future proof family home.

## Barriers

- Cost
- Choice paralysis
- Unreliable installers
- Suitability of property, it may need further retrofit works.
- Aesthetic concerns.
- Noise Concerns
- Conflicting, confusing information.



# The environmentally and socially conscious, convenience adopter.



## Context/Info

35+ Living in a semi-detached home on the outskirts of a major city. They have a young family and they're worried about the climate. Improving the environmental impact of their home is a priority. They are also keen to adopt technology to increase convenience and reduce cost.

## Goals

- Reduce emissions
- Being seen to be part of the green revolution.
- Technology being hassle free and smart.
- Long term solution, something they can forget about.
- Future proof their home.

## Barriers

- Unreliable installers, they don't call back.
- Where to find help/advice.
- Lack of trusted information
- Don't know anyone with a HP
- Don't fully understand HP's and how it will change their home.
- House maybe unsuitable.
- Don't have the cash to fund it outright.
- Concerned about paying a premium if the price is soon to drop.

Visit a heat  
pump

[visitaheatpump.com](http://visitaheatpump.com)

nesta

A group of diverse people are gathered in a garden setting, looking at a woman who is presenting information. In the foreground, a large white heat pump unit is visible. The background shows a wooden fence and a house. The scene is brightly lit, suggesting a sunny day.

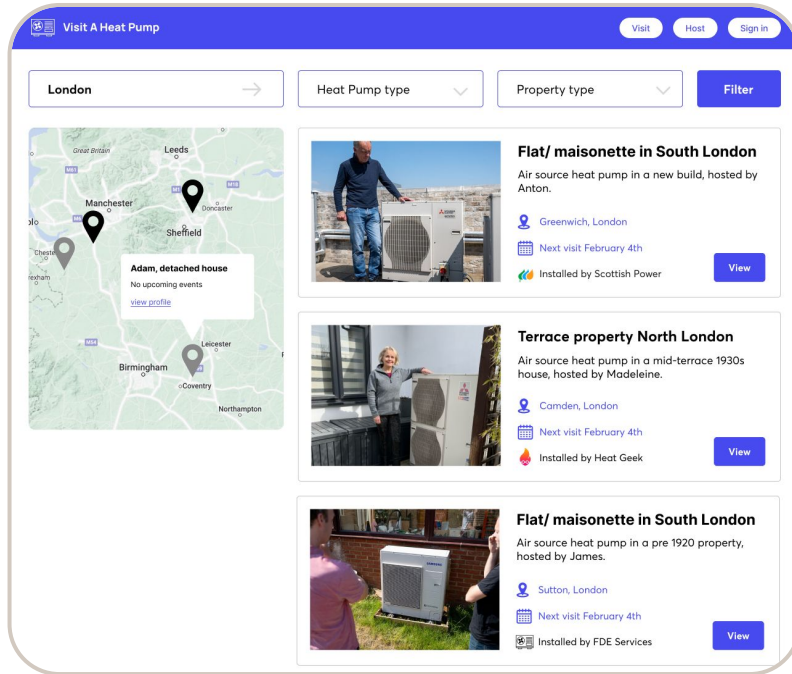
Visit a heat pump exists to support the growth of heat pumps in the UK

We enable anyone to visit a heat pump near them and get the support they need to take the next steps

We provide the service, technology and partnerships to make this happen at scale across the UK

**850  
visits!**

# What we provide



- **Online service, enabling anyone to list a heat pump location and book visits**
- **Training, support and guidance for hosts**
- **Resources for visitors to guide them pre and post-visit**
- **Advertising and PR to promote the service nationwide**
- **A pipeline of over 200 locations nationwide & 1,000+ interested visitors**
- **Currently perfecting events and onboarding new hosts**
- **New visitor booking & hosts coming online weekly**

## Why visit a heat pump? For consumers...



Some of the biggest barriers to heat pump adoption are that most people in the UK...

- **Have not seen one operating in a real space**
- **Are unsure of the noise heat pumps make**
- **Don't know much about how heat pumps work**
- **Don't have access to a trusted person to answer their questions**
- **Don't know what to do to get a heat pump**

Visiting a heat pump in real life and talking with owners, with first hand experience, is one of the most effective ways to overcome these barriers. Before and after surveys show that customers are **twice** as likely to say that they would get a heat pump, after visiting a heat pump.

## Why visit a heat pump? For installers...

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For installers, we know that your customers are:

- **Hard to acquire**
- **Costly to qualify**
- **Need lots of advice**
- **Have a low level of confidence in heat pump technologies**
- **Slow to convert**

Offering visits to heat pumps operating in real homes builds consumer confidence and makes them more likely to convert.

## Visit a Heat Pump web service

- Search for a heat pump near Inverness -  
<https://www.visitaheatpump.com/>
- Search for Vaillant heat pumps -  
[https://app.visitaheatpump.com/hosts?q%5Blocation%5D=falkirk&q%5Bhp\\_type\\_in%5D=&q%5Bproperty\\_type\\_in%5D=&filter\\_manufacturer%5B%5D=Vaillant](https://app.visitaheatpump.com/hosts?q%5Blocation%5D=falkirk&q%5Bhp_type_in%5D=&q%5Bproperty_type_in%5D=&filter_manufacturer%5B%5D=Vaillant)
- Search for an installation by a particular installer company -  
[https://app.visitaheatpump.com/hosts?q%5Blocation%5D=hounslow&q%5Bhp\\_type\\_in%5D=&q%5Bproperty\\_type\\_in%5D=&filter\\_installer%5B%5D=Your+Energy+Your+Way](https://app.visitaheatpump.com/hosts?q%5Blocation%5D=hounslow&q%5Bhp_type_in%5D=&q%5Bproperty_type_in%5D=&filter_installer%5B%5D=Your+Energy+Your+Way)

# Piloting - What we learned: validating the service

## **Proving this model**

Highly usable for visitors and hosts, enabling members of the public to sign up, book and visit events run by other parties, simplicity of the proposition and system highly appreciated

## **A demonstrable need for real life experience**

Visitors had a basic knowledge of heat pumps, with most knowledge coming from online content. Only a small number had ever spoken to someone with experience of using one.



## Piloting - What we learned: what visitors need

### **A broad range of hopes & expectations**

Some visitors had very specific questions and were hoping to solve them on the day, others wanted to find installers, others were very general and early in their journey

### **Potential information overload**

Resources for visitors were generally underutilised, and sense that there was a lot to take in and unclear how much people were expected to remember.

### **Some things more useful to see in person**

After their visit the visitors consistently rated seeing the size of the installation, and the whole system as most useful, with process, costs and recommendations ranking lower

# Piloting - What we learned: effect on visitors

## **Positive effects on visitors**

Self reported confidence in understanding heat pumps went up significantly after their visit, with vast majority stating 'fairly well' or 'very well'

## **The first step of a journey**

60% were unlikely to get a heat pump in the short term, but only 20% said it was unlikely in the next 2 years. Many were motivated to continue but not in a position to do so now, often with building issues or funding to resolve

# Get a heat pump

[getaheatpump.org.uk](https://getaheatpump.org.uk)

Beta

This is a new service - your feedback will help us improve it



## Get a heat pump

[What is a heat pump?](#)

[About](#)

[FAQs](#)

[Case studies](#)

**Which heat pump is right for me?**

**How much does a heat pump cost?**

**Will I need to do extra work to my property?**

**How to find the right installer?**

**What to expect during installation?**

# What type of heat pump is right for my home?

Different types of heat pumps warm your home using heat from different sources, such as the air or ground.

## Key learnings from getaheatpump.org.uk

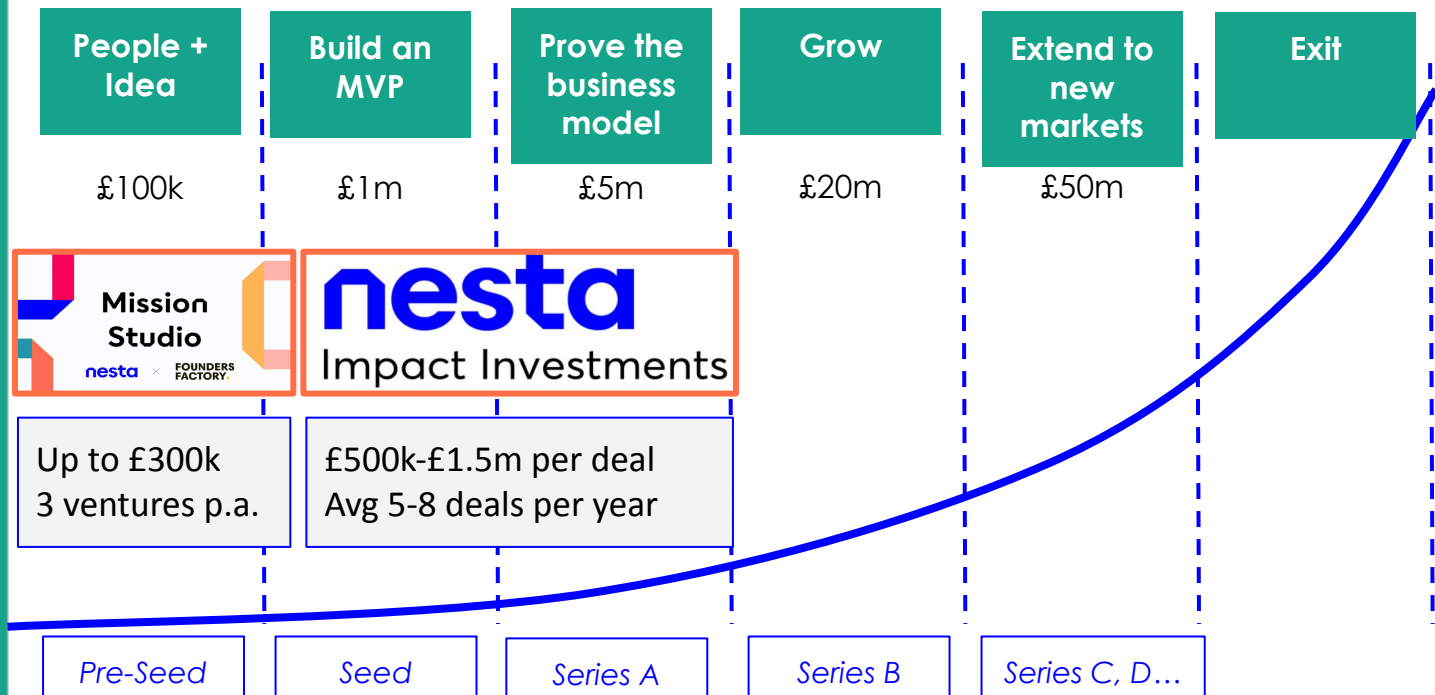
1. **Value of independent information and collaborations:** Trusted messengers are still hard to find in this space, and are disproportionately important
2. **Tailored information and personalisation:** The solutions are different for different homes and people. This makes it more complicated for individuals to work out what the 'right thing to do is'. Tailored information - e.g. through our quizzes help.
3. **People want bitesize information on specifics:** People need different information at different steps in the journey. Info on servicing, aftercare, running costs, planning system, consumer protection, alternative technologies, installer verification etc.

# Nesta Impact Investments

NII invest money from our Endowment (c.£400m) into early stage companies which are aligned with Nesta's mission.

NII initially invests between £500k-£1.5m into start ups

NII's KPIs are to create both a positive financial return for the endowment and recycle our returns, as well as positive impact in line with our Mission Goals.



# Case Studies

## Naked Energy

Solar thermal technology



## Mixergy

Smart hot water tanks



## Electron

Software to drive grid flexibility

## WeWALK

Smart cane navigation



## Aira

End-to-end heat pump installation

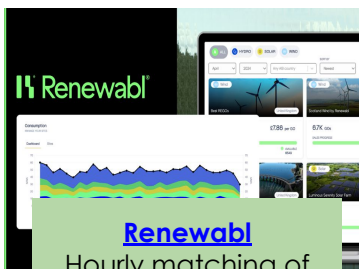
## Oxford Medical Products

Weight loss solution



## Airex

Smart air ventilation bricks



## Renewabl

Hourly matching of renewable energy



## Koru Kids

High quality childcare



## Nesta's Sustainable Future mission

Robin Parker, Mission Manager  
(Scotland)

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Mission website

<https://www.nesta.org.uk/sustainable-future/>

Newsletter

<https://www.nesta.org.uk/newsletter/>

## Nesta Impact Investments

Alex Hook, Investment Director,  
Sustainable Future mission

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Website

<https://nestainvestments.org.uk/>

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