

Actionable insight to support UK climate change goals

Helping Nesta accelerate heat pump adoption across the UK with smart segmentation

How Nesta built a segmentation framework to identify and engage future heat pump adopters

To meet the UK's climate goals, around 3 million homes must switch to low-carbon heating by 2030 - a twelvefold increase from current adoption rates. Nesta, the UK's innovation agency for social good, is driving this shift by helping energy, tech, and finance sectors engage future adopters. But to do that effectively, Nesta needed to pinpoint who's ready to adopt and what's holding others back.

The Challenge

While only around 360,000 homes are currently heated by heat pumps, they are a proven low-carbon technology. They are three times more efficient than a gas boiler, work in the coldest UK temperatures, and use electricity, which can be generated from renewable resources. To meet climate change targets we need to be installing 450,000 heat pumps per year by 2030.

We are moving into a phase of early adoption of this technology. The innovators have tested it, but heat pumps are not yet the norm.

Around 3 million homes must switch to low-carbon heating by 2030



The segmentation drew on:

Each of the eight distinct consumer segments is defined by:



Demographics (e.g. age, income, family status)



Housing characteristics (e.g. property type, heating system)



for future work."

Attitudes and motivations toward heat pumps

Working with Experian gave us access to deep segmentation expertise and layered data insights that were critical to understanding heat pump adoption. The team felt like an extension of ours collaborative, flexible, and focused on finding the right solution. The result is a robust framework with actionable insights we can build on

Elin Price, Mission Communications Lead, Nesta



The Solution

Nesta partnered with Experian to build an actionable segmentation framework that helps identify and engage future heat pump adopters.

The segmentation drew on:

- Experian's geodemographic Mosaic segmentation, covering 30M UK households
- Attitudinal survey data, via YouGov, distilling insights from 7,000 respondents (awareness, appeal, affordability, barriers)
- Installation data from the Microgeneration Certification
 Scheme (location, property type, uptake trends)

By combining policy expertise with rich consumer data and insights, the team identified eight distinct segments of future adopters, each with unique motivations, barriers, and behaviours. The segmentation supports Nesta's goal of predicting future adoption trends and ensuring that information and services evolve with changing consumer profiles.



Find out how Mosaic can power your next campaign with household level segmentation

https://www.experian.co.uk/business/platforms/mosaic

By understanding which segments are most likely to adopt heat pumps next, Nesta can guide training and capacity-building for installers and help manufacturers and suppliers forecast demand and plan accordingly.

More information on the segments visit the Nesta site.

Benefits



Insights grounded in reality
Built on actual adoption and attitudes,
segments reveal who's most likely to adopt
and what's holding them back.



Supports targeted messaging

Informing marketing and education campaigns as each group has different motivations from cost savings through to sustainability.



Cross-sector program design

Insights are being leveraged to support planning across energy, finance, and tech sectors.



Consistent framework

Segmentation lays the foundation for future research and projects to accelerate heat-pump adoption

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