

Which?

Beyond Affordability: Why Heat Pumps Feel Like a Gamble

**Homeowners perceptions of risk and
uncertainty**

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Executive Summary

Heat pumps will have an important role in the UK's transition from a fossil fuel energy system to electrification. The number of heat pumps in the UK is still relatively small, however homeowners are increasingly open to the idea of installing one.¹ Interest is also likely to continue to increase as homeowners look for ways to manage volatile energy bills, find more environmentally friendly ways to heat their home, and benefit from government grants and other support.

With heat pumps costing more to install than a gas or oil boiler, surveys have often shown that the upfront cost of installing a heat pump is the main barrier for most households. This will be an issue for many households and particularly households that are not eligible for a 100% grant from the government, but who don't have savings and are unable to afford any additional outgoings. However households who could afford to make the switch are also choosing not to, suggesting other factors are also influencing decision making. While previous assumptions heavily weighted the upfront financial cost as the primary roadblock, this new research shows that the problem runs deeper. It is not simply a question of affordability, but of willingness to pay.

This willingness is being affected by a combination of factors, reflecting the fact that changing a heating system is a big decision for homeowners. Not only does it involve high upfront costs and disruption, but the choice can also have a major impact on their future energy bills and the warmth, comfort and saleability of their home. Heat pumps are also an unfamiliar technology for most homeowners, so they lack the reassurance of knowing it is a 'tried and tested' technology². However on top of this homeowners experience a recurrent sense of risk and uncertainty in relation to important aspects of the decision making process that makes it feel like a high stakes gamble. Together, these factors are preventing homeowners that could otherwise afford to purchase a heat pump from installing one.

The following is a summary of the new evidence that we have uncovered that is undermining homeowners' confidence and dissuading them against getting a heat pump:

1. The heat pump "high stakes gamble"

Previous work in this sector has largely focused on financial decision making, treating upfront cost as the ultimate barrier. However, this research demonstrates that even householders with the financial means - through higher incomes or savings - are actively choosing not to get a heat pump.

Homeowners do not view heat pumps as a standard home upgrade (like a new kitchen or a bathroom) because the technology currently lacks a clear "emotional payoff" or immediate tangible gratification. Instead, consumers approach heat pumps as an open-ended risk-management decision. They weigh the concrete upfront costs against uncertainty about the quality of the installation, ambiguous ongoing running costs, and fears about performance. Because the long-term returns are not clear or guaranteed, the investment

¹ Warming up to change Which? 2026

² Heat pumps are widely used in commercial settings and domestically in other countries but only 2-3% of homes in the UK have a heat pump.

feels less like a sensible improvement and more like a “high-stakes gamble”. Until the industry can address the uncertainties, the willingness to pay will remain suppressed.

2. Uncovering the psychology nuances through qualitative research

Much of the existing evidence base has been survey-focused, which effectively identified affordability as a major issue but failed to capture why consumers with the right homes and adequate budgets were still getting stuck in the decision-making funnel. By utilising qualitative methods, specifically in-depth interviews and focus groups, this research uncovered the deeper psychology nuances governing homeowners behaviour.

This approach revealed that the decision to not get a heat pump is heavily influenced by behavioural biases such as present bias and loss aversion. Most homeowners are currently living with a heating system that is ‘tried and tested’ and whilst they may be worried by recent energy price rises and the impact that oil and gas has on the environment, taking a step into the unknown feels like a high risk. The qualitative findings make it clear that simply introducing new financial loans or models that spread out the cost will not be enough; the psychological barriers of perceived risk and lack of control must be addressed first and foremost.

3. The property tenure and value mismatch

A critical new finding from this research centres on housing tenure and the fear of property devaluation. Because the financial payback period for a heat pump is long, homeowners suffer from a “tenure mismatch”. Many are unsure they will live in the property for long enough to ever see a return on their investment and make it feel worthwhile.

Consequently, a heat pump is frequently viewed as a financial liability rather than a value-adding asset. Homeowners were deeply concerned about how prospective buyers might view both the technology and any financial arrangements attached to it. For some, the concern was not the heat pump itself, but the prospect of transferring a Property-Linked Finance (PLF), which some homeowners actively rejected as a “debt burden” being passed on to the next owner.

Together, these concerns point to homeowners not currently seeing heat pumps or associated financing arrangements as adding value at the point of sale. Instead, they are often viewed as a complicated risk with potential financial disadvantage. To overcome this, the presence of a heat pump must be repositioned in the property market so that these homes are viewed as premium, “ready-to-run” assets.

4. The psychological barriers of service-based models

To address the high upfront costs, the industry is exploring service-based models such as Heat-as-a-Service (HaaS) and Third Party Ownership (TPO). While these models theoretically remove the barriers of upfront cost and maintenance risks, they introduce several new psychological uncertainties regarding home ownership.

Rather than reassuring homeowners, these models trigger deep emotional resistance. Homeowners view heating and hot water as a basic, intrinsic human right necessary for survival; the idea of handing control of this over to a third-party provider via a “heating cap” feels restrictive. Furthermore, signing 10 to 15 year lease agreements raises anxieties about being trapped in restrictive contracts, facing arbitrary price hikes, and falling victim to scams or profiteering middlemen. Homeowners ultimately want control, and they interpret these service models as a loss of control over their own homes.

5. The invisible reassurance: The Microgeneration Certification Scheme (MCS)

A major driver of consumer anxiety is the perception that the heat pump installation market is a “Wild West” with inconsistent advice and “cowboy” builders. To mitigate this risk, homeowners want a recognised, rigorous standard of authority, frequently citing the Gas Safe register or CORGI as the benchmark for trust.

The MCS seeks to provide the guarantee of quality and installer competence that homeowners are looking for. However, it is currently an invisible solution. Homeowners have almost no spontaneous awareness of the MCS acronym, rendering it entirely meaningless to them. For MCS to serve as a genuine tool for confidence, the industry must improve the MCS’s visibility and communicate its standards in plain, accessible language that directly addresses homeowners fears.

Our recommendations

To some extent, the uncertainty experienced by homeowners reflects the complexity of the decision making process itself. There are multiple issues for homeowners to consider, some of which are dependent on the type of property, how the household will use the heat pump in practice, and the wider unpredictability of energy prices. However, it is clear from homeowners’ experiences that the sector has failed to provide the clarity and reassurance they need to move forward.

The Warm Homes Plan has set out the government’s strategy for supporting households to make the transition to warmer, more affordable, low carbon homes. The plan included a new focus on the use of solar panels and batteries to reduce energy bills, a commitment to enhance consumer protections and a financial offer for all households regardless of tenure or income.

We have identified four areas where the government needs to do more to build confidence, reassurance, and support well informed consumer choices. The government should aim to equip homeowners with a range of credible options which they feel safe choosing between, depending on their needs and circumstances. Importantly, there is no single heating or financing solution that works for all homeowners. In some areas, the government has already identified or started to address the issues we have highlighted, but it needs to make faster progress and address the specific needs of homeowners so they have the confidence and reassurance they need.

Long term confidence on running costs.

- **Reduce the price of electricity:** Heat pumps are significantly more efficient than gas or oil boilers, but the price of electricity is inflated by environmental and social levies with the result that a heat pump can be more expensive to run compared to a gas or oil boiler.

The government should remove environmental and social levies from the price of electricity and fund them through general taxation. This will provide some benefit to all households, and provide most benefit to households on direct electric heating that are disproportionately living in fuel poverty. It will also support the transition to more efficient electrified heating options such as heat pumps.

- **Incentivise the use of performance monitoring:** More efficient heat pumps cost less to run. Efficiency is influenced by a number of factors related to the size and insulation of the property, but the design of the heating system plays a critical role.

The government should incentivise the use of heat pump and insulation performance monitoring technology with the aim of making it widespread when effective schemes are in place and the supply chain is sufficiently established. This will incentivise installers to install efficient systems, and enable homeowners to hold installers to account if a system doesn't reach the efficiency that was promised.

- **Support homeowners to access appropriate tariffs:** A third step to reducing energy costs is for homeowners to use a smart tariff that offers them lower rates for the energy they use. With a variety of smart tariffs available (including time of use tariffs), homeowners need support to assess which is most suitable to their needs.

The government should work with businesses to make it easier for homeowners to get the advice they need to find the best tariff (including smart tariffs) and set up their heat pump and any other low carbon -technology they have to work with that tariff. This includes raising awareness of the tariffs available and providing accessible means of comparison. Some homeowners may also need the reassurance of risk free trial periods with Time of Use tariffs with mechanisms to prevent them accidentally incurring much higher bills.

Assurance around the quality of the installation

- **Introduce a Warm Homes Guarantee:** Our research shows that a government backed certification scheme can provide homeowners with more reassurance around the quality of heat pump installations, but they are largely unaware of MCS.

The government should introduce a more straightforward Warm Homes Guarantee covering the quality of heat pump installations and other energy efficiency measures. This should include a commitment that any problems will be put right quickly and without hassle. The guarantee must be supported by more detailed requirements as

currently set out in government backed certification schemes such as MCS. The guarantee should apply to any energy efficiency measure funded or backed by government financing, and a date should be set for when it will be applied to all measures. The government has committed to a consultation on consumer protection in the summer, this will be an opportunity to simplify and strengthen the current system to ensure a more straightforward and effective system.

Financial products that meet homeowners' needs

- **Deliver promised zero or low interest loans:** Even with a grant from the government Boiler Upgrade Scheme (BUS), the initial cost of installing a heat pump can be expensive. Additional measures such as pairing a heat pump with solar panels or a battery will help to reduce future energy bills, but also increase the upfront cost.

The government should meet its commitment to make zero or low interest loans available through commercial lenders. Many homeowners had a preference for the relative simplicity and control that a short-term loan or a mortgage extension offers and this should be the priority for the government.

- **Address homeowners' questions and concerns about new financial products.** New financial products such as Property Linked Finance and Third Party Ownership agreements seek to address consumer needs when considering a heat pump, but for many homeowners they leave too many questions unanswered. These are often related to different scenarios that could occur over the course of a very long term agreement.

The government and industry should resolve these issues and ensure that any gaps in consumer protection are addressed before making third party agreements eligible for Boiler Upgrade Scheme funding³.

- **Ensure new financial products do not frustrate homeowners selling their home.** Homeowners have specific concerns about the impact that owning a heat pump may have on selling their property. Some relate to the desirability of the heat pump itself and will need to be addressed through the confidence and reassurance measures above. Others were more directly related to the home selling process.

The government should work with relevant businesses to ensure that new financial products such as third party agreements and property linked finance do not become a barrier to accessing a mortgage or add unreasonable friction or costs to selling a home.

³ [Financing for low carbon home heating](#), Which?, 2025.

Consistent reliable information and advice:

- **Provide core information services:** Changing a heating system is a complex decision and homeowners need information they can trust. However currently many homeowners struggle to know where to go for information and are often frustrated by the information they receive.

The government should provide core information for homeowners that look to the government for information and advice. This will also give businesses the information that they can use with confidence.

- **Support partnerships to reach more homeowners with good quality information and advice:** Many homeowners go to businesses, local authorities or consumer groups for information and advice on installing a heat pump, but are confused by the lack of consistency.

Government and businesses should work together to provide consistent information and signpost to reliable sources of information and advice where they are not providing it themselves. There is still a gap in the market that needs to be filled for services that provide advice tailored to the needs of a specific household and property.

Introduction

Encouraging households to switch to electrified heating has been government policy for more than ten years.⁴ The policy was initially driven by the UK's legal commitment to reach net zero, with home heating accounting for a significant proportion of UK carbon emissions.⁵ However, with two foreign wars in the last four years creating instability in global energy markets, and the ongoing cost of living crisis putting pressure on household bills, electrified heating combined with smart tariffs, solar panels and energy storage, is now also seen as a critical step towards greater energy security and reducing energy bills.

The transition to electrified heating will ultimately affect more than 80% of UK households that currently heat their homes using gas or oil.⁶ In the majority of cases households are expected to switch to a ground or air sourced heat pump, though heat networks will also be introduced where these are a better option.

In the last few years, the number of heat pump purchases has increased rapidly, however currently only around 2-3% of UK households heat their homes using a heat pump. This means that heat pumps continue to be an unfamiliar technology for most UK consumers even though they are widely used in other countries and in commercial settings.

The innovation and adoption curve is useful for understanding where the UK is in terms of the adoption of heat pumps. The curve illustrates how adoption of new technologies tends to increase slowly before picking up as the market develops and the technology becomes more familiar. In the 'early adopter' phase consumers are often characterised by being more interested in innovation and more willing to take risks. In the case of heat pumps many homeowners buying heat pumps are also strongly motivated by environmental concerns⁷. In order for adoption to increase, the transition must move into the 'early majority' phase where these characteristics will be less prominent, but consumers are reassured by seeing the product used by others. To some extent this phenomenon can already be seen in that homeowners who have a friend or family member that owns a heat pump are more open to installing one than homeowners that don't (55% and 30% respectively).⁸

The other major challenge for consumers who are considering switching to a heat pump is the relatively high cost of installing one. 67% of homeowners in the Which? Sustainability Tracker identified this as the main barrier.⁹ The average cost of installing an air source heat pump is around £13,000,¹⁰ however this can vary depending on the size of the property, and any changes that are required to the property such as increasing the size of radiators. The government offers a full grant for households on low incomes through the Warm Homes Local Grant, and the government Boiler Upgrade Scheme (BUS) provides a grant of £7,500

⁴ The Domestic Renewable Heat Initiatives was launched in 2014.

⁵ In 2021 home heating accounted for 18% of UK carbon emissions, [Decarbonising Home Heating, NAO, 2024](#).

⁶ DESNZ Public Attitudes Tracker: Heat and energy use in the home, Winter 2025, UK. [gov.uk](#), 2026.

⁷ https://media.nesta.org.uk/documents/Heat_pump_user_survey_report_May_2023.docx.pdf

⁸ [Sustainability tracker 2025](#).

⁹ [Sustainability tracker 2025](#).

¹⁰ [Boiler Upgrade Scheme statistics](#): March 2026, gov.uk

that most homeowners in existing homes will be eligible to receive.¹¹ Different grants are available in Scotland. However, even after the BUS grant is applied the cost of installing a heat pump can be significantly more than simply replacing a gas or oil boiler.

Reducing upfront costs will be critical for making heat pumps a realistic option for many households, however upfront costs are not the only barrier to heat pump installations. Currently even those households that have sufficient savings to buy a heat pump are not doing so, and the uptake of relatively generous financial products to support heat pump installations has remained low. This suggests that whilst the focus on upfront costs is certainly important in encouraging homeowners to consider a heat pump it is not the only barrier consumers experience.

Most recently the government has launched the Warm Homes Plan¹² that sets out their strategy for supporting the transition. Important aspects of the Warm Homes Plan relevant to homeowners considering a heat pump include:

- £18 billion of support with options for every type of household. These will include grants, low or zero interest loans, and more innovative products such as Property Linked Finance and Third Party Ownership agreements through which the homeowner effectively hires their heat pump from a company.
- A focus on the installation of solar panels and batteries so households can generate and store their own energy, thereby reducing their energy bills.
- A commitment to consult on consumer protection issues in the summer of 2026 and the government has more recently sought views on a possible tender process for consumer protection in this sector.

There are some differences in provision across the UK nations with Scotland in particular having a different system of financial support and the provision of advice.

Separately, in the budget for 2025 the government started to reduce the levies on electricity prices by ending the Energy Company Obligation scheme and funding 75% of the renewables obligation through general taxation.¹³

Despite these initiatives, the Warm Homes Plan revised down government targets for the purchase of heat pumps from 600,000 installations a year by 2028 to 450,000 installations by 2030; recognition of the challenges there have been in reaching previous targets.

¹¹ In response to the dramatic increase in the price of LPG the government has temporarily increased the BUS grant to £9,000 for households that are not on the gas grid

¹² [Warm Homes Plan, gov.uk](#), March 2026

¹³ [Budget 2025, gov.uk](#), November 2025

Methodology

This research combined qualitative and quantitative approaches across three stages to develop a robust understanding of homeowner attitudes towards heat pump installations. With a particular focus on the relationship between affordability and willingness to pay, to understand the barriers faced by homeowners who had considered a heat pump but haven't gone ahead.

Stage 1 - In-depth qualitative interviews

The first stage consisted of **nine 60-minute online in-depth interviews conducted via Zoom**. This stage was designed to explore in detail how homeowners balance affordability considerations with willingness to pay when thinking about heat pump installations in their home.

Participants were selected to ensure variation in age, financial affluence, and housing context, and all had reasonably considered a heat pump within the past 12 months. The sample was split evenly between those who had considered but remained undecided and those who had considered and ultimately rejected a heat pump. In the report the in-depth interview verbatims will be referenced using D1-D9.

Sample:

D1 Higher affluence (£41k+) 36-54 Undecided on HP	D2 Higher affluence (£41k+) 28-35 Undecided on HP	D3 Lower affluence (<£41k) 28-35 Undecided on HP
D4 Lower affluence (<£41k) Undecided on HP 55-70	D5 Higher affluence (£41k+) 55-70 Decided against HP	D6 Lower affluence (<£41k) 28-35 Decided against HP
D7 Higher affluence (£41k+) 36-54 Decided against HP	D8 Lower affluence (<£41k) 36-54 Decided against HP	D9 Higher affluence (£41k+) 55-70 Decided against HP

Household Income Considerations

The research was designed to understand what is driving reluctance to heat pump purchases among homeowners who could, in principle, afford one. This included those with higher household incomes (over £41,000), who made up around half the sample.

In our research, we used £41,000 as the distinction between lower and higher affluence bands based on annual household income. While we recognise this threshold sits above standard statutory definitions of 'low income' or 'fuel poverty', this classification was sense-checked with policy experts specifically in relation to the £10,000+ upfront cost of a heat pump installation, where access to disposable capital is a primary driver of affordability.

Under these thresholds, lower-affluence households were defined as those earning up to £41,000, and higher-affluence households as those earning over £41,000. To provide balance, half of our sample included homeowners from the lower-affluence group. This allowed us to test whether homeowner attitudes and barriers were specific to wealthier early-adopters, or whether the psychological and financial barriers to adoption were consistent across the wider, less affluent population.

What we found: Across the in-depth interviews (and the focus groups), a consistent pattern emerged in how homeowners think about heat pump adoption irrespective of household income. While affordability is a factor, the findings show that uncertainty goes well beyond cost considerations alone.

Importantly, these uncertainties were not limited to higher-income households. In fact, many of the concerns around risk, disruption, performance, and future value were just as valid among the lower-income households too. This suggests that even among those with the financial means to purchase a heat pump, there are wider hesitations that are holding back decision-making.

Individual interviews were chosen deliberately to allow for a private, reflective setting, enabling participants to go beyond surface-level cost considerations. This format created space to probe deeply into personal decision-making, perceived risks, and the underlying reasons why participants chose not to proceed.

Stage 2 - Focus groups with homeowners

The second stage involved **five, 90-minute focus groups, comprising four to six homeowners per group**. Two groups were conducted in person, with the remaining three delivered online. As in Stage 1, participants reflected a spread of age, affluence, and housing types, and included both those who had considered but remained undecided and those who had considered but rejected a heat pump. In the report the focus group verbatims will be referenced using G1-G5.

Sample:

<p>G1 (online) Higher affluence (£41k+) Younger (aged 28-35) Undecided on HP</p>	<p>G2 (online) Higher affluence (£41k+) Family (aged 36-54) Undecided on HP</p>	<p>G3 (online) Lower affluence (<£41k) Older (aged 55-70) Undecided on HP</p>
<p>G4 (F2F) Higher affluence (£41k+) Older (aged 45-70) Decided against HP</p>	<p>G5 (F2F) Lower affluence (<£41k) Younger (aged 28-44) Decided against HP</p>	

The group format was selected to enable a broader range of perspectives to emerge and to allow participants to build on, challenge, and refine each other’s views. This approach was particularly useful for testing reactions to delivery and solutions models.

The discussion guide covered:

- Homeowners respond to descriptions for delivery and solution models that were found using online desk research.
- Reactions to scenario-testing the following models:

Property-based financial model	Service-based financial model	Certification & Supporting Renewable Technology
Property-Linked Finance	Heat-as-a-service (HaaS)	Microgeneration Certification Scheme (MCS)
Additional Mortgage Borrowing	Third Party Ownership (TPO)	The “Full Package“

- Participants also assessed existing financial routes such as upfront purchase and short-term lending

This stage aimed to assess whether different models could reduce homeowners’ uncertainty, improve perceived control, and increase willingness to pay. We also tested homeowners reactions to how industry are currently framing the delivery and solution models, exploring whether this helps alleviate risk or compounds it. The sessions were facilitated by researchers with a deep understanding of the topic, and participants were able to ask questions or seek clarification where needed, ensuring the discussion reflected informed interpretation rather than standalone reading of the materials (e.g. model descriptions, scenarios etc.).

Scenario-based testing: To explore potential ways of overcoming barriers to buying a heat pump, participants were introduced to a series of delivery and solution models designed to address common challenges such as upfront costs, installation, maintenance and ongoing

performance. Each model was presented as a scenario, and participants were guided through them one at a time to understand their initial reactions, perceived benefits, concerns and overall appeal. The aim was not to assess technical feasibility, but to explore how homeowners interpreted these approaches and whether they addressed, reduced, or introduced new sources of uncertainty. Throughout Chapters 2, 3, 4 and 5, box-outs are included to illustrate the information and scenarios used when discussing each model.

Descriptions of these models: Participants were also shown examples of how these delivery and solution models are currently described, based on publicly available information sources. These descriptions, reproduced in the Technical Annex, were developed through desk-based research and reflected language used by energy companies, government websites and other organisations. The intention was not to test fully explained versions of the models, but rather to understand how homeowners might interpret them when encountering information independently. This exercise provided insight into the role that language, framing and information play in shaping perceptions of different models. Further findings relating to communication, information needs and the impact of language are discussed in Chapter 6.

Why a qualitative approach adds value

Previous quantitative research in this area has tended to focus primarily on affordability as the dominant barrier to heat pump installation, and explored barriers through surveys. However, even among households who could potentially afford a heat pump and live in suitable properties have not been getting one. This suggests other factors outside affordability are taking place that are beyond that ability of online surveys to capture.

The qualitative stages allow us to dive deeper into the willingness to pay issue and explore the level of uncertainty, perceived risk, and lack of control, which are not easily captured through survey methods alone. These insights point to a more complex suite of barriers, in addition to affordability, that influence decision-making, even where financial capacity exists.

Qualitative findings presented in this report are therefore interpretive and illustrative. They reflect the themes, priorities and reasoning expressed by participants during discussions. The insights represent what participants thought and felt after they had the opportunity to hear others' perspectives and reflect on their own views.

The Stage 3 quantitative stage was designed to measure the prevalence of the qualitative findings, providing robust evidence on how widespread the issues were. This was specifically amongst homeowners who had looked into heat pumps and rejected or were undecided about getting a heat pump. Given that the majority of this report presents qualitative insights supported by participant quotes, any quantitative survey findings included will be highlighted in bold to ensure they are clearly identifiable and easy to locate within the text.

Stage 3 - Online survey with homeowners

The third stage was a **10-minute online survey with 1,004 homeowners in the UK who had considered heat pumps but were undecided or decided against getting one.**

Household income was based on natural fallout where we achieved 25% of homeowners with a lower household income below £41,000, and 71% of homeowners with a higher household income of £41,000 or more. The remaining 4% chose to not disclose their household income. We also achieved 43% who had access to savings of £50,000 or more, 51% who had access to under £50,000, and 6% who preferred not to say.

The other eligibility criteria mirrored the qualitative stages and the sample also included variation in age and home ownership status (those who owned their property outright or with a mortgage).

This stage quantified the prevalence of key themes identified in the qualitative phases, particularly around perceived uncertainty, control, affordability constraints, and attitudes towards proposed solution models and sector terminology.

The participants

Throughout this report, statistical references to “homeowners” relate specifically to respondents who had considered a heat pump and were either undecided or had decided against installing one. Where relevant, an asterisk is used to indicate that figures or findings reflect the full sample composition, with further detail provided in the footnotes.

As participants were a subset of homeowners, the findings reflect the perspectives, concerns and decision-making processes of homeowners who encountered barriers to adoption, and may not be representative of all homeowners considering or installing a heat pump.

This report

The rest of this report presents our research findings and recommendations of heat pumps barriers and solutions that could help alleviate those risks*.

Chapter 1: Beyond affordability - how uncertainty and risk make heat pumps a perceived gamble. This chapter explores why affordability alone does not explain homeowner hesitation towards heat pumps. Drawing on qualitative and quantitative findings, it examines how uncertainty and perception of risk shape decision making.

Chapter 2 to 5: Reducing uncertainty - what delivery and support models mean for heat pump installation. These chapters explore how homeowners perceive different delivery and support models for heat pumps. They assess whether these approaches reduce uncertainty and perceived risk, or introduce new concerns that may affect willingness to proceed. The discussion is based on focus groups with homeowners who had rejected or were undecided about heat pumps.

Chapter 2: Property-Linked Finance and Additional Borrowing on a Mortgage. This chapter explores reactions to financing models that spread upfront cost over time, and how these are weighted against concerns about future obligations and selling a home.

Chapter 3: Service-based models - Heat-as-a-Service and Third-Party Ownership. This chapter examines perceptions of models that transfer aspects of ownership, maintenance and performance to a third party, and how this affects views on control, trust and flexibility.

Chapter 4: Certification and Supporting Renewable Technology. This chapter explores models aimed at improving confidence through accreditation and fitting the home with the “full package” of heat pump, solar panel and storage battery.

Chapter 5: What would make homeowners reconsider? This chapter brings together findings to identify what delivery and solution models (current and new) influence willingness to reconsider a heat pump, focusing on reducing uncertainty and building confidence.

Chapter 6: Information and language. This chapter explores how information and language may be shaping homeowners' understanding of heat pumps and different delivery models, including issues of clarity, consistency and trust.

Chapter 7: Summary and recommendations. This chapter summarises key findings and sets out recommendations to improve clarity, reduce uncertainty and support informed decision-making.

Chapter 1: Beyond Affordability: How uncertainty and risk make heat pumps a "gamble"

Chapter summary

- Heat pumps feel like a massive risk due to compounding uncertainties around disruption and performance, not just upfront affordability
- The heat pump market feels like a “Wild West” with hidden installation costs and a lack of trust in the industry
- Homeowners worry the technology will be expensive to run day-to-day and fail to keep homes warm during the winter
- The long payback period makes heat pumps feel like a financial liability that could deter future buyers if the homeowner moves

The cost of buying a heat pump is not simply a question of affordability. While some households are priced out, even amongst those who have the financial means (through savings or a higher household income) many are actively choosing not to have a heat pump. This raises a critical question for the move to low-carbon heating: why are people holding back when they have the means?

This research has uncovered that the answer lies in the volume of compounding uncertainties homeowners face. Decisions are shaped not just by the upfront cost, but by how people weigh risk and long-term value. **Of our survey of 1,004 homeowners who had rejected or were undecided about getting a heat pump, almost half (49%) stated that *both upfront and ongoing costs are stopping them from getting a heat pump.*** While the initial price tag is often a shock, it is at least a starting figure that homeowners can process. What will happen *after* the purchase, however, can often be an open-ended loop of “what ifs”.

We conducted 9 x 60 minute in-depth interviews and 5 x 90 minute focus groups, of 4-6 homeowners per group who had looked into heat pumps but had either decided against or were undecided. We found that homeowners viewed the purchase of a heat pump as a literal financial gamble rather than a confident investment.

We found that a third (33%) homeowners surveyed* said there are “too many long-term uncertainties” for them to fully consider getting a heat pump and 29% explicitly agreed that “the investment feels too much of a gamble”.

This chapter unpacks the affordability versus willingness-to-pay conundrum. Through our in-depth interviews with homeowners who had either rejected a heat pump or remained undecided, we explored the factors holding them back from buying a heat pump. Their concerns and uncertainties were rarely limited to a single point in the journey. There were

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

questions and uncertainties focused on the upfront cost and disruption of installation, while others reflected on what day-to-day life with a heat pump might be like, or the potential implications for future resale if they did not plan to stay in their home long term. For the purposes of this report, we have mapped these considerations across three key phases of heat pump ownership:

1. Purchasing and installing a heat pump;
2. Living with a heat pump, and;
3. Eventually selling a home with a heat pump.

1.1: Purchasing and installing a heat pump

The first stage of getting a heat pump - the initial purchase and installation - presents a gauntlet of confusions and practical fears that immediately frame the decision as a high-stakes gamble. Rather than a straightforward, transactional home upgrade, homeowners from our qualitative research faced an opaque market where obtaining a clear price, understanding the technical requirements, and the process of the physical installation are filled with unknowns.

The unclear quotation gamble

How much will this actually cost me?

Our research found that homeowners face great confusion when attempting to establish the true upfront cost of a heat pump. Among homeowners who had considered a heat pump but later rejected it or remained undecided, **62% had obtained at least one quote to install a heat pump in their home. However, of these people only 12% reported being able to do so easily, with no issue. The vast majority (88%) experienced at least one difficulty during the quoting process.**

Among those who had issues when getting a quote, uncertainty around pricing was common. **Nearly a third (33%) of these homeowners said they did not come away with a clear sense of what the likely cost would be, while 19% spoke to installers directly but still did not walk away with a clear sense of the likely cost.** This suggests that the process is likely hindered by a lack of standardisation and the fact that concrete pricing often cannot be provided, with or without a potentially invasive, sometimes costly, expert survey.

Throughout homeowners' own research, they were frequently caught off guard by the discovery of additional costs, realising only later that they must also pay to upgrade their pipework, install larger radiators, or make the space for a hot water cylinder.

“Not explicit, but implicit things that need to be done, that you don't find out upfront.”

- Lower income participant, 55-70 (D4)

This murky pricing structure makes the financial commitment feel like an open-ended risk. As one younger homeowner explained:

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

“It gonna cost you... Oh wait, but then you’ve got to add this bit. Then you’ve got to add this, but we didn’t know anything about that” - Lower income participant, 28-35 (D6)

Another participant recounted the sheer exasperation of trying to get a firm price for necessary pipework, only to be told on the day of the survey that her initial quote was invalid and the installers couldn’t actually tell them how much it would cost:

“I did arrange somebody to come, and I got a quote for how much the pipes are going to cost. And then, on the day that they were going to come around and do the measurements. The person said, “that [cost] is invalid. I don’t know who gave you that quote because it’s not going to cost that, and we can’t actually tell you how much it will cost”. So I really do not understand, what I would have had to pay” - Higher income participant, 36-54 (D1)

Furthermore, of those surveyed homeowners* who had difficulty receiving quotes, 18% found them tricky to compare. We found that accessing the market was also a struggle for some: 12% struggled to get a response from installers at all, and 11% were told installers were unwilling to quote for their specific home.

The disruption gamble

How much disruption will it have on my home

According to our survey, almost half (46%) of homeowners surveyed* struggled to find clear, reliable information about installation requirements and the home changes needed (e.g. radiators, space, insulation). Even among those who looked for obtained quotes and had an issue, a fifth (23%) still had lingering concerns about the physical installation process.

A regular theme that came out of speaking to homeowners in the in-depth interviews and focus groups was their perception that a heat pump installation was a highly invasive and destructive process. One participant explained:

“What I’ve got existing and what’s buried in walls...I’ve got nicely decorated...It would mean digging some of those walls out...and also radiators would need to be changed...it’s quite a major upheaval in terms of installation.” - Lower income participant, 55-70 (D4)

Another participant spoke of holding off installing a heat pump until they planned a larger refurbishment of their property to accommodate the level of disruption:

“The right time to do it is...when there is an intrusive, refurbish of the property, the living spaces and stuff like that, so that I can then accommodate all of that upheaval that’s required, and replastering and refitting, and taking up skirting boards and and floorboards and carpets” - Lower income participant, 55-70 (D4)

Driven by present bias, people often catastrophise the immediate upheaval required to retrofit their homes, fearing severe damage to recently decorated rooms and aesthetics. The

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

reality that installation frequently requires lifting floors and potential damage to walls to replace pipework acts as a massive deterrent. Our focus group participants echoed this anxiety, noting they had heard stories about people having significant disruption to their homes during installation, where parts of the home such as floors and walls had been opened up to accommodate new pipework.

Present bias

Present bias is a behavioural tendency where people place greater weight on immediate costs, disruption or discomfort than on potentially long-term benefits. In practice, this can lead to homeowners to focus more heavily on the short-term upheaval of installing a heat pump, such as disruption to the home, noise, mess or redecorating costs, while placing less value on future benefits like improved efficiency or potential savings over time.

Our research suggests this bias can amplify anxieties around retrofit work, particularly when homeowners hear negative stories or imagine worst-case scenarios about the installation process.

Homeowners were also weighing up the wider disruption caused by installing a heat pump. For some, concerns centred on the potential damage to existing home improvements and the upheaval of putting this right afterward. One participant worried the installation process could ruin newly fitted carpets:

“There’ll be explicit costs of changing the pipe work. But then there might be implicit costs, hidden costs of, oh God, the carpets ruined. Now we’re gonna have to change the carpet” - Lower income participant, 55-70 (D4)

Additionally, the amount of space people believe a heat pump system will take up, including losing indoor space for a water cylinder and garden space for a noisy external unit. These all add to the practical concerns:

“We would have had to store a big tank of about 300 litres” - Higher income participant, 55-70 (D9)

“My garden’s really quiet...so I don’t really want any noise in the garden” - Higher income participant, 55-70 (D5)

The trust gamble

Compounding the fear of physical disruption is a severe lack of trust in the installation industry. Homeowners desire accredited, reliable tradespeople but perceive the current market as a “Wild West” fraught with inconsistent advice and “cowboy” builders. In one focus group a participant highlighted a friend’s terrible installation experience, noting:

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

“Contractors were pretty much cowboys and just kind of smashed up his flat and then took a really long time to get it sorted” - Lower income participant, 28-44 (G5)

Homeowners also report erratic, high-pressure sales tactics that make them feel vulnerable to being scammed, equating the industry to double-glazing sales of the past. One participant expressed frustration with the unpredictable pricing models:

“There’s a lot of smoke and mirrors going on...if you sign today, we’ll knock you another £2,000...let’s stop going through these iterations and everybody having a different starting price” - Higher income participant, 55-70 (D9)

Ultimately, this anxiety leaves homeowners questioning the safety of their purchase, perfectly summarised by one homeowner:

“Who do you trust? I don’t know...I don’t think it’s a very reputable industry” - Higher income participant, 36-54 (D7)

Without clear markers of quality that rival those of traditional gas boilers, homeowners hesitate to take the leap:

“The thing with my oil boiler is it’s got a 10 year warranty now...with a heat pump system I’d have probably got a 2 year warranty if I was lucky. After which, if it failed...what happens then?” - Higher income participant, 55-70 (D9)

Our survey confirmed the qualitative findings about the “Wild West” industry, with 26% of surveyed homeowners* who were frustrated because they do not know who to trust for independent advice, and 28% are frustrated that the information available is not personalised to their specific home situation.

1.2: Living with a heat pump

Beyond installation, thoughts shift to the perceived gambles of living with a heat pump day to day. Importantly, this reflects what homeowners expect or imagine rather than lived experience. In this context, they raise two main areas of uncertainty: financial performance (ongoing running costs) and functional performance (warmth and comfort).

A gamble with day-to-day costs and value

Long-term value is a massive grey area for consumers. We found that 54% of homeowners surveyed* struggled to find clear, reliable information about running costs and how their bills might change over time. As a result, when asked this group why they wouldn’t get a heat pump, 36% said they were unclear about how much money they will actually save by switching away from their current system.

Participants said the issue was not solely finding the upfront money. Instead, many were unsure whether a heat pump would deliver value over time. With electricity prices being

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

higher than gas, and future energy costs uncertain, people felt they had no clear way of knowing whether switching would save them money in the future.

“It’s a gamble because we don’t know what the costs will be day to day...They don’t know what’s the price of [electricity] in 6 months, a year, 10 years, so it could be a better investment. But in the same case it could be a worse investment” - *Lower income participant, 36-54 (D8)*

We found that 36% of homeowners surveyed* were unsure about the ongoing value for money, with 31% actively believing that ongoing costs of running a heat pump will be expensive. When homeowners attempted to calculate their return on investment, the math frequently failed to provide reassurance. Participants alluded to the upfront cost feeling immediate and real, while the long-term savings feeling distant, abstract, and too small to justify the capital:

“Okay, I’ll save £500 a year, but I still have to spend £20,000 and pay interest...I’m gonna need 40 years to pay off that investment...What’s the guarantee I’m gonna live another 40 years? The math doesn’t add up for me” - *Lower income participant, 36-54 (D8)*

A gamble with performance, comfort and warmth

Over a third (37%) of homeowners surveyed* said they don’t know if a heat pump will perform better than a gas boiler, and 33% feel they have too many unanswered questions about what it would actually be like to live with a heat pump.

“I understand the difference...between an electric cooker, or a gas cooker, the gas is going to go whoosh! And electric might take a little bit longer... I want to know what compromise there is with a heat pump” - *Higher income participant, 55-70 (D5)*

Unlike a gas boiler, which provides fast and familiar heating, heat pumps are often perceived as a fundamentally different way of heating the home. This lack of familiarity creates a key barrier: homeowners feel they are being asked to commit to an expensive system without the opportunity to fully understand how it will perform in their own home.

This uncertainty is not abstract. It is closely tied to concerns about comfort, speed of heating, and whether homes will feel as warm as they do now. Homeowners want to see and feel how it works before committing, as one participant put it:

“The proof is in the pudding...I want to see how [someone else] is getting on with it, whether they would recommend” - *Higher income participant, 36-54 (G2)*

For many, the lack of experience creates a fear of downgrading comfort, particularly given the importance of heating in daily routines and wellbeing. The idea of investing in a system that might not deliver the same experience as a boiler was a major source of anxiety:

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

“What if we find out actually it’s just not going to be good at heating our home?” -
Higher income participant, 28-35 (D2)

“It would be awful to get a heat pump and then find my house was colder” - *Higher income, 55-70 (D5)*

These concerns are often reinforced by the way heat pumps are understood and operate differently from boilers. Participants often described them as slower to heat up and requiring longer run times, which further challenges expectations shaped by gas systems that provide immediate warmth. **This is compounded by four in ten homeowners surveyed* saying they struggled to find reliable information regarding day-to-day heating comfort and performance (warmth and reliability) and 32% were frustrated with industry explanations of performance being unclear.**

At the same time, people also questioned whether performance would hold up under real-world UK conditions, particularly in winter. These concerns are shaped by a broad mix of information sources, rather than a single trusted channel. Homeowners draw on energy companies (52%), energy and heating advice websites, such as the Energy Saving Trust and Heating Hub (49%), installer websites (44%) and government sources (40%). Consumer champions such as Which? or Martin Lewis are also commonly used (36%), alongside word of mouth from friends and family (36%). However, a notable minority also turn to less formal channels, including social media (25%) and online forums such as Reddit (15%).

Within this wider information landscape, anecdotal accounts circulating online can reinforce uncertainty around heat pump performance, in this case about how it performs in cold weather. This includes the perception, often drawn from second-hand experiences or discussions, that efficiency may decline during harsh UK winters or that the technology may not be reliable year-round:

“The performance drop...once you started to drop below zero degrees...the efficiencies do drop away” - *Higher income participant, 55-70 (D9)*

This uncertainty extended beyond day-to-day comfort to long-term reliability and durability. The fact that heat pumps are external units exposed to the elements adds to concerns about lifespan and maintenance:

“I can’t presume they would last longer than a normal gas boiler, because they’re outside in the elements” - *Higher income participant, 36-54 (D7)*

Together, these perceptions create a wider sense of financial and emotional risk. Without being able to “test” the technology in advance, households are left weighing a significant purchase against an uncertain outcome. This reinforces hesitation, particularly as comfort, reliability and long term value are central to decision making.

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

Emotional pay-off gap

The emotional pay-off gap refers to the mismatch between the upfront effort, cost and disruption associated with adopting a heat pump, and the uncertain or delayed sense of reward that follows. In the absence of prior experience, homeowners are asked to commit to a significant change without being able to fully test or feel confident in the outcome in advance.

This gap can heighten perceived risk. Immediate considerations such as cost, disruption and loss of control are concrete and easy to imagine, while benefits such as improved efficiency, lower emissions or long-term savings are less tangible at the point of decision. As a result, emotional reassurance does not always keep pace with the scale of the decision being made, reinforcing hesitation.

It's not going to be as good as a gas boiler

A recurring concern was whether a heat pump would genuinely deliver the same level of comfort as a familiar gas boiler. For many, this was not just a technical question, but a practical worry about whether their home would feel warm enough, quickly enough, and consistently enough.

Participants often described a clear sense that heat pumps work differently, and that this difference is not always easy to translate into everyday expectations. One participant explained that heating feels slower and more gradual, requiring the system to be on for much longer periods:

“It's a completely different approach to heating a house. It has to be on a lot longer...they take a long time to bring a house up to temperature, so you'd have to run it for a number of hours” - Higher income participant, 55-70 (D9)

This created uncertainty about comfort in day-to-day life, particularly during colder months or when heating is needed quickly. Some worried that this could mean accepting a trade-off in warmth:

“I want to know what compromise there is... it would be awful to get a heat pump and then find my house was colder.” - Higher income participant, 55-70 (D5)

It's not going to warm the room up evenly

“Is the house going to get hot enough in the rooms that we want it to get hot in?” - Higher income participant, 55-70 (D9)

Linked to this was concern about whether heat would be distributed evenly across the home, and whether all rooms would reach a comfortable temperature. Some participants had encountered conflicting information, including online accounts suggesting underperformance:

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

“I was starting to see a lot of anecdotal evidence on the internet of people going, my house just isn’t getting warm” - Higher income participant, 55-70 (D9)

There was also uncertainty about whether heat pumps could meet peak demand in the same way as traditional systems, or whether they would need to be supplemented:

“They’ll probably cover 60, maybe 80% of your heating, and you need to supplement it with a boiler heating as well.” - Lower income participant, 55-70 (D4)

However, this was not universally negative. Some participants also recognised a potential benefit in maintaining a steadier temperature once the home had warmed up, suggesting a different but possible more consistent experience:

“Once you’d got it to a comfortable heat, it would keep... the heat would be kept in more efficiently, so it would maintain a more comfortable level of heat.” - Higher income participant, 36-54 (D1)

It’s not going to be as reliable

Beyond day-to-day comfort, participants also raised questions about how long heat pumps last, and how robust they are compared with traditional boilers. **44% of homeowners surveyed* struggled to find reliable information on the maintenance, upkeep, and lifespan of heat pumps.** This uncertainty was often heightened by the visibility of external units and concerns about exposure to weather conditions:

“The one thing that I actually didn’t find out was what the lifespan would be... I can’t presume they would last longer than a normal gas boiler, because they’re outside” - Higher income participant, 36-54 (D7)

Some worried about wear and tear over time, particularly in relation to rust or corrosion:

“I’ve read a lot of bad things that when they’re exposed to the environment, the rust, the corrosion, that can contribute to the lack of lifespan of it.” - Lower income participant, 28-44 (G5)

It’s going to have issues and cost me more

Finally, there was a strong undercurrent of concern about what would happen if something went wrong. Given the upfront cost, participants questioned whether repairs, would be expensive and whether failure might be more severe or harder to fix than with a conventional boiler:

“If you spent the 20 grand and it lasted 5 years... you could buy multiple gas boilers in that time, couldn’t you?. Would parts be super expensive? Probably, if it costs so much to buy” - Higher income participant, 36-54 (D7)

Overall, uncertainty about performance, durability and repair costs combined to create a broader sense of financial and practical risk. For many, the key issue was not just whether

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

heat pumps work, but whether they can be relied on in the same way as systems they already know and trust.

1.3: Selling a property with a heat pump

The final layer of uncertainty extends to the homeowner's future life plans and the property market. Because the financial payback period is often very long, homeowners worry that they will not live in the property long enough to see a return on their investment:

“If I were to spend [thousands] of pounds that would take me 12 years to repay for itself, I have never lived in a house for 12 years. So therefore it's unlikely that I would recoup those own costs anyhow” - Higher income participant, 55-70 (D5)

“I don't want to spend like £20 grand if I'm not going to be here, and it's not going to be beneficial, and it's not going to improve the value of my house, or if it's going to put off people buying the house” - Higher income participant, 36-54 (D1)

For most homeowners, their home is their primary financial asset. There was a widespread perception from participants that heat pumps could reduce a property's appeal or value in the housing market. This was linked to their unfamiliarity and visibility, which some felt could make homes less attractive to prospective buyers. Their perception formed the backdrop to wider concerns about resale implications:

“If you sell your home that might be a barrier...I don't know what I feel about it, but I would be the only one of my neighbours that had one” - Higher income participant, 55-70 (D5)

In some cases, this concern was thought to play out at the point of sale. Participants felt that a heat pump could become something buyers focus on during negotiations, either as a drawback or an extra complication. This was thought to create a risk that buyers would try to push the price down when the property is being sold:

“You run the risk when you're selling [the heat pump] with the house, of somebody turning around and saying... you're running on a heat pump system...it's 8 years old... I'm gonna knock you down [a few] grand” - Higher income participant, 55-70 (D9)

Throughout our research it was clear that homeowners were divided on whether a heat pump would add value to their home or become a burden. While some see it as a worthwhile purchase, many remain uncertain once they weigh up the financial commitment alongside the unknowns of living with the technology.

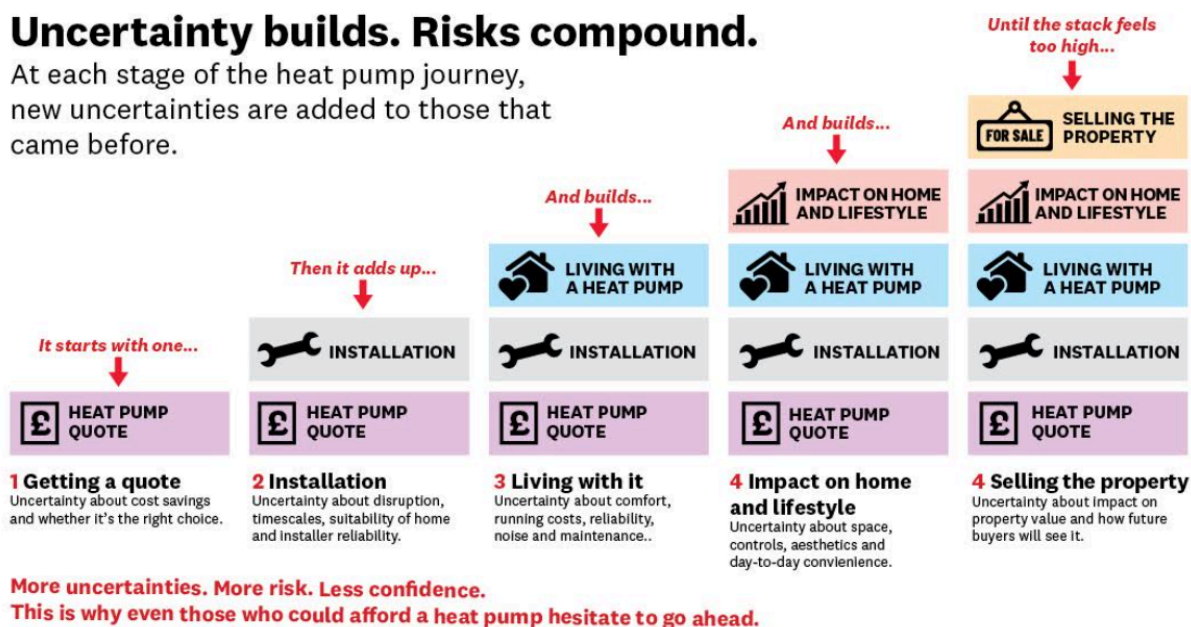
Conclusion

Ultimately, our research shows that homeowners are not simply making a financial trade-off. Instead, their decision is a psychological one where they are weighing a series of connected uncertainties, around unclear quotes, installation disruption, performance, and selling the

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

home with a heat pump. For homeowners it is about the psychology of risk and long-term uncertainty (see Figure 1).

Figure 1: Infogram visualising the uncertainty that builds for homeowners when assessing whether to get a heat pump



This suggests the current promotion of heat pumps and financing approaches, which tend to prioritise affordability, are not sufficient on their own. Policy and delivery need to do more to reduce and manage perceived risk for homeowners and build confidence around the lived experience.

It also points to a need for a consumer-led approach within the sector. Further research and engagement with homeowners is required to better understand their perceptions, concerns and decision-making, and to ensure these are actively addressed alongside affordability considerations, rather than treated as secondary.

Household Income Comparisons

What we found: Across the in-depth interviews and the focus groups, a consistent pattern emerged in how homeowners thought about heat pump adoption. While affordability is a factor, the findings show that uncertainty goes well beyond cost considerations alone.

Importantly, these uncertainties were not experienced solely by the higher-income households who were more likely to be able to afford the upfront cost of a heat pump. In fact, many of the concerns around risk, disruption, performance, and future value were seen just as much among the lower-income households too.

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

Crucially, this means that for the lower income household groups, the barrier is two-fold: not only is affordability a challenge, but the perceived risk and uncertainty of living with a heat pump further suppresses willingness to engage in the technology. In this sense, those who could potentially benefit most from lower running costs are also facing the greatest combined burden of cost and uncertainty.

Chapter 2: Property-based financial models

Chapter summary

- Property-Linked Finance (PLF) is widely rejected and homeowners didn't like the idea of passing debt to future buyers, fearing it will make selling their home impossible
- The majority of homeowners prefer consolidating the upfront cost into a familiar financial model like an existing mortgage. They feel it gives them financial simplicity and stability
- A few young homeowners are not keen on Additional Mortgage Borrowing because they fear missing a mortgage payment or losing their home
- A few older homeowners also would not opt for adding to their mortgage as they are nearing retirement and want to become debt-free

2.1: Property-Linked Finance

What is it?

Property Linked Finance (PLF) enables a homeowner to take out a loan for home energy improvements that is linked to the property rather than the individual. If they move home, rather than taking the loan with them, it is transferred to the new homeowner.

Why we've included it?

- PLF is designed for homeowners who are considering home energy improvements but are concerned they won't see the benefit of the investment before moving.
- It is not currently available in the UK, however it is available in different forms in other countries including the US and Australia.
- In the UK, the Green Finance Institute (GFI) has worked with financial providers to make recommendations for how it could be introduced.
- PLF is currently being considered by the Green Home Finance Strategic Partnership which is led by the Minister for Energy Consumers and GFI.

Property-Linked finance is widely seen as a risk when selling a home

The dominant reaction to property-linked finance (PLF) was overwhelmingly negative. Across the focus groups, participants described the idea as complicated, burdensome and difficult to navigate. Rather than simplifying the cost of home improvements, many felt it would create another layer of stress and uncertainty during an already complex process.

When homeowners surveyed who had rejected or were undecided about heat pumps were asked how they would fund a £6,000 heat pump installation, over half (54%) stated they would be unlikely to use a property-linked loan, while only 27% said they would be likely, with 19% neither likely nor unlikely.

For most homeowners, the central concern was resale. Participants worried that attaching finance to a property would make homes harder to sell, because buyers would not want to inherit somebody else's financial commitments or decisions. One participant compared it to taking on the cost of a previous owner's renovations:

“I wouldn't touch it with a barge pole. It's like buying a house, and then you've still got to pay someone's kitchen off.” - Higher income participant, 36-54 (G2)

Others described the idea of inheriting debt as fundamentally off-putting:

“Run a mile, lumber new owner with debt burden. Disaster. Once it has happened, next owner buying someone else's choices.” - Lower income participants, 55-70 (G3)

“I can't imagine anybody buying a house would want to take on like a financial loan... I think it would make selling houses impossible.” - Higher income participant, 45-70 (G4)

For many, the issue was not just the financial cost itself, but the perception that PLF adds friction and complexity to the selling process. Participants felt buyers are already making one of the biggest financial decisions of their lives, and are unlikely to welcome additional commitments tied to the property. As a result, some believed PLF could actively reduce interest in a home:

“It doesn't actually benefit the person who's coming to buy. What it does is it creates a disinterest in your property.” - Lower income participant, 28-44 (G5)

Among older participants, these concerns were reinforced by memories of earlier solar panel lease schemes. Some recalled how lease arrangements attached to properties created hesitation among buyers and complicated sales:

“A scheme from about 15 years ago, when solar panels first started appearing, where you leased your roof... it did put a lot of people off buying a house... because effectively, they would have to keep that lease. And it sounds a similar arrangement.”
- Lower income participants, 55-70 (G3)

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

Some participants also disliked the structural complexity of PLF. Alongside the stress that comes with selling a house they feared that adding a property-linked loan would result in additional legal fees:

"That sounds like something that solicitors would have to charge a fortune for...I just imagine the conveyancing involved in this" - Higher income participant, 36-54 (G2)

Some feared the loan would look like an additional "sneaky" cost to the new buyer and that would ultimately deter buyers late in the process:

"You're gonna buy a property, and then suddenly find out that, actually, you've got this loan to pay." - Higher income participant, 36-54 (G2)

Overall, PLF triggered strong emotional reactions because participants felt it conflicted with a deeply held expectation that a home purchase should provide a clean financial starting point. The idea of inheriting ongoing costs, agreements or obligations from a previous owner was widely viewed as unfair and risky, creating immediate resistance to the model.

It suggests that for the majority the PLF actively fails to alleviate the "uncertainty and gamble" feeling. Only 11% of homeowners surveyed* said a property-linked loan would make them feel secure and in control of their finances. Offering this model is not a strong enough incentive to overcome what are the current risks in homeowners minds. Only 10% of homeowners surveyed stated that being able to take out a property-linked loan would encourage them to get or reconsider a heat pump.

The minority view: Why two people loved the concept

Despite the heavy pushback, there were two specific participants who liked the PLF model and viewed it as the best option available to them.

Case study 1: The Flexible Home Mover

Two homeowners liked the PFL specifically because they planned to move home. They preferred it over a traditional personal loan because it meant they wouldn't be stuck paying off a 10-year loan for a heat pump they no longer used once they moved out. Being able to leave the finance attached to the home reduced the pressure of needing to recover the cost themselves before moving:

"PLF would be a benefit. If you're thinking to move in the next 5 years...you're not locked into the payments yourself, it's ultimately to the property, you'd be able to sell it... it would open up the potential to doing it if you're less certain you're gonna stay where you are" - Higher income participant, 28-35 (G1)

For them, PLF helped solve the problem of paying upfront for improvements while potentially not living in the home long enough to benefit from the savings:

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

“You’re paying to save longer term. If you’re looking to potentially move, you’re not getting that longer-term benefit” - *Higher income participant, 28-35 (G1)*

Conclusion

While PLF technically solves the upfront cost for homeowners looking to move, the psychological and practical fears of burdening a future buyer with debt severely outweighed the benefits for the vast majority.

While the concept alienated most, it *did* find a niche appeal for two homeowners when looking to move without the loan following them.

2.2: Additional Mortgage Borrowing

What is it?

Additional borrowing on a mortgage allows a homeowner to increase their mortgage in order to pay for a home energy upgrade. The additional borrowing could be at a lower 'green' rate for a period of time before reverting to the standard mortgage rate. Some providers may also offer a cash back incentive.

Why we've included it?

- Additional borrowing on a mortgage is designed to enable homeowners to invest in 'green' improvements, such as a heat pump, that will reduce carbon emissions.
- These products are quite widely available in the UK, however some financial providers have reported disappointing take up.
- The government's plan to support the introduction of low and/ or zero interest loans through commercial providers should improve the choice and affordability of 'green' mortgage products.

Additional mortgage borrowing felt familiar, flexible, and gave a sense of control

For many participants, additional mortgage borrowing was the most intuitive and acceptable way to finance upfront costs of a heat pump. The key appeal was not just familiarity, but the sense that it kept their finances organised and predictable. Rather than introducing a new loan or separate repayment stream, it was seen as a way of consolidating everything into one place, making household finances feel easier to manage.

This sense of simplicity was particularly important for participants who already think carefully about monthly budgeting. One participant described how it would reduce financial "noise" and make payments feel more controlled and less fragmented:

"This seems the most peaceful and simplistic. It's just the same interest rate, same payment terms... it would just seem more succinct and seamless." - *Lower income participant, 28-44 (G5)*

For others, the attraction was directly linked to cost efficiency and clarity. A mortgage-linked option was seen as potentially cheaper than alternative borrowing routes, while also avoiding the feeling of taking on multiple competing debts:

"It would still work out cheaper than, say, getting a [personal] loan" - *D3*

By folding costs into an existing system, it reduced the sense of financial disruption and helped people feel more in command of their monthly outgoings.

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

“It keeps everything in one place” - Lower income participant, 28-44 (G5)

One participant, who had recently bought a home, strongly preferred the mortgage extension approach. Their reasoning centred on emotional ease and financial clarity, rather than purely cost considerations. They described how adding costs into the mortgage would feel more stable and less disruptive than introducing a new financial product:

“It seems better linked to have the increase in your mortgage... rather than having a bit of a shock.” - Lower income participant, 28-44 (G5)

For them, the appeal was about continuity. By keeping repayments within an existing structure, they felt it would be easier to track, understand, and manage day-to-day. This reinforced a sense of control at a time when household finances already feel complex.

Overall, adding the amount to the existing mortgage was often viewed as a mechanism for maintaining a sense of control, not just over payments, but over the structure of household finances. This is important given most homeowners are weighing up many uncertainties when getting a heat pump, this option gives back an element of control and reassurance.

Additional mortgage borrowing did not work as well for those nearing retirement or the younger, less affluent

While additional mortgage borrowing had clear appeal for most participants, reactions were heavily shaped by life stage. The same idea could feel either reassuring or entirely unsuitable depending on where participants were in their mortgage journey.

- **Older homeowners**

For older homeowners, the idea of adding to a mortgage often felt incompatible with their goal of becoming debt-free, particularly those approaching retirement, the mortgage was seen as something to actively pay down. The extra repayments, with limited time left, would be significant. One participant, aged 54, acknowledged that the model could work well for younger homeowners, but rejected it for their own mortgage situation:

“I am 54... I haven't got 20 years... I'm trying to keep my payments down.” - Higher income participant, 36-54 (D1)

Others were even more direct, linking age to lack of relevance:

“Well, no, I'm too old... so therefore it would have zero interest to me.” - Higher income participant, 55-70 (D5)

Rather than creating stability, it was seen as extending financial obligations at a stage where reducing them felt more important with a clear goal of financial freedom in later life.

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

One participant explained that at 67, the priority was no longer investment in long-term repayment structures, but using income for immediate quality of life:

“If I were 30 or 40 I would do it... but at 67, I’d rather spend my money enjoying my retirement.” - Higher income participant, 55-70 (D9)

- **Less affluent, younger homeowners**

For younger homeowners and those already under financial pressure, additional mortgage borrowing was often seen as increasing exposure to risk rather than creating stability. Many in this group had recently entered the housing market or experienced rising repayments due to interest rate hikes, making their mortgage feel like a fragile and sensitive commitment.

Rather than offering reassurance, the idea of increasing mortgage borrowing triggered anxiety. For this group, there is a strong concern that increasing mortgage commitments could stretch household budgets further, raising the risk of falling behind on monthly repayments:

“Mortgages already scare me that, if we default on payment, my house is gone... I wouldn’t want to do something that could jeopardise the house if I wasn’t able to afford to pay, make a mortgage payment.” - Lower income participant, 28-35 (D6)

This is particularly pertinent for homeowners still feeling the cost of living pressures of today’s society. Our most recent [Consumer Insight Tracker](#) found that 7.5% of UK households reported missing a housing, bill, loan or credit card payment in the month to May 13th 2026.

There was also concern about extending repayment timelines and increasing long-term financial burden at a time when many were still adjusting to the costs of home ownership:

“I don’t want to increase my mortgage, meaning I’ve got longer... my payments are going to go longer.” - Lower income participant, 28-44 (G5)

For some in this group, the reaction was more instinctive, they viewed mortgages as a loaded term and it was seen as a red flag, so any form of additional mortgage borrowing was seen as something to avoid entirely:

“No one likes a mortgage... If people see an additional mortgage, they’re like, oh, nope, don’t want to do this. It just... I think it’s, like, an instinctual thing.” - Higher income participant, 28-35 (G1)

Across this group, the mortgage was not viewed as a flexible financing tool. Instead, it was seen as a high-stakes financial commitment that many are already managing carefully, or actively trying to reduce. As a result, any suggestion of increasing it felt like amplifying financial risk at a time when security is still being established, whether from being a new homeowner or managing through the cost of living crisis.

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

Conclusion

Overall, borrowing more on a mortgage to pay for a heat pump stood out as the most familiar and structurally acceptable financing option. It was valued for consolidating debt, reducing complexity, and creating a sense of financial control.

However, its appeal is conditional. It works most effectively for mid-life homeowners who are comfortable embedding additional costs into a long-term financial plan. For younger homeowners, it can heighten anxiety around financial risk, while for older homeowners it often conflicts directly with the goal of becoming mortgage-free.

Chapter 3: Service-based models

Chapter summary

- Heat-as-a-Service (HaaS) currently feels too restrictive with the heating cap and giving your heat ownership to a third party feels like a loss of a basic human right
- Third Party Ownership is a model where homeowners are on the fence, some can see the benefits of spreading the upfront cost and maintenance/ servicing being covered
- However some homeowners also disliked paying for a system embedded in their home that they don't fully own
- The "third party" framing makes people fear sudden price hikes, "fleecehold" scams, or companies going bust

3.1: Heat-as-a-Service (HaaS)

What is it?

With a Heat as a Service agreement, a company would install and own the heat pump and other energy equipment such as solar panels and a battery. The homeowner would pay a fixed monthly 'subscription' for an agreed level of heat. Due to the cost of the equipment, the agreement is likely to be for ten or more years after which the equipment belongs to the homeowner or payments would fall to a minimal amount. If the homeowner moves, the agreement is transferred to the new owner or the owner pays an agreed amount to buy the heat pump from the company.

Why we've included it?

- HaaS is designed to make home heating as easy as possible for homeowners. It removes the upfront cost of installing equipment and the company is responsible for maintenance, repair and optimisation..
- It is not currently available in the UK, though some variations have been trialled.
- In the UK, the government has included some questions about HaaS in consultations but it is not seen as a product that is likely to be introduced soon.

Heat-as-a-Service is a new model not yet available on the market. It is designed to remove the barrier of upfront cost and eliminate the performance risk for the homeowner. However,

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

participants in the focus groups overwhelmingly rejected the concept. **Even in our survey, four in ten (40%) homeowners surveyed who had rejected or were undecided about a heat pump cited a direct “feeling of losing control over my own heating system” when considering a subscription-based model.**

Instead of viewing the model as a reassuring and hassle-free way to manage costs (e.g. upfront costs are smoothed out over a series of monthly repayments and the monthly subscription covers maintenance and servicing), all of these benefits seemed to be shrouded by the loss of control and ownership.

Loss aversion

Loss aversion refers to the tendency for people to feel the pain of a loss more strongly than the pleasure of an equivalent gain. This helps explain why participants reacted negatively to the idea of capped heating allowances. Even if the model could offer greater predictability or service reassurance in theory, it was thought of as something being taken away, which made it feel less acceptable.

In simple terms, this means people are reacting far more strongly to the possibility of *losing* comfort, control and flexibility than to the potential *gain* of a managed heating service that spreads the financial burden and alleviates performance and maintenance concerns with servicing. The following were what people were concerned about:

- Fear of losing control over comfort with heating “caps”
- Heating viewed as a basic human need, not a managed service
- Fear of penalties and cut offs

The heating cap was strongly rejected

The idea of contracting a specific amount of heating (e.g. the home will be heated to a maximum of 21 degrees and will receive three hours of hot water per day) was completely alien to homeowners. Though the concept of a subscription is very common in today's society - such as mobile phone contracts, where you agree to pay a monthly cost for 100 texts, 100 minutes, and 5GB of data - for something as integral as heating it was a concept too far.

When presented with the subscription-based model, nearly half (48%) of homeowners surveyed* who were not comfortable with this model said “losing the flexibility to make future changes” and struggled to grasp the concept:

“How do you agree what that agreed level of heat and hot water is?” - Higher income participant, 36-54 (G2)

“They're charging you for the actual heat, but it's like how they're measuring it with like a thermometer.” - Lower income participant, 28-44 (G5)

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

There was a fixation on the idea that “agreed heating” was a limitation and participants struggled to move beyond the sense that heating would now be rationed or controlled. This immediately made the model feel restrictive and unrealistic for everyday life:

“The fact that you’re 3 hours of hot water a day... it feels quite restrictive...you don’t know what the weather’s going to be like” - Lower income participant, 28-44 (G5)

“Would you have to pay more if your son came home from football, your daughter came home from hockey, and they both wanted a shower, and then your husband wanted... like, how... no two days are the same, are they?” - Higher income participant, 36-54 (G2)

Participants also struggled with the rigidity of fixed allowances because daily life is not predictable. They described homes as dynamic environments where needs fluctuate constantly depending on guests staying over, children returning from sport, or caring responsibilities. These were seen as enough to make a rigid system feel unworkable:

“What if you’ve got teenagers... who like to be in the bath for two hours each?” - Lower income participants, 55-70 (G3)

“What if my mum’s coming to stay, and I want it another 5 degrees hotter for a month?” - Higher income participant, 36-54 (G2)

Many also associated the idea of heating limits with highly controlled living situations, such as renting, it felt like they had moved forward by progressing to home ownership only to feel like they’ve gone a step backward with HaaS:

“It’s like living in an HMO [House in Multiple Occupation]...the landlord controls the heating and when the hot water goes on.” - Higher income participant, 36-54 (G2)

“This kind of almost seems similar to people who’ve got, like, shared ownership properties” - Higher income participant, 36-54 (G2)

The cap itself became the defining feature of the model in participants’ minds, overshadowing any potential benefits around predictability or service.

Heating is seen as a basic human need, not a managed service

Beyond concerns about restriction, many participants fundamentally rejected the framing of heat as a subscription-style service altogether. Heating was not viewed as a discretionary product, but as something essential for well-being, safety and dignity.

Participants strongly disliked the sense that something as essential as heating would be externally controlled. For some, the language of “service agreements” and “allocations” felt uncomfortable because it appeared to commercialise a basic human need. This sentiment was felt strongly across lower and higher income groups:

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

“This seems like it’s trying to feel more human, but actually it’s the opposite...you’re trying to sell something that should be...a basic human right” - *Higher income participant, 36-54 (G2)*

Homeowners emphasised that heating is an essential service rather than a discretionary purchase. Given the UK’s climate, maintaining a warm and comfortable home was viewed as a non-negotiable household need, not simply as comfort, but something necessary to stay healthy and safe:

“Particularly living in the UK, heat is...you need it to stay alive” - *Higher income participant, 28-35 (G1)*

The concept of allocating or controlling access to heat created strong emotional reactions, with some participants describing it as overly controlling or even “dictatorial”:

“Trying to supply something that is a basic right... don’t like the idea of allocation” - *Lower income participants, 55-70 (G3)*

At its core, the model appeared to conflict with people’s expectations of what home ownership represented: independence, autonomy and control over basic living conditions.

Anxiety about penalties and hidden costs

Alongside concerns about restriction, participants were also sensitive to the potential financial consequences of exceeding usage limits. Many immediately compared the model to familiar systems such as mobile phone contracts or car leasing, where going over an allowance can result in unexpected charges.

This created a strong sense of anxiety about “what if” scenarios and hidden costs:

“What happens when I go over? Is it like an unauthorised overdraft? Is it like some crazy extra fee?” - *Lower income participant, 28-44 (G5)*

“You have an extra bath... you’d suddenly find you’ve got £10 extra.” - *Higher income participant, 45-70 (G4)*

Participants were particularly uncomfortable with the uncertainty this introduced (amongst the other compounding uncertainties they already had). Many felt they would constantly need to monitor or second-guess their own heating use, creating ongoing anxiety around overpaying rather than providing reassurance.

“Like, what if summer months it spikes and it’s hot for like a week? Are you still going to charge me for that week?” - *Lower income participant, 28-44 (G5)*

There was also frustration at the opposite possibility: paying for heating they did not use during holidays or warmer weather.

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

“What if you went on holiday for four weeks... are you going to get your money back for what you haven't used?” - Lower income participant, 28-44 (G5)

This created a sense that the model was unfair in both directions, penalising people for using too much, but also for using too little.

Together, these concerns reinforced a wider perception that the model transfers risk and uncertainty onto households. Rather than feeling secure, participants worried about being financially “caught out”, losing flexibility, or having insufficient control over an essential part of daily life.

Conclusion

Rather than providing certainty, “heat as a service” introduced a new set of uncertainties for most participants. The model raised ongoing questions about how usage is defined, how flexibility is handled, and how costs would behave in real life.

Despite the promise of predictable bills, HaaS does not currently make homeowners feel in command of their significant purchase. Only 19% of homeowners surveyed* stated that the HaaS model would make them “feel secure and in control”.

Across the groups, there were no real positives suggested and the dominant reaction was that it replaces one familiar system with another that feels more complex, more restrictive, and harder to trust. Instead of simplifying heating, it amplifies concerns about control, fairness and unexpected financial consequences.

These reactions from participants also suggest that language and framing may play an important role in shaping perceptions. While not a primary focus of the research, the way the proposition was described appeared to influence how it was understood, particularly in relation to whether it was viewed as empowering and convenient, or as restrictive and difficult to trust.

Our research suggests that as currently positioned HaaS struggles to move the dial. Only 15% of surveyed homeowners said that the availability of a 10-15 year subscription covering heat and hot water would encourage them to reconsider getting a heat pump.

3.2: Third Party Ownership (TPO)

What is it?

Under a Third Party Ownership agreement the company would install and own the heat pump. They would also be responsible for its maintenance and repair. The homeowner would choose their own energy supplier and pay for their heating in the usual way.

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

Due to the cost of the heat pump, the agreement is likely to be for ten or more years after which the heat pump belongs to the homeowner or they pay a minimal yearly fee. If the homeowner moves, the agreement can be transferred to the new owner or the owner pays an agreed amount to buy the heat pump from the company.

Why we've included it?

- TPO removes the up front cost of installing a heat pump and the company is responsible for maintenance and repair. It is designed for homeowners who are considering home energy improvements but are concerned they won't see the benefit of the investment before moving.
- Heat pump installations where the heat pump is the property of a third party do not qualify for BUS funding. As a result, currently there is not enough demand for TPO offers.
- TPO is currently being considered by the Green Home Finance Strategic Partnership which is led by the Minister for Energy Consumers and GFI.

While Third Party Ownership (TPO) removes the highly unpopular "heating caps" associated with the Heat as a Service (HaaS) model, participants in the focus groups ultimately viewed it with similar suspicion.

The key concerns this raised beyond the problems from HaaS was losing ownership, being beholden to a "middle man" and the fear of scams.



1. Owning less of my house - loss of equity and value

Third-party ownership (TPO) models were sometimes recognised as a way to reduce upfront costs, but they introduced a deeper tension for homeowners around ownership, control, and long-term value. Rather than simplifying decision-making, they raised questions about what homeowners are actually gaining if part of their home is owned or financed by a third party.

45% of homeowners surveyed* expressed concern for the subscription model that they “would not fully own the equipment for a long time”.

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

The most frequent concern was that TPO could erode a sense of ownership over the property. Participants struggled with the idea of paying for something over time that they do not fully own, particularly when it is physically embedded in the home.

“It's a cheaper option and I'm owning less and less of my house... what am I owning?” - Higher income participant, 28-35 (G1)

“I'm owning less and less of my house, and at some point, if you don't own the heating for your house, what am I actually owning?” - Higher income participant, 28-35 (G1)

For many, this created a strong emotional response. Home ownership is closely tied to control, independence, and building equity over time. Introducing a third-party asset into that structure felt like it blurred the boundary between owning and renting.

“This kind of almost seems similar to people who've got, like, shared ownership properties” - Higher income participant, 36-54 (G2)

Uncertainty over whether it adds value or creates a burden

A key tension running alongside was uncertainty about whether technologies like heat pumps are even seen as adding value to a property. Across other parts of our research, participants were not confident that installing a heat pump increases resale value. Instead, it was often seen as neutral at best, and in some cases a potential burden if future buyers are wary of it.

Against that backdrop, TPO created a particular contradiction: homeowners felt they were being asked to give up some control or ownership over their heating system, without believing they would get enough value back in return:

“Actually, you don't actually own it... you'll pay a retainer for it, but it's not going to give you property value though.” - Lower income participant, 28-44 (G5)

“The only problem I've got with third party ownership is it adds no value... you can't claim that on your property because you don't own it.” - Lower income participant, 28-44 (G5)

Homeowners liked the idea of lower upfront costs, but many felt uncertain about what they were giving up in return. This created a sense of imbalance. While the model helped make heat pumps more affordable in the short term, some worried it could weaken their sense of ownership or reduce the value tied up in their home.

Control remains central, even where value is uncertain

Even if participants weren't sure a heat pump would increase their home's value, they still wanted full control over anything installed in their home. For many participants, owning a home wasn't just about money. It was about:

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

- Being in charge of decisions
- Feeling secure
- Having something that is fully theirs

So when a third party is involved in owning or controlling part of the heating system, it can feel uncomfortable or “not quite right”, even if it reduces upfront costs.

Heating was also seen as especially sensitive because it is essential to daily living, not an optional add-on:

“You could live without a car... but you would struggle to live without heating in your home.” - Higher income participant, 45-70 (G4)

Because heating is fundamental to comfort and wellbeing, participants viewed any loss of full control as a higher-risk proposition. As another participant explained:

“This thing that I don't own that's in my house... it's too risky of a variable.” - Higher income participant, 36-54 (G2)

This reinforces a key tension in the findings. Participants are not primarily judging these models on whether they improve financial value. Instead they are guided and driven by the principle of ownership and control over their own home environment.

Third-Party Ownership therefore sits in a difficult position. It offers affordability benefits at the point of installation, but introduces uncertainty around ownership, control, and long-term value. This is especially significant given that participants are already uncertain about whether technologies such as heat pumps add financial value in the first place.

This creates a clear contradiction: even where financial return is uncertain, ownership itself remains non-negotiable.

2. Fear of price hikes and dependence on a “middle man”

Alongside concerns about ownership, participants were also deeply uneasy about becoming dependent on a third-party for something as essential as heating. The strongest anxieties centred on long-term uncertainty: fears that providers could increase prices, change ownership, go bust, or leave households trapped in contracts they cannot easily escape. **A massive 72% of homeowners surveyed* stated that “being tied into a long-term contract of 10 to 15 years” was a major concern.**

For many, the phrase “third-party ownership” itself immediately triggered suspicion rather than reassurance. Participants often associated the model with companies motivated primarily by profit, rather than long-term customer support.

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

“It’s another sector of profiteering people... if it’s a third party, always a bit worrying.”
- Higher income participant, 45-70 (G4)

There was a strong sense that introducing a “middle man” creates another layer of vulnerability between households and an essential service. Participants worried that once equipment is installed and embedded within the home, they lose bargaining power and flexibility.

“If they raise prices, we’re very stuck. Can’t rip it out... you can be stuck with something you don’t have any choice over.” - Higher income participant, 36-54 (G2)

This lack of control felt particularly risky because heating systems are not easily interchangeable or removable once installed. Unlike switching mobile phone providers or insurance policies, participants felt tied into a long-term relationship with very limited ability to leave if circumstances change.

Several participants also worried about what would happen if providers were taken over or changed ownership over time. Even if a company initially appeared trustworthy, there was concern that future management, pricing or contract terms could become less favourable:

“You might sign a contract with a company... they may get taken over by another company, the interest rates change, and they could go bust...” - Higher income participant, 45-70 (G4)

Participants were not just assessing the technology itself, but whether they could trust an unknown company to remain stable and fair over many years.

Fear of companies collapsing or disappearing altogether

Another major source of anxiety was the possibility of providers going out of business entirely. Participants questioned what would happen to equipment installed in their homes, and whether they could suddenly lose access to heating support or be left financially exposed.

“I also worry about if this company was to go bust... they would obviously then come and take the equipment away, and then you’d be back at square one.” - Higher income participant, 36-54 (G2)

Others imagined worst-case scenarios where providers disappear after installation, leaving households with unresolved maintenance issues or uncertain ownership arrangements:

“These companies do go bust... who’s to say that you haven’t got this thing installed and then they just disappear?” - Higher income participant, 36-54 (G2)

The practical implications also felt unclear and unsettling, particularly where systems are physically integrated into the property:

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

“Do they whip it out? Like, if you've got the ground source one, do they come and take all the things up out of the garden and take them away?” - Higher income participant, 36-54 (G2)

Across these discussions, participants repeatedly highlighted the lack of clarity around accountability and long-term protection if something goes wrong.

Trust and stability are central barriers

Underlying many of these concerns was a broader lack of trust in private third-party providers operating in a relatively unfamiliar market. Without the backing of a recognised or regulated institution, participants often defaulted to assuming risk rather than reassurance.

For some, this echoed wider concerns about “fleecehold” arrangements and other long-term housing-related charges where homeowners feel locked into escalating costs they cannot control. **Nearly half in our survey expressed fears of providers profiteering or hiking prices with 47% of homeowners surveyed* expressing concern about whether “the monthly payments remain fair over time (if energy prices or technology costs change).**

Overall, participants worried that third-party ownership replaces one upfront financial challenge with a new form of long-term uncertainty, where households become dependent on companies they may not fully trust, for a service they cannot realistically live without.

3. Fear of scams and profiteering undermines trust from the outset

Alongside concerns about ownership and long-term costs, many participants expressed an immediate instinctive distrust of third-party ownership models. While less dominant than concerns about resale value or price hikes, fears about scams shaped how participants interpreted the model from the very beginning.

For many, the phrase “third party” itself felt vague and unsettling. Rather than signalling expertise or support, it raised questions about who is really benefiting from the arrangement and whether homeowners are exposing themselves to unnecessary risk.

“We have a skepticism of who the third parties are - how am I being fleeced.” - Higher income participant, 45-70 (G4)

This suspicion was closely tied to broader public awareness around scams, misleading contracts and exploitative housing arrangements. Several participants referenced “fleecehold” or compared the model to timeshares, products initially presented as beneficial but later associated with financial traps and loss of control.

“Leasehold equals fleecehold.” - Higher income participant, 36-54 (G2)

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

“It almost reminds me of timeshares... it just turned into quite a millstone around their neck.” - Higher income participant, 45-70 (G4)

For some, the concern was not necessarily outright fraud, but the fear of entering into arrangements where the provider’s interests are prioritised over those of the homeowner.

“There's something sinister... it's in their best interest rather than you as the homeowner.” - Higher income participant, 36-54 (G2)

“It seems like it's benefiting the people selling it to you rather than yourself benefiting from the heat pump.” - Lower income participant, 28-44 (G5)

Participants also worried that the complexity of the market increases the likelihood of homeowners choosing the “wrong” provider, particularly in a relatively new and unfamiliar sector where trust has not yet been established and the risk of being scammed is front of mind.

“You know, in the age we're living in digital scams and all that, you've got to be careful” - Lower income participant, 28-44 (G5)

This uncertainty was reinforced by wider concerns about company stability and legitimacy. Participants questioned whether some firms may appear credible initially but fail to deliver long term:

“There's lots of them that kind of aren't what they appear to be on face value...” - Higher income participant, 36-54 (G2)

Across these discussions, distrust was often driven less by the technology itself and more by the perceived opacity of the business model surrounding it. Participants repeatedly questioned who the provider is, what their incentives are, and whether they are sufficiently protected if things go wrong.

The appeal: removing upfront cost and reducing personal risk

Despite widespread scepticism, a smaller group of participants could see benefits to third-party ownership (TPO) when prompted to consider its potential benefits by the moderator. Even among those who were broadly critical, some were able to recognise the model’s potential value when they focused less on what problems it introduced (questions and uncertainty) and more on what risks it takes away.

The main benefits of TPO identified in the focus groups revolved around removing their two most daunting barriers to getting a heat pump: the large upfront installation costs and the ongoing performance and maintenance.

It removed the large upfront installation cost

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

For households who would struggle to fund installation costs, this model was seen as a meaningful barrier being addressed:

“It actually could be really appealing to those that don't have the money up front to install... Option to get more houses to have heat pumps.” - *Higher income participant, 28-35 (G1)*

“It works for someone that can't afford the heat pump... it facilitates, it opens up a whole raft of people to get it that necessarily couldn't afford it.” - *Lower income participant, 28-44 (G5)*

It removed the risks of ongoing performance and maintenance burden

Beyond affordability, participants also recognised the value of reducing the burden of ownership. By keeping the system under third-party control, homeowners felt they could avoid the worry and responsibility of repairs, servicing, and unexpected breakdown costs.

“It remains the property of the third party, so it takes off that kind of commitment of... I need to do the maintenance, I need to do the repairs.” - *Lower income participant, 28-44 (G5)*

This shift was seen by some as particularly helpful for people who want a more hands-off approach to home energy systems, where ongoing risk and upkeep sit outside of the household.

A solution that opens access, if the value is clear

By leasing the heat pump instead of buying it, a few participants recognised that they would not have to deplete their savings to access the technology, and they would be shielded from the financial shock of future breakdowns because the provider retains the responsibility for servicing and repairs.

However, acceptance was conditional. Even those who were open to the model emphasised that it would only work if the ongoing cost made clear financial sense compared with current energy bills.

“Do you know what? I'm all for this. If it can solidly show me figures, that means I'm going to pay less than I'm paying on my regular bills.” - *Lower income participant, 28-44 (G5)*

This highlights an important distinction: support for TPO was not driven by enthusiasm for the model itself, but by its perceived ability to reduce barriers and deliver tangible cost savings.

Conclusion

Overall, third-party ownership (TPO) sat in a space of hesitation rather than outright rejection. **When the homeowners surveyed* were asked directly if they felt comfortable**

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

with the TPO model, the population was perfectly split: 39% felt comfortable, and 40% felt uncomfortable. The remainder said neither or don't know (20%).

The majority of focus group participants were sceptical, driven by concerns about losing equity, reduced control over their home, and uncertainty about relying on an external provider for a core household system.

However, this view was not fixed. When prompted to focus on the practical benefits, some participants, including initial sceptics, could see value in the model. In particular, they recognised its ability to remove upfront costs and shift maintenance and performance risk away from the homeowner.

The concept of selling a property with this model was also a concern for many homeowners. Nearly half (49%) of homeowners surveyed* expressed concerns that a subscription model would be a “problem when I came to sell the property”.

Unlike “heat as a service”, where rigid heating caps quickly dominated thinking and limited engagement with wider benefits, TPO allowed more space for reflection. Without an immediate constraint on comfort or daily use, participants were better able to weigh trade-offs and, in some cases, see the underlying value.

In short, TPO was not widely accepted, but it was also not rejected outright, it sits in a genuinely mixed space of concern and conditional acceptance.

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

Chapter 4: Certification and Supporting Renewable Technology

Chapter summary

- Microgeneration Certification Schemes (MCS) is an invisible solution: 77% of homeowners are unaware of the MCS certification
- When MCS is explained to participants it immediately builds trust and homeowners liken it to the Gas Safe industry standards for boilers. It also provides a massive reassurance against rogue traders
- The “Full Package” is highly desired. Building a heat pump, solar panel and storage battery offers the ultimate homeowner autonomy and future-proofing
- But the massive upfront cost means for homeowners it must be financed seamlessly or installed in manageable stages

4.1: Microgeneration Certification Schemes

What is it?

The Microgeneration Certification Scheme (MCS) establishes standards for micro generation products and installers. Installers that are certified by the scheme must use certified products, follow a consumer code, offer financial protections and offer homeowners access to Alternative Dispute Resolution. All certified installers are vetted and audited by the scheme.

Why we've included it?

- All heat pumps that are installed with government funding such as a BUS grant, or as part of a government backed scheme must be installed by an MCS certified installer.
- MCS has recently launched a new installer scheme after a period of consultation and redevelopment.

Homeowners are initially unaware of the MCS

We initially tested MCS with the focus groups by showing them the logo and acronym. From spontaneous reactions there were hardly any participants across any of the focus groups who were aware of, or recognised it.:

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

“It obviously isn’t widely known. If we’ve all researched it and none of us had come across it before” - Higher income participant, 36-54 (G2)

Because the acronym and name “Microgeneration Certification Schemes” was unfamiliar, introducing it without a description of what it is and what it does, meant participants felt it carried little meaning or authority. As a result, it was often dismissed as jargon rather than a trusted standard:

“No idea what that is, sorry.” - Higher income participant, 28-35 (G1)

“It could mean anything... it's just a form of words.” - Lower income participants, 55-70 (G3)

“It’s just a little garb to me... it’s not telling us exactly what they are.” - Lower income participants, 55-70 (G3)

The online survey supports this with a massive 77% of homeowners surveyed* who had rejected or were undecided about getting a heat pump said they were not aware of the MCS certification for heat pump installers prior to taking the survey. Without explanation, MCS did not function as a signal of quality. Instead, it highlighted a wider issue in the market: homeowners do not yet have a clear reference point for judging what “good” looks like in heat pump installation and where to get trusted information.

Clarity and language are key to building trust

After providing a description of what MCS meant, participant's perceptions shifted and they responded positively to clearer, stronger language such as “industry standard”, “quality mark” and “certified installer”, which helped anchor the idea in familiar concepts of safety and compliance.

“It’s helpful that it says what MCS stands for... It makes it sound [like] it isn’t just a made-up thing.” - Higher income participant, 36-54 (G2)

“Yeah, mark of quality. Industry standard. Competence. No carbon. Certifies, I think, is the key word.” - Lower income participant, 28-44 (G5)

The same thing happened in the survey, once the MCS concept was explained to respondents as the “UK’s quality mark for renewable energy systems”, 75% of homeowners surveyed* stated that an MCS certification would reassure them about getting a heat pump, with only 4% saying it would not.

Certification reduces fear of poor installation and “cowboy” risk

Once participants understood the MCS certified both the product itself *and* the installer carrying out the work, their reception of the scheme turned highly positive. The knowledge that an installer was bound to a code of practice gave homeowners the confidence they needed to overcome their deep-seated fears of property damage and “cowboy” builders. It transformed the heat pump from an unknown gamble into a much safer, regulated purchase.

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

“It just makes me feel like it’s a safer product... Checked by experts to industry standards...it just gives you a lot more confidence.” - Higher income participant, 36-54 (G2)

“It does give you that reassurance that your installer’s not gonna rip a hole in your roof.” - Higher income participant, 36-54 (G2)

For some, certification became a minimum requirement rather than a nice-to-have:

“If it doesn’t have that, then obviously it’s not really one to be looking at.” - Higher income participant, 36-54 (G2)

Desire for stronger, more recognisable standards

Despite warming to the MCS concept, participants ultimately desired a standard that carries the same universal recognition and legal weight as existing safety registers. Participants repeatedly compared it to the Gas Safe register (formerly CORGI), arguing that heat pump installations should be governed by a similarly mandatory, rigorous framework that leaves no room for rogue traders.

“It’s almost like a... it should be like a legal requirement, shouldn’t it? In the same way Gas Safe and stuff is.” - Higher income participant, 36-54 (G2)

“It should be like Gas Safe... you’d be mad to use an installer who wasn’t Corgi registered. Because they’ve gone through the right training, they’ve got the certificates” - Lower income participants, 55-70 (G3)

“I just read it and instantly thought it’s like a kite mark you find on a plug. You know, like up to EU standards, it’s like if it’s got a kite mark, you know, certified, it’s good to go kind of thing.” - Lower income participant, 28-44 (G5)

This comparison highlights an important gap: while MCS helps, it does not yet carry the immediate recognition or trust needed to fully reassure homeowners on its own.

Mixed feelings on Government association: reassurance vs. scepticism

The detail that an MCS-certified installer must be used to access government grants provoked a mixed reaction. On one hand, the government’s “rubber stamp” added a layer of legitimacy and reassurance, signaling that the scheme had official backing.

“It kind of gives you a certain level of confidence.” - Higher income participant, 45-70 (G4)

On the other hand, it triggered a lot of scepticism, particularly among younger participants and those who remembered past government-backed energy failures. Participants immediately drew parallels to the cavity wall insulation scandals, expressing doubt about

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

whether government endorsement actually guaranteed quality or simply allowed sub-par contractors to secure quick work.

“It makes me think of cavity wall insulation... they just want to get in and out.” - Lower income participant, 28-44 (G5)

“All government and stuff, and that disaster, and the companies have all just gone bankrupt...” - Higher income participant, 45-70 (G4)

“It's just saying the government's kind of rubber stamped it... but what does that actually mean for you?” - Higher income participant, 45-70 (G4)

Conclusion

MCS currently has limited standalone meaning for homeowners, largely due to low awareness and lack of familiarity. However, once explained clearly, it plays an important role in reducing perceived risk, particularly around installation quality and trust in contractors.

The findings suggest that certification alone is not enough; trust depends on how clearly it is communicated and how strongly it is anchored in recognised, authoritative standards. In the current context of uncertainty around heat pumps, MCS works best as a reassurance mechanism, but only once homeowners understand what it is and why it matters.

4.2: The “Full Package”

What is it?

Pairing a heat pump with solar panels and a battery enables homeowners to generate their own energy and store it for when they want to use it. If they are also on a smart tariff they can also charge their battery when energy is cheap for use when it is more expensive.

Why we've included it?

- The main attraction of pairing a heat pump with solar panels and a battery is the potential to significantly reduce future energy bills, however it will require a much larger investment upfront.
- Homeowners will potentially be able to choose from a variety of financial options to make the cost more affordable, including loans and Third Party Ownership agreements or they can purchase the solar panels, battery and heat pump separately over time.
- The ability to use solar panels and a battery to reduce costs was a major focus of the Warm Homes Plan.

Across the focus groups, the idea of a fully integrated “package”, combining a heat pump, solar panels and a battery, was one of the most positively received concepts. In contrast to

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

other models that introduced restrictions or third-party control, this option was seen as coherent, logical and aligned with long-term home improvement thinking.

A joined-up system that feels efficient and future-focused

For many participants, the key strength of the full package was how well the technologies worked together. Rather than viewing a heat pump in isolation, they saw value in creating a system where energy generation, storage and use are all connected.

Participants viewed this not just as an environmental upgrade, but as a synergistic and fully coherent long-term solution to future-proof their properties and maximise efficiency. They recognised that bundling these technologies together was the most logical way to directly offset the high electricity demands of running a heat pump.

“The complete package feels the coherent way to do this... if I'm going to invest, I would much prefer a fully integrated solution.” - Higher income participant, 45-70 (G4)

“Because you have to have solar... if you can't recoup the power... it's not going to make sense over time.” - Lower income participant, 28-44 (G5)

This joined-up thinking gave participants a sense of control and coherence, particularly compared with more fragmented or externally managed models.

Autonomy and full control remain with the homeowner

Unlike third-party models, the full package was strongly associated with ownership and autonomy. **More than half (55%) of homeowners surveyed* who didn't own solar panels or storage batteries found the full package option appealing. When asked specifically about how they felt about it, 39% agreed it was a “good idea”, and 26% noted that “it would give me control over my energy”.**

Participants valued that they would be in control of the entire system, rather than relying on external providers or being tied into long-term service agreements.

“You're not being sold down a particular route... you're in control of where you want to go.” - Lower income participant, 28-44 (G5)

This sense of control was important in a wider context of uncertainty around heat pumps and energy upgrade decisions. Owning the full system felt like a way to avoid future dependency and retain flexibility over time.

Weather and performance in the UK climate

Despite the strong conceptual appeal, participants quickly raised practical concerns about how the system would perform in real-world UK conditions. In particular, there was uncertainty about whether solar generation would be sufficient during winter months when heating demand is highest and there were limited hours of daylight.

This created questions about reliability, backup systems, and whether the purchase would still deliver value in less favourable weather conditions.

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

“I would want to see figures... on cloudy days... how reliable it can be in my area.” - Lower income participant, 28-44 (G5)

“I don’t see many sunny days in London... it’s going to have to use the battery all the time.” - Lower income participant, 28-44 (G5)

“Scotland... do you need a boiler as a backup?” - Higher income participant, 36-54 (G2)

These concerns did not undermine the appeal of the model, but they did highlight a clear need for trustworthy information to help alleviate misconceptions about how weather conditions affect performance.

It alleviates long term uncertainty BUT raises upfront cost concerns

While the complete package successfully addresses the long-term gamble of volatile energy prices, it creates a massive hurdle: the sheer upfront capital required. **26% of homeowners surveyed (who didn’t have solar and storage already) explicitly felt the complete package was “unaffordable upfront”.**

When presented with the "all-inclusive" nature of three major pieces of hardware, participants immediately saw "*pound signs*" and assumed the installation would be expensive:

“Combined installation - would expect it to be more expensive.” - Higher income participant, 28-35 (G1)

“I’m just seeing solar panels, batteries, like the actual pump. I’m just seeing a lot of cost.” - Lower income participant, 28-44 (G5)

When looking at a comprehensive, long-term property investment like the full package, participants strongly favored financing the package by extending their existing mortgage rather than paying outright or taking on loans. This route offered a familiar, seamless administrative experience that consolidated their debt into one manageable, lower-interest monthly payment.

“It seems better linked to have the increase in your mortgage. So imagine when you get your breakdown every month... would just seem more succinct and seamless, rather than having a bit of a shock.” - Lower income participant, 28-44 (G5)

“It’s not an added bill I’m looking at every month on top, it’s the same bill I’m already paying every month, if that makes sense.” - Lower income participant, 28-44 (G5)

Because the complete package represented a major step-change in increased cost, paying outright was viewed by most as completely infeasible. Furthermore, short-term personal loans (e.g. 2-5 years) were heavily rejected for this scenario; participants felt the repayment window was far too short for such a large sum, and they strongly disliked the idea of taking on high-interest debt for home improvements:

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

“The sheer cost of this complete package means for me that buying outright isn't really, I can't see it ever being feasible, not for a very, very long time, regardless of what the actual costs are. So again, the short-term loan, two to five years, doesn't feel like it's a long enough period of time to make that different from buying it outright.” -

Higher income participant, 45-70 (G4)

Conclusion

The full package is one of the most positively received approaches in principle. It aligns with how participants want to think about home with a heat pump: integrated, efficient, and fully under their control. **31% of surveyed homeowners* said that being able to install solar panels or a battery alongside a heat pump would actively encourage them to reconsider the technology.**

However, this appeal is quickly balanced by practical concerns. While it reduces uncertainty about long-term energy use, it introduces immediate concerns about affordability and upfront cost. In this sense, the model shifts rather than removes uncertainty - from ongoing energy performance to initial financial feasibility.

Because of the massive upfront cost, the survey revealed a strong desire to break down the investment. Nearly a quarter (24%) of homeowners surveyed who didn't have solar and storage* stated they would be more interested if the package was broken into stages (e.g. buying solar first, and adding the heat pump and batteries later).

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

Chapter 5: What would make homeowners reconsider?

5.1: Which delivery and serving models encouraged homeowners to relook into getting a heat pump

This research explored how different delivery and solution models for heat pumps influence homeowner willingness to reconsider installing one in their home. Across all discussions, participants were not just assessing cost, but uncertainty, control and long-term risk. Models that reduce these uncertainties or feel familiar are more positively received.

A clear hierarchy emerged in terms of which models are most likely to currently encourage reconsideration.

Green: Most likely to drive reconsideration

These models feel familiar, credible, and/or give homeowners a strong sense of control.

- **Additional Borrowing on a Mortgage** - familiar financial mechanism that consolidates cost into existing payments, reducing perceived financial disruption
- **The Full Package (heat pump + solar + battery)** - well received, seen as coherent, efficient long-term investment that keeps full control with the homeowner
- **MCS Certification** - increases confidence by signalling installer competence and reducing fears of poor workmanship or “cowboy” installers

Why it works: These options either reduce upfront cost, reinforce trust in the performance technology, or preserve homeowners sense of ownership and control amidst overwhelming uncertainties.

Amber: Mixed appeal

- **Third Party Ownership (TPO)** - this model is seen as a practical route to reduce upfront cost and transfer maintenance risk. However, concerns about loss of equity, unclear long-term value, and dependence on external providers limited broader acceptance.

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

Why it sits in the middle: Some recognise its role in improving access, but ownership concerns remain significant.

Red: Least likely to drive reconsideration

- **Property-Linked Finance (PLF)**
- **Heat as a Service (HaaS)**

These models introduced the highest levels of perceived uncertainty. PLF raised concerns about property value, resale complexity, and debt burden. HaaS was particularly polarising due to heating caps, which were seen as restrictive and incompatible with daily life. There was also uncertainty around how much more homeowners would have to pay if they went over the agreed amount.

Why they fail to land: Both models reduce perceived control and introduce new forms of restrictions, complexities, or uncertainties, making them difficult for homeowners to accept.

Overall takeaway

The strongest driver of reconsideration is not affordability alone, but the extent to which a model:

- Preserves homeowner control
- Reduces perceived risk of a gamble
- Feels familiar and credible
- Avoids introducing new restrictions on daily life

Models that introduce uncertainty about ownership, usage, or future costs consistently reduce consumer's willingness to engage.

Importantly, our findings show that **there is no single solution that works for all** homeowners. Preferences vary depending on life stage, financial situation, and attitudes to risk and ownership. The opportunity lies not in promoting one dominant model, but in equipping homeowners with a range of credible options which they feel safe choosing between, depending on their needs and circumstances. A well-designed system would allow individuals to make informed decisions, with each model playing a role in reducing different types of uncertainties and gambles.

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

Chapter 6: Information and language

Chapter summary

- Homeowners consult multiple sources but severely lack confidence in the answers, ranking government websites low down for good quality information
- Unclear quotes leave homeowners frustrated and guessing about how much it will actually cost to install in their home
- Corporate jargon accidentally creates uncertainty and confusion for homeowners - communication must shift away from technical language to being clear how these models actually work in real life, especially highlighting the benefits of service-based models and what happens during a property sale

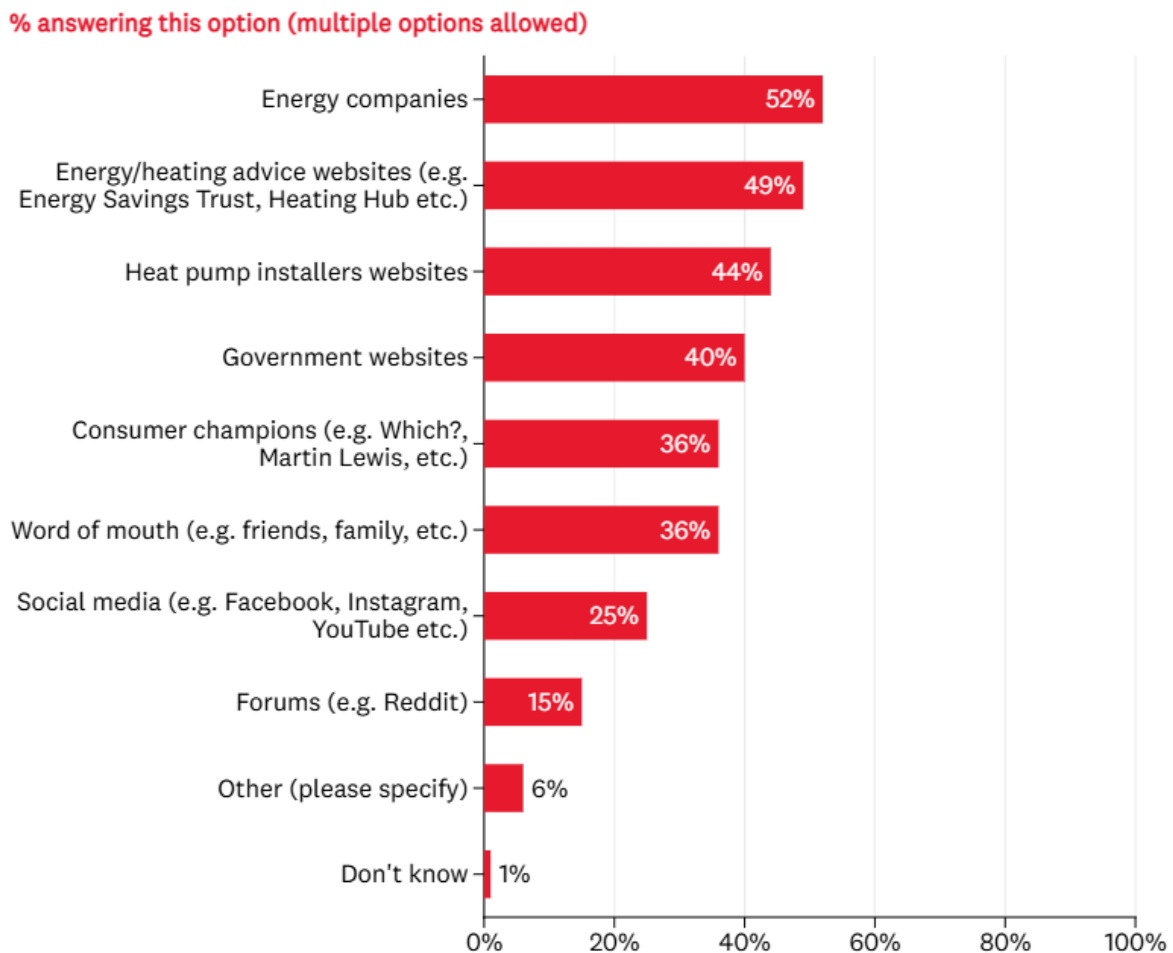
6.1: Where homeowners currently look and who they trust

Before homeowners can even begin to evaluate the language used by the heat pump industry, they must first navigate a fragmented and often frustrating information landscape. Our online survey reveals that consumers are actively searching for answers, consulting an average of three different sources, but they are consistently walking away without the clarity and reassurance they need to make a confident decision.

Where homeowners are looking: When searching for information about heat pumps, homeowners primarily turn to the industry players they already know. Of homeowners surveyed* who researched heat pumps and rejected or were undecided about getting one for the home, more than half (52%) consulted energy companies, followed closely by energy and heating advice websites (49%) and heat pump installer websites (44%).

The government also plays a role in the initial research phase, with four in ten (40%) of these homeowners* surveyed visiting government websites (see Figure 2):

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

Figure 2: Information sources used when homeowners researched heat pumps

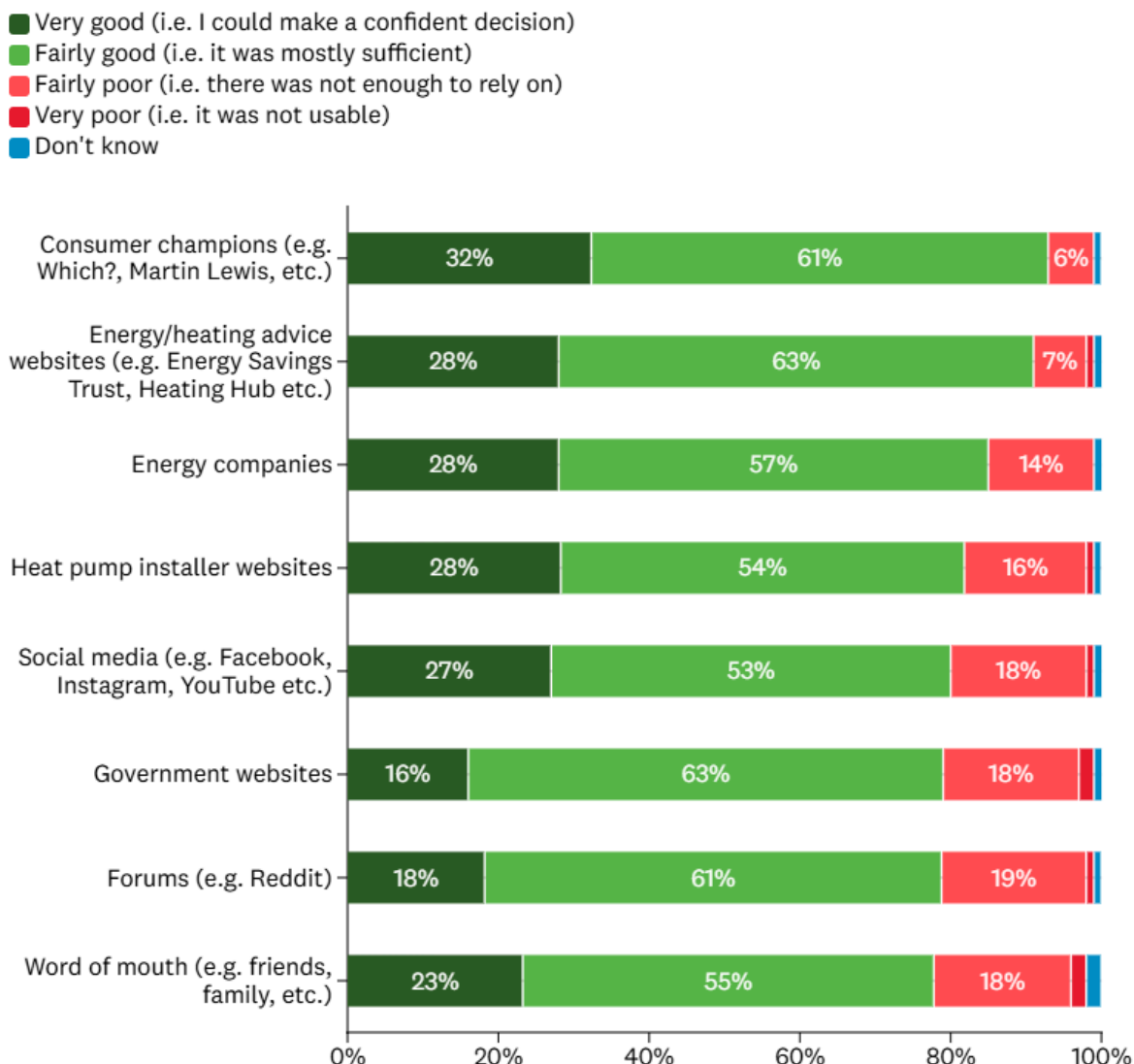
A1. Which, if any, of the following sources did you use to find information [about heat pumps] ?
Base size: 1,004

How they rate the information and the government's position: While homeowners consult a wide variety of sources, they severely lack confidence in the information provided. We found that across the information sources the level of ratings for "very good" - confident enough to make decisions - was between 32% for consumer champions (e.g. Which?, Martin Lewis, etc.) down to 16% for the government websites.

When looking at overall "NET Good" ratings for information sources, the government ranked near the bottom with 79% "good" (63% 'fairly good' and 16% 'very good') compared to 20% "poor". This figure significantly trailed behind consumer champions with 93% "good" (60% 'fairly good' and 32% 'very good') and advice websites with 91% "good" (63% 'fairly good' and 28% 'very good') (see Figure 3).

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

Figure 3: Rating the information sources that homeowners used (ranked by Net Good)



A2a. Thinking about the information you came across when considering getting a heat pump. In general, would you say the information available on each of the following was good or poor?
 Base sizes (top to bottom): 366; 497; 525; 442; 251; 400; 154; and 363.

6.2: Frustrations with language, clarity, and missing information

Because there is no established, standardised sector lexicon that everyone understands, homeowners are left frustrated by the language and explanations currently available about heat pumps.

To explore this further, we tested examples of descriptions of delivery and solution models in the focus groups (as seen in the Technical Annex). These descriptions were developed through desk-based research and reflected how the models are currently presented across publicly available sources, including energy companies, government websites and other organisations. The intention was not to test fully explained or idealised versions of the

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

models, but rather to understand how homeowners might interpret them when encountering information independently.

The findings suggest that language and framing can have an impact on perception. In the case of Heat-as-a-Service, for example, participants often focused on the idea that somebody else would be responsible for, or have control over, an important part of their home. Rather than seeing the model as a mechanism for reducing risk and responsibility, many interpreted it through the lens of ownership and control, triggering concerns about dependency, future costs and being tied to a provider.

Industry language for service-based models: ownership vs risk

We found that a key barrier to heat-as-a-service and, to some extent, third-party ownership models was how they were currently interpreted by homeowners. These approaches were often understood as someone else “owning” or controlling a core part of the home, which can trigger concerns around dependency, reduced flexibility and uncertainty over future costs.

At present, the dominant perception and reaction from homeowners was: *“I don’t want someone else controlling something in my home”*. This interpretation brings with it worries about being locked into a provider, unclear price changes over time, and a perceived loss of autonomy in managing an essential household system.

These responses appear to reflect, at least in part, how the models are currently communicated and understood, rather than solely the intent behind them. While they are designed around shifting responsibility for system performance away from the homeowner, they are frequently interpreted through a lens of ownership and control.

From a design perspective, these models transfer responsibility for maintenance, servicing and repairs to the provider, while spreading upfront costs into more predictable ongoing payments and reducing exposure to unexpected repair or efficiency costs. However, for some homeowners, this can still be interpreted as a reduction in control rather than a transfer of risk.

This suggests that current perceptions can be linked to how concepts such as responsibility, control and ownership are framed and communicated. Greater clarity around what is being transferred, and what remains with the homeowner, may help give consumers a more accurate understanding of how these models function in practice.

Similar patterns emerged for other models. For Property Linked Finance, participants frequently focused on the implications for future buyers and the potential impact on selling their home. While the model is designed to spread costs over time, homeowners often interpreted the transfer of repayments to a future owner as an additional source of uncertainty. Rather than reducing financial barriers, the concept and language tested

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

introduced new questions about marketability, buyer perceptions and future liabilities. In both cases, the way the models were described appeared to amplify existing concerns and create new ones.

Communication challenge: selling a home with PLF or TPO

The focus group discussion suggests that homeowners are trying to understand these models through familiar assumptions about homeownership and mortgages. When participants were shown the descriptions of Property Linked Finance or Third Party Ownerships, many immediately focused on what would happen if they decided to move home.

However, participants often had questions about how these arrangements would operate during a property sale, what obligations would transfer to a future owner, and how any associated benefits would be communicated to prospective buyers. In the absence of this information, homeowners frequently filled the gaps themselves, often assuming additional complexity, reduced marketability and ultimately a greater risk.

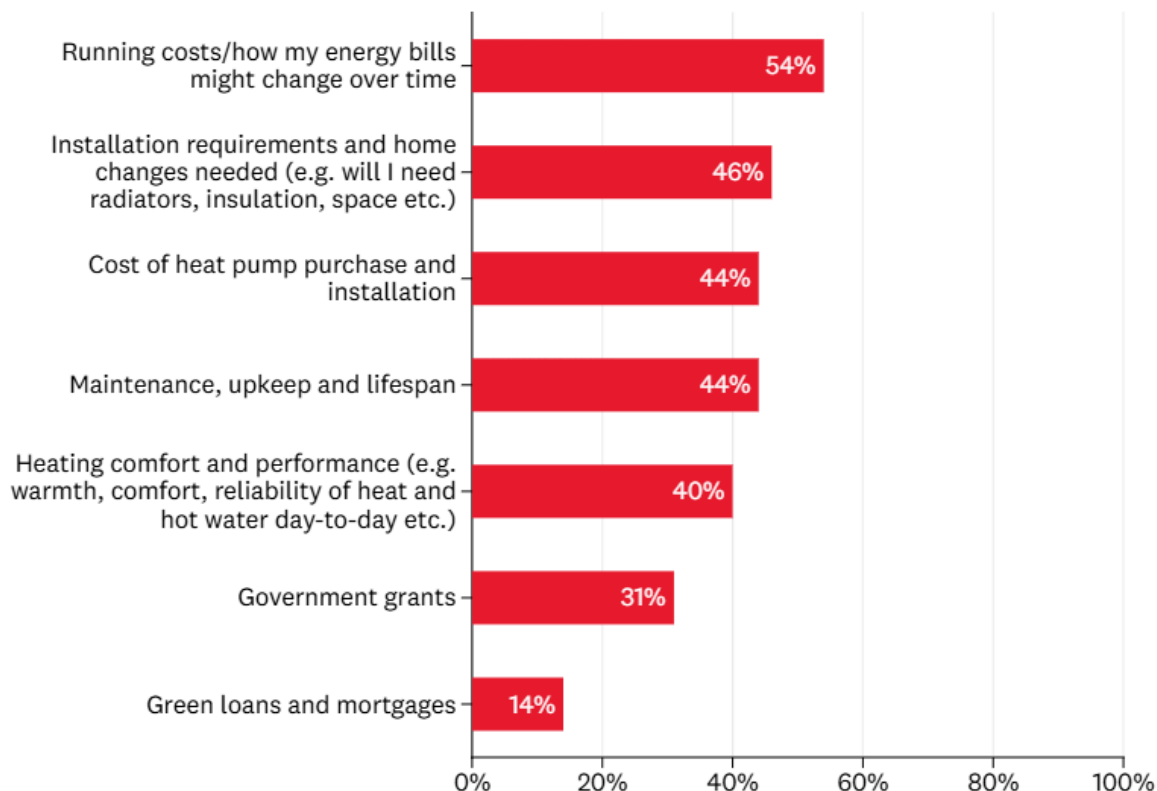
This highlights a broader communication challenge for industry. Information currently available appears to place greater emphasis on how these models are structured than on what they mean in practice for homeowners. Clearer explanations of how a property sale would work, what responsibilities transfer, and how any benefits are realised by future buyers may help homeowners make more informed assessments of these models.

The survey findings reinforce this picture. Homeowners surveyed* reported frustration with unclear explanations of ongoing costs and future energy bills (35%), upfront and installation costs (33%), and ongoing performance (32%). These frustrations translate into substantial knowledge gaps. Over half (54%) struggled to find clear and reliable information about running costs, while 46% could not find sufficient information about installation requirements and 44% struggled to find reliable information about maintenance requirements and product lifespan (see Figure 4).

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

Figure 4: Topics homeowners struggle to find information on

% selecting each answer (multiple answers allowed)



A5. Which, if any, of the following areas did you struggle to find clear, reliable information about heat pumps?
Base size: 1,004

Trust also remains a challenge. Around a quarter of homeowners surveyed* said they did not know who to trust for independent advice (26%), while 25% reported encountering conflicting or contradictory information.

At the same time, 28% felt the information available was not tailored to their home's circumstances, and 17% found technical jargon to be a barrier to understanding.

Taken together, the findings suggest that current industry communication can unintentionally compound uncertainty. Rather than encountering clear, trusted information that helps them assess the risks and benefits of the different options, homeowners are often required to navigate inconsistent terminology, complex explanations and information that feels disconnected from their own circumstances. As a result, existing concerns can be reinforced, while new uncertainties emerge through the way information is framed and communicated.

*Homeowners surveyed who had researched heat pumps and were undecided or decided against getting one

Chapter 7. Conclusions and recommendations

Our research shows that for too many homeowners considering a heat pump, the process is dogged by complexity, uncertainty, and risk, and these concerns are felt by all homeowners regardless of income. Even for homeowners who can afford the upfront cost of a heat pump, uncertainty about what those costs will be, the impact a heat pump will have on future energy bills, and how effective the heat pump will be in heating their home are major barriers.

A costly and complex decision

It is not surprising that homeowners are looking for greater reassurance. Purchasing a new heating system is both a costly and complex decision. For most homeowners the installation of a heat pump is a major investment, often costing substantially more than replacing an old gas or oil boiler. Heat pumps are also a relatively unfamiliar product so they don't have the reassurance they would have if purchasing a product that they see as "tried and tested". As a result they typically dig into the details to give themselves confidence. However when homeowners look for information they are often frustrated by what is available. Ultimately, they often require advice that is specific to their circumstances and their home, but when homeowners sought quotes from installers many were still unsatisfied with the process.

In order to support homeowners considering whether a heat pump is right for their home, the government and businesses need to address the upfront cost of installation, but also address the sense that installing a heat pump is too much of a gamble.

The impact of a heat pump on future energy bills

Not surprisingly given recent energy price rises and price volatility, future energy bills are a major concern¹⁴ and homeowners want to know if switching to a heat pump will reduce their energy bills and provide some stability. There are a number of steps the government can take to give homeowners more assurance in this area. The government can reduce the price of electricity by removing levies and making changes to the wholesale energy market. This will send a clear message to consumers considering a heat pump whilst also supporting other energy consumers. Measures to incentivise installers to improve the efficiency of heat pump installations, and to support consumer adoption of smart tariffs will also help to push bills down. Whilst all these steps will make a difference, ultimately homeowners will want to be reassured their energy bills will be lower and an explanation that relies on multiple 'ifs' risks adding to confusion and uncertainty. This potentially creates opportunities for companies that can offer innovative packages that give consumers more reassurance around costs, but these will need to overcome consumers' natural wariness of unfamiliar products. Some homeowners will want to wait and see.

¹⁴ [MCS and Public First](#) conducted a survey of 4,000 households to establish openness to home energy upgrades and their motivations for wanting to improve their homes energy efficiency. Their findings highlight the different issues influencing households but whilst reducing bills may not be the factor that ultimately motivates them to go ahead most people would not even consider upgrades without assurance that their bills will be reduced.

The other solution that directly addresses future energy bills and proved appealing to many homeowners was the idea of pairing a heat pump with solar panels and a battery. Supporting the uptake of solar and batteries was at the centre of the government's Warm Homes Plan. Interestingly many households in our sample that were considering a heat pump had already installed solar panels or a battery and were therefore a step along this journey. However whilst this provides some long term certainty and control over bills, the higher upfront cost is a major barrier for most households that the government and financial providers will need to address.

Providing more clarity and control

Homeowners are clearly searching for more clarity about the process of installing a heat pump and what it is like to live with one. Providing more good quality information and advice will go some way to helping with this, but when there are multiple information providers and a lot of detail to consider, there is a risk of mental overload and further contributing to a confusing and even contradictory picture. We have made recommendations for improving information and advice but information remedies are unlikely to be sufficient when the root cause of the uncertainty is the level of complexity and risk in the market itself.¹⁵

Perhaps unsurprisingly issues of clarity and control also influenced homeowners responses to the different financial options that are being proposed. As a result there is a clear preference for financial solutions that feel simple and familiar such as short term loans and mortgages. Even when considering mortgages homeowners had a preference for combining the loan into an existing mortgage over the complication of adding a new loan. New financial products such as Third Party Agreements that remove upfront costs and seek to provide some certainty around maintenance and ongoing costs provide some appeal but financial providers will need to address homeowners questions and concerns around issues such as selling a home and control over their heating.

Reassurance around quality and resolving any problems

Finally, homeowners are also concerned by the quality of the installation and whether a heat pump will be effective at heating their home. Again this is not surprising given the size of the investment and the day to day impact that poor heating could have on the home. Opinions were also affected by perceptions of the wider home improvements sector and the failure of previous 'green' schemes promoting energy efficiency. There was clear interest in certification schemes that offered guarantees around standards of installation and a swift resolution of problems if anything goes wrong, but none of the homeowners that had been considering a heat pump were aware of the existing government backed scheme. Providing consumers with a more straightforward and accessible guarantee that is backed by the detail of existing schemes could help to cut through the complexity and jargon.

The Warm Homes Plan sets out the government's strategy for warm, affordable, low carbon heating. Encouragingly our research suggests that the focus in the Warm Homes Plan on solar panels and batteries, and the commitment to introduce low or zero interest loans are

¹⁵ [Safe products, unsafe choices: Why consumer confidence is the real barrier to Europe's energy transition](#), David Trevithick, LCP, March 2026.

both popular with homeowners. However, these won't be viable options for all homeowners. More progress is needed to give clarity and confidence both to consumers that choose to install solar panels and a battery as well as those that consider other options. In some areas, the government has already identified or started to address the issues we have highlighted, but it needs to make faster progress and address the specific needs of homeowners so they have the confidence and reassurance they need.

Currently heat pumps are only one option for homeowners, the government has no plans to phase out gas and oil heating beyond the UK's commitment to reach net zero by 2050. Many consumers support this goal and are keen to play their part in the transition, but they need reassurance that alternative heating systems, such as heat pumps, will not increase their energy bills and will be effective at heating their home.

Recommendations

We have identified four areas where the government needs to do more to build confidence and support well informed consumer choices. Importantly, there is no single heating or financing solution that works for all homeowners. The government should aim to equip homeowners with a range of credible options which they feel safe choosing between, depending on their needs and circumstances.

Long term confidence on running costs.

- **Reduce the price of electricity:** The government should further remove environmental and social levies from energy bills and fund these through general taxation.

Reducing the price of electricity provides greater certainty that future energy bills will be lower when switching to efficient electrified heating such as a heat pump, whilst also delivering benefits to all households as everyone uses electricity, and delivering most benefit to households with direct electric heating (who are disproportionately likely to be in fuel poverty).

- **Incentivise the use of performance monitoring:** The government should incentivise the use of heat pump and insulation performance monitoring technology with the aim of making it widespread when effective schemes are in place¹⁶ and the supply chain is sufficiently established. This will incentivise installers to install efficient systems, and enable homeowners to hold installers to account if a system doesn't reach the efficiency that was promised.

More efficient heat pumps cost less to run. Efficiency is influenced by a number of factors related to the size and insulation of the property, but the design of the heating system plays a critical role. Performance monitoring technology provides reassurance that heat pumps (and other energy efficiency upgrades) are working as they should. The technology can also support the introduction of guarantees allowing

¹⁶ Would performance guarantees increase consumer confidence in heat pumps? Nesta 2026.

homeowners to require installers to make improvements where products aren't meeting the standards agreed.

- **Support homeowners to access appropriate tariffs:** A third step to reducing energy costs is for homeowners to use an energy tariff that offers them lower rates for the energy they use. With a variety of tariffs available, homeowners need support to assess which is most suitable to their needs.

The government should work with businesses to make it easier for homeowners to get the advice they need to find the best tariff (including smart tariffs) and set up their heat pump and any other low carbon technology to work with that tariff. This includes raising awareness of the tariffs available and providing accessible means of comparison. Some homeowners may also need the reassurance of risk free trial periods with Time of Use tariffs with mechanisms to prevent them accidentally incurring much higher bills.¹⁷

Assurance around the quality of the installation

- **Introduce a Warm Homes Guarantee:** The government should introduce a Warm Homes Guarantee that gives homeowners confidence in the quality of a heat pump installation and other energy efficiency measures, and that any problems will be fixed quickly and without hassle. The guarantee should apply to any energy efficiency measure funded or backed by government financing and a date should be set for when it will be applied to all measures. It must be backed by the detailed requirements set out in government backed certification schemes, such as the redeveloped MCS installer scheme. The government should maintain strict oversight of these schemes to ensure they deliver. The government has committed to a consultation on consumer protection in the summer and this must result in a simpler and more effective system.

Our findings suggest homeowners like the sound of MCS certification, but had not heard about it. Consumers need an accessible version that highlights the key features they care about.

Financial products that meet homeowners' needs

- **Deliver promised zero or low interest loans:** The government should meet its commitment to make zero or low interest loans available through commercial lenders

Traditional short term loans and mortgages were homeowners preferred financing options. Mortgages were particularly suited to homeowners that were considering more expensive options such as pairing a heat pump with solar panels and/or a battery to maximise their ability to reduce their energy bills. Additional grant funding is needed for households that are not currently eligible for 100% funding, but are unable to afford any additional outgoings.

¹⁷ Unlocking flexibility: how to engage households in demand side response, MCSF, 2025.

- **Address homeowners' questions and concerns about new financial products.** The government and industry should resolve consumer issues with new financial products and ensure that any gaps in consumer protection are addressed before making third party agreements eligible for Boiler Upgrade Scheme (BUS) funding¹⁸

New financial products such as Property Linked Finance and Third Party Ownership agreements seek to address consumer needs when considering a heat pump, but for many homeowners they leave too many questions unanswered. These are often related to different scenarios that could occur over the course of a very long term agreement, including changes to the homeowners circumstances and the need to make changes to the property.

- **Ensure new financial products do not frustrate homeowners selling their home.** The government should ensure new financial products such as third party agreements and property linked finance do not add unreasonable friction to selling a home.

Homeowners were very concerned about the potential impact that financial products could have on their ability to sell their home, and are likely to seek considerable reassurance on this point before considering these products themselves. There was also concern about how a heat pump will be viewed by potential buyers. This is a question about wider confidence in heat pumps that our other recommendations seek to address.

Consistent reliable information and advice:

- **Provide core information services:** The new Warm Homes Agency should provide core information for homeowners that look to official sources for information and advice. This will also give businesses a source of information that they can use with confidence.

Changing a heating system is a complex decision and homeowners need information they can trust. However currently many homeowners struggle to know where to go for information and are often frustrated by the information they receive.

- **Develop partnerships to reach more homeowners with good quality information and advice:** National, regional and local governments, businesses, and advice organisations should work together to develop partnerships to provide consistent information, and signpost to reliable sources of information and advice where they are not in a position to provide it themselves.

Many homeowners go to businesses, local authorities or consumer groups for information and advice on installing a heat pump, but are frustrated and confused by the lack of consistency. There is still a gap in the market which needs to be filled for services that provide advice tailored to the needs of a specific household and property.

¹⁸ Financing for low carbon heating, [Which?](#) 2025.

Technical annex

The descriptions included in this annex were used as stimulus materials during the qualitative research with homeowners. They were shown to participants to explore initial reaction and perceptions of different delivery and solution models. The sessions were facilitated by researchers with a deep understanding of the topic, and participants were able to ask questions or seek clarification where needed, ensuring the discussion reflected informed interpretation rather than standalone reading of the materials.

The wording used in these stimuli was developed through desk-based research and reflects how these models are currently described in publicly available online sources, as they might typically be encountered by homeowners searching for information.

The purpose was to understand how existing industry and information framing may shape interpretation, rather than to test fully explained versions of these models.

Property Linked Finance

Enables access to affordable and long-term funding for environmental improvements for buildings by linking the finance to the property, rather than the owner. This means the payment obligation can transfer to the new owner when it is sold. Property owners would only pay for energy efficiency measures up until they sell their property.

Additional Mortgage Borrowing

You can extend your mortgage via a Green Further Advance or a Green Additional Borrowing scheme. This lets you borrow the required amount added directly onto your existing mortgage, often at a discounted rate or with cashback.

Third Party Ownership

Third Party Ownership can support several leasing or hire arrangements under which the heat pump remains the property of a third party and it is leased to the household for a monthly fee. These agreements typically include a maintenance and repair contract as the product is still owned by the third party.

Heat-as-a-Service

A financing model in which a homeowner outsources its heating needs to a specialised provider, an energy service company. The company finances, builds and operates the renewable heat generation asset and subsequently sells the heat produced to the homeowner.

Microgeneration Certification Scheme

MCS is a mark of quality on heat pumps which demonstrates adherence to recognised industry standards; highlighting quality, competency and compliance. We certify low-carbon products and installations used to produce electricity and heat from renewable sources.

The “Full” Package - Heat pump, solar panel and storage battery

Over the next few years, heat pumps are going to become the dominant way of getting heating in most people’s homes. Paired with solar, batteries and the right sprinkling of tech magic, they can even help give some customers Zero Bills.

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