

# Peterborough Accelerated Net Zero (PANZ)

## Consumer Attitudes to Heat Pumps and Local Authority-led Support Services

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July 2025

# Executive summary

The Peterborough Accelerated Net Zero (PANZ) project aims to create a comprehensive platform that integrates technical, social, demographic, and economic data to develop effective Net Zero plans.

Building on Peterborough's pioneering Local Area Energy Plan (LAEP), the project will further tailor energy plans to the specific needs of the community. Energy Systems Catapult (The Catapult) is supporting the project by helping to enable the large scale and rapid delivery of heat pumps across Peterborough, including rural areas.

The Catapult commissioned qualitative and quantitative research with UK residents to:

- Understand attitudes to net zero;
- Uncover the barriers limiting heat pump installations;
- Test and refine services that can be delivered by the Local Authority to drive heat pump uptake amongst residents.

The research included individual depth interviews with 24 Peterborough residents and a nationally representative online survey of 1,976 UK residents.

Although developed with a focus on Peterborough, the research data evidences little difference in attitudes between residents in Peterborough and the rest of the UK. Therefore, the data presented in this report includes the national sample and offers insights that are highly relevant to all local authorities seeking to implement a place-based approach to heat pump adoption.

## Key findings

**Barriers to heat pump adoption span the customer journey:** Barriers range from a lack of information and interest, to concerns about heat pump performance, financial barriers through to low confidence in finding an installer and practical concerns e.g. disruption and aesthetics.

**Low awareness is an immediate barrier to heat pump uptake - simple accessible information is needed:** Only 12% of survey participants claim to have a good knowledge of heat pumps and 44% state they don't know enough to make an informed decision as a result.

**Interest in heat pumps is very low - communication must highlight clear and relevant benefits:** Low interest in heating in general, and heat pumps in particular, limits engagement. The lack of basic understanding means consumers struggle to identify benefits of heat pumps and just 27% want to learn more.

**Messaging about heat pumps should emphasise long-term cost reduction and the saving on monthly bills:**

Climate change has little impact on desire to install a heat pump. Motivation is driven by ongoing financial savings to monthly bills, with 65% consumers interested in learning about new technologies that could reduce energy bills.

**A Retrofit One Stop Shop service presents a meaningful opportunity for Local Authorities to accelerate heat pump adoption:**

The 3 services that were tested with a national quantitative sample of consumers were all felt to be appealing. However, the One Stop Shop has a more immediate impact than other services with stated heat pump uptake within the next 2 years rising to 27% when it's available. The One Stop Shop is the only service which addresses multiple barriers to heat pump adoption, and it can be integrated with other services, e.g. financial support, to maximise impact.

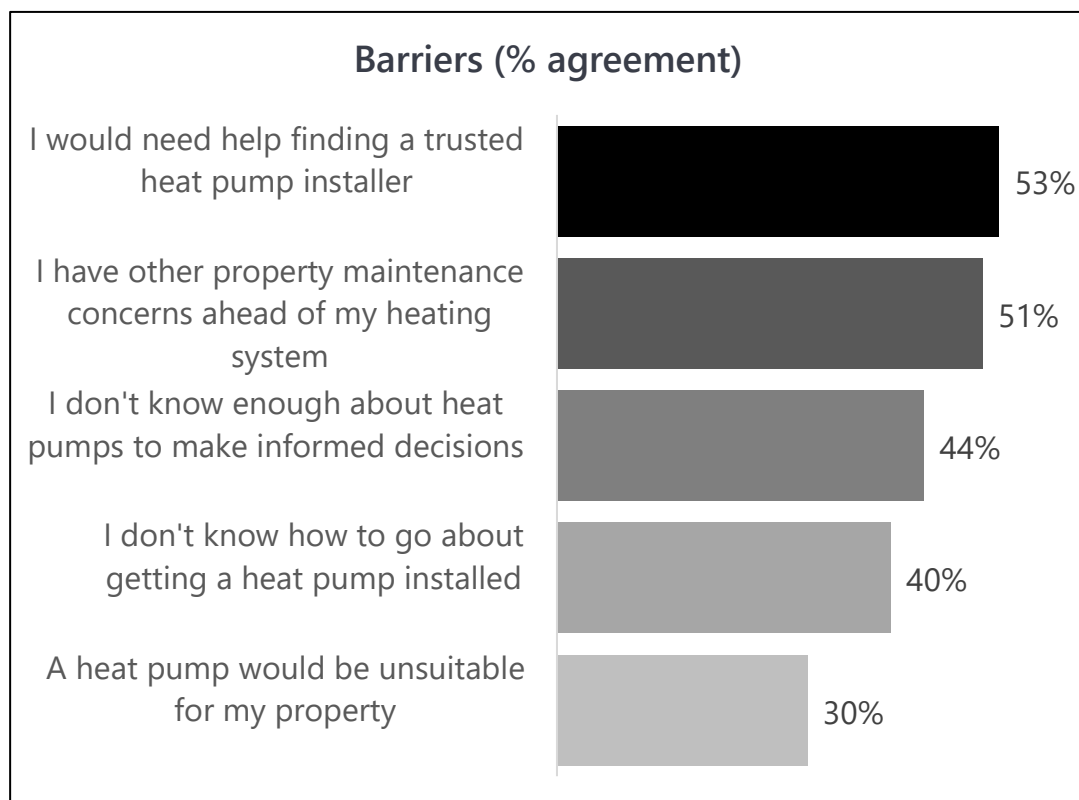


# Findings

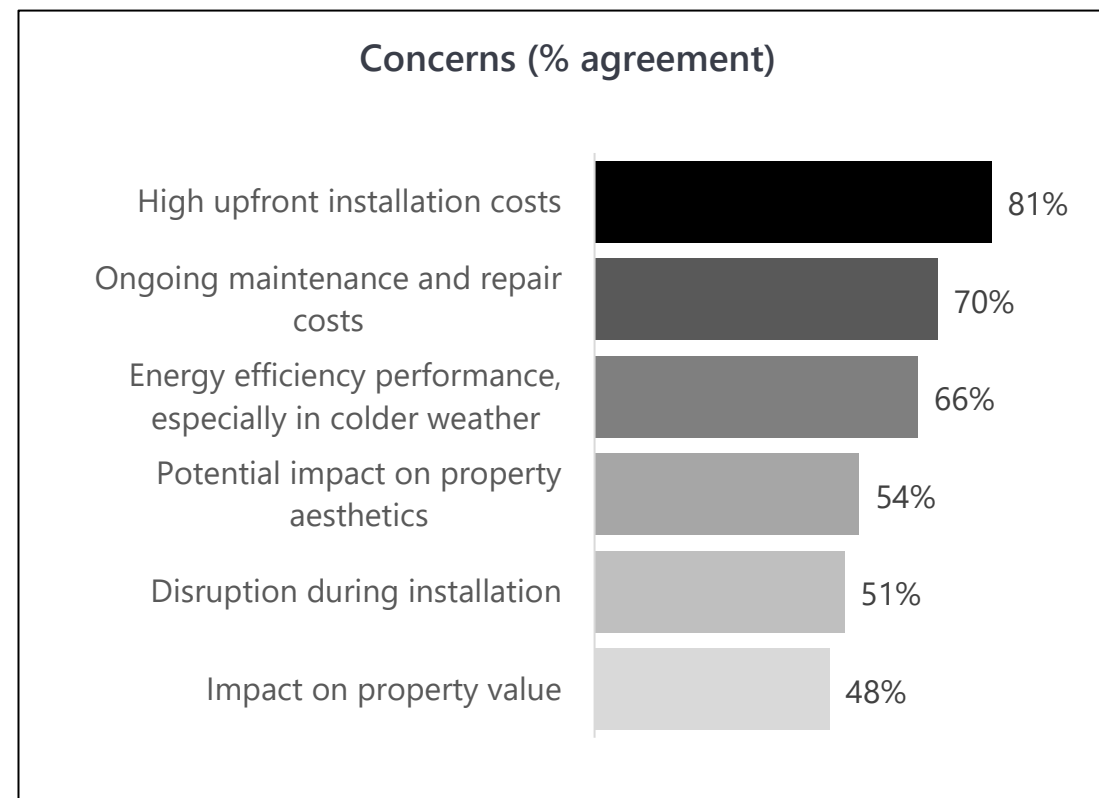


# Barriers to heat pump adoption span the customer journey from awareness to install and beyond

The qualitative and quantitative research identifies a number of **barriers to heat pump adoption, spanning the consumer journey – before, during, and after installation.** These barriers range from a lack of information about heat pumps to being unsure of how to install one, and concerns about the upfront and ongoing costs as well as disruption and impact on property value. This wide spread of barriers can make it **hard for Local Authorities to know where to start** in driving heat pump adoption.



How strongly do you agree or disagree with the following statements? (Base: homeowners only 1,115) (Data shows those agreeing i.e. scoring 4 or 5 on a 5-point scale).



How concerned are you about each of the following when thinking about installing a heat pump in your home? (Base: homeowners only 1,115) (Data shows those indicating concern i.e. scoring 4 or 5 on a 5-point scale).

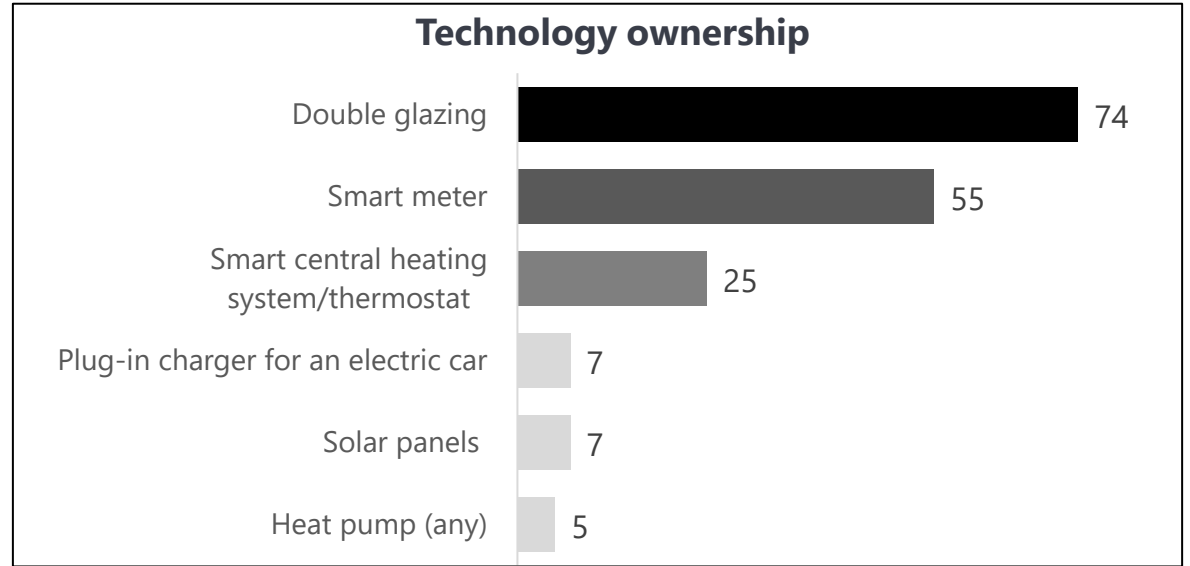
# Low awareness of heat pumps is an immediate barrier to adoption

**Adoption of all energy saving and low carbon technologies is low.** Only 55% respondents in our quantitative survey of nearly 2,000 people have a smart meter, and only 25% have smart heating or thermostats.

Across all low carbon technologies, uptake is below 10% and **only 5% report having a heat pump** of any kind in their home (including hybrids).

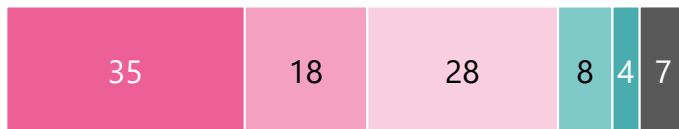
Awareness of these technologies is very low and **only 12% respondents claim to have a good knowledge of heat pumps.** Without a basic awareness there is nothing to entice consumers to find out more, but they cannot act and enjoy the benefits of these technologies until they do so. Currently, **44% of survey participants say they do not have enough information to make informed decisions** about heat pumps.

**Raising awareness is the first key step in building a funnel of potential interested consumers.**



Which of the following do you have in your home? (Base: all n=1,976)

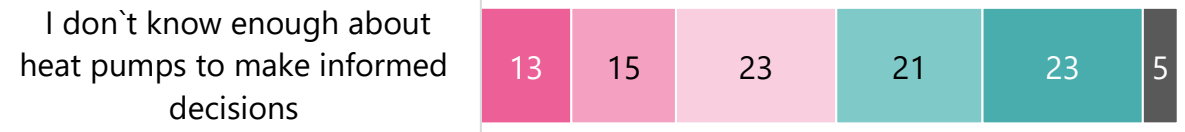
## Knowledge of heat pumps



■ 1- No knowledge ■ 2 ■ 3- Moderate knowledge ■ 4 ■ 5- High knowledge ■ Don't know

How would you rate your knowledge on the following topics (Heat Pumps)? (Base: all n=1,976)

## Impact of knowledge



■ 1- Strongly disagree ■ 2 ■ 3 ■ 4 ■ 5- Strongly agree ■ Don't know

How much do you agree or disagree with the following statements? (Base: all n=1,976)

# Lack of interest in heating and heat pumps prevents consumers engaging with - and installing - the technology



**There is a lack of interest in heating in general, and heat pumps in particular, that prevents consumers engaging with this technology.**

Qualitative interviews highlighted that, when working well, heating systems function in the background and are easily overlooked. When not working, costly repairs divert funds away from more enjoyable purchases. Only **35% survey participants are interested in trying a new heating system** that is different to their current one.

Whilst media coverage has increased general awareness of heat pumps, the lack of detailed understanding means **consumers struggle to confidently identify benefits of the technology**. Word-of-mouth has also reinforced associations with high costs and uncertain benefits.

In qualitative interviews, when the concept of heat pumps was introduced, participants responded with further questions rather than enthusiasm. Only a few spontaneously highlighted potential benefits, such as:

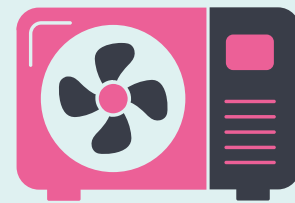
- Energy efficiency
- Low carbon emissions
- Improved safety (no gas involved)
- Consistent indoor temperature

With perceptions dominated by negativity, **only 27% of survey participants are interested in learning more about heat pumps and only 5% say they are likely to install a heat pump in the next 2 years**, rising to 11% in the next 5 years.



**27%**  
**Interest in learning about heat pumps**

## Likelihood to install a heat pump

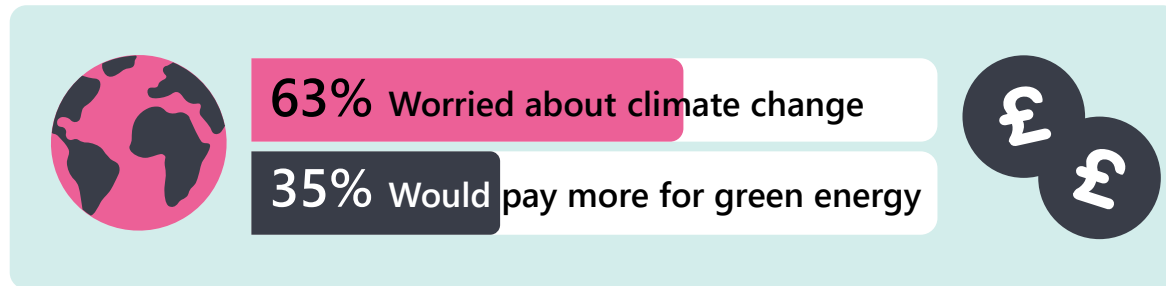


To increase engagement and uptake of heat pumps it is not enough to raise awareness. **Interest in the technology must be encouraged by clearly communicating the benefits that matter to consumers.** This will ensure consumers want to find out more and can build the level of knowledge and confidence they need to move forward with planning and installing a heat pump.

# Ongoing financial savings are the key to engaging consumers



Whilst two-thirds of respondents claim to be worried about climate change and agree that we should all reduce our home energy use to help the environment, only 1 in 5 would pay more for energy from green sources. **Climate change is not a strong enough motivator to drive spending, particularly on high up-front-cost items.**

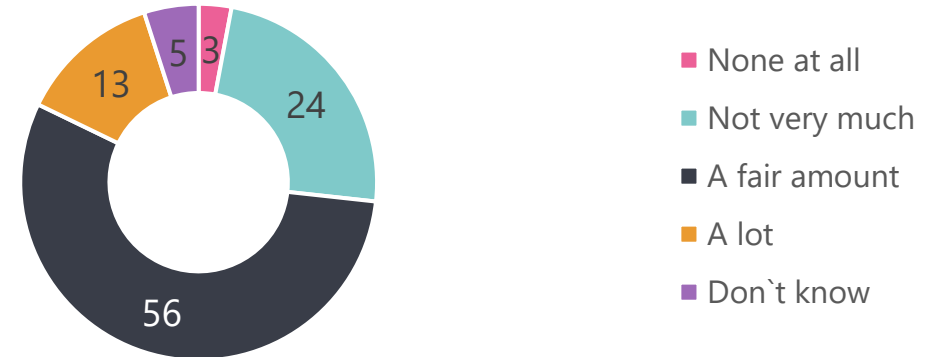


In uncertain economic times many households are struggling financially and are focussed on stretching their monthly income. 70% tell us they put a fair amount or a lot of thought into energy efficiency at home. **65% state they are interested in learning about new technologies and products that could reduce their energy bills.**

Half of survey respondents state that energy bills continuing to rise would make them more likely to consider a heat pump. **Ongoing cost savings to household's monthly bills are very motivating and the energy efficiency of heat pumps represents an important benefit to consumers which should be promoted to boost adoption.**

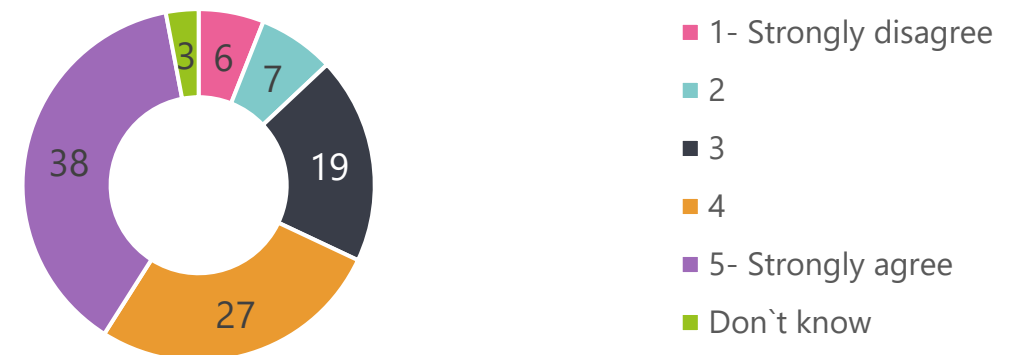
Opportunities to save further through using heat pumps alongside solar PV and batteries may amplify this benefit, if upfront costs can be mitigated through appropriate financial support or business services.

## Thought given to energy efficiency at home



How much thought, if any, would you say you give to energy efficiency in your home? (Base: all 1,976)

## Interest in energy bill reducing technology



How much do you agree or disagree with the following statements about energy use and heating (I am interested in learning about new technology and products that could reduce my energy bills)? (Base: all 1,976)

# Three services were designed to encourage heat pump adoption



We identified 10 potential services that could encourage heat pump uptake, each one addressing different consumer barriers. Through rigorous shortlisting, including desk research and interviews with consumers and industry stakeholders, we identified 3 to be developed further and validated in the quantitative consumer survey (See Appendix for more detail).



## One Stop Shop

Simplifies the entire heat pump journey by giving residents easy access to expert advice, tailored home assessments, approved installers and more.



## Heat Pump Finance

Spreads heat pump installation costs over time with a low-interest repayment plan to reduce upfront costs.



## Community Owned Renewable Energy

Residents buy into a shared local renewable energy co-operative and receive bill savings.

# CORE is the most appealing of the three services, but One Stop Shop has the most immediate impact on heat pump uptake



All three services were well received as they were considered easy to understand and appealing. In **Community Owned Renewable Energy (CORE)** participants buy in to a co-operative renewable energy source (e.g. solar farm) and reduce their electricity costs as a result. CORE is suitable for those with any heating type or housing tenure and so was felt to be relevant by the widest audience. It also **scored most highly on appeal**, with 59% agreeing the proposition was appealing to them included participants who had restrictions on the modifications they could make to their homes. This suggests **the benefits of CORE extend beyond homeowners**.

Service	Appeal (% agreement)	Relevance (% agreement)	Stated Heat Pump Uptake (if available) 2 yrs	Stated Heat Pump Uptake (if available) 5 yrs
One Stop Shop	49%	22%	27%	31%
Heat Pump Finance	49%	24%	23%	32%
Community Owned Renewable Energy	59%	35%	n/a%	33%

Based on what you've seen and read, to what extent do you find [service] appealing? To what extent do you agree or disagree with the following statements about [service]? The service is relevant to me. (Base: All 1,976). And if this service was available to you, how likely would you be to install a heat pump in the next 2 years? 5 years? (Base: All homeowners (1,115) (Data shows those agreeing i.e. scoring 4 or 5 on a 5-point scale)

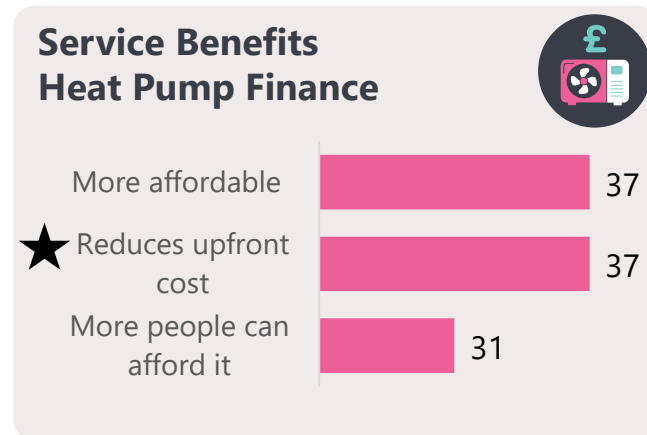
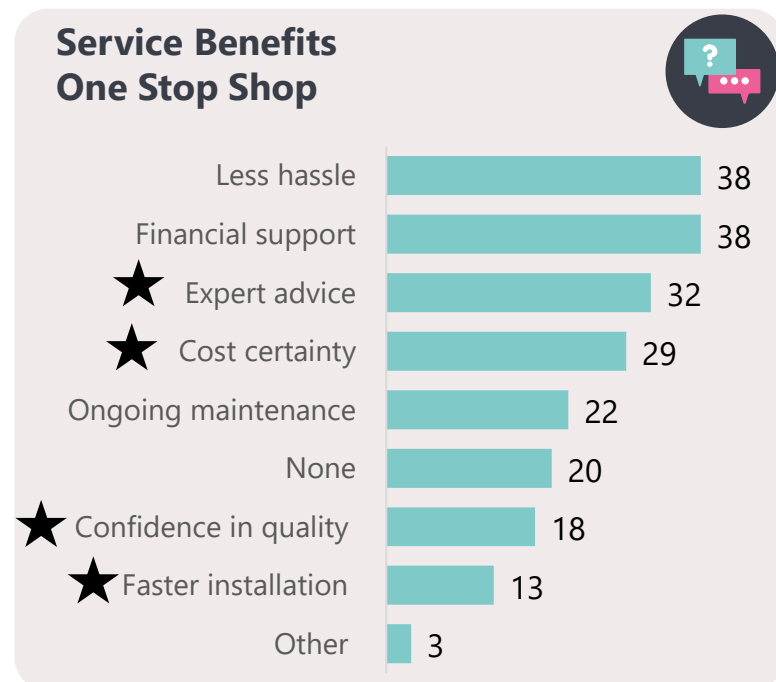
**All three services drive intended heat pump installations.** Stated heat pump uptake rises **by around 20%** when any of the services is considered to be available, reaching 31-33% stated uptake in 5 years (from 11% where no service is available). Survey participants indicate that the **One Stop Shop can have a more immediate impact than other services**. Stated heat pump uptake within the next 2 years is 27% when the One Stop Shop is available, compared to 23% for the Heat Pump Finance service, and 5% with no support service available.

# A One Stop Shop better addresses a wide spread of heat pump barriers than other services tested

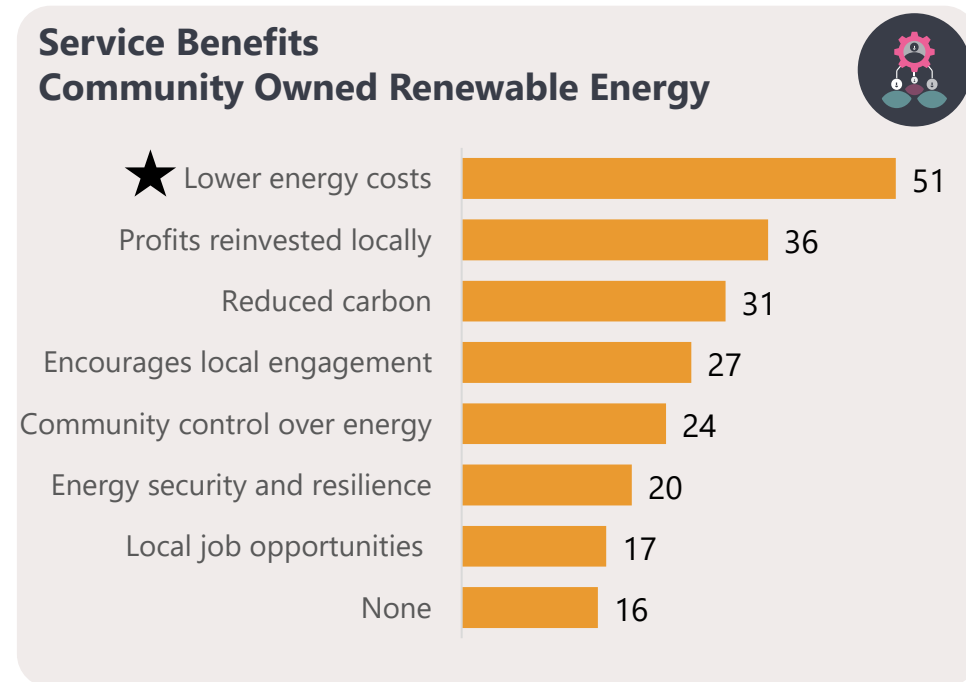


Respondents identified a range of benefits from each service when prompted. However, **Heat Pump Finance and Community Owned Renewable Energy each only addressed one of the heat pump barriers** identified on slide 4, reducing upfront costs in the case of Heat Pump Finance, or ongoing running costs in the case of Community Owned Renewable Energy.

**A One Stop Shop service addresses a range of barriers to heat pump uptake.** In addition to raising awareness, these services support homeowners by simplifying the retrofit journey. They offer the tailored guidance and planning needed for consumers to know how to proceed, and feed confident doing so, reduce upfront costs and coordinate installs to minimize disruption. **Other services can be promoted through a One Stop Shop**, e.g. Heat Pump Finance, which **further extends the benefits** of this service and allows a Local Authority to tailor it to the needs of the local community.



★ Addresses a heat pump barrier (shown on page 4)



What do you think would be the main benefits of the One Stop Shop/ having Heat Pump Finance available for installing a heat pump/ of a Community Owned Renewable Energy project? (Base: all 1,976)

# The One Stop Shop expands interest in heat pumps beyond the young, suburban, high-income group who show interest now



## Most likely to install a heat pump (next 5 yrs)

Survey participants who claimed to be likely to install a heat pump within the next 5 years, were more often:

- 35-44 years old
- Household income over £75,000
- Suburban
- Expecting to stay in current home for at least 4-10 yrs or 10+ years



Interest in a One Stop Shop service includes those who are already likely to install a heat pump AND expands this group further to include a breadth of ages, incomes and geographies

## Most likely to find a One Stop Shop appealing

Survey participants who found the One Stop Shop service appealing were more often:

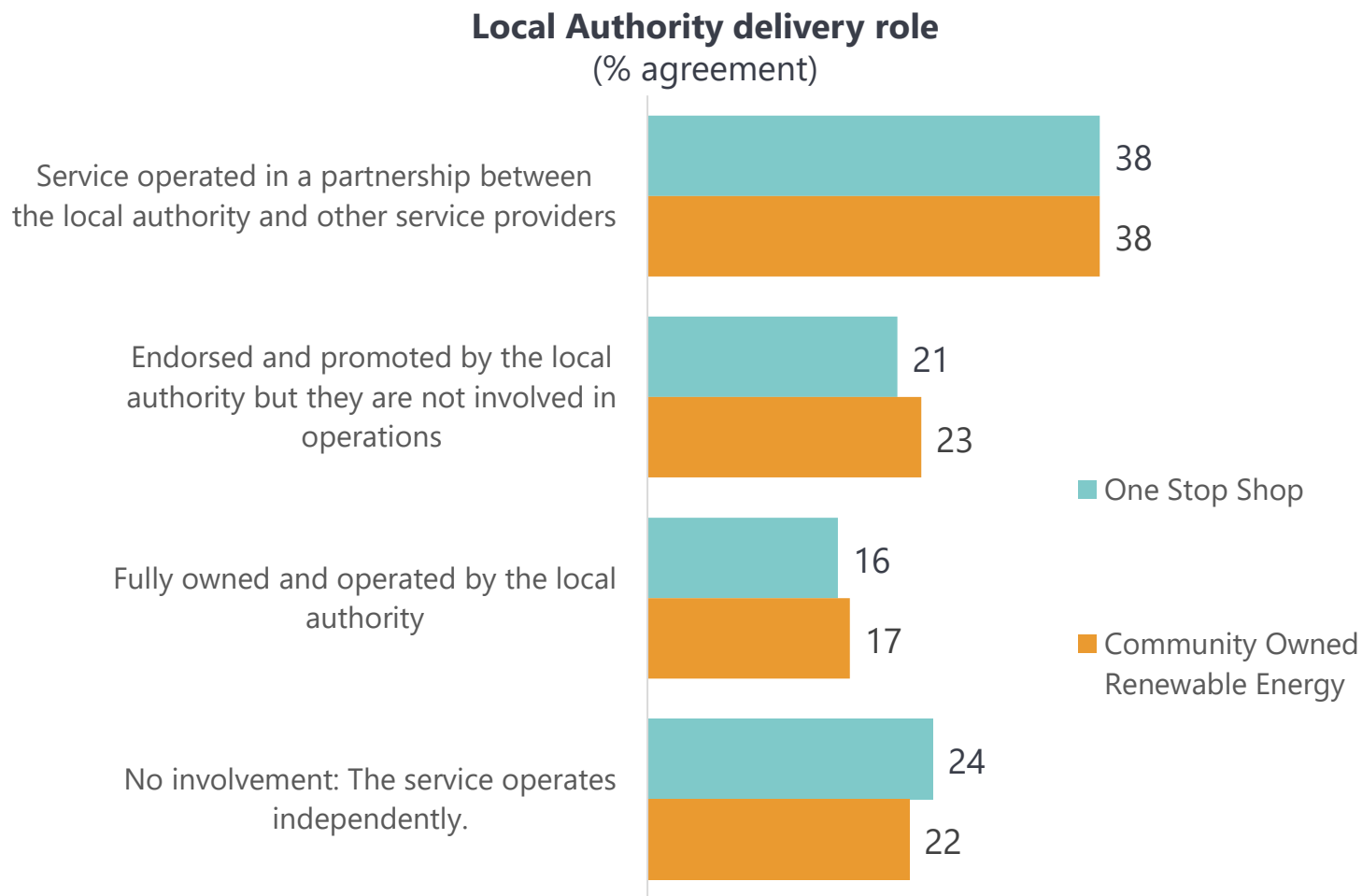
- 18-65 years old
- Household income over £50,000
- Urban
- Expecting to stay in current home for at least 4-10 yrs or 10+ years





# A clear role for Local Authorities in delivering low carbon initiatives through a partnership approach

Feedback is consistent across heat pump initiatives on the role of the Local Authority in their delivery. **A partnership between the Local Authority and other delivery partners is the preferred route** with 38% selecting this option for both One Stop Shop and Community Owned Renewable Energy. However approximately 1 in 5 believe there should be no role for their Local Authority in delivering these services.



What role should your local authority have in offering this service to residents like you? (Base: all 1,976)

# Rural homeowners are less likely to engage with heat pumps or a One Stop Shop service



The research found that **rural homeowners are less likely** than their suburban and urban counterparts **to adopt a heat pump or use the retrofit One Stop Shop (OSS) service** in the next few years.

Likelihood - % agreement	Rural	Suburban	Urban
Likely to install in 2 years	4% ▼	4%	8%
Likely to take up OSS in 2 yrs	21% ▼	26%	32%
Likely to install with the OSS in 5 yrs	23% ▼	30%	39%

Moreover, **rural participants are less concerned** about the impacts of climate change.

Climate change - % worried	Rural	Suburban	Urban
Worried about climate change	59% ▼	63%	68% ▲

Significantly higher ▲  
Significantly lower ▼

How worried or unworried are you about the impact of climate change? (Base: all 1,976)  
How likely or unlikely are you to install a heat pump in your home within the next 2 years? (Base: homeowners only 1,115) Assuming this service were available now, how likely or unlikely would you be to take up this service in the next 2 years (Base: all 1,976)  
(Data shows those agreeing i.e. scoring 4 or 5 on a 5-point scale)

And while they appear to be slightly more knowledgeable about heat pumps, they are also amongst the **least interested in learning more** about them. Very few believe that installing a heat pump adds value to their property.

Barriers to heat pump adoption - % agreement	Rural	Suburban	Urban
A heat pump would be unsuitable for my property	30	27	40 ▲
I don't know enough about heat pumps to make informed decisions	37 ▼	49 ▲	41
I don't know how to go about getting a heat pump installed	33 ▼	44 ▲	37
I would need help finding a trusted heat pump installer	49 ▼	55 ▲	51
I have other property maintenance concerns ahead of my heating system	49	49	56 ▲
Heat pumps add value to the property	17 ▼	18 ▼	24

Significantly higher ▲  
Significantly lower ▼

How concerned are you about each of the following when thinking about installing a heat pump in your home? (Base: homeowners only 1,115)  
(Data shows those indicating concern i.e. scoring 4 or 5 on a 5-point scale).



# (Sub)urban communities are more open to heat pumps and a better short-term target group for a One Stop Shop

For rural homeowners then, the issue appears to be both the lack of knowledge (even when higher than in urban and suburban groups, it still represents a barrier) and a particular lack of interest in heat pumps.

In addition, they express greater **concern about high upfront installation costs and the energy efficiency performance** of the systems. Over half are also worried about other costs, as well as the potential impact on their property's aesthetics and value.



Concerns about heat pumps - % agreement	Rural	Suburban	Urban
High upfront installation costs	84 ▲	82	77
Ongoing maintenance and repair costs	69	71	69
Potential impact on property aesthetics	56	57	46 ▼
Energy efficiency performance, especially in colder weather	73 ▲	66	58
Disruption during installation	51	50	53
Impact on property value	50	52	40 ▼

As a result of these high barriers, rural homeowners consistently appear as the **least influenced group** when presented with recognised triggers to considering a heat pump. They show the highest proportion of participants stating that such events would make 'no difference' to their decision.



Influence of events on decision to install a heat pump - "No difference"	Rural	Suburban	Urban
Moving to a new house	42	43	32 ▼
Energy bills continue to rise	39 ▲	30	27
The Government continuing to offer heat pump installation grants	33 ▲	28	28
Starting retirement	57 ▲	52	47
Renovating your house	49 ▲	46	37
Building an extension	55 ▲	50	45
Your current heating system breaks down	38	33	36

Significantly higher ▲  
Significantly lower ▼

How concerned are you about each of the following when thinking about installing a heat pump in your home? (Base: homeowners 1,115)  
How much impact would the following events have on your decision to install a heat pump in your home? (Base: Those without a heat pump)

With higher barriers to heat pump uptake, rural areas are a poor initial target for a One Stop Shop. A better **short- to mid-term strategy would be to target a One Stop Shop at urban and suburban homes**. This focus will help **demonstrate the effectiveness of the service and overcome the identified barriers**. It will also generate positive word-of-mouth, build customer confidence, increase interest, and establish heat pumps as a viable heating solution for local homes and communities. When **coupled with additional activities to demonstrate heat pump success in rural buildings**, this can help **build the momentum needed to expand** into more challenging markets, such as rural homes, in the longer term.

# Summary

# Conclusions and recommendations



- Heat pump adoption is hindered at every stage of the customer journey and low awareness is having a significant impact on engagement and uptake. Only 12% people feel well informed about heat pumps.

- Low interest in heating in general, and heat pumps in particular, limits engagement. The lack of basic understanding of heat pumps means consumers struggle to confidently identify benefits of the technology and there is nothing to entice them to learn more, or to install a heat pump themselves. Just 27% consumers want to learn more about heat pumps.

- Climate change has limited impact on desire to install a heat pump for the majority,
- Motivation is driven by ongoing financial savings to the consumer's monthly bills, with 65% consumers interested in learning about new technologies and products that could reduce their energy bills.

- We tested 3 services that could be offered by a Local Authority to support the uptake of heat pumps. All three services showed appeal amongst a broad spread of consumer demographics.
- Whilst the Community Owned Renewable Energy service was considered relevant (35%), and therefore appealing to more people (59%), the One Stop Shop can have a more immediate impact than other services. Stated heat pump uptake within the next 2 years is 27% when the One Stop Shop is available.

- The One Stop Shop is the only service which addresses multiple barriers to heat pump adoption across the customer journey. It can also be used alongside other services e.g. Heat Pump Finance, to further extend the benefits and tailor the service to the needs of the local community.

- Engagement in rural areas is low, with limited interest and confidence in heat pumps. Evidence and experience of affordable warmth with a heat pump in a rural setting will be required to build confidence amongst residents.
- Interest in heat pumps, and One Stop Services, is higher amongst urban and suburban residents.

**Prioritising simple, accessible information about heat pumps is needed to drive awareness.**

**Communication about heat pumps must highlight clear and relevant benefits to consumers rather than technical detail.**

**Messaging about heat pumps should emphasis long-term cost reduction and the saving on monthly bills.**

**A One Stop Shop service presents a meaningful opportunity for Local Authorities to accelerate heat pump adoption.**

**A One Stop Shop should be used as a hub to both raise interest in heat pumps and integrate and promote other support services including finance.**

**A One Stop Shop should first target urban and suburban owner-occupiers whilst installations in rural community buildings are used to grow trust in this setting.**

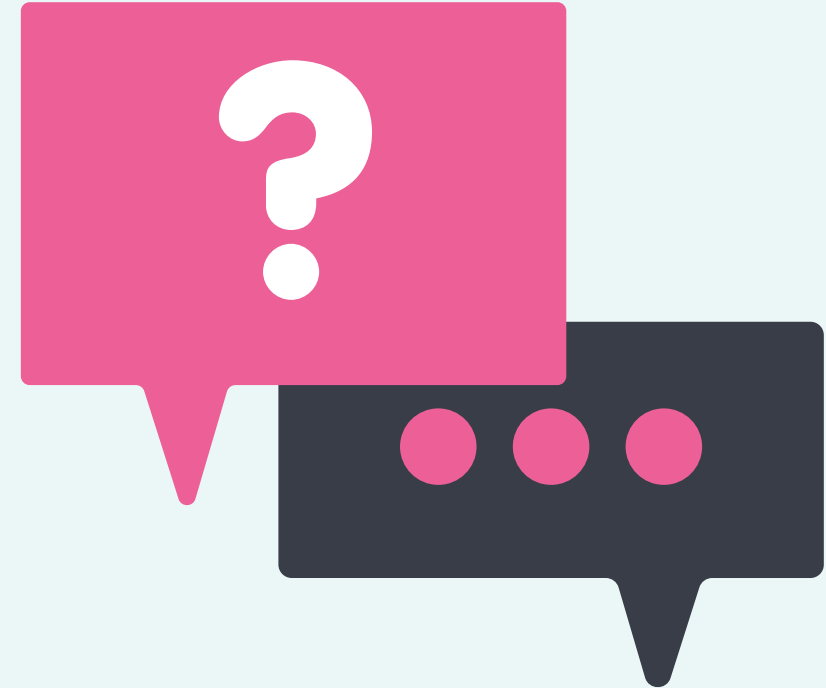
# Appendix



# One Stop Shop survey text:



- Many people want to know about the benefits of heat pumps and how they can make their home more energy efficient, lowering your monthly bills.
- Now you can visit your local and online pop-up shops where your Local Authority has brought together expert information to tell you more, including grants that give you £7,500 off heat pumps, the best approved installers, monthly funding options, and post-installation support to help you maximise energy savings.
- To get you started you can choose:
  - **The Quick One:** Complete an online form or a short phone call to get free advice on energy efficiency measures. Want to find out more? Be matched with trusted installers for free, no obligation quotes.
  - **The Tailored One:** A detailed energy assessment based on a survey of your home. Get tailored energy efficiency advice with accurate quotes from approved local installers and savings estimates based on your personal energy use. This service costs £450 and is non-refundable.
- One Stop Shop shows you how other homes have made changes and discover what works best for your property to save money, add long-term value, and be part of the positive energy change.





# Heat Pump Finance survey text:



- Installing an energy efficient heat pump rather than a gas boiler could lead to a reduction in long-term monthly energy bills and an increase in property value.
- To manage the costs, some people prefer to avoid upfront payment and spread the installation and equipment costs.
- This flexible finance agreement allows you to pay for your heat pump monthly. It offers tailored repayment plans: you can choose whether you want to pay a small amount up front and how long you want to pay it back over, getting the right monthly payment for you.
- Most people can take advantage of the Boiler Upgrade Scheme that allows them to save £7,500 on total costs, which means that installing an environmentally friendly heat pump could potentially cost you £4,000 and last for over 20 years.
- The finance agreement will be supported by your local authority, ensuring customers receive benefits such as low interest rates.
- We're also looking into linking the finance agreement to your property, so if you move, the debt stays with the house.

## Heat Pump Finance example costings

Factors	£70.99 per month	£37.71 per month
Cash Price	£4,000	£4,000
% Deposit	0	0
Length of agreement	5 years	10 years
Rate of Interest	2.5% per annum, fixed	2.5% per annum, fixed
Monthly Repayment	£70.99	£37.71
Total Amount Payable	£4,259.37	£4,524.96

vs. traditional loans

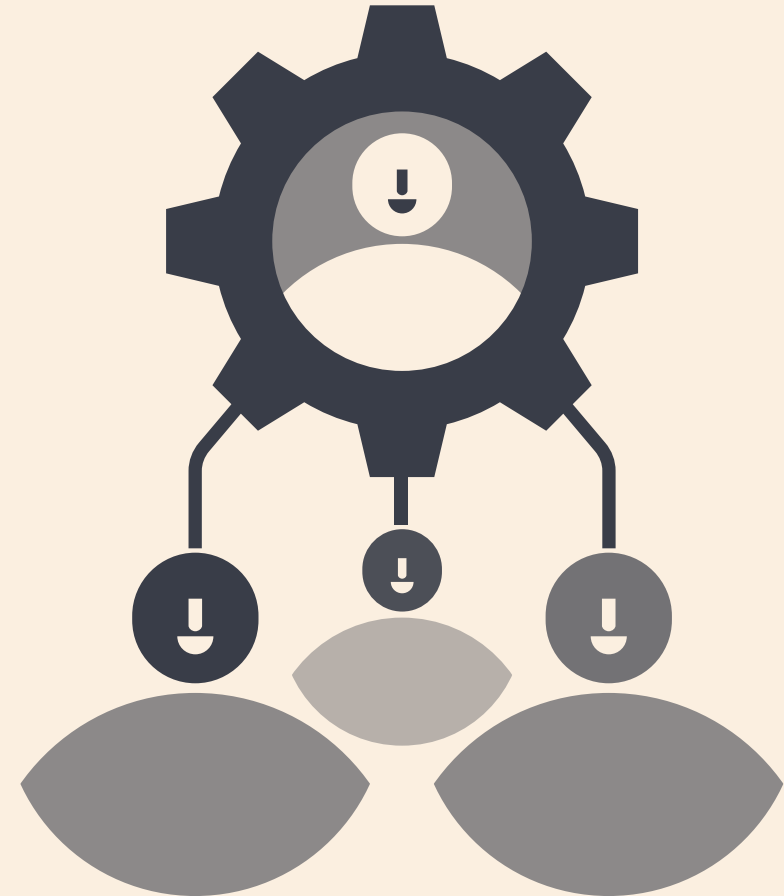
£82.84 per month
£4,000
0
5 years
8.9% per annum, fixed
£82.84
£4,970.37



# Community Owned Renewable Energy survey text:



- When we come together, local communities can make a difference to our environment and benefit local people.
- Under this new scheme, households can invest from as little as £25 and become a member of a local co-operative that collectively owns a renewable energy source (e.g. **a solar farm** or even a wind farm).
- The scheme is managed by an independent expert and all the energy that is generated by the local wind or solar farm is sold to an energy supplier.
- As it is cheaper for the supplier to buy renewable energy at the source than from the traditional market, they share the savings with the co-operative members. Members can take their share as cash payments or a reduction on their energy bills every month.
- The cash or credit members receive depends on how much they have invested. The more you buy, the more you save in your energy bills!
- Investing in a local co-operative encourages new renewable energy sources to be built, reduces energy bills and brings communities together. It can also improve the local economy through new jobs building/managing the renewable sources.



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