DESNZ Public Attitudes Tracker: Heat and energy use in the home, Spring 2025, UK

3 July 2025 **Official Statistics**

The DESNZ Public Attitudes Tracker is a nationally representative annual survey of adults (aged 16+) in the UK that tracks public awareness, attitudes and behaviours relating to the policies of the Department for Energy Security and Net Zero (DESNZ), such as energy and climate change.

This report provides a summary of the headline findings relating to heat and energy use in the home from the Spring 2025 wave of the Tracker, which ran from 17 March to 22 April 2025.

Notes for interpretation of findings

Differences between groups are only reported where they are statistically significant at the 95% confidence interval level.

The annual personal income referred to in the report is a self-reported measure.

The age-related findings are reported using six age groups (16-24, 25-34, 35-44, 45-54, 55-64 65 and over). In some cases, findings across age groups have been combined to describe a general trend, for example, 'between 78% and 88% of people aged 45 and above' refers to the range of percentages for the three age groups 45-54, 55-64 and 65+.

Two summary self-reported measures are used in this report:

- **'Awareness'** encompasses all respondents who said they had heard of a particular concept or technology, including those who said 'hardly anything but I've heard of this', 'a little', 'a fair amount' or 'a lot'.
- **'Knowledge'** encompasses those who said that they know 'a fair amount' or 'a lot' about a topic.

Awareness of heating changes to meet Net Zero targets

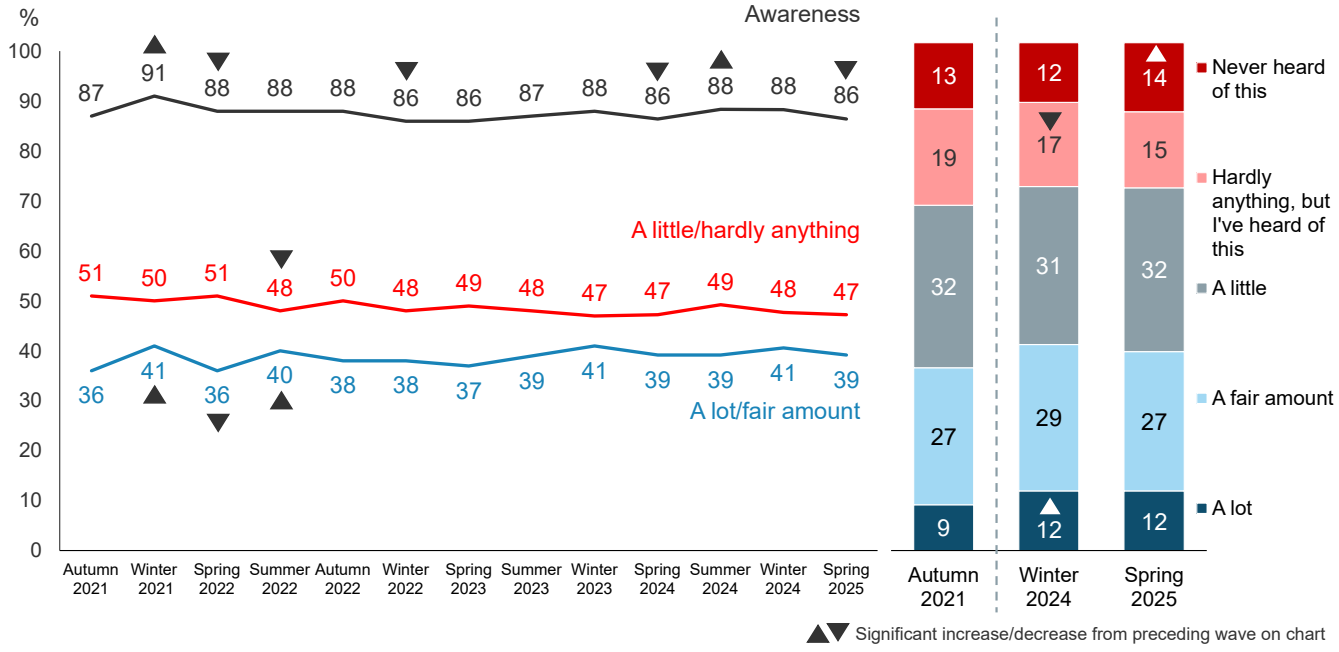
Respondents were presented with the following explanation: '*In the lead up to 2050, the way we heat almost all of our homes and buildings will need to change in order to reach the UK government's Net Zero target'.*

Figure 4.1 displays both the longer-term trends in overall awareness and knowledge (a lot/fair amount) of the need to change the ways our homes are heated to reach Net Zero (line chart) and the detailed awareness and knowledge data for the most recent two waves alongside the baseline (bar chart).

Over the longer-term, following an increase in knowledge levels at the start of the tracking series between Autumn 2021 and Winter 2021, levels of awareness and knowledge of the need to change the way homes and buildings are heated in order to reach the Net Zero target have remained broadly stable.

In Spring 2025, 39% said they knew a lot or a fair amount. Overall awareness was, however, slightly lower (86%, down from 88% in Winter 2024).

Figure 4.1: Awareness of the need to change the way homes are heated to reach Net Zero targets in 2050 (% based on all people), Autumn 2021 to Spring 2025



HEATHOMEKNOW. In the lead up to 2050, the way we heat almost all of our homes and buildings will need to change in order to reach the UK government's Net Zero target. Before today, how much if anything did you know about this?

Base: All wave respondents – Autumn 2021 (5,552), Winter 2021 (3,705), Spring 2022 (4,374), Summer 2022 (4,489), Autumn 2022 (4,160), Winter 2022 (3,572), Spring 2023 (4,406), Summer 2023 (3,998), Winter 2023 (3,741), Spring 2024 (4,083), Summer 2024 (3,640), Winter 2024 (3,211), Spring 2025 (3,412) (Asked each wave)

Note: On the line chart, arrows denote a significant difference between one wave and the next. For the bar chart, significant differences are noted between Autumn 2021 and Winter 2024, and between Winter 2024 and Spring 2025.

Analysis by subgroups

Self-reported knowledge (the percentage who felt they knew a lot or a fair amount) about the need to change the way homes are heated to reach Net Zero targets was higher among the following subgroups:

- People in age groups 55 and over: between 46% and 48% compared with between 31% and 39% in age groups 16 to 54.
- People who said they knew a lot or a fair amount about Net Zero: 68% compared with 10% of those who knew a little or hardly anything and 3% of those who were not aware of Net Zero.
- People living in owner-occupied homes: 44% vs 30% living in rented accommodation.

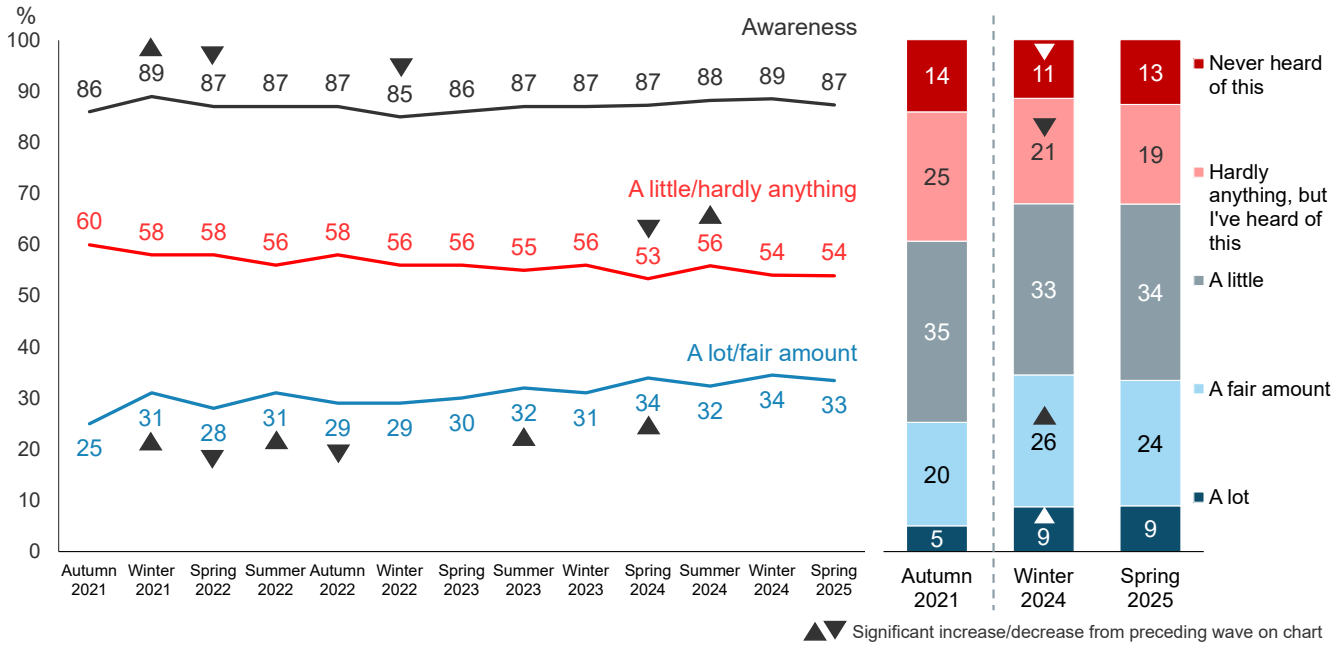
Awareness of low-carbon heating systems

Low-carbon heating systems were described to respondents in general terms as '*…environmentally friendly heating systems which no longer rely on conventional gas central heating but instead use energy from low-carbon alternatives such as hydrogen, the sun, or heat pumps which draw heat from the ground, air or water to heat homes*'.

Over the longer-term, following an increase in awareness and knowledge at the start of the tracking series between Autumn 2021 and Winter 2021, overall awareness on this measure has remained largely stable. However, there has been a gradual increase in the proportion saying they knew a lot or a fair amount from 25% in Autumn 2021 to 33% in Spring 2025 (Figure 4.2).

Between Summer 2024 and Spring 2025, both awareness (87%) and knowledge (a lot/fair amount) (33%) of low-carbon heating systems remained stable.

Figure 4.2: Awareness of low-carbon heating systems (% based on all people), Autumn 2021 to Spring 2025



LOWCARBKNOW. The next question is about low-carbon heating systems. By this we mean environmentally friendly heating systems which no longer rely on conventional gas central heating but instead use energy from low-carbon alternatives such as hydrogen, the sun, or heat pumps which draw heat from the ground, air or water to heat your home. Before today, how much if anything did you know about low-carbon heating systems?

Base: All wave respondents – Autumn 2021 (5,552), Winter 2021 (3,702), Spring 2022 (4,376), Summer 2022 (4,488), Autumn 2022 (4,161), Winter 2022 (3,573), Spring 2023 (4,404), Summer 2023 (4,000), Winter 2023 (3,743), Spring 2024 (4,085), Summer 2024 (3,640), Winter 2024 (3,212), Spring 2025 (3,410) (Asked each wave)

Note: On the line chart, arrows denote a significant difference between one wave and the next. For the bar chart, significant differences are noted between Autumn 2021 and Winter 2024, and between Winter 2024 and Spring 2025.

Analysis by subgroups

Self-reported knowledge about low carbon heating systems (the percentage who felt they knew a lot or a fair amount) was higher among the following subgroups:

- People in age groups 55 and over: between 39% and 41%, compared with between 23% and 25% of those in age groups under 35.
- People living in owner-occupier households: 39% compared with 23% of those in rented households.
- People who said they knew a lot or a fair amount about Net Zero: 58% compared with 9% of those who knew at most a little and 3% of those who were not aware of Net Zero.

Heat Pumps

Awareness of heat pumps, and likelihood to install them, has been asked annually in Winter waves since Winter 2022, alongside other types of low carbon heating. In Spring 2025, an adapted version of this question was added to allow more frequent tracking of awareness and attitudes towards air source and ground source heat pumps only[1]. Awareness of the more complete list of all seven types of low carbon heating systems will continue to be tracked annually in Winter.

Awareness of heat pumps

In Spring 2025 a brief description of two types of heat pump was provided to respondents as follows:

- **Air source heat pumps** - these extract heat from the outside air to heat your home and water.
- **Ground source heat pumps** - these extract heat from pipes buried in the ground to heat your home and water.

Figure 4.3 shows awareness of air source heat pumps and Figure 4.4 shows awareness of ground source heat pumps .

Over the longer-term, awareness of both air source and ground source heat pumps has increased between Winter 2021 and Spring 2025: from 71% to 79% for air source heat pumps, and from 67% to 76% for ground source heat pumps. There have been similar increases in knowledge (knowing a lot or a fair amount): from 20% to 27% for air source heat pumps, and from 19% to 24% for ground source heat pumps.

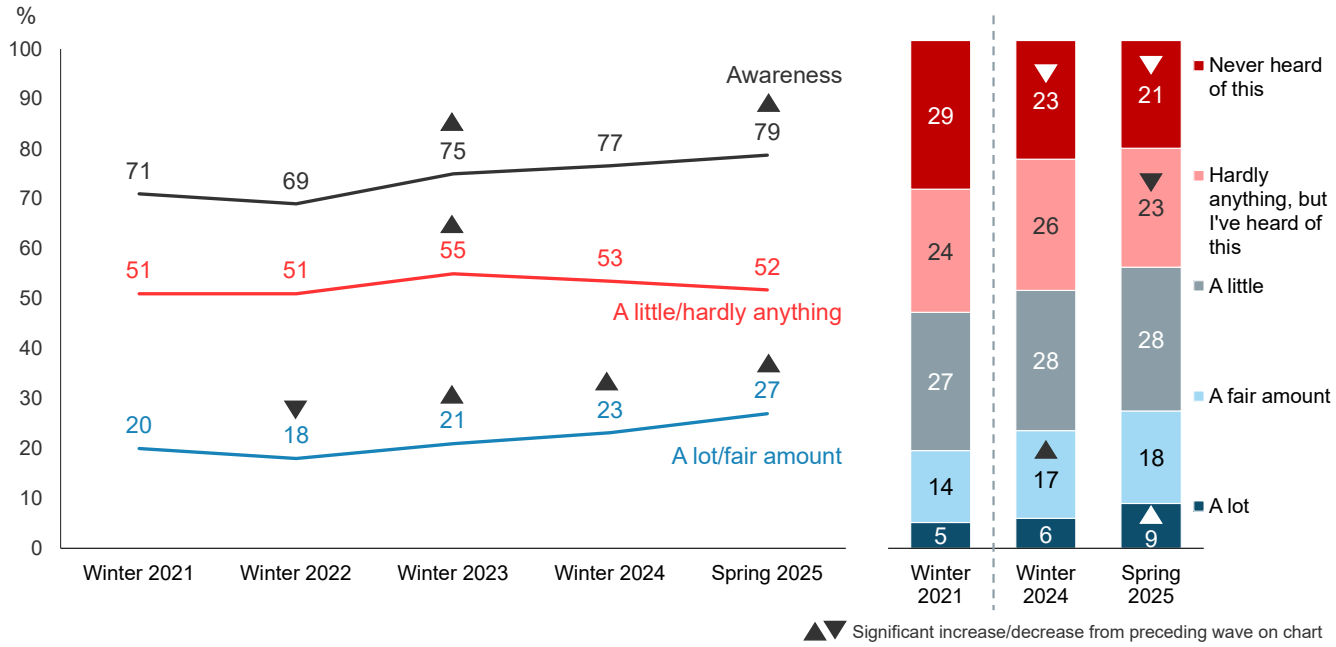
Focussing on more recent waves, between Winter 2024 and Spring 2025 awareness of and knowledge about air source heat pumps increased slightly: from 77% to 79% for awareness, and from 23% to 27% for knowledge. This included an increase from 6% to 9% of people who said they know a lot about air source heat pumps.

There was a similar increase between Winter 2024 and Spring 2025 in knowledge about ground source heat pumps: from 21% to 24% for knowledge, and from 5% to 8% saying they

[1] The fieldwork period followed a DESNZ heat pump campaign in England and Wales called ‘Feel All Warm and Fuzzy Inside’ (6th March 2025), which aimed to increase heat pump adoption and applications for the Boiler Upgrade Scheme.

knew a lot about this. However, there was no significant increase in awareness of ground source heat pumps, which remained stable at 76%.

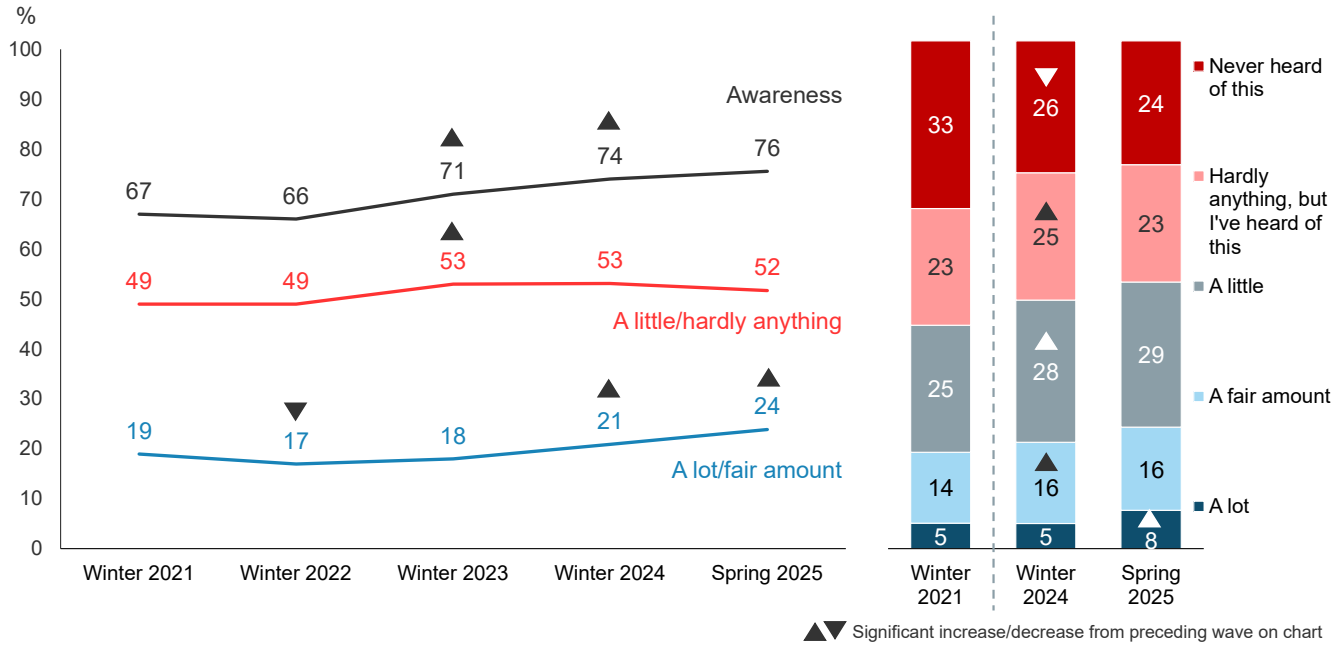
Figure 4.3: Knowledge about air source heat pumps (% based on all people), Winter 2021, Winter 2023, Winter 2023, Winter 2024, Spring 2025



LCHEATKNOW1. How much would you say you know about the following low carbon heating systems: air source heat pumps?

Base: All wave respondents – Winter 2021 (3,696), Winter 2023 (3,552), Winter 2023 (3,736), Winter 2024 (3,209), Spring 2025 (3,410)

Figure 4.4: Knowledge about ground source heat pumps (% based on all people), Winter 2021, Winter 2023, Winter 2023, Winter 2024, Spring 2025



LCHEATKNOW2. How much would you say you know about the following low carbon heating systems: ground source heat pumps?

Base: All wave respondents – Winter 2021 (3,693), Winter 2023 (3,560), Winter 2023 (3,729), Winter 2024 (3,211), Spring 2025 (3,406)

Note: On the line charts (Figures 4.3 and 4.4), arrows denote a significant difference between one wave and the next. For the bar charts, significant differences are noted between Winter 2021 and Winter 2024, and between Winter 2024 and Spring 2025.

Analysis by subgroups

For these two types of heat pump, the following general trends were observed.

By age:

- For both types of heat pump older people were more likely than younger people to report both awareness and knowledge. For example, awareness of air source heat pumps was between 88% and 89% for people in age groups 55 and over, compared with between 64% and 66% in age groups below 35; knowledge followed a similar pattern.

By tenure:

- People living in owner-occupied households were more likely than those in rented households to say they were aware of both air source heat pumps (86% vs 65%) and ground source heat pumps (82% vs 64%), with knowledge following a similar pattern.
- People in owner-occupied households were more likely than those in socially rented households to report knowledge about both air source heat pumps (33% vs 13%) and ground source heat pumps (28% vs 11%).

By self-reported knowledge of Net Zero:

- Awareness and knowledge of both types of heat pumps was substantially higher for those who reported higher levels of knowledge of Net Zero. For example, 91% of those who felt they knew at least a fair amount about Net Zero were aware of air source heat pumps, compared with only 37% of those who had never heard of Net Zero, with knowledge levels showing a similar pattern (44% vs 4%).

Likelihood to install heat pumps

To gauge the propensity to adopt heat pumps, respondents were asked if they would consider installing an air source heat pump or a ground source heat pump[2].

Two in ten of all respondents (20% for both types of heat pump) said that a decision around installing a new heating system was not theirs to make. This was mainly explained by people renting: for each type of heat pump 41% of renters said that this was not their decision to make compared with 8% of people in owner-occupier households. Given the high rate of renters who said these questions were not applicable to them, the findings for these questions have been based only on people living in owner-occupied households.

Figures 4.5 and 4.6 respectively display the likelihood to install air source heat pumps and ground source heat pumps, rebased on all owner-occupiers. Only a very small proportion of owner occupiers in Spring 2025 said that they had already installed one (2% and 1% for air source and ground source heat pumps respectively).

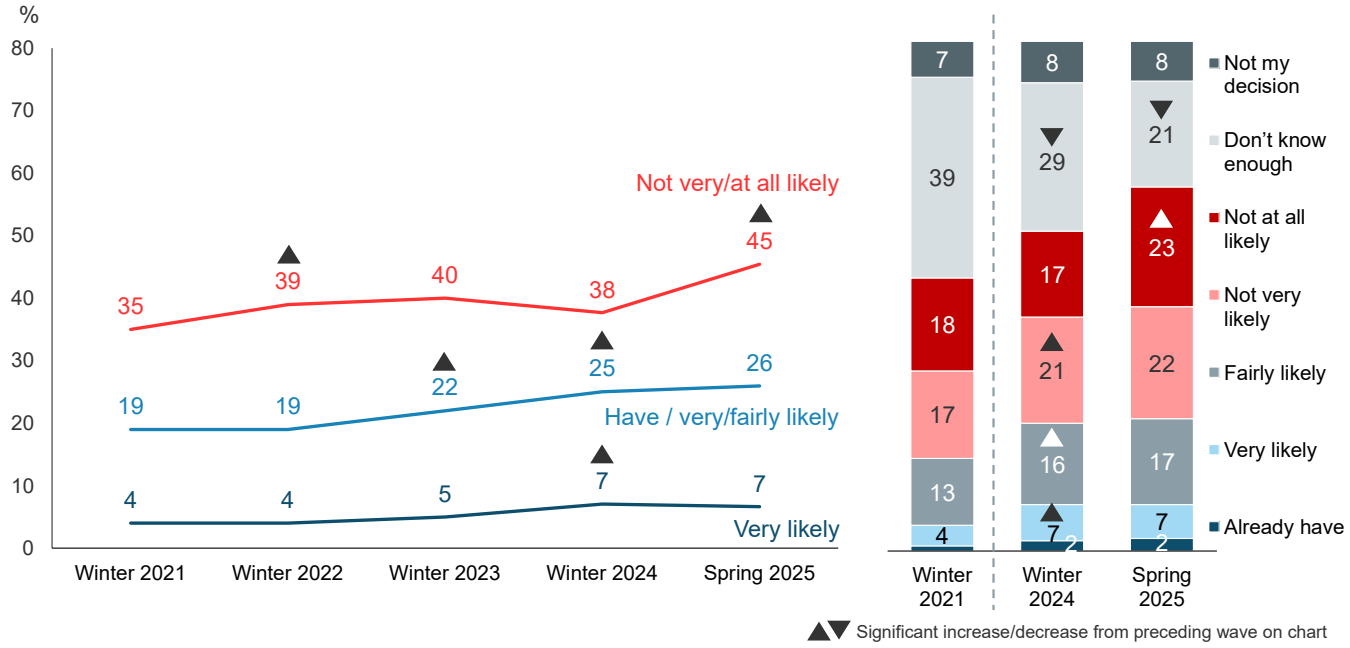
At each wave, a substantial minority of people in owner-occupied households reported not knowing enough about each system to make a decision, but this has decreased steadily over the longer-term, from Winter 2021 to Spring 2025: from 39% to 21%, and from 39% to 22% for air source and ground source heat pumps, respectively.

Over time, between Winter 2021 to Spring 2025, there has been a steady increase in the likelihood (very or fairly likely) to install either type of heat pump and in those who said they already have one: rising from 19% to 26% for air source heat pumps and from 13% to 18% for ground source heat pumps.

Between Winter 2024 and Spring 2025, there has been no further increase in the likelihood to install both types of heat pump. However, there has been an increase in the proportion saying they were either not very or not at all likely to install either type of heat pump. Between Winter 2024 and Spring 2025 this increased from 38% to 45% for air source heat pumps and from 43% to 52% for ground source heat pumps.

[2] Results throughout this section are weighted by individual. In practice, the differences between weighting these results by individual or by household are minor and do not change the narrative of the results.

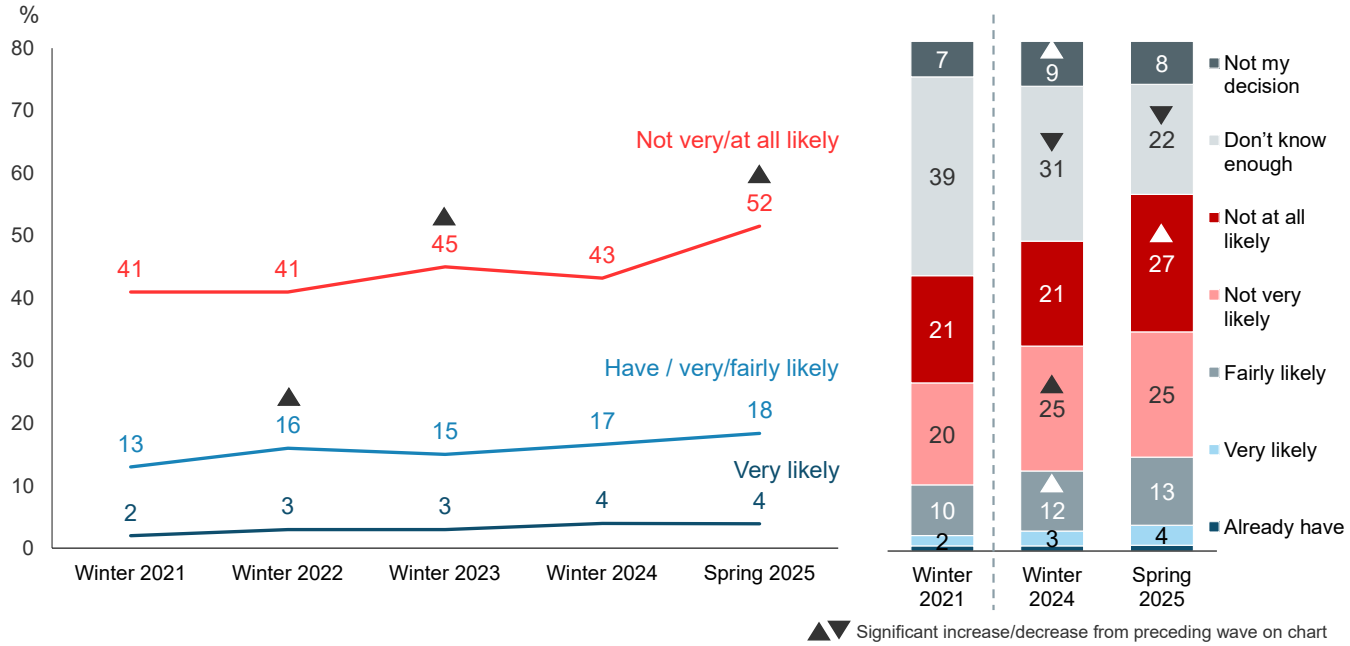
Figure 4.5: Whether likely to install air source heat pumps next time they need to change (% based on people living in owner-occupied accommodation), Winter 2021, Winter 2023, Winter 2023, Winter 2024, Spring 2025



LCHEATINSTALL1. How likely is it that you would install each of the following heating systems in your home when you next need to change your heating system or boiler: air source heat pumps?

Base: All wave respondents living in owner-occupier households – Winter 2021 (2,738), Winter 2023 (2,566), Winter 2023 (2,681), Winter 2024 (2,476), Spring 2025 (2,622)

Figure 4.6: Whether likely to install ground source heat pumps next time they need to change (% based on people living in owner-occupied accommodation), Winter 2021, Winter 2023, Winter 2023, Winter 2024, Spring 2025



LCHEATINSTALL2. How likely is it that you would install each of the following heating systems in your home when you next need to change your heating system or boiler: ground source heat pumps?

Base: All wave respondents living in owner-occupier households – Winter 2021 (2,728), Winter 2023 (2,561), Winter 2023 (2,643), Winter 2024 (2,448), Spring 2025 (2,614)

Note: On the line charts (in Figures 4.5 and 4.6), vertical scale has been reduced to 0-80%, and arrows denote a significant difference between one wave and the next. For the bar charts, significant differences are noted between Winter 2021 and Winter 2024, and between Winter 2024 and Spring 2025.

Analysis by subgroups

The following trends are based on owner-occupiers only. The findings for the age group 16 to 24 have been omitted due to a low base (< n=100) of owner-occupiers in this age group.

By age:

- People aged 25 to 34 were most likely to say that they lacked sufficient knowledge about heat pumps to provide an answer (32% for air source and 33% for ground source heat pumps) or that it was not their decision to make (9% and 11% respectively).
- Older people in age groups 55 and above were less likely than younger people to consider installing both types of heat pump. For example, between 17% and 20% of those in age groups 55 would consider installing air source heat pumps compared with between 27% and 31% of those in age groups 25 to 54.

By annual personal income:

- People with a higher personal income were more likely to likely to consider installing both types of heat pump. For example, between 25% and 30% of those with income bands of £15,000 or over would consider an air source heat pump compared with 16% of those with an income below £15,000.

By self-reported knowledge of Net Zero:

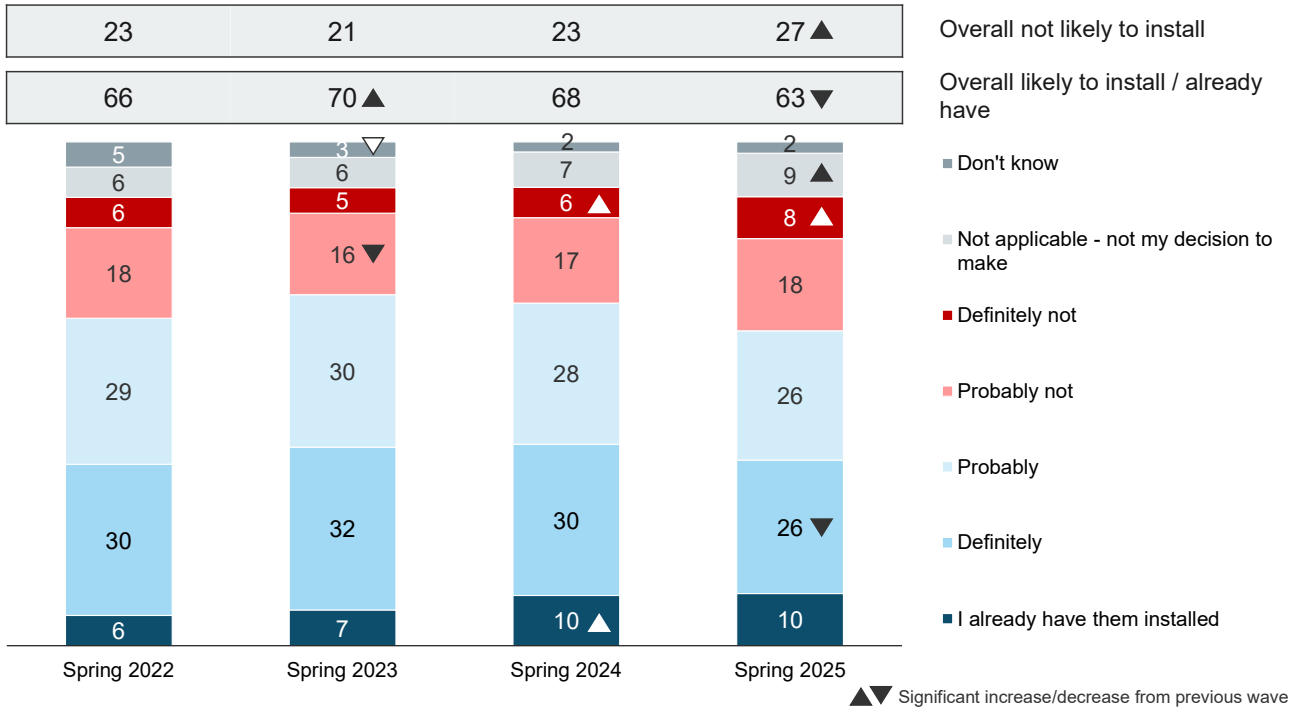
- The proportion unable to express an opinion (don't know enough about this to make a decision or not my decision to make) was far higher among those who had not heard of Net Zero compared with those who said they knew a lot or a fair amount. For example, for ground source heat pumps this difference was 49% vs 24%.
- People who knew at least a fair amount of Net Zero were, however, more reluctant to install a heat pump: for example, 57% of this group said they were unlikely to install a ground source heat pump compared with 24% of those had not heard about Net Zero.

Attitudes towards solar panels in the home

Respondents were asked whether they were likely to install solar panels in their home in the next few years. As a relatively large proportion of people who rented their home (30%) said that this question was not applicable to them as it was not their decision to make, the results are based only on people living in owner-occupied homes.

The likelihood to install solar panels in the home increased between Spring 2022 and Spring 2023, but has declined more recently (Figure 4.7). In Spring 2025, 63% said they either already had solar panels (10%) or were probably or definitely likely to install them (52%)[3]. This proportion has however, fallen from 68% in Spring 2024 and 70% in Spring 2023. Correspondingly, the proportion unlikely to install panels increased from 23% in Spring 2024 to 27% in Spring 2025.

Figure 4.7: Likelihood to consider installing solar panels in the home to generate electricity (% based on people living in owner-occupied accommodation) Spring 2022, Spring 2023, Spring 2024, Spring 2025



SOLARHOME. Would you consider having solar panels installed in your current home to generate electricity, in the next few years?
Base: All wave respondents living in owner-occupier households - Spring 2022 (3,285), Spring 2023 (3,239), Spring 2024 (3,175), Spring 2025 (2,631)

[3] The net figure of 63% is calculated using non-rounded figures.

Analysis by subgroups

The following trends are based on owner-occupiers only.

- Younger people[4] in age groups 25 to 44 (between 66% and 67%) were more likely than people aged 65 or over (39%) to consider installation of solar panels.
- People in Northern Ireland (69%) were much more likely than average (52%) to consider installation of solar panels; in contrast people in the East of England were least likely to consider this (42%).

Reasons for being likely and unlikely to install solar panels

Owner-occupiers who did not already have solar panels and who said they would probably or definitely install them in the next few years (52% in Spring 2025) were asked why they would consider this. Respondents were asked to select from a list of possible reasons.

Reasons given in Spring 2025 remained in line with those given in Spring 2024. The most frequent reasons for being likely to install solar panels were: to cut electricity bills (82%); to provide a renewable source of electricity (71%, down from 81% at the Spring 2022 baseline); to reduce dependence on the national grid (49%, down from 56% in Spring 2022); and so they could sell excess electricity back to the grid (40%).

Owner-occupiers who did not already have solar panels and who said they would probably or definitely not install them in the next few years (27% in Spring 2025) were asked why this was the case, again selecting from a list.

In Spring 2025 the reasons selected for not considering solar panels were also unchanged from Spring 2024. By far the most reported reason was that they were too expensive to install (63%). Secondary reasons were that they would not be suitable for their home (23%), would look unsightly (22%) and the UK not being sunny enough (20%).

Around one in ten of those not considering solar panels (9%) said that payback period would be too long[5].

What might encourage people to install solar panels

People living in owner-occupied homes who did not already have solar panels[6] were asked which of a list of possible factors might encourage them to install solar panels (Figure 4.8). While this question has been asked annually since 2022, changes to the question over time mean that Spring 2025 data is only fully comparable with data collected in Spring 2024.

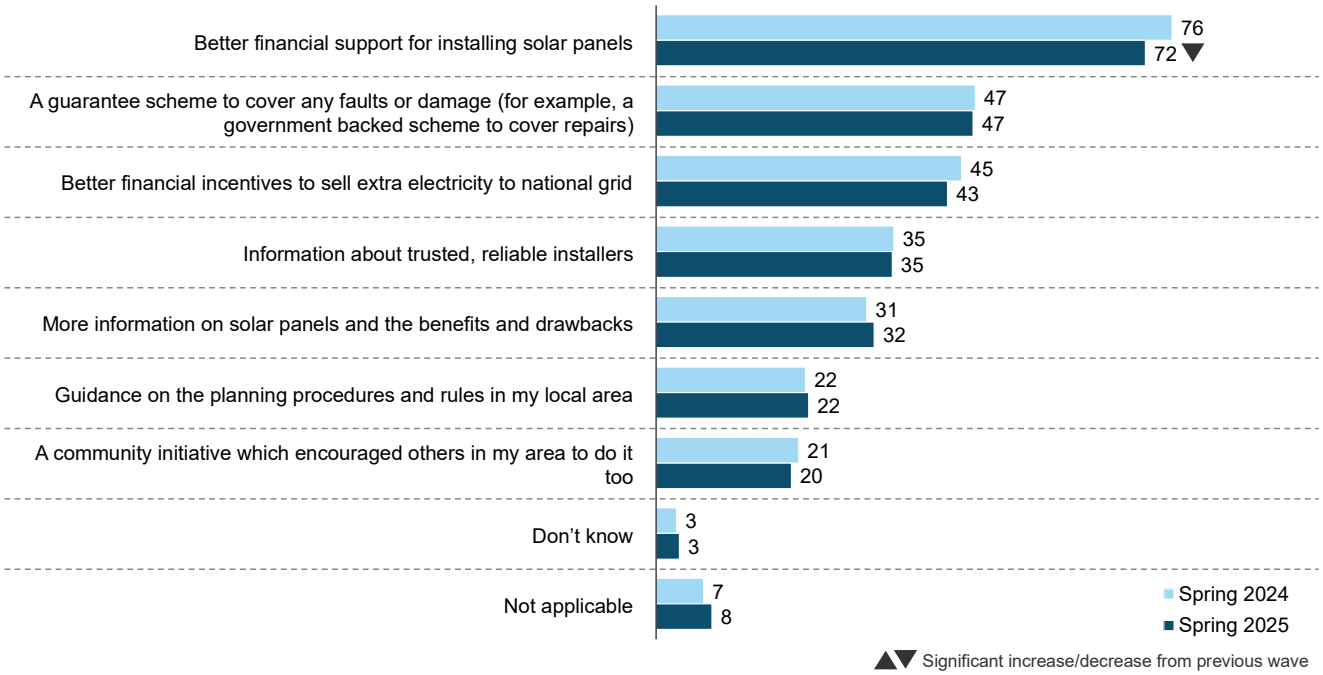
In Spring 2025 the factors most likely to encourage installation were better financial support for installation (72%, down from 76% in Spring 2024), a guarantee scheme for faults or damage (47%), and better financial incentives to sell electricity back to the grid (43%). More information was also thought to be helpful: 35% would be encouraged by more information about installers, and 32% by more information about the benefits and drawbacks of solar panels.

[4] The findings for the age group 16 to 24 have been omitted due to a low base (< n=100) of owner-occupiers in this age group

[5] This response was coded from the write- in ‘other’ response. If it had been included on the presented list, it is likely that this proportion would be higher.

[6] Excluding people living in owner-occupied homes who said this was not their decision to make.

Figure 4.8: What would encourage people to install solar panels (% based on owner-occupiers responsible for decision who have not yet installed panels) Spring 2024, Spring 2025



SOLARENC. Which, if any, of the following might make you personally* more likely to consider installing solar panels? Please select all that apply. (* word 'personally' added to question in 2024, and two new answer codes included in list).

Base: All wave respondents living in owner-occupier households who have not already installed them excluding those who said it was not their decision to make – Spring 2024 (2,670), Spring 2025 (2,190)[7]

Analysis by subgroups

The following subgroup findings are based on owner-occupiers who did not already have solar panels and who said they would probably or definitely install them in the next few years. The findings for the age group 16 to 24 have been omitted due to a low base (< n=100) of owner-occupiers in this age group.

By age

- People in age groups 25 to 54 were more likely to be influenced by financial support or financial incentives. For example, between 80% and 85% of people in age groups 25 to 54 cited this as an encouragement factor for installation compared with 60% of people aged 65 and above.

By geography

- People in Northern Ireland were more likely to be encouraged by better information about solar panels (42% vs 25% in Scotland and 32% in England), while people in Wales were more likely to be encouraged by a guarantee scheme (55% vs 43% in Northern Ireland).

[7] While this question was also asked in Spring 2022 and Spring 2023 changes in the answer list reduced comparability, so data is only shown from Spring 2024 onwards.

Further findings on heat and energy in the home

In previous waves, questions were included on other topics relating to heat and energy in the home. The latest findings relating to these topics can be found as follows:

- Awareness and likelihood to install a range of different types of low carbon heating systems, and attitudes towards such systems see Winter 2024 report on heat and energy use in the home – section on 'Low carbon heating systems'
- The main systems used to heat and cool homes, see Winter 2024 report on heat and energy use in the home – section on 'Heating and cooling in the home'
- Likelihood to replace heating systems and who people would trust to provide advice about which heating system to install, see Winter 2024 report on heat and energy use in the home – section on 'Likelihood to replace heating systems'.
- Awareness of Energy Performance Certificates and EPC recommendations, and changes made as a result, see Winter 2024 report on heat and energy use in the home – section on 'Energy Performance Certificates (EPCs)'.
- Awareness of the minimum energy standards for rental properties, see Winter 2024 report on heat and energy use in the home – section on 'Awareness of rental property standards'.
- Types of insulation in the home, see Winter 2022 report on heat and energy in the home - section on 'Insulation in the home'

This publication is available from: https://www.gov.uk/government/collections/public-attitudes-tracking-survey

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