

DESNZ Public Attitudes Tracker: Heat and Energy in the Home Winter 2023, UK

07 March 2024 – Revised March 2024

Official Statistics

This report covers the results of questions on heating and energy usage in homes asked in the DESNZ (formerly BEIS) Public Attitudes Tracker, and previously covered results from the quarterly questions on awareness of changes to the heating of people's homes to reach Net Zero, and awareness of low carbon heating. The report also includes the latest results for annual Winter questions (see table below), results from new questions on cooking appliances, and previous results on insulation and solar panels in the home.

Following the creation of DESNZ, and the removal of topics not within the remit of DESNZ, the survey will be shifting from quarterly to triannually.

What you need to know about these statistics: These results from the DESNZ (formerly BEIS) Public Attitudes Tracker (PAT) were collected using the Address Based Online Surveying (ABOS) methodology introduced in Autumn 2021, which uses random probability sampling. The results should not be compared with previous PAT surveys, which used different data collection methods. For details, see the [Technical Report](#).

Revision: After the publication of the Winter 2023 report, it was identified that the data labels relating to Northern Ireland and Wales were incorrectly swapped during the data production process. This affects the Winter 2023 data only. Sections on awareness of heating changes, heating and cooling in the home, attitudes towards heating in the home and cooking appliances have been updated with corrections. In addition, figure 4.2 has been corrected. More details on these changes are set out in the accompanying Revision Note.

The table below shows the topics covered in this report and when these questions were included in the Public Attitudes Tracker. Links are included to the findings for each topic within this report.

Topic	When included	Link to findings
Awareness of heating changes to meet Net Zero targets and of low carbon heating	Triannually	Link
Low carbon heating systems	Winter 2021, Winter 2022, Winter 2023	Link
Heating and cooling in the home	Winter 2021, Winter 2022, Winter 2023	Link
Attitudes towards heating in the home	Winter 2021, Winter 2022, Winter 2023	Link
Replacing heating systems	Winter 2021, Winter 2022, Winter 2023	Link
Cooking appliances	Winter 2023	Link
Energy Performance Certificates (EPCs)	Winter 2021, Winter 2022, Winter 2023	Link

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Awareness of rental property energy standards	Spring 2022, Winter 2022, Winter 2023	Link
Insulation in the Home	Winter 2021, Winter 2022	Link
Attitudes towards solar panels in the home	Spring 2022, Spring 2023	Link

Awareness of heating changes to meet Net Zero targets and of low carbon heating

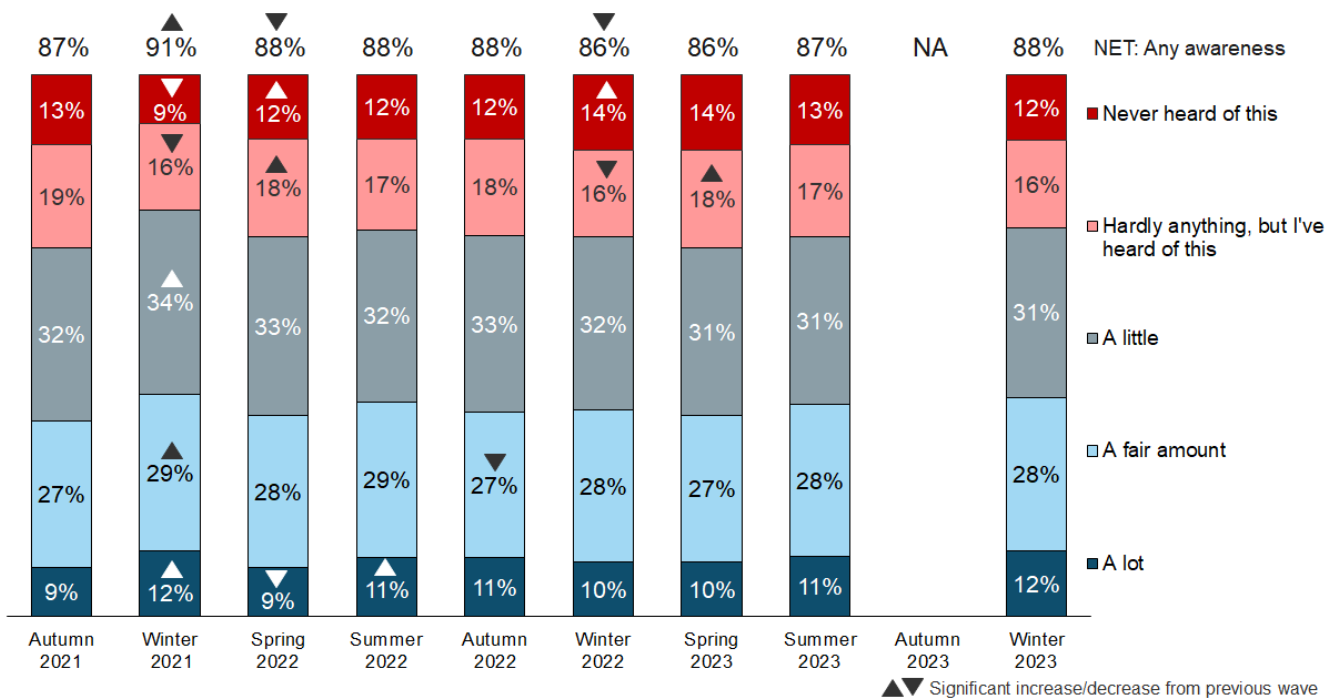
Awareness of need to change domestic heating to meet Net Zero target

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'.

In Winter 2023, after reading this explanation, 88% of people said they were aware of the need to change the way homes are heated to reach Net Zero targets (Figure 1.1). This measure has remained unchanged since Summer 2023 but is higher than in Winter 2022 (86%), albeit lower than the peak in Winter 2021 (91%).

In Winter 2023, 41% said they knew at least a fair amount, including 12% who said they knew a lot about the need for changes in domestic heating. Around half (47%) said that they knew a little (31%) or hardly anything (16%) about this, which has remained unchanged over recent waves.

Figure 1.1: 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 Winter 2023



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? 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) (Asked each wave)

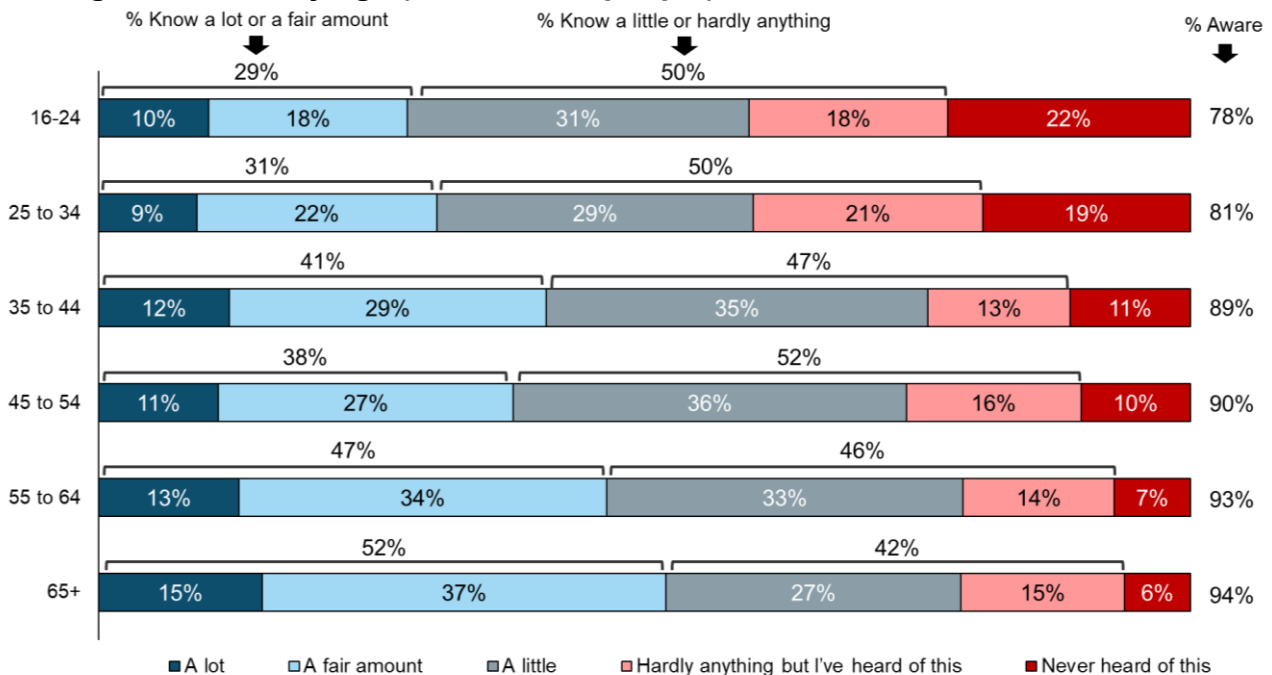
As in Winter 2022, there was a difference in overall awareness of the need to change the way homes are heated to reach Net Zero targets by gender; 92% of men had heard of this, compared with 84% of women. Men were also more likely to report knowing at least a fair amount about this (49% of men, compared with 32% of women).

The proportion of people who reported knowing at least a fair amount about the changes to domestic heating required to reach Net Zero was also higher among people living in owner-occupied homes (47%, compared with 31% of renters) and among people educated to degree level or above (55%, compared with 37% of those with other qualifications and 22% of people with no qualifications).

Claimed knowledge levels were higher in rural areas, where 47% reported knowing at least a fair amount, compared with 39% in urban areas. By geography, the proportion that reported knowing at least a fair amount was lower in the North East (31%) than in other areas (ranging from 42% to 45%).

Self-perceived levels of knowledge generally increased by age band. The proportion who said they knew at least a fair amount was lowest for those aged under 35 (29% of those aged 16 to 24 and 31% of those aged 25 to 34). This proportion then increased through the age bands to 47% of those aged 55 to 64 and 52% of those aged 65 and over (Figure 1.2).

Figure 1.2: Awareness of the need to change the way homes are heated to reach Net Zero targets in 2050, by age (based on all people), Winter 2023



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?

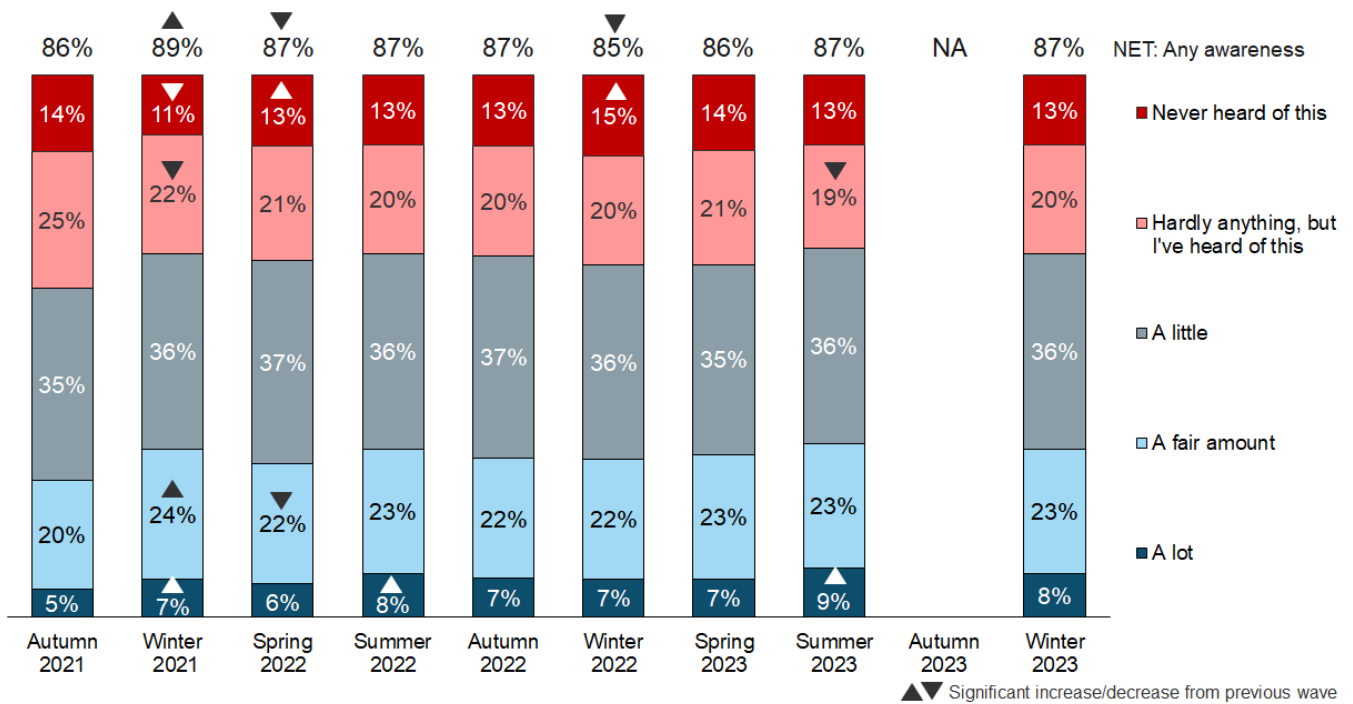
Base: All wave respondents Winter 2023 – 16-24 (205), 25-34 (432), 35-44 (563), 45-54 (512), 55-64 (719), 65+ (1,237)

Awareness of low-carbon heating systems

Low-carbon heating systems were first 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’. More detailed awareness of different types of low carbon heating is covered in the next section.

After reading this explanation, 87% of people in Winter 2023 said they had at least heard of low-carbon heating systems (Figure 1.3), unchanged from Summer 2023. This remains higher than the dip in Winter 2022 (85%) but lower than the peak in Winter 2021 (89%). Around a third (31%) said they knew at least a fair amount about low-carbon heating systems and this proportion had remained fairly stable since Winter 2021, maintaining a level that was higher than in Autumn 2021 (25%). The proportion saying they knew a lot about this (8%) remained higher than the level seen in Autumn 2021 (5%). In Winter 2023, over half (56%) said they knew just a little (36%) or hardly anything (20%).

Figure 1.3: Awareness of low-carbon heating systems (based on all people), Autumn 2021 to Winter 2023



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) (Asked each wave)

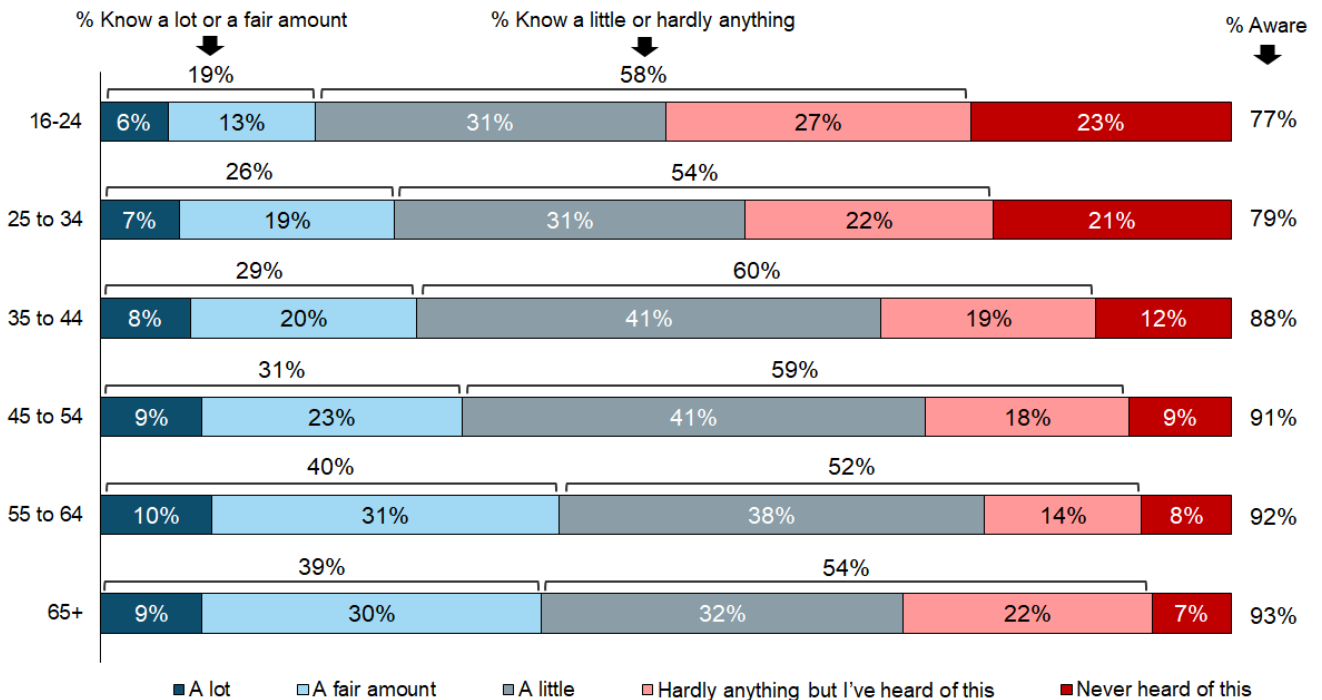
The proportion who reported knowing at least a fair amount about low-carbon heating systems was higher among men (41%, compared with 22% of women), people educated to degree level (45%, compared with 28% of those with other qualifications and 12% of people with no qualifications), and owner-occupiers (37%, compared with 20% of renters).

The proportion knowing at least a fair amount about low-carbon heating systems was higher for those living in rural areas (38%, compared with 30% of those in urban areas). This also

varied by geography: it was highest in the South West (36% said they knew at least a fair amount) and the South East (35%) and lowest in Wales (24%), the North East (25%) and Yorkshire and the Humber (26%).

Levels of reported knowledge were lower among younger people (Figure 1.4), with 19% of those aged 16 to 24 said they knew at least a fair amount about low-carbon heating systems, increasing by age band to 40% of those aged 55 to 64 and 39% of those aged 65 and over.

Figure 1.4: Awareness of low-carbon heating systems by age (based on all people), Winter 2023



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 Winter 2023 – 16-24 (205), 25-34 (432), 35-44 (563), 45-54 (512), 55-64 (720), 65+ (1,238)

Low carbon heating systems

Awareness of specific low carbon heating systems

An annual question in the Winter wave measures awareness and knowledge of different types of low carbon heating systems. A brief description of each type 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.
- **Biomass boilers** - these work in a similar way to standard gas boilers to heat your home and water but instead use a renewable material such as wood pellets as fuel.
- **Hybrid heat pumps** - these combine heat pump and standard gas boiler technology to heat your home and water.
- **Heat networks (also known as communal or district heating)** - these take heat from a central source and distribute it to multiple customers in a building or across several buildings.
- **Hydrogen boilers** - these work in a similar way to standard gas boilers to heat your home and water, but use hydrogen rather than natural gas as fuel. This technology is not currently available in the UK.
- **Hydrogen-ready boilers** - These are designed to use hydrogen in the longer term but are initially constructed to use natural gas to heat your home and water. This technology is not yet available

In Winter 2023, solar thermal panels were removed from the list of low carbon heating system types. The data for solar thermal panels from previous waves is, however, included at the bottom of Figure 2.1 for reference¹.

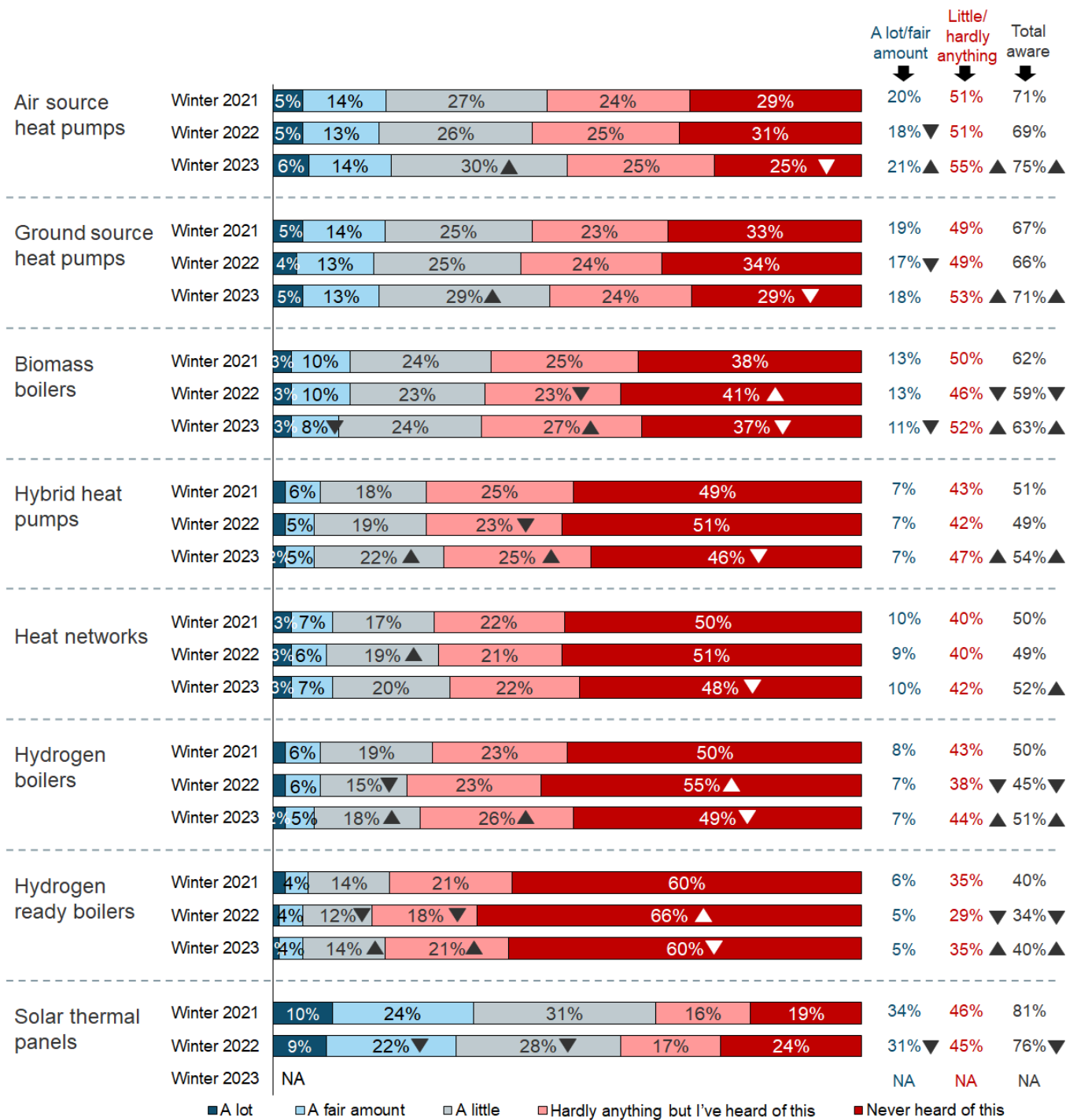
In Winter 2023, as in previous years, awareness varied across the different types of heating systems (Figure 2.1). Between Winter 2022 and Winter 2023, awareness had increased for all seven types of heating systems asked about in both waves, matching or exceeding Winter 2021 levels for all types.

Awareness was highest for air source heat pumps (75%, up from 69% in Winter 2022), ground source heat pumps (71%, up from 66%), and biomass boilers (63%, up from 59%).

Around half had heard of hybrid heat pumps (54%, up from 49% in Winter 2022), heat networks (52%, up from 49%) and hydrogen boilers (51%, up from 45%) while people remained least aware of hydrogen-ready boilers (40%, up from 34%).

¹ Previous question testing has indicated that solar thermal panels are often confused with solar photovoltaic panels, so it is possible that historic awareness and knowledge figures are an overestimate. In the question wording used up until Winter 2022, it was explained that these were 'not the same as solar panels which use energy from the sun to produce electricity' although despite this it is likely that confusion between the two technologies persisted.

Figure 2.1: Knowledge about specific low-carbon heating systems (based on all people), Winter 2021 to 2023



LCHEATKNOW1-8. How much would you say you know about the following low carbon heating systems?
 Base: All wave respondents – Winter 2021 / Winter 2022 / Winter 2023: Air source heat pumps (3,696/3,552/3,736), Ground source heat pumps (3,693/3,560/3,729), Hybrid heat pumps (3,690/3,545/3,729), Heat networks (3,686/3,547/3,728), Biomass boilers (3,692/3,543/3,731), Hydrogen boilers (3,694/3,552/3,726), Hydrogen-ready boilers (3,688/3,549/3,725); Solar thermal panels (3,693/3,558/NA)

In Winter 2023, the proportion who said they knew at least a fair amount about each technology ranged from 5% (hydrogen-ready boilers) to 21% (air source heat pumps).

Overall, the proportion in Winter 2023 who said they knew at least a fair amount about these technologies had remained relatively stable compared with Winter 2022, with the exception of

a small increase in knowledge of air source heat pumps (from 18% to 22%), and a small decline in knowledge for biomass (11% down from 13% in the previous two waves).

Awareness of air source heat pumps was highest for those aged 55 to 64 (86%) and 65 and over (83%) and declined through the age bands to 55% of those aged 16 to 34. Awareness of ground source heat pumps was higher for those aged 35 and over (between 72% and 80%) compared with those aged 25 to 34 (64%) and 16 to 24 (61%). Awareness of biomass boilers was higher for those aged 45 and over (between 66% and 69%) compared with those aged below 45 (between 57% and 59%). In contrast, awareness of hybrid heat pumps was higher for those aged 25 to 64 (between 56% and 59%) than those aged 65 and over (47%).

As in previous years, awareness and knowledge of low carbon heating systems was higher for those who had more knowledge of the concept of Net Zero. For example, 89% of those who claimed to know 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.

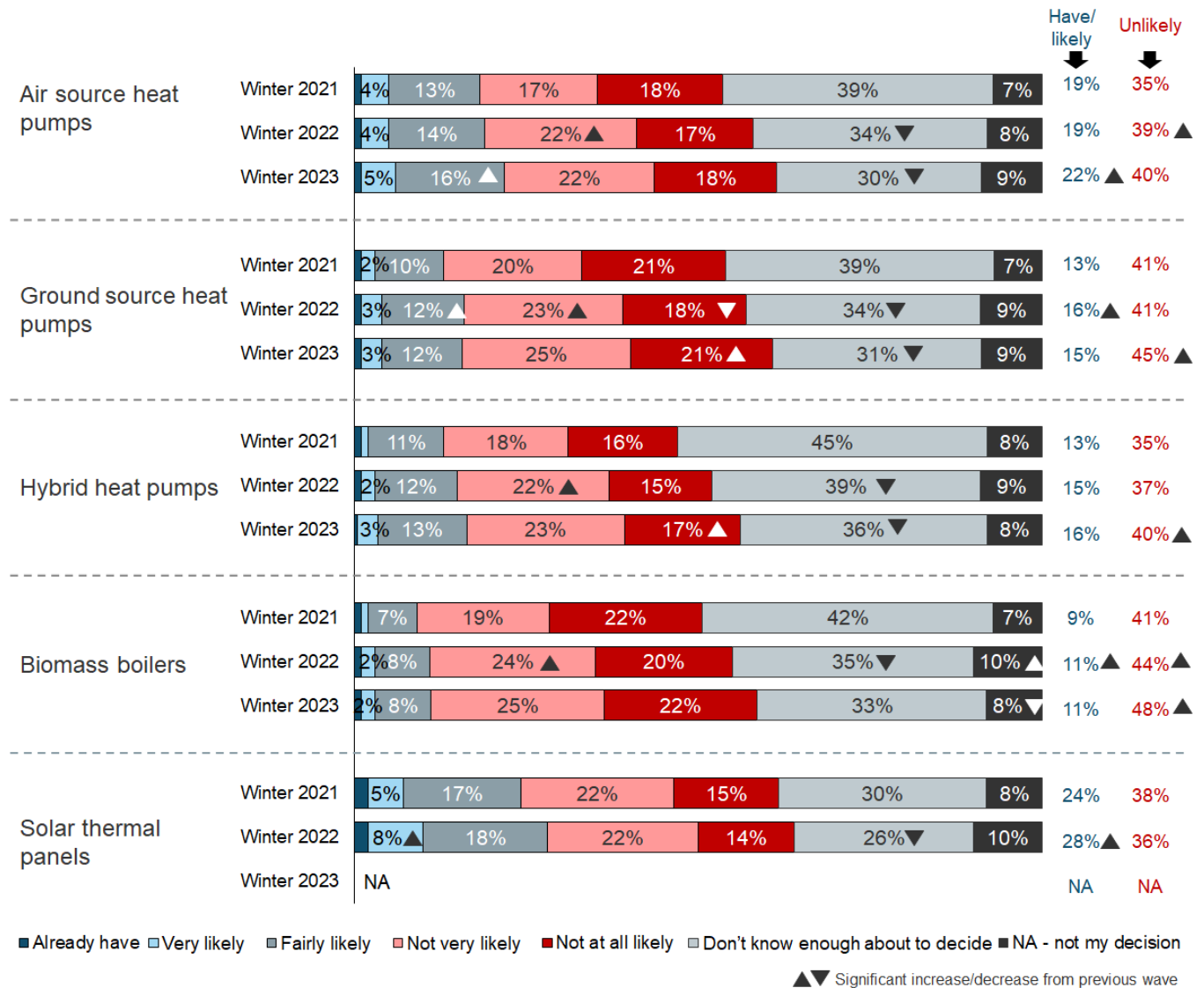
Likelihood to install low carbon heating systems

In order to gauge the propensity to adopt low carbon heating systems, people were asked if they would consider installing each of four different low carbon systems the next time they needed to change their heating system or boiler². As for the question reported on above, in Winter 2023 solar thermal panels were removed from the list of low carbon heating system types asked about. The data for solar thermal panels from previous waves is however included at the bottom of Figure 2.2 for reference.

A quarter (26%) said that a decision around installing a new heating system was not theirs to make. This was mainly explained by people renting: around six in ten renters (between 61% and 63% for each type of low-carbon heating system) said that this was not their decision to make compared with between 8% and 9% for people in owner-occupier households. Given the high rate of renters who said these questions were not applicable to them, the findings for this question are based only on people living in owner-occupied households (Figure 2.2).

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 2.2: Whether likely to install specific low-carbon heating systems next time they need to change among owner-occupiers (based on people living in owner-occupied accommodation), Winter 2021 to 2023



LCHEATINSTALLA-E. 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?

Base: All wave respondents living in owner-occupier households – Winter 2021 / Winter 2022 / Winter 2023: Air source heat pumps (2,738/2,566/2,681), Ground source heat pumps (2,728/2,561/2,634), Hybrid heat pumps (2,730/2,554/2,620), Biomass boilers (2,725/2,554/2,611), Solar thermal panels (2,727/2,561/NA)

In Winter 2023, around a third (between 30% and 36%) of those living in owner-occupied households did not know enough about each of these heating systems to decide whether they would install a low carbon heating system in the future. As seen in Figure 2.2, the proportion who selected this response has fallen over the past two years for all four types of heating system.

Where owner-occupiers did express an opinion, a greater proportion said they were unlikely to change to a low carbon heating system than said they were likely to do so. Including the very small proportion who had already installed the heating system in question, perceived likelihood to install was highest for air source heat pumps (22% likely, 40% unlikely) and lowest for biomass boilers (11% likely, 48% unlikely).

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Just over a quarter (27%) of people in owner-occupier households said they would be likely to install any type of heat pump (whether air source, ground source or hybrid).

Among people living in owner-occupied accommodation, including those who had already installed it, men were more likely than women to say they would consider installing each system; for example, 25% of men compared with 18% of women already had or would be likely to install air source heat pumps.

Older people in owner-occupied accommodation were less likely to consider installation of low-carbon heating systems. For example, compared with younger age groups, higher proportions of those aged 55 to 64 (46%) and over 65 (55%) responded that they were not very or not at all likely to install air source heat pumps.

Including those who had already installed them, people living in owner-occupier households who were very concerned about climate change were more likely than those who were not concerned to consider installing air source heat pumps (24% compared with 12%), ground source heat pumps (16% compared with 9%), and hybrid heat pumps (16% compared with 11%), but with no difference for biomass boilers.

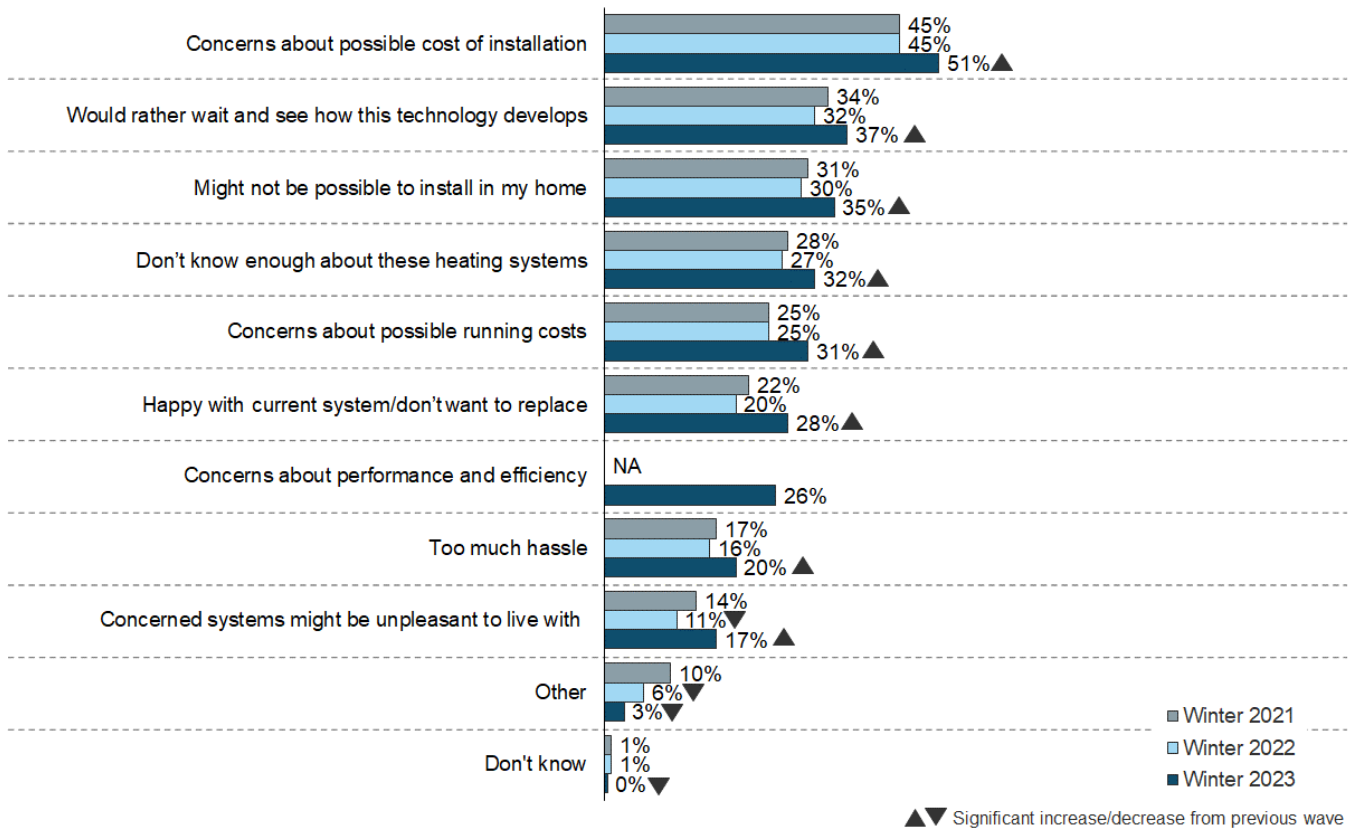
Overall, in Winter 2023, 56% of people living in owner-occupier households said that they were unlikely to install at least one of the four different types of low carbon heating systems if they needed to replace their heating system (stable from 56% in Winter 2021 and 57% in Winter 2022). This subgroup was asked their reasons for their reluctance to install one or more low-carbon heating system (Figure 2.3).

Whilst the ranking of the reasons for why owner-occupiers would be unlikely to install low carbon systems has not changed, the proportion selecting each option has increased from Winter 2022.

In Winter 2023, the main barriers to changing to a low carbon heating system included concerns about the cost of installation (51%), a preference to wait to see how the technology develops in time (37%), or a perception that it might not be possible to install in their home (35%). The latter view was especially prevalent among those living in a flat or maisonette (42%).

Other main barriers included not knowing enough about the heating systems (32%), concerns about running costs (32%), and because they were happy with their existing system (28%), with 26% selecting concerns about performance and efficiency, a new response added in Winter 2023.

Figure 2.3: Why unlikely to install specific low-carbon heating systems (based on owner-occupiers unlikely to install one or more of the low carbon systems), Winter 2021 to 2023



▲▼ Significant increase/decrease from previous wave

LCNOWHY. You said you would be unlikely to install the following heating systems in your home [...] Why is this?
 Base: All owner-occupier households who are unlikely to install one or more of low carbon types of heating in home – Winter 2021 (1,621), Winter 2022 (1,551), Winter 2023 (1,631)

Attitudes towards low carbon heating systems

The public were asked the extent to which they agreed or disagreed with the following six statements:

1. Low-carbon heating systems are expensive to install
2. Low-carbon heating systems would heat people's homes better than the conventional systems (for example, gas or oil boilers)
3. Low-carbon heating systems are cheaper to run than conventional systems
4. Low-carbon heating systems are less reliable than conventional systems
5. To make low-carbon heating systems more attractive, conventional systems should be made more expensive
6. I would know where to find reliable information on low-carbon heating systems [new statement added in Winter 2022]

In Winter 2023, a large proportion said they either didn't know, didn't have enough information or neither agreed nor disagreed with each of these statements (Figure 2.4). This combined proportion ranged from 53% for Statement 5 to 79% for Statement 4. For all six statements, between Winter 2022 and Winter 2023, there was a shift away from saying 'don't know' towards saying 'neither agree nor disagree' which indicates that people were more likely to give an uncertain rather than a non-informed decision.

Even among people who said they knew at least a fair amount about low carbon heating systems in general, the proportion answering 'neither agree nor disagree' or 'don't know/don't have enough information' was still relatively high, ranging from 32% for Statement 5 to 65% for Statement 4.

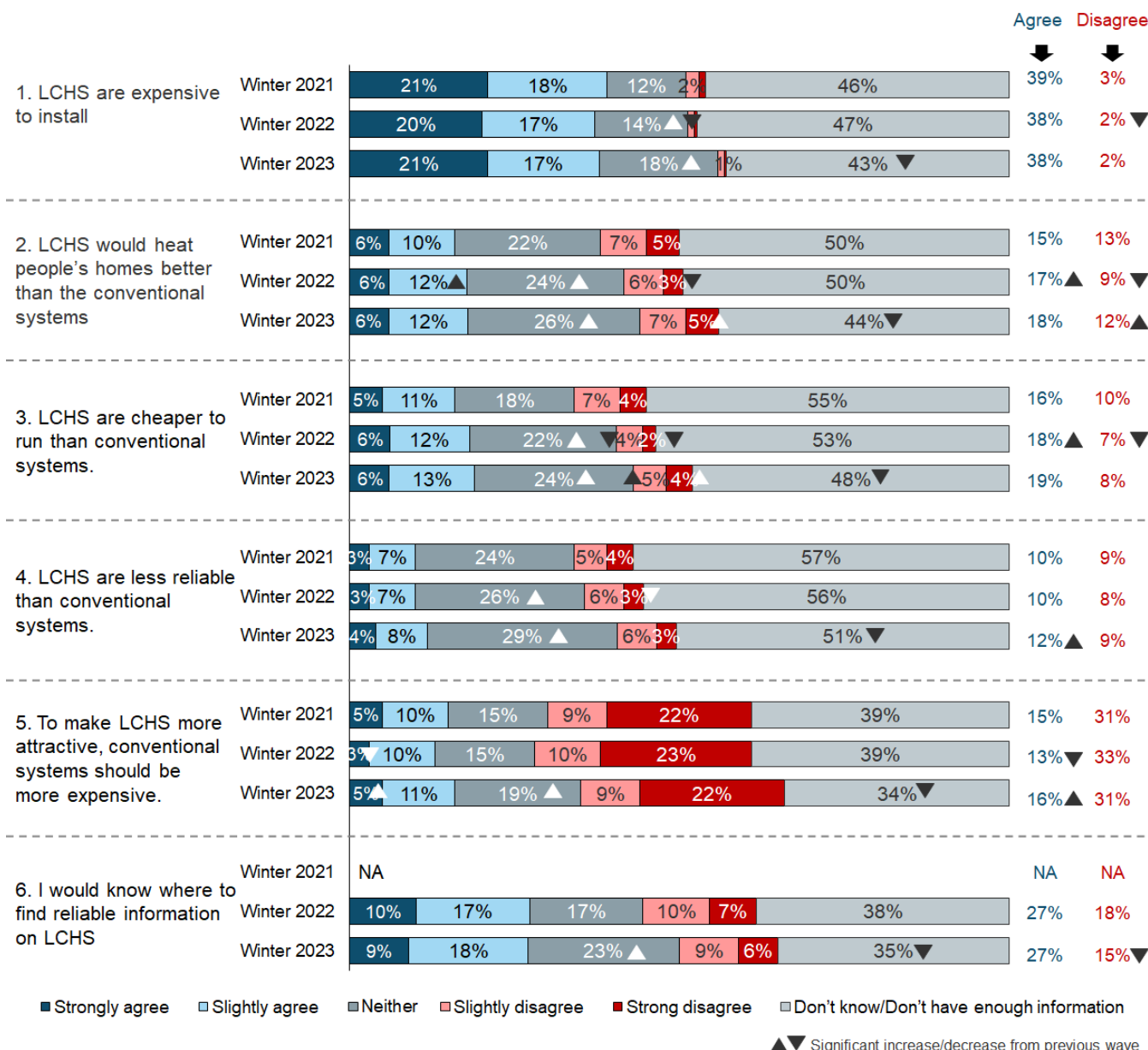
Reinforcing the results shown in Figure 2.4, which showed that the strongest barrier for rejecting low carbon systems was installation costs, people remained considerably more likely to agree (38%) than disagree (2%) that 'low carbon heating systems are expensive to install'. They were also more likely to agree (19%) than disagree (8%) that 'low carbon systems are cheaper to run than conventional systems'. There was no change in either of these since Winter 2022, with belief that these systems are cheaper to run remaining higher than in Winter 2021.

People remained twice as likely to disagree (31%) than agree (16%) that 'conventional heating systems should be made more expensive to make low carbon alternatives more attractive', although the proportion agreeing with this has increased since Winter 2022 (when agreement was 13%).

People were more inclined to agree (27%) than disagree (15%) that they 'would know where to find reliable information on low-carbon heating systems', although the proportion disagreeing had declined from 18% in Winter 2022.

Views were more evenly balanced when it came to reliability, with the results indicating that opinions on reliability have become slightly more negative since Winter 2022. Slightly more people agreed (12%) than disagreed (9%) that 'Low-carbon heating systems are less reliable than conventional systems', with agreement levels increasing to 12% from 10% in Winter 2022. However, there was more agreement (18%) than disagreement (12%) that 'Low-carbon heating systems would heat homes better', with disagreement levels increasing to 12% from 9% in Winter 2022.

Figure 2.4: Attitudes towards low carbon heating systems (LCHS) (based on all people), Winter 2021 to 2023



LOWCARBATT1-6. How much do you agree or disagree with the following statements? NOTE – LCHS is included in full as 'low-carbon heating systems' in the questionnaire statements.
 Base: All wave respondents – Winter 2021 / Winter 2022 / Winter 2023: expensive to install (3,684/3,557/3,723), would heat people's homes better than the conventional systems (3,679/3,553/3,719), cheaper to run than conventional systems (3,680/3,553/3,721), less reliable than conventional systems (3,677/3,550/3,718), conventional systems should be more expensive (3,676/3,556/3,719), know where to find information (NA/3,551/3,720)

People who were very concerned about climate change were more likely than those who were not concerned to feel positive about most aspects of low carbon heating. They were more likely to rate low carbon heating systems as able to heat homes better (24% vs 9%), to be cheaper to run (25% vs 12%), and to feel able to find reliable information about installation (35% vs 22%), while being less likely to agree that low carbon heating is not as reliable (11% vs 19%). People who were very concerned about climate change were also more likely than those who were not concerned to agree that conventional heating systems should be made more expensive to increase the appeal of low carbon systems (24% vs 10%).

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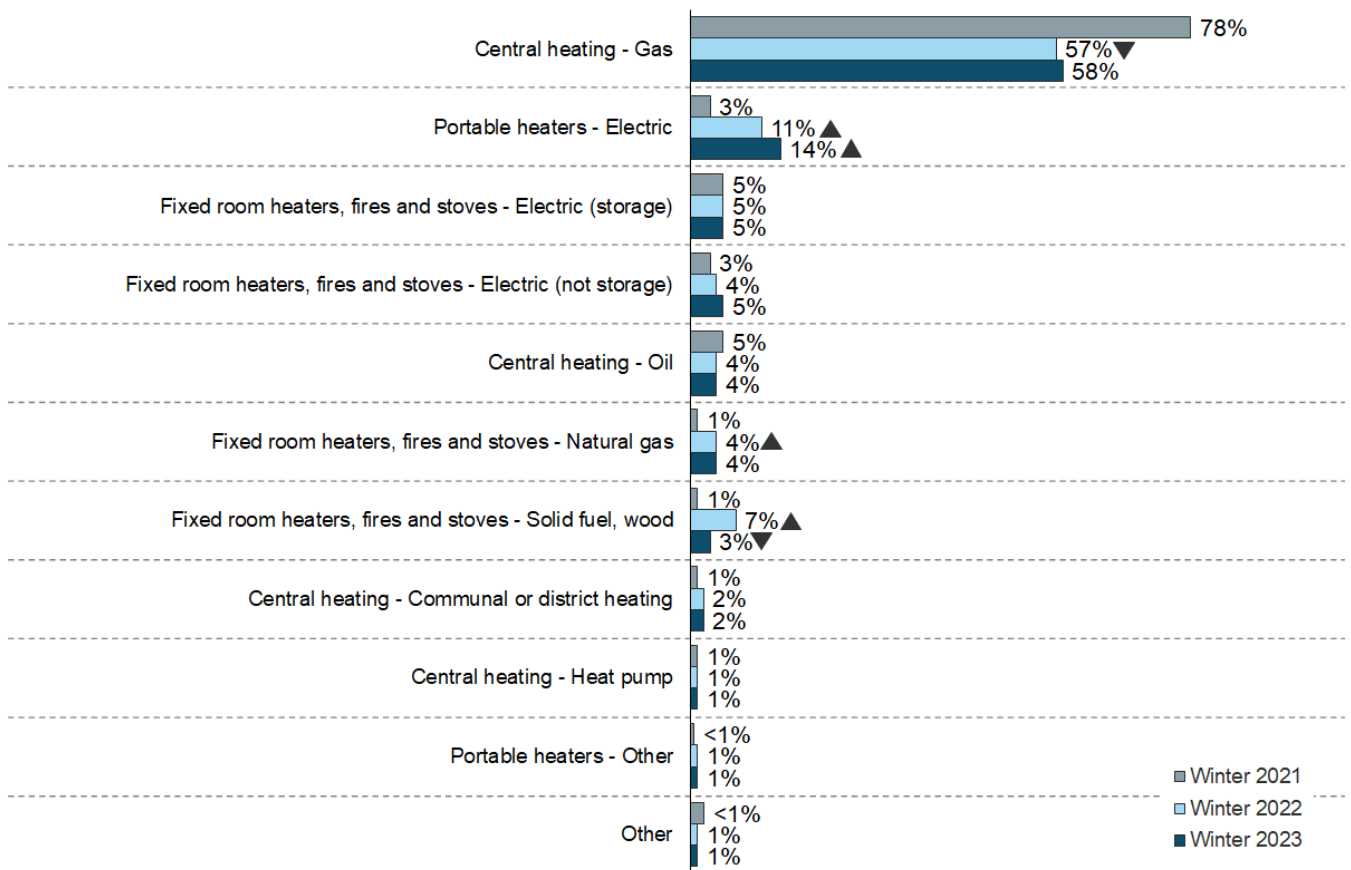
Older age groups were in general more likely to feel negative about low carbon heating systems, with the exception of concern regarding the reliability of the system. For example, the proportion who agreed that these systems are expensive to install increased from 22% of people aged 16 to 24 to 41% of people aged 65+, while the proportion who agreed that they heat homes better decreased from 22% of people aged 16 to 24 and 24% of people aged 25 to 34 to 11% of people aged 65+. Older people were also much less in favour of making conventional heating systems more expensive (from 24% of people aged 16 to 24 to 8% of people aged 65+). In contrast, 19% of those aged 16 to 24 were more concerned about reliability compared to those aged 45 above (13% for 45 to 54 and 10% for 55+).

Heating and cooling in the home

People are asked annually (in the Winter wave³) about the main systems used at home to heat and cool their homes. The results have been weighted to represent all households.

In Winter 2023, the main system for heating the home remained as gas central heating (58%), unchanged since Winter 2022, but still considerably lower than in Winter 2021 (78%). The use of portable electric heaters increased further to 14%, up from 3% in Winter 2021 and 11% in Winter 2022, but the use of solid fuel and wood heaters dropped back to 3% from 7% in Winter 2021 (Figure 3.1).

Figure 3.1: Main method of heating home (based on all households), Winter 2021 to 2023



▲▼ Significant increase/decrease from previous wave

HEATMAIN. What is the main way you heat your home?

Base: All wave respondents – Winter 2021 (3,484), Winter 2022 (3,573), Winter 2023 (3,585)

Note: At this question, results are weighted to households (not individuals)

The use of gas central heating was lower in rented households (51%), and particularly in privately rented households (42%), compared with owner-occupied households (61%). Rented households were more likely than owner-occupied households to report using electric storage heaters (9% compared with 3%) and electric non-storage heaters (8% compared with 3%). There was a similar difference by type of housing, with those living in a house more likely to report gas central heating than those in a flat (62% compared with 49%), with those in a flat

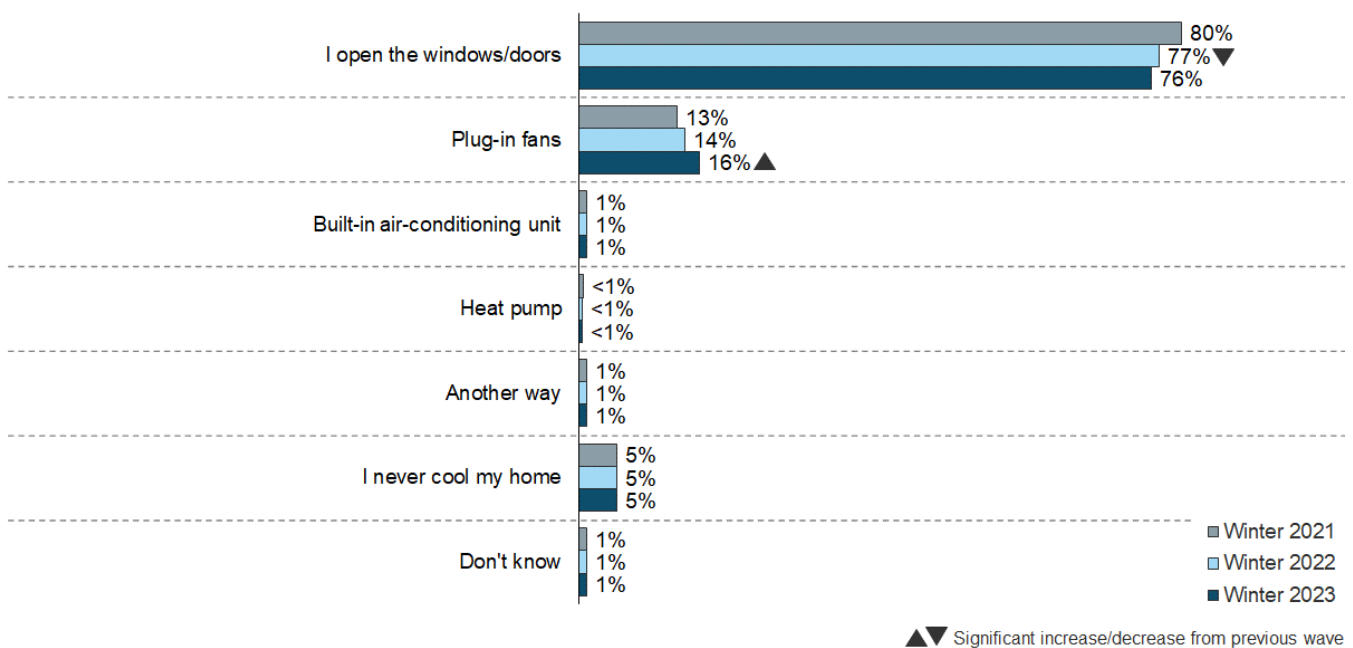
³ Two methods of heating that had been reported by under 1% of respondents at previous waves were removed from the answer list in 2023 (fixed LPG room heaters and fixed solid fuel room heaters).

more likely to report the use of electric storage heaters (11% compared with 3%) and non-storage heaters (10% compared with 3%).

By geography, people in Northern Ireland were much less likely than average to use gas central heating (28% compared with 58% overall), and more likely than average to use oil central heating (42% compared with 4% overall) than average. Gas central heating was also used by a smaller proportion than average in London (51%), while reporting greater use of communal heating (6%) and portable electric heaters (18%).

In Winter 2023, people were asked how they mainly cool their homes when they need to (Figure 3.2). As in previous years, people mainly opened windows and doors (76%, down from 80% in Winter 2021) rather than using cooling equipment. The use of plug-in fans increased slightly to 16% from 14% in Winter 2022.

Figure 3.2: Main method of cooling home (based on all households), Winter 2021 to 2023



COOLMAIN. What is the main way you cool your home when you need to?

Base: All wave households – Winter 2021 (3,705), individuals - Winter 2022 (3,546), Winter 2023 (3,732)

Note: At this question, results for Winter 2021 are weighted to households and to individuals for Winter 2022 and Winter 2023

People living in flats were more likely than those living in houses to use plug-in fans (20% compared with 15%) and less likely to say that they open windows and doors (71% compared with 77%).

By geography, people in the South West (84%), Scotland (83%), Northern Ireland (82%), and Wales (81%) were relatively more likely to report opening windows and doors, with those in the East Midlands (20%), West Midlands (22%), and London (21%) relatively more likely to report using a plug-in fan.

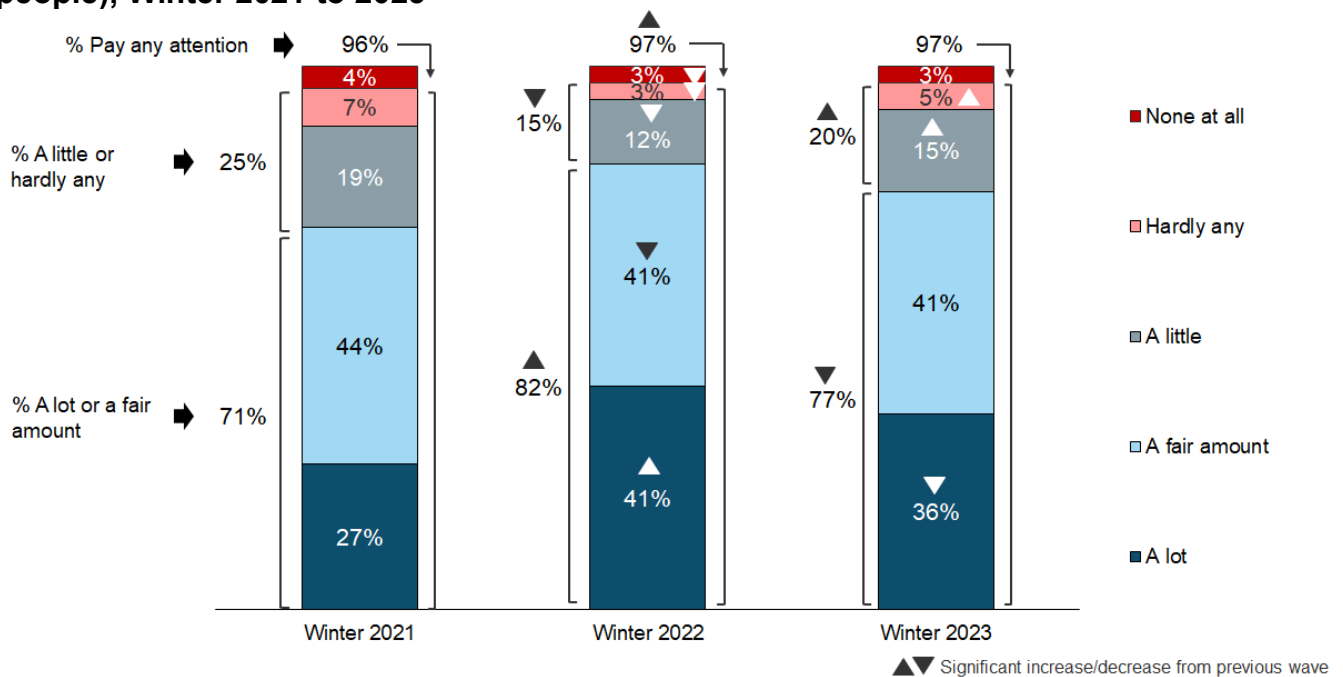
Attitudes towards heating in the home

Questions are asked annually, in the Winter wave, about people’s attitudes towards heating in the home.

Between Winter 2021 and Winter 2022 there was a marked increase in the level of attention people paid to the amount of heat they used in their home, which was thought to be attributable to steep cost of living and energy price rises over that period. Between Winter 2022 and Winter 2023, energy prices fell although remained higher than in Winter 2021. Consistent with this, the trends over time indicate that people paid less attention to heating in Winter 2023 compared with Winter 2022, but that levels of attention are still higher compared with Winter 2021.

In Winter 2023, 36% reported paying a lot of attention to the amount of heat used in their home, which was down since Winter 2022 (41%) but remained considerably higher than in Winter 2021 (27%) (Figure 4.1). Correspondingly, the proportion who said they paid a little or hardly any attention to this rose from 15% in Winter 2022 to 20% in Winter 2023 while remaining lower than in Winter 2021 (25%).

Figure 4.1: How much attention paid to amount of heat used in home (based on all people), Winter 2021 to 2023



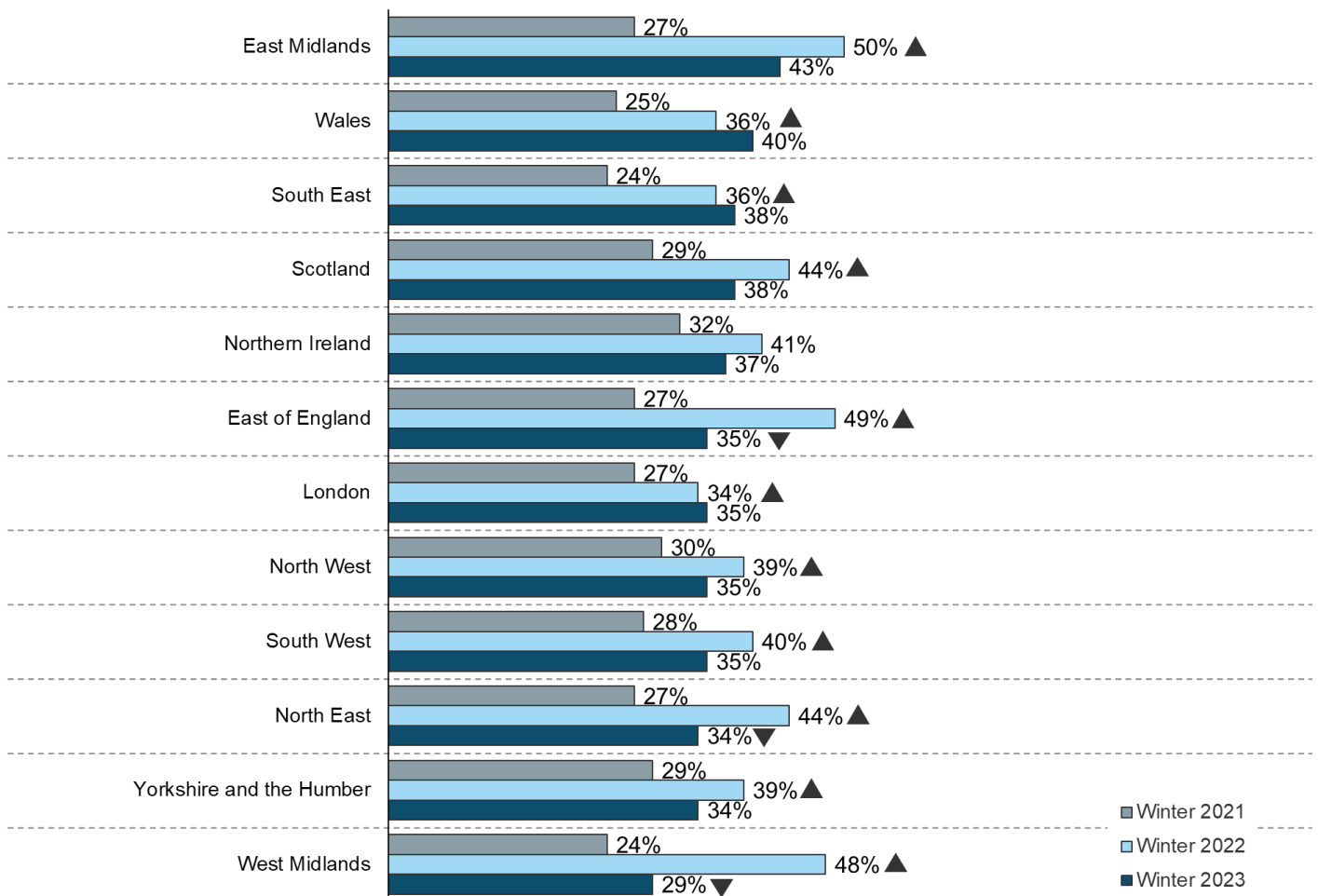
HEATUSE. How much attention do you pay to the amount of heat you use in your home?
 Base: All wave respondents – Winter 2021 (3,701), Winter 2022 (3,571), Winter 2023 (3,741)

In Winter 2023 those aged 16 to 24 (51%) were less likely to pay at least a fair amount of attention to heat usage in the home than those aged 25 and over (72% of those aged 25 to 34 rising through the age bands to 84% of those aged 55 and over). This is likely to reflect the fact that people in the 16 to 24 age group are more likely to have someone else as the decision maker in their household (72% compared to 22% overall). Household decision makers (83%) are more likely to pay at least a fair amount of attention to heat usage, compared to people whose household decision maker was someone else (54%). People who were very concerned about climate change were much more likely than those who were not concerned to pay at least a fair amount of attention to the amount of heat used at home (86% compared with 58%).

In Winter 2023 the proportion of people saying they paid a lot of attention to heat use in the home was higher in the East Midlands (43%), Wales (40%) and the South East (38%) compared with those in the West Midlands (29%) (Figure 4.2).

Between Winter 2021 and Winter 2022, increases in the amount of attention paid to heating the home were observed across all geographical areas in the UK⁴. Between Winter 2022 and Winter 2023, decreases in this measure were observed in the following areas: the East of England (from 49% to 35%), the North East (from 44% to 34%) and the West Midlands (48% to 29%).

Figure 4.2: Percentage paying a lot of attention to amount of heat used in home (based on all people) by geography, Winter 2021 to 2023



▲▼ Significant increase/decrease from previous wave

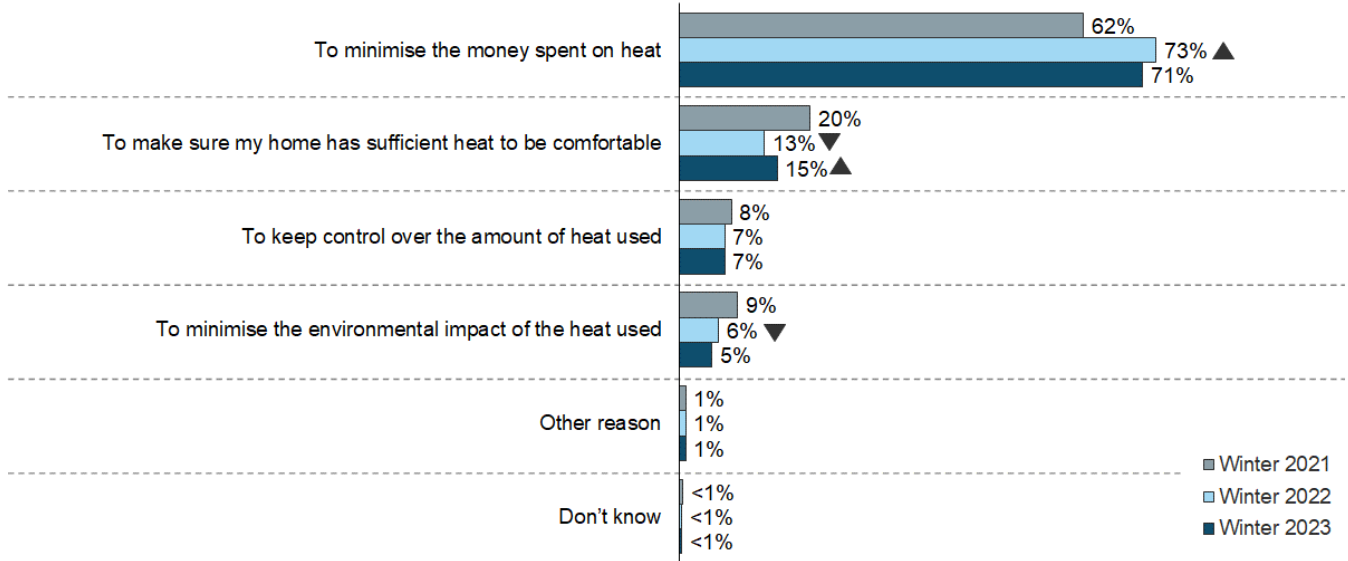
HEATUSE. How much attention do you pay to the amount of heat you use in your home?

Base: All wave respondents – Winter 2021 / Winter 2022 / Winter 2023: North East (168/167/256), North West (386/417/335), Yorkshire and the Humber (300/305/291), East Midlands (260/274/263), West Midlands (334/294/277), East of England (345/341/349), London (367/358/400), South East (528/454/467), South West (380/327/279), Wales (228/161/201), Scotland (295/292/382), Northern Ireland (110/181/241)

⁴ Although in Northern Ireland the increase is smaller and not statistically significant.

Those that reported paying a lot or a fair amount of attention to heat used in their home (77%) were asked their reasons for doing this. (Figure 4.3). In Winter 2023, 71% said they did so to minimise the amount of money they spent on heat, up from 62% in Winter 2021 but with no significant change since Winter 2022 (73%). There was a small increase since Winter 2022 in the proportion saying they paid attention to make sure their home is warm enough for comfort (15% up from 13%), but this remains below Winter 2021 levels (20%).

Figure 4.3: Reasons for paying attention to the amount of heat used (based on those who pay at least a fair amount of attention), Winter 2021 to 2023



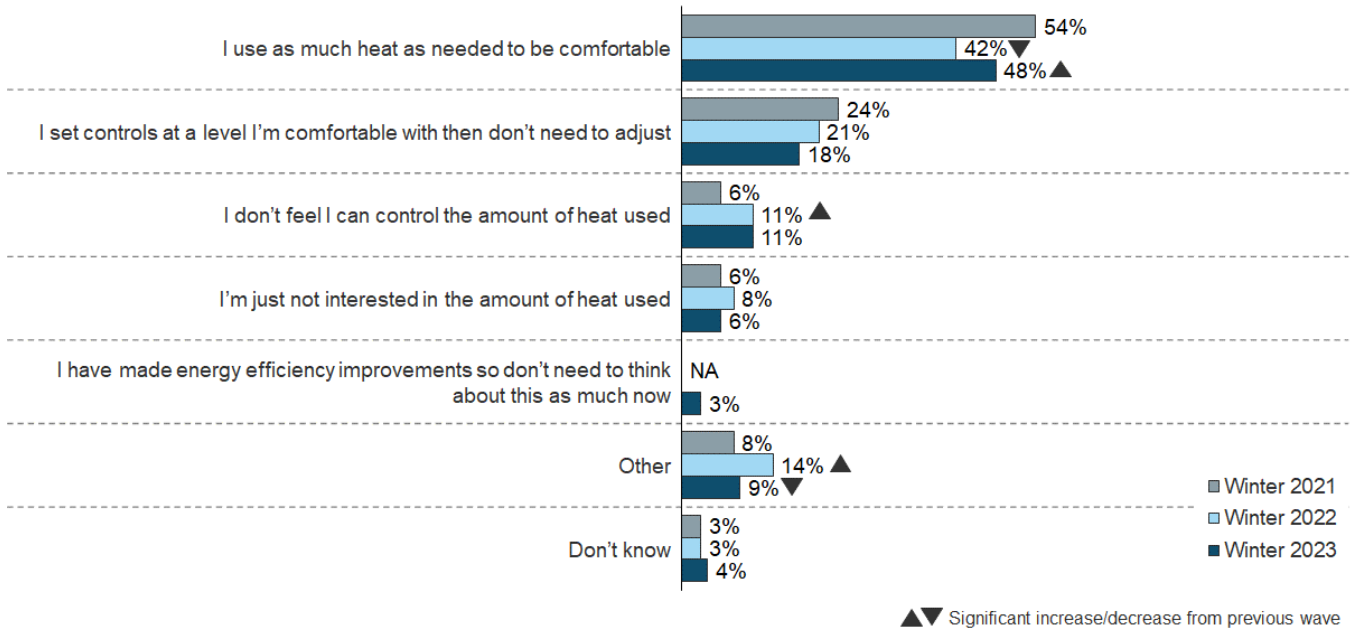
▲▼ Significant increase/decrease from previous wave

HEATATTWHY. You said that you pay [a lot / a fair amount] of attention to the amount of heat you use in your home. What is the main reason for this?

Base: All wave respondents who pay at least a fair amount of attention – Winter 2021 (2,769), Winter 2022 (3,036), Winter 2023 (3,010)

Overall, 20% said they paid a little, hardly any or no attention at all to the amount of heat used, up from 15% in Winter 2022. This group were also asked the reason for this (Figure 4.4), with the most common being they used as much heat as needed to be comfortable (48%, up from 42% in Winter 2022). Other reasons remained in line with Winter 2022 levels: 18% reported setting controls to a comfortable level, while 11% said they did not feel they could control the amount of heat used.

Figure 4.4: Reasons for not paying attention to the amount of heat used (based on those who pay at most a little amount of attention), Winter 2021 to 2023



HEATNOATTWHY. You said that you pay [only a little/hardly any/no] attention to the amount of heat you use in your home. What is the main reason for this?

Base: All wave respondents who pay at most a little attention – Winter 2021 (925), Winter 2022 (529), Winter 2023 (714)

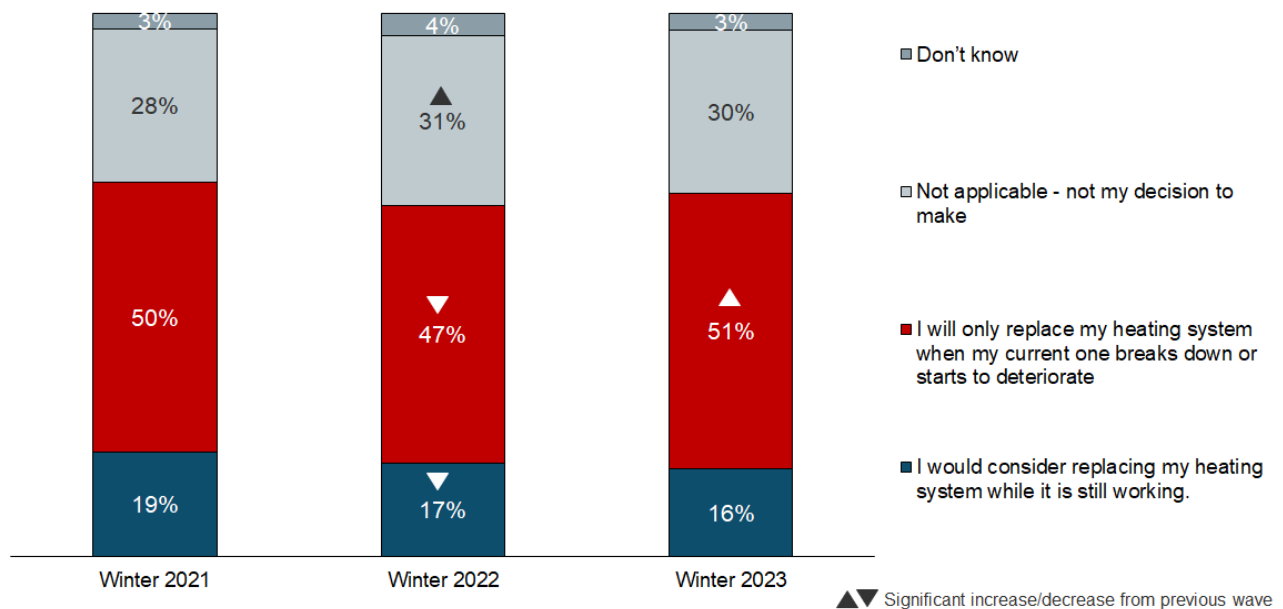
Replacing heating systems

Questions are also asked annually, in Winter, about replacing heating systems.

Likelihood to replace heating system

In Winter 2023 around half of people (51%) said they would only replace their heating system when their current one breaks down or starts to deteriorate, 16% said they would consider replacing their heating system while it was working, while 30% said this was not their decision to make. Compared with Winter 2022, people were slightly more likely to say that they would only replace their heating system when it breaks down (51%, up from 47%).

Figure 5.1: Whether would replace heating system while it was still working (based on all people), Winter 2021 to 2023



REPLACEHEAT. Now thinking about your heating system. Which one of these statements comes closest to your view?

Base: All wave respondents – Winter 2021 (3,702), Winter 2022 (3,570), Winter 2023 (3,739)

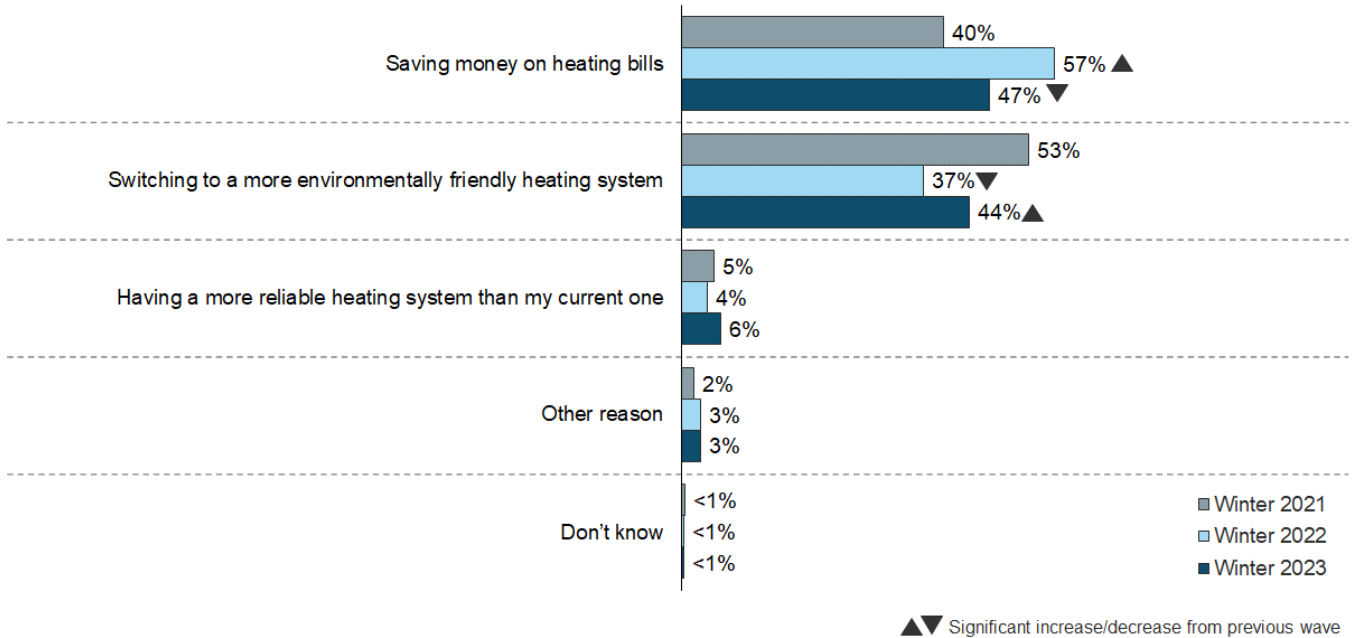
The propensity to consider replacing a heating system while it is still working was higher among people with higher levels of education (24% of degree-educated people compared with 14% of those with other qualifications and 9% of those with no qualifications), and owner-occupiers (20%) compared with renters (9%).

This was also higher among those who paid a lot or a fair amount of attention to heat use at home (18%, compared with 11% of those who paid a little, or hardly any attention, and 5% of those who paid no attention to heat use), and among people concerned about climate change (26% of those who were very concerned, compared with 13% of those who were fairly concerned and 6% of those who were not concerned).

Those who said they would consider replacing a working heating system were asked to choose their most important consideration for doing this (Figure 5.2). Between Winter 2021 and Winter 2022, cost saving considerations displaced environmental reasons for adopting a new heating system. However, between Winter 2022 and Winter 2023, this has shifted back slightly, with more people now mentioning environmental benefits (44%, up from 37% in Winter 2022) and a

reduced proportion mentioning saving money (47%, down from 57%). This is likely to reflect the fall in energy prices since the steep rises observed between Winter 2021 and Winter 2022.

Figure 5.2: Most important consideration in changing heating system (based on those who would replace their system while it was still working), Winter 2021 to 2023



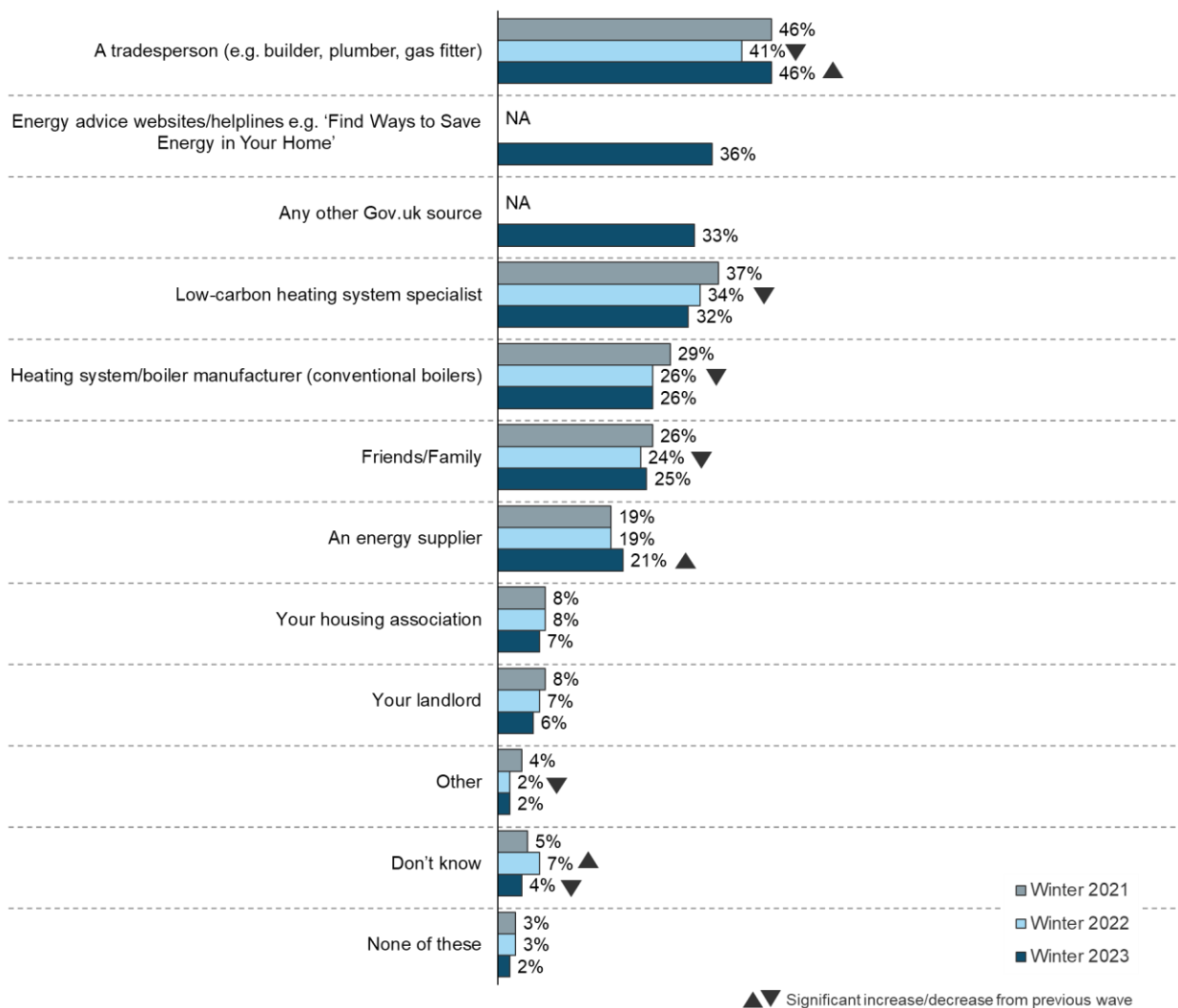
REPLACEIMP. Which one of these would be the most important consideration in changing your heating system?
 Base: All wave respondents who would replace their heating system while it is still working – Winter 2021 (775), Winter 2022 (689), Winter 2023 (662)

Trust in heating system installation advice

People were further asked who they would trust to provide advice about which heating system to install in their home⁵.

In Winter 2023, a tradesperson was the most trusted source (46%), followed by energy advice websites (36%), other Gov.UK sources (33%) and low-carbon heating specialists (32%). Changes in the response list means that results are not fully comparable with Winter 2022.

Figure 5.3: Who would trust to provide advice on which heating system to install in home (based on all people), Winter 2021 to 2023



TRUSTHEAT. Which of the following would you trust to provide advice about which heating system to install in your home? Please select all that apply.

Base: All wave respondents – Winter 2021 (3,706), Winter 2022 (3,564), Winter 2023 (3,704)

⁵ There were a number of changes to the answer list in Winter 2023, with the 'Simple Energy Advice website or similar website' replaced by 'Energy advice websites or helplines e.g., "Find Ways to Save Energy in Your Home"', and 'Gov.uk' replaced with 'any other Gov.uk source'. Due to the changes in wording, they should not be compared with earlier results.

DESNZ Public Attitudes Tracker (Winter 2023, UK)

People aged 45 to 64 were more likely than other age groups to say they trusted energy advice websites and helplines (45% of those aged 45 to 54 and 43% of those aged 55 to 64) with trust levels lower than average among people aged 16 to 24 (23%). The proportion who would trust another Gov.uk source was lower for those aged 16 to 24 (27%) and aged 65+ (28%) than those aged 25 to 64 (between 35% and 37% within each age band). Those with a degree level qualification were also more likely to select these sources compared with those with no qualification (Energy advice website or helpline: 47% compared with 22%, “any other Gov.uk source”: 43% compared with 23%).

Cooking appliances

In Winter 2023 a new set of questions were added to understand consumer preference and decision-making in relation to domestic cooking appliances, that is hobs and ovens. For each type of cooking appliance, people were asked what they currently use, what they would choose next time, and the factors driving any potential purchase decisions.

Hobs

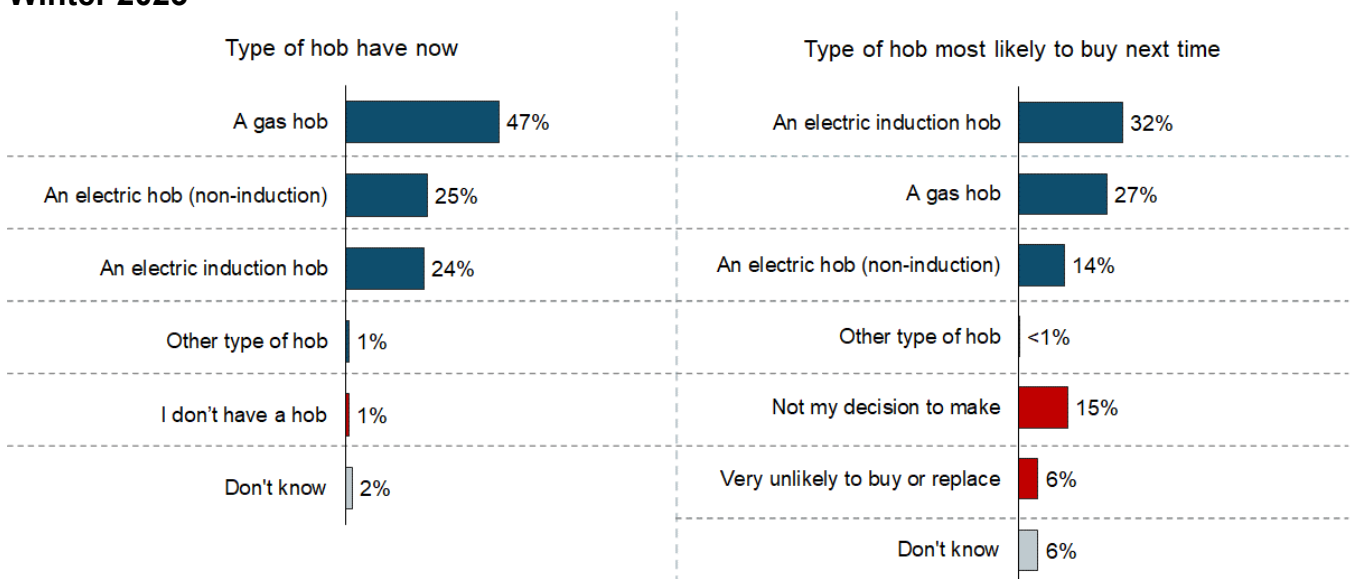
People were first asked which type of hob they currently have within their home (Figure 6.1, left hand side). Appliance ownership was evenly split between gas (47%) and electric (49%), with electric appliances further split between induction (24%) and non-induction (25%).

Gas hobs were much more common among people living in houses or bungalows (52% compared with 27% living in a flat), while residents of flats were much more likely to have an electric hob (67% compared with 45% living in a house or bungalow). Gas hobs were also more common among owner-occupiers (52% compared with 35% of renters), while electric hobs were more common among renters (59% compared with 45% of owners), with this difference greatest for non-induction hobs (38% compared with 19% of owners).

In terms of age, gas hobs were most common among those aged 55 to 64 (54%) and least common among those aged 16 to 24 (41%) and 65+ (43%). On the other hand, non-induction hobs were most common amongst those aged 16-34 (30%), as well as those over the age of 65 (27%), compared to 24% of 35 to 44s, and 20% of 45-64s.

By geography, residents in Northern Ireland were much more likely to use an electric non-induction hob (48% compared with 25% overall) and much less likely to use a gas hob (20% compared with 47% overall). Gas hobs were also more commonly used in urban areas (49% compared with 39% in rural areas) while electric induction hobs were more common in rural areas (30% compared with 23% in urban areas).

Figure 6.1: Type of hob in home and most likely to buy next (based on all people), Winter 2023



HOBTYP. What type of hob do you have in your home? If you have more than one, please choose the type you use most. HOBREPLACE. Thinking about the next time you need to buy or replace a hob, which of these options would you be most likely to choose?

DESNZ Public Attitudes Tracker (Winter 2023, UK)

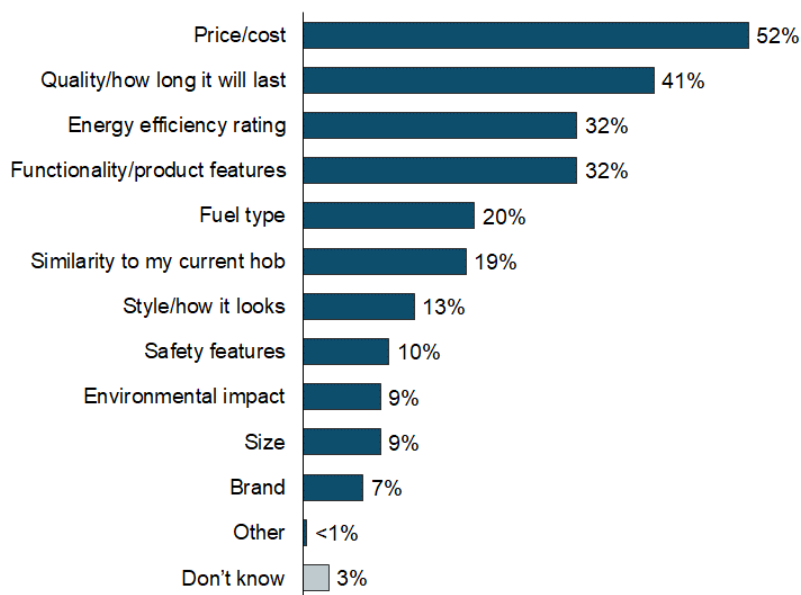
Base: All wave respondents – Have now: Winter 2023 (3,731); Buy next: Winter 2023 (3,721).

People were also asked what type of hob they would choose next time if they wanted to buy or replace it (Figure 6.1, right hand side). Around one in five felt that this was not applicable to them, either because it wasn't their decision to make (15%) or because they were unlikely to ever replace their current hob (6%), while 6% did not have an opinion.

Based on those who stated a preference for their next hob purchase, most current electric hob owners (93%) said they would stick with electric, while 7% said they would switch to gas. Of those with an electric induction hob, 87% said they would stick with this option next time. Of those with a non-induction hob, 57% would stick with this and 35% would switch to an induction hob. On the other hand, 67% of current gas hob owners said they would retain this choice next time while 33% would switch to electric.

People who stated a specific preference for their next hob purchase were asked to select the three factors they considered the most important in their purchase decision (Figure 6.2). The most popular amongst these were price (52%) and quality/longevity (41%), followed by energy efficiency rating (32%) and product features (32%). Around one in five mentioned fuel type (20%) or wanting something similar to their existing hob (19%).

Figure 6.2: Most important factors (up to three) in deciding which hob to buy (based on people who feel they would be in a position to buy a new hob in the future), Winter 2023



HOBFACTORS. If you were choosing a new hob, what would be the most important factors in your decision? Please select up to three factors.

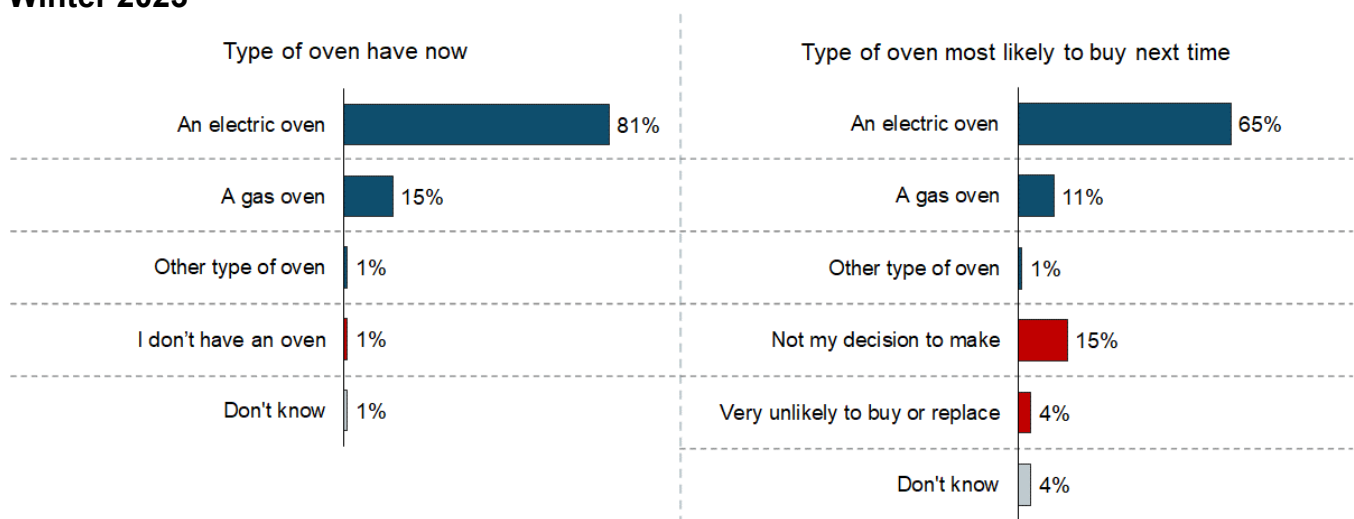
Base: All wave respondents except those who say buying or replacing a hob is not applicable: Winter 2023 (3,090).

Ovens

People were first asked which type of oven they currently have within their home (Figure 6.3, left hand side). Compared with hobs, where around half had a gas appliance, fewer people owned a gas oven. Overall, 81% had an electric oven, while 15% used a gas oven.

Electric ovens were more common among owner occupiers (85% compared with 75% of renters) while gas ovens were more common among renters (21% compared with 13% of owners). Following the same trend as hobs, residents in Northern Ireland were more likely than average to use an electric oven (94% compared with 81% overall) and less likely to use a gas oven (4% compared with 15% overall).

Figure 6.3: Type of oven in home and most likely to buy next (based on all people), Winter 2023



OVENTYPE. And what type of oven do you have in your home?

OVENREPLACE. Now thinking about the next time you need to buy or replace your oven, which of these options would you be most likely to choose?

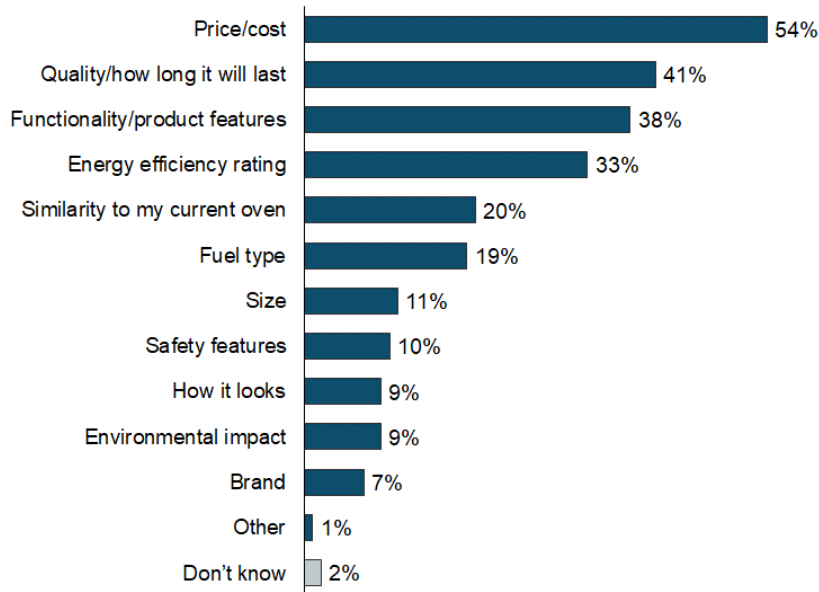
Base: All wave respondents – Have now: Winter 2023 (3,733); Buy next: Winter 2023 (3,736).

People were also asked what type of oven they would choose next time if they wanted to buy or replace it (Figure 6.3, right hand side). Similar to the findings for hobs, around one in five felt that this was not applicable to them, either because it wasn't their decision to make (15%) or because they were unlikely to ever replace their current oven (4%), while 4% did not have an opinion.

People were most likely to choose an electric oven as their next purchase. Based on those who stated a preference for their next oven purchase, most current electric oven owners (94%) said they would purchase an electric oven again, while 5% said they would switch to gas. On the other hand, of those who currently own a gas oven, 63% would purchase a gas oven next time while 36% would switch to electric.

People who stated a specific preference for their next oven purchase were asked to select the three factors they considered the most important in their purchase decision (Figure 6.4). The ranking of purchase drivers for ovens was similar to that for hobs, with price (54%) and quality/longevity (41%) the most important factors, followed by product features (38%) and energy efficiency rating (33%).

Figure 6.4: Most important factors (up to three) in deciding which oven to buy (based on people who feel they would be in a position to buy a new oven in the future), Winter 2023



OVENFACTORS. If you were choosing a new oven, what would be the most important factors in your decision? Please select up to three factors.

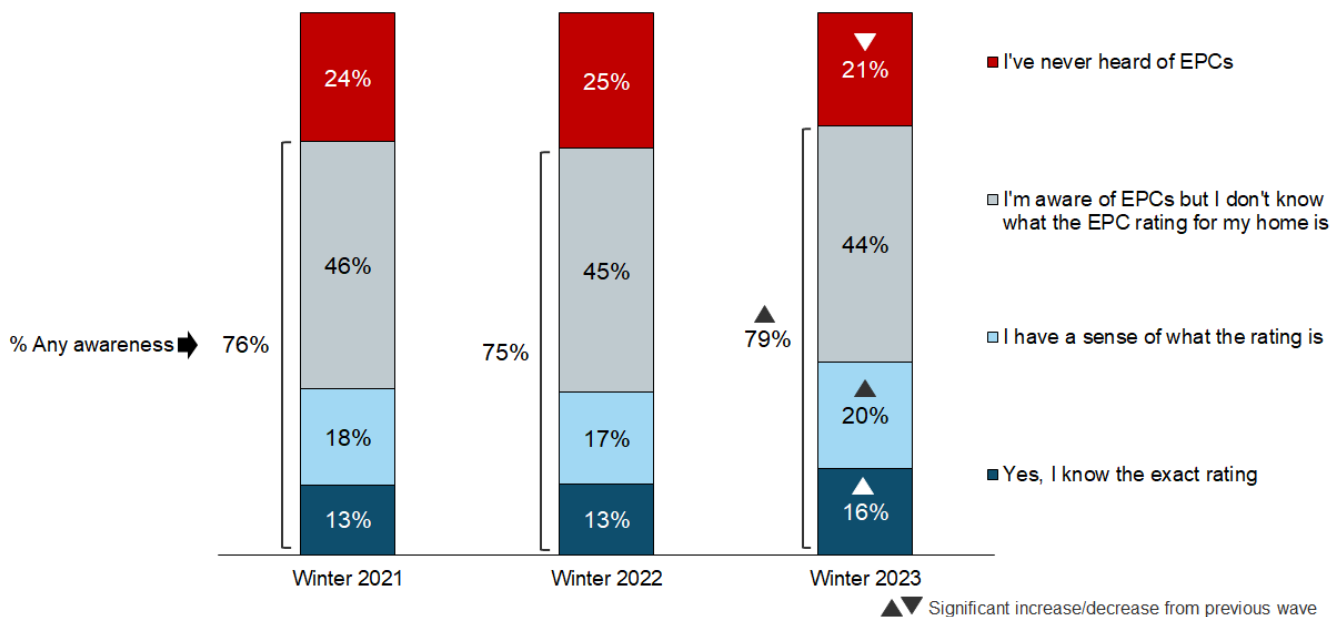
Base: All wave respondents except those who say buying an oven is not applicable: Winter 2023 (3,170).

Energy Performance Certificates (EPCs)

People are asked questions annually (in the Winter wave) to assess awareness of Energy Performance Certificates (EPCs) and their ratings. This includes questions to assess their recollection of the recommendations in their home’s EPC, and how useful those recommendations were.

In Winter 2023, 79% of the public were aware of EPCs, up slightly from 75% in Winter 2022. There was also an increase in knowledge of EPCs, with a higher proportion than in Winter 2022 saying they knew the exact rating (16%, up from 13%) or had a sense of their rating (20%, up from 17%). Just under half (44%, no significant change) said they were aware of EPCs but did not know the rating for their home (Figure 7.1).

Figure 7.1: Awareness of EPC rating for home (based on all people), Winter 2021 to 2023



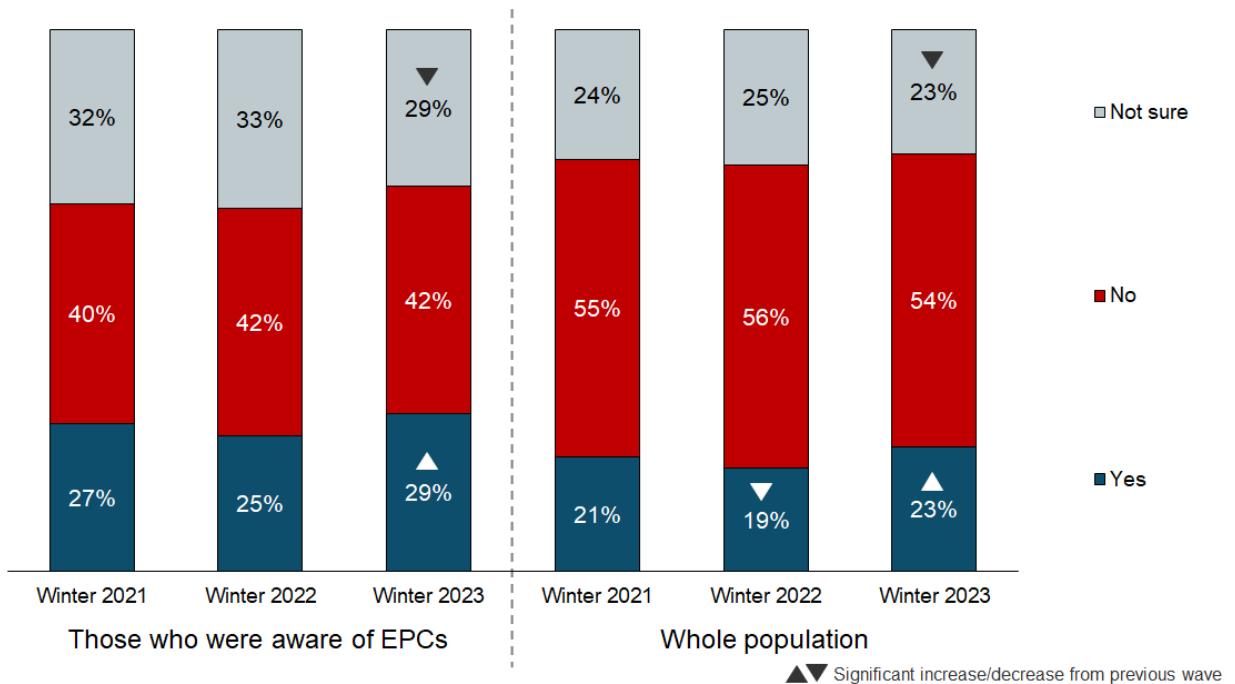
EPCKNOW. Do you know what the Energy Performance Certificate (EPC) rating for your home is?
 Base: All wave respondents – Winter 2021 (3,700), Winter 2022 (3,569), Winter 2023 (3,733)

People in owner-occupier households were more likely than those in rented households to have at least some awareness of EPCs (85%, compared with 74% private renters), with this lower still for those in socially rented households (63%). A similar pattern was found in relation to knowledge of the exact EPC rating of their home (19% owner-occupiers, compared with 14% of private renters, and 6% in socially rented households).

Those who were aware of EPCs were asked whether they recalled seeing the section in their home’s EPC which recommends how they could improve energy efficiency (Figure 7.2). Of that base, almost three in ten (29%) said that they recalled seeing the recommendations, up from 25% in Winter 2022. Over four in ten (42%) had not seen this section, and 29% said they were not sure or could not remember whether they had seen it.

When based on all people, 23% had seen the guidance section in their home’s EPC, up slightly from 19% of all people in Winter 2022 and 21% in Winter 2021.

Figure 7.2: Awareness of recommendations section on EPC (based on those who were aware of EPCs and based on all people), Winter 2021 to 2023



EPCSEEN. Have you ever seen a section on your Energy Performance Certificate which recommended how you could improve the energy efficiency of your home?

Base: All wave respondents aware of EPCs – Winter 2021 (2,963), Winter 2022 (2,835), Winter 2023 (3,093); All wave respondents – Winter 2021 (3,684), Winter 2022 (3,569), Winter 2023 (3,733).

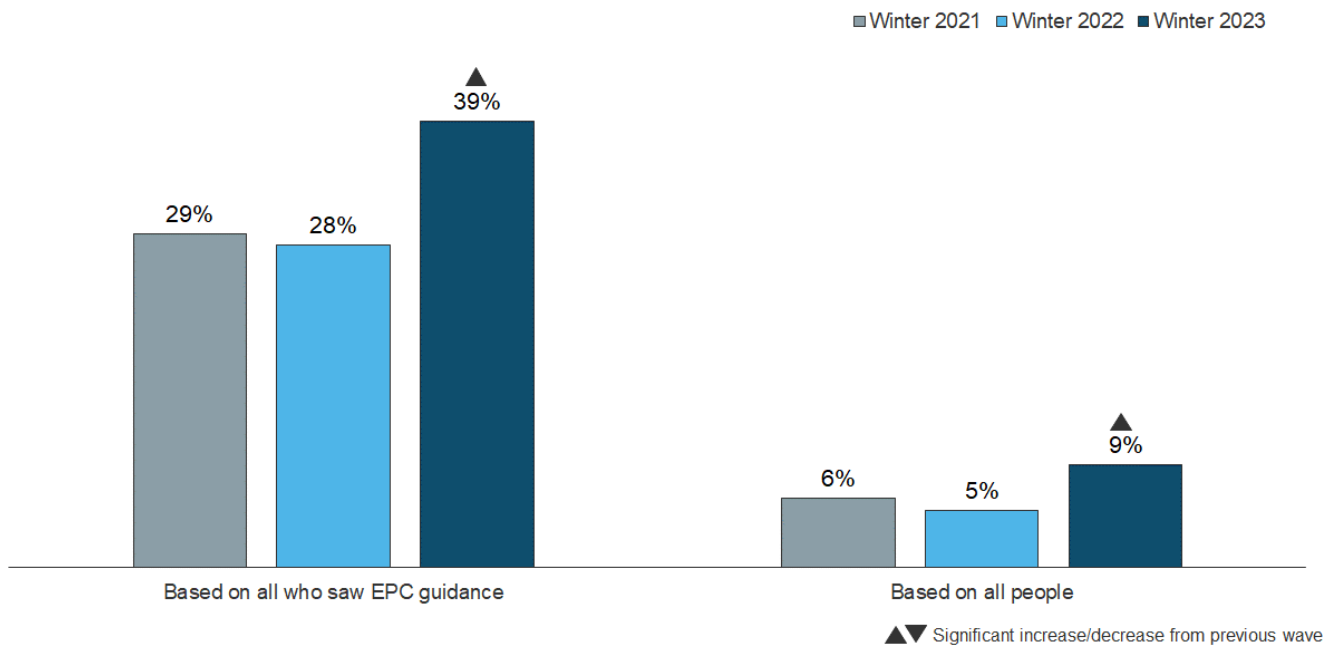
EPC Recommendations

Those who recalled seeing the section of their EPC on energy efficiency were asked whether they had made large or small changes to their home based on these recommendations. Overall, 26% of those who had seen the recommendations said they had made large energy efficiency changes to their home in the last 12 months (up from 20% in Winter 2022), while 48% said they had made small energy efficiency changes to their homes (up from 40% in Winter 2021). Owner-occupiers were more likely than renters to report making any changes (73% compared with 65%).

Combining both small and large changes, 72% said they had made changes based on recommendations they had seen, with this having increased from 54% in Winter 2022 and 61% in Winter 2021.

Where changes had been made, a clarification question was asked to confirm whether people had made the changes directly or partly because of the guidance in their home’s EPC, or if they would have made the changes anyway. Of those who said they had seen the section of their EPC on energy efficiency, 39% said they made these changes based on the EPC’s recommendations, up from 28% in Winter 2022. Based on all people, this equates to 9% of all people who made changes to their home as a result of seeing the energy efficiency recommendations in their home’s EPC, up from 5% in Winter 2022 (Figure 7.3).

Figure 7.3: Made any changes to home because of recommendations on EPC (based on those who had seen the recommendations section and on all wave respondents), Winter to 2023



EPCIMPROVE. Now think about the recommendations you saw on your Energy Performance Certificate on how you could improve the energy efficiency of your home. Did you make any changes to your home based on these recommendations? Please select all that apply.

EPCDIRECT. And did you make these changes...?

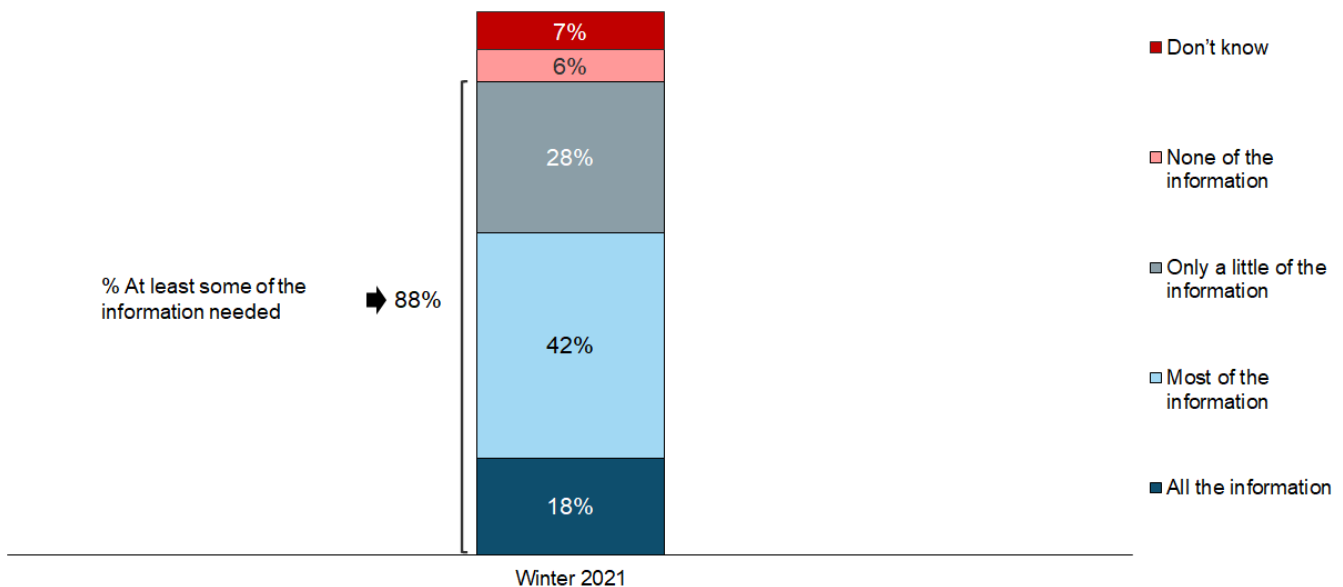
Base: All wave respondents who saw EPC guidance – Winter 2021 (854), Winter 2022 (722), Winter 2023 (903); / All wave respondents – Winter 2021 (3,706), Winter 2022 (3,569), Winter 2023 (3,733).

Information provided by EPC

In Winter 2021⁶, regardless of whether they were directly motivated by EPC guidance, all those who had seen the recommendations section of their EPC and subsequently made changes to their home were asked the extent to which their EPC gave them the information they needed to go ahead with these changes.

Just under two in ten (18%) in this subgroup said that the EPC gave them all the information they needed to make changes to their home to improve its energy efficiency (Figure 7.4). Roughly twice as many (42%) said the EPC gave them most of the information they needed, while 28% said it gave them only a little of the information they needed. Overall, 88% of those who made changes either directly or partly because of the guidance in their home’s EPC said it gave them at least some of the information they needed to make changes to their home.

Figure 7.4: Extent to which EPC recommendations provided information needed to go ahead with changes (based on those who had made improvements either directly or partly due to EPC recommendations), Winter 2021



EPCINFORM. To what extent did the recommendations on the Energy Performance Certificate inform you about what was needed to go ahead with the changes you made? Did it give you...

Base: All wave respondents who have made improvements based directly or partly on recommendations in their home’s EPC – Winter 2021 (516)

⁶ This question was not asked in Winter 2022 or Winter 2023.

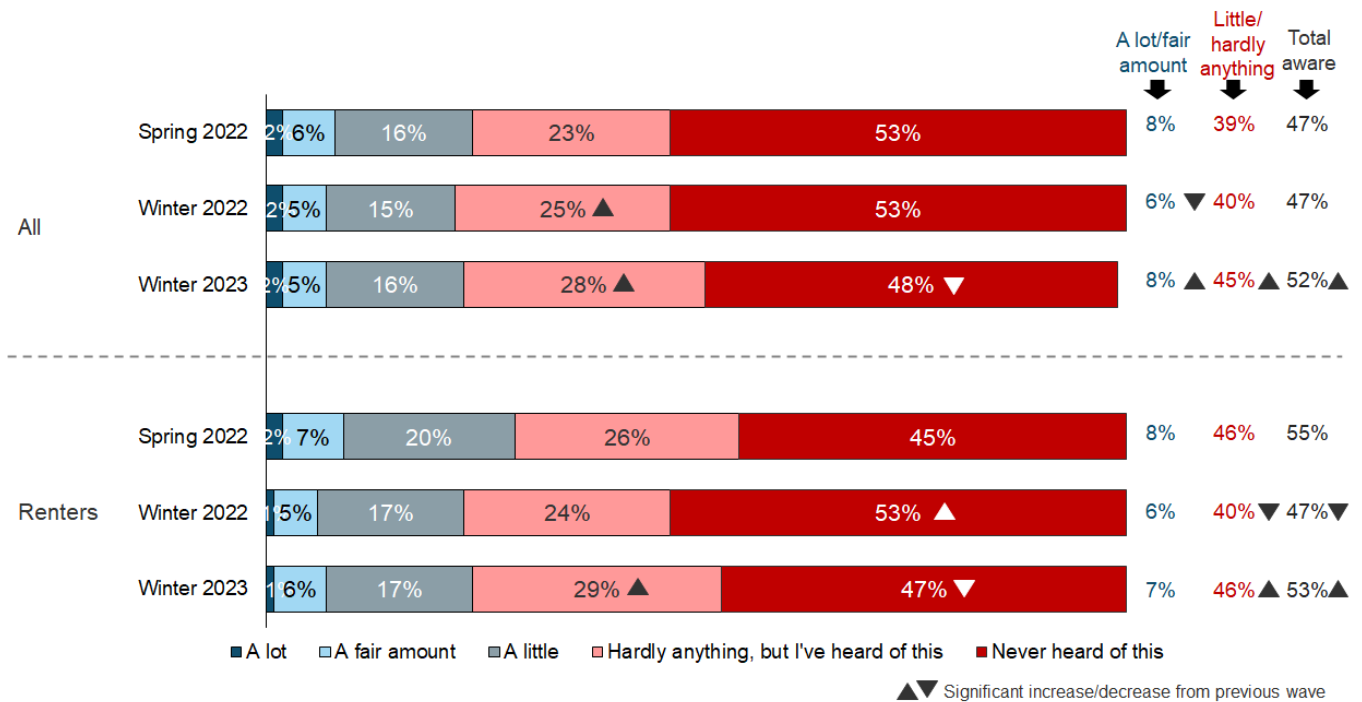
Awareness of rental property standards

In Spring 2022, Winter 2022 and Winter 2023, people were asked how much they knew about the minimum energy standards for rental properties.

In Winter 2023 just over half (52%) said they had at least some awareness of this, with 2% saying they knew a lot, 5% a fair amount, 16% a little, and 28% hardly anything (Figure 8.1). Overall awareness had increased from 47% in Winter 2022, with this driven by an increase in those who had knew hardly anything but had heard of rental standards (28% up from 25%).

Among renters, overall awareness had also increased since Winter 2022 (53% up from 47%), but this constitutes a return to Spring 2022 levels, rather than any longer-term increase. Again, this increase was driven by those who knew hardly anything about the standards (29% up from 24%).

Figure 8.1: Awareness of energy efficiency standards in rental properties (based on all people and all renters), Spring 2022, Winter 2022 and Winter 2023



RENTALSTAND. The next question is on energy standards in rental properties. How much, if anything, do you know about the minimum energy efficiency standards for rental properties?

Base: All wave respondents – Spring 2022 (4,286), Winter 2022 (3,519) Winter 2023 (3,682); Renters – Spring 2022 (966), Winter 2022 (869), Winter 2023 (857).

Awareness of minimum energy efficiency standards was higher among people educated to degree level (63% compared with 35% of people with no qualifications). Awareness was also higher for people aged 35 to 54 (59% of those aged 35 to 44 and 56% of those aged 45 to 54) than among older and younger people (46% of those aged 16 to 24, 48% of those aged 65 and over).

Awareness was also lower in the North East (45%) and East of England (44%) compared with in London (58%) and the South West (59%).

Insulation in the Home

The public are asked in Winter 2021 and Winter 2022, whether any of the following types of insulation had been installed in their home, and, if not installed, whether they had considered it:

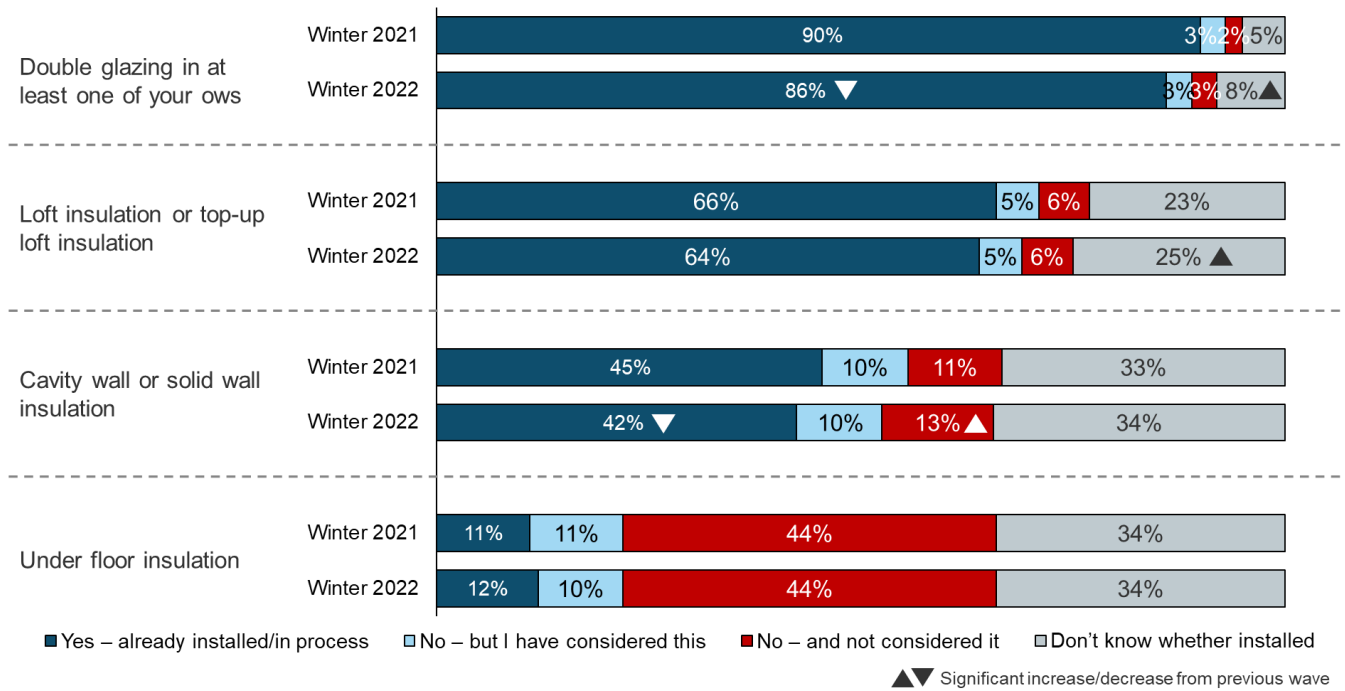
- Loft insulation or top-up loft insulation
- Double glazing in at least one window
- Cavity wall insulation or solid wall insulation
- Under floor insulation

Figure 9.1 shows the results for this question based on all people. However, as people renting their homes are less likely to be aware of, or to be responsible for making decisions about, insulation measures in their home, Figure 9.2 displays the results for Winter 2022 split out by tenure.

In Winter 2022, the most commonly installed measures were double glazing (86% of all people, 94% of people living in owner-occupier households) and loft insulation or top-up loft insulation (64% of all people, 79% of those living in owner-occupier households). Smaller proportions said they had cavity or solid wall insulation installed (42% of all people, 52% of those living in owner-occupier households), while 12% of all people (and 15% of those living in owner-occupier households) had under floor insulation installed.

Around a third of all respondents did not know if their home had cavity or solid wall insulation (34%) or underfloor insulation (34%), while 25% did not know if their loft was insulated. The levels of 'don't know' were smaller for those living in owner-occupier households although still a fifth of this group did not know if their home had cavity or solid wall insulation (20%) or underfloor insulation (22%). Only small changes were observed between Winter 2021 and Winter 2022.

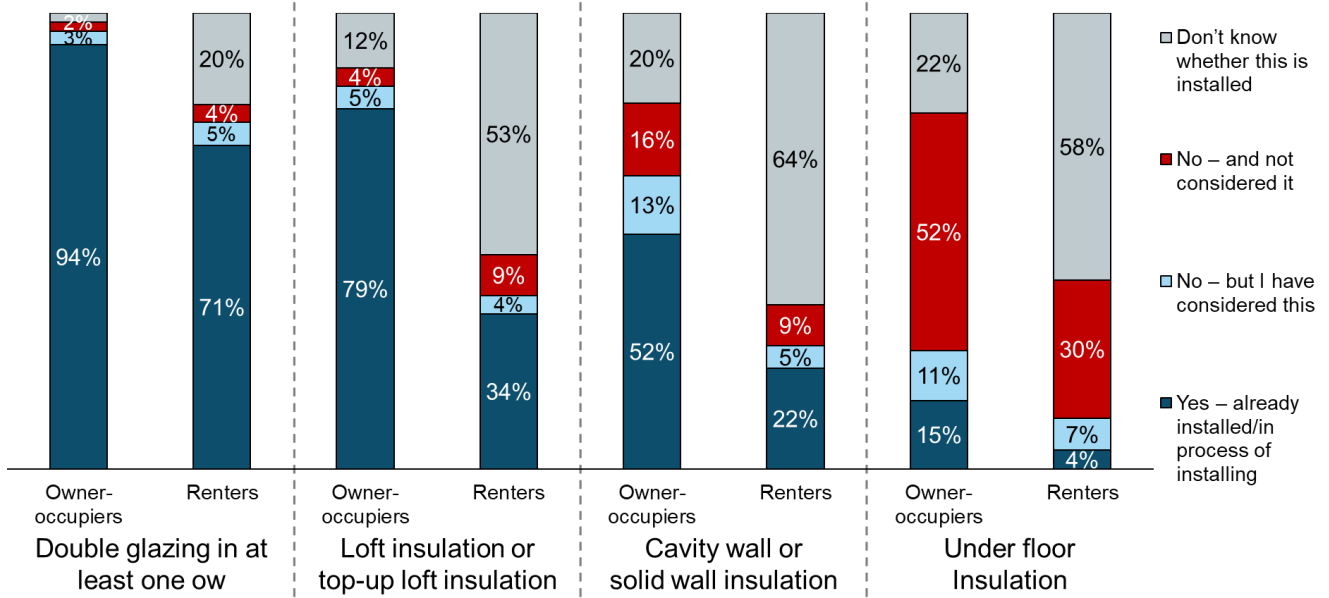
Figure 9.1: Types of insulation already installed in home (based on all people), Winter 2021 and Winter 2022



INSTALLA-E. Have any of these been installed in your home, even if not by you or your household?

Base: All wave respondents – Winter 2021: Loft insulation or top-up loft insulation (3,675), double glazing in at least one of your windows (3,691), cavity wall or solid wall insulation (3,627), under floor insulation (3,559); Winter 2022: Loft insulation or top-up loft insulation (3,536), double glazing in at least one of your windows (3,557), cavity wall or solid wall insulation (3,519), under floor insulation (3,469)

Figure 9.2: Types of insulation already installed in home (based on owner-occupiers and renters), Winter 2022



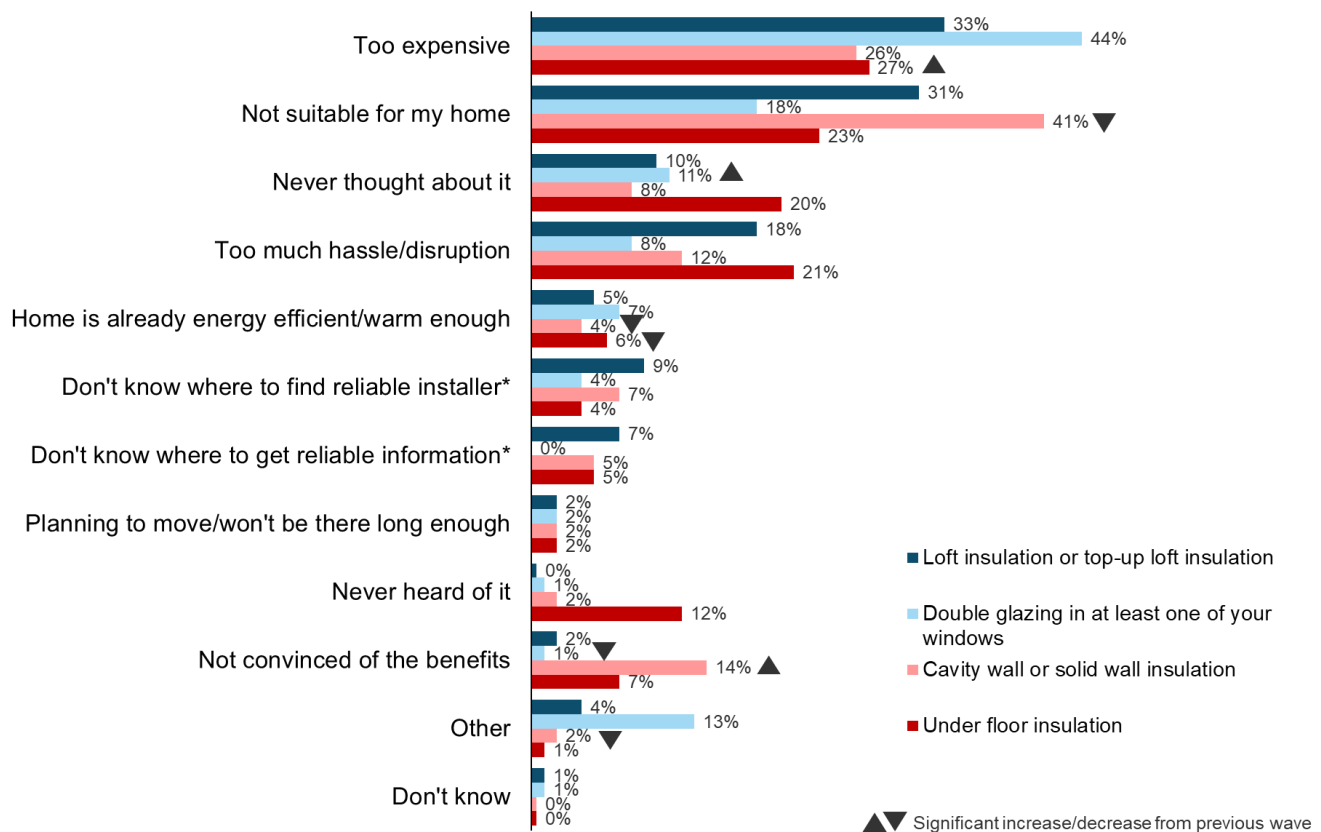
INSTALLA-E. Have any of these been installed in your home, even if not by you or your household?

Base: All wave owner-occupiers – Winter 2022: Loft insulation or top-up loft insulation (2,580), double glazing in at least one of your windows (2,585), cavity wall or solid wall insulation (2,560), under floor insulation (2,521); All wave renters – Winter 2022: Loft insulation or top-up loft insulation (853), double glazing in at least one of your windows (867), cavity wall or solid wall insulation (854), under floor insulation (846).

For each insulation measure, people who had not installed it were asked to select their reasons for this⁷. These findings have been based on those living in owner-occupier households only, as a large proportion of renters say that this is not their responsibility (Figure 9.3).

In Winter 2022 there was an increase from Winter 2021 in those that did not install underfloor heating because it was too expensive (from 22% to 27%). More people were not convinced of the benefits of cavity wall or solid wall insulation in Winter 2022 (14% up from 10% in Winter 2021) and 11% had never considered installing double glazing (from 2%).

Figure 9.3: Why have not yet installed specific types of insulation (based on owner-occupiers who have not installed each), Winter 2022



WHYNOINSTA-E. Are there any particular reasons why you haven't installed [...] so far?

Base: All owner-occupiers who have not installed loft insulation / double glazing / wall insulation / floor insulation – Winter 2022: Loft insulation (220), Double glazing (101), Cavity or solid wall insulation (730), underfloor insulation (1638)

In Winter 2022, for each type of insulation, among those living in owner-occupier households, the common barriers to installing these included cost, feeling it was unsuitable for their home, that they had never thought of it or that it entailed too much hassle or disruption. Cost was the main barrier for double glazing, loft insulation and underfloor insulation, and especially for double glazing where 44% of those living in owner-occupier households who had not installed this gave this as a reason.

The main barrier among those in owner-occupier households for installation of cavity or solid wall insulation was perceived unsuitability for their home (41%). While not as prevalent, this

⁷ Two new codes were added to the list of reasons in Winter 2022: 'I don't know where to find a reliable installer' and 'I don't know where to get reliable information'.

DESNZ Public Attitudes Tracker (Winter 2023, UK)

was also a major barrier to installation of loft insulation and under floor insulation (respectively 31% and 23% of those living in owner-occupier households).

Compared with Winter 2021, there was an increase in the proportion of people in owner-occupied homes mentioning expense as a barrier to installing under floor insulation (27%, up from 22%) and a decrease in the proportion of people saying that cavity or solid wall insulation was not suitable in their home (41%, down from 47%).

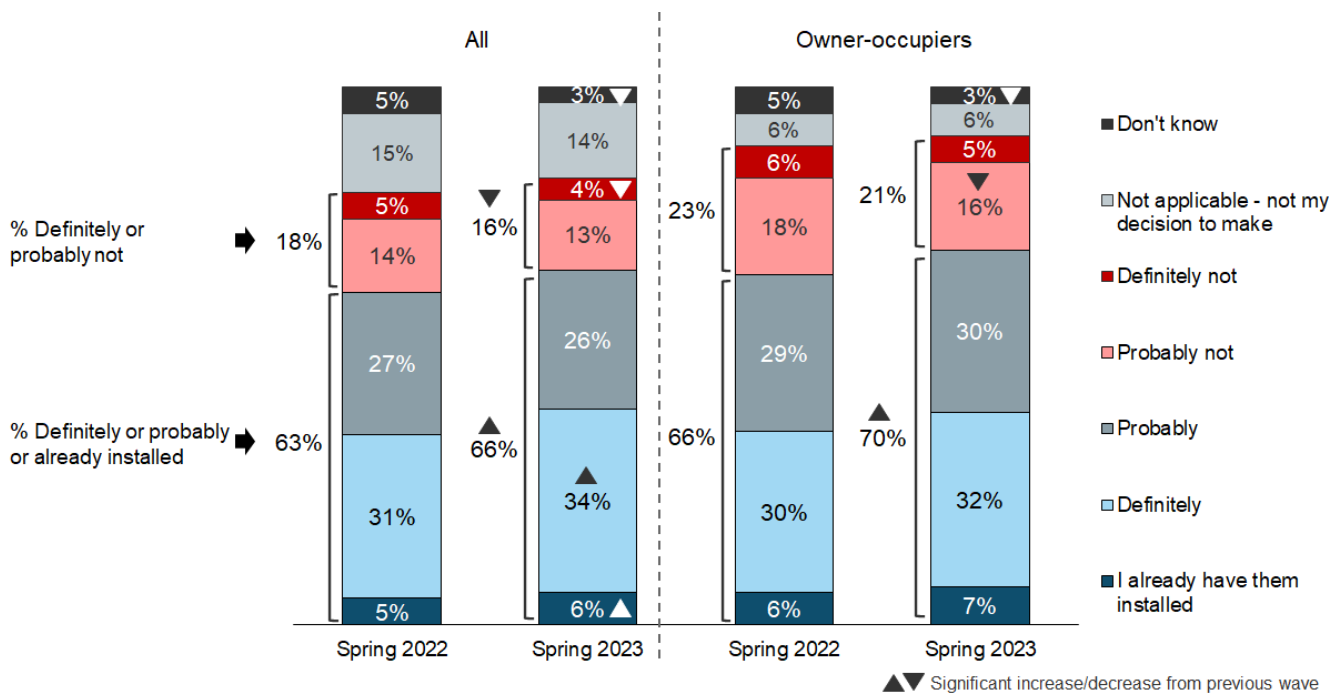
Those living in owner-occupier households were more likely to say they had never thought about installing double glazing (11%, up from 2% in Winter 2021) but were less likely to say they were not convinced of the benefits of this (1%, down from 7%). In contrast owner-occupiers without cavity or solid wall insulation were more likely to say they were not convinced of the benefits in Winter 2022 (14%, up from 10%).

Attitudes towards solar panels in the home

In Spring 2023, people were asked whether they were likely to install solar panels in their home in the next few years. The results are shown for all survey respondents as well as separately for people living in owner-occupied homes.

In Spring 2023, 66% of all respondents (up from 63% in Spring 2022) and 70% of those living in owner-occupied homes (up from 66%), said that they either already had or would be likely to consider installing solar panels in their home in the next few years. In Spring 2023, 32% of people living in owner occupier homes said they would definitely consider this, 30% said they would probably do so, and 7% already had these installed (Figure 10.1). Around a fifth (21%) of people living in owner-occupied homes said they probably would not (16%) or definitely would not (5%) do this.

Figure 10.1: Likelihood to consider installing solar panels in the home to generate electricity by tenure (based on all respondents), Spring 2022 and Spring 2023



SOLARHOME. Would you consider having solar panels installed in your current home to generate electricity, in the next few years?

Base: Spring 2022 / Spring 2023 - All wave respondents (4,367/4,400); Owner-occupiers (3,285/3,239)

Given that a large proportion of people in rented accommodation (30%) do not regard this issue as applicable to them, the remaining analysis in this section is based only on people living in owner-occupied homes.

Focussing on owner-occupied homes only, the following subgroups of people living in owner-occupied homes were more likely to be open to the idea of installing solar panels in their home⁸: People educated to degree level (77%, compared with 53% of those with no qualifications); people who live in a house or bungalow (71% compared with 51% of people who live in flats); and people with higher level occupations (ranging from 75% of those in managerial and professional occupations to 59% of those in semi-routine or routine

⁸ These percentages include those who had already had these installed in their home.

occupations). The likelihood of installing solar panels in the home declined with age from those aged 25 to 34 (82%) to those aged 65 and over (58%); 81% of those aged 35 to 44 were likely to install them, 78% of those aged 45 to 54, and 68% of those 55 to 64.

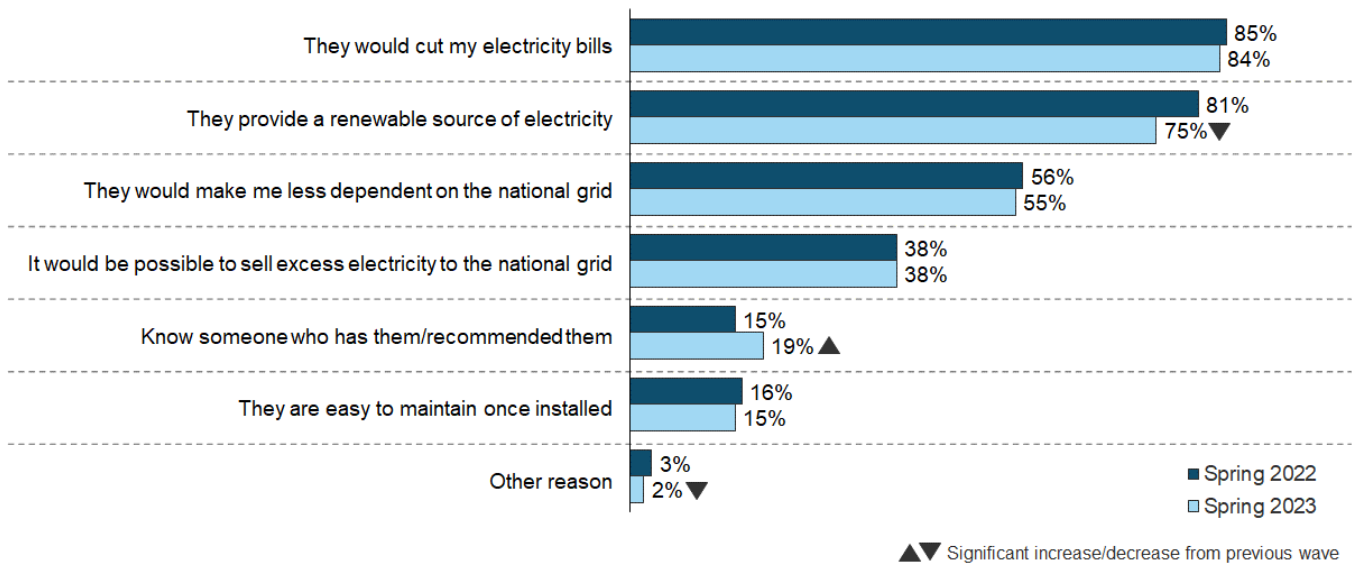
Reasons for being likely to install solar panels

62% of people living in owner-occupied homes in Spring 2023 who didn't already have solar panels said they were likely to install them in their home in the next few years. These people were asked their reasons for this and were presented with a list of possible reasons.

In Spring 2023, economic and environmental considerations continued to play a role in propensity to install solar panels (Figure 10.2). The two main motivations for considering solar panels were to cut electricity bills (84%) and to provide a renewable source of electricity (75%), albeit with this second reason chosen less often than in Spring 2022 (81%).

Other reasons for considering solar panels included reduced dependency on the national grid (55%), the ability to sell excess electricity to the grid (38%) and knowing someone who has them or having been recommended them (19%, up from 15% in Spring 2022). Ease of maintenance remained the least frequently selected motivator in Spring 2023 (15%).

Figure 10.2: Reasons for considering installing solar panels in the home to generate electricity (based on owner-occupiers who would consider this), Spring 2022 and Spring 2023



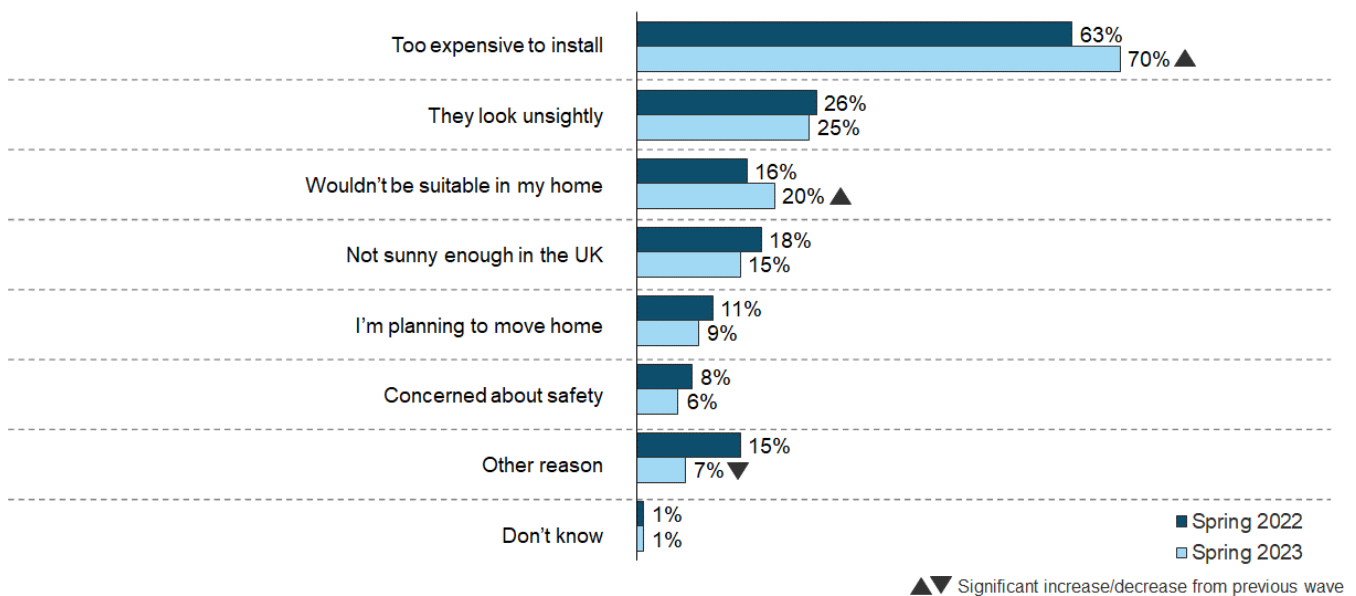
SOLARWHYINT. You said that you would consider installing solar panels. Why is this? Please select all that apply. Base: All wave owner-occupiers who would consider this - Spring 2022 (1,921), Spring 2023 (2,010)

Reasons for being unlikely to install solar panels

People living in owner-occupied homes who said they were unlikely to install solar panels in their home in the next few years (21% of all owner-occupiers in Spring 2023) were asked their reasons for this. Respondents were presented with a list of possible reasons.

Expense was by far the main barrier for owner-occupiers, with 70% of this subgroup saying they were too expensive to install, up from 63% in Spring 2022 (Figure 10.3). Other objections included looking unsightly (25%), not being suitable to install in their home (20%, up from 16% in Spring 2022)⁹, insufficient sun in the UK (15%), and plans to move home (9%).

Figure 10.3: Reasons for not considering installing solar panels in the home to generate electricity (based on owner-occupiers who would not consider this), Spring 2022 and Spring 2023



SOLPANWHYNO. You said that you probably or definitely wouldn't install solar panels. Why is this? Please select all that apply.

Base: All wave owner-occupiers who would not consider this – Spring 2022 (845), Spring 2023 (666)

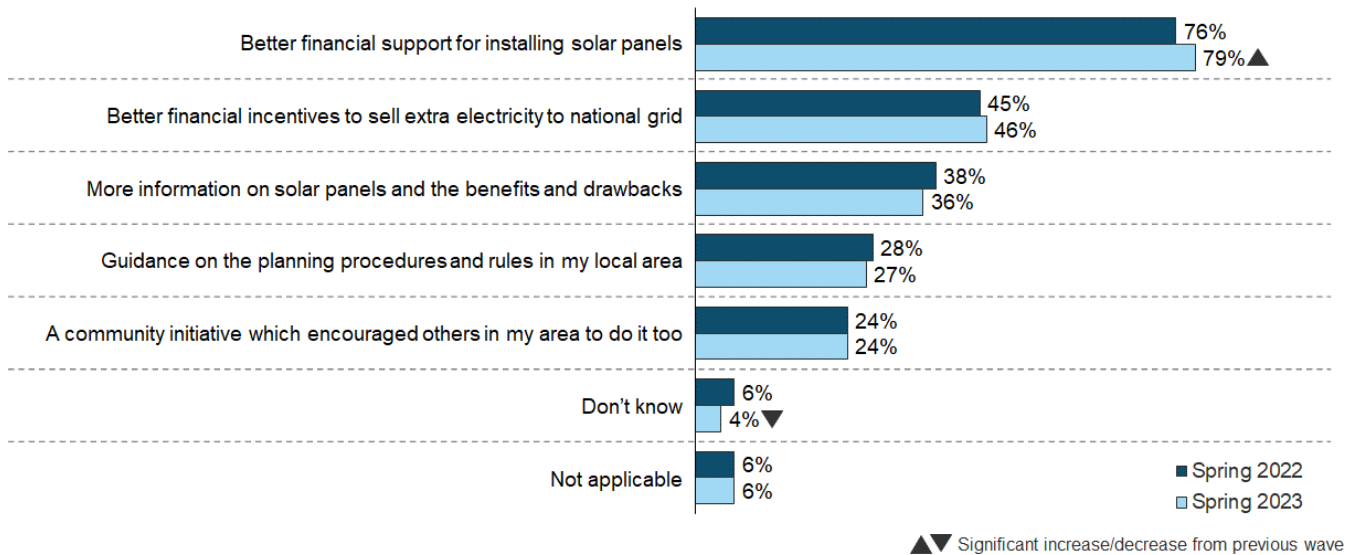
⁹ While this figure may seem relatively low, it is worth noting that 92% of people living in owner-occupied homes live in a house or bungalow and only 7% live in a flat.

What might encourage people to install solar panels

Excluding those who said this was not their decision to make, people living in owner-occupied homes who did not already have solar panels were asked which of a list of possible factors might encourage them to install solar panels (Figure 10.4).

In Spring 2023, better financial support for installation remained the most important encouragement factor: overall 79% selected this reason, and this had increased since Spring 2022 (76%). Other people in this subgroup would be encouraged by better financial incentives to sell electricity to the national grid (46%), and more information about solar panels (36%). Around a quarter would be encouraged by receiving guidance on local planning rules (27%) or by community initiatives (24%).

Figure 10.4: What would encourage people to install solar panels (based on owner-occupiers responsible for decision who have not yet installed panels), Spring 2022 and Spring 2023



SOLARENC. Which, if any, of the following might make you more likely to consider installing solar panels? Please select all that apply.

Base: All wave owner-occupiers who have not already installed them excluding those who said it was not their decision to make – Spring 2022 (2,907), Spring 2023 (2,799)



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