BEIS Public Attitudes Tracker: Heat and Energy in the Home Winter 2022, UK

9 MARCH 2023 **Official Statistics**

This report covers the results of questions on heating and energy usage in homes asked in the BEIS Public Attitudes Tracker. This includes 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 Winter 2022 results for annual questions on heating and insulation in the home, low carbon heating and Energy Performance Certificates (EPCs), and for a question on rental property energy standards previously asked in Spring 2022.

This report also includes the results from questions on solar panels asked in Spring 2022.

What you need to know about these statistics: These results from the 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. Some revisions were made following the publication of the Winter 2021 report. See the Winter 2021 Revision Note for details.

The table below shows the topics covered in this report and when these questions were included in the BEIS 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	Quarterly	Link
Low carbon heating systems	Winter 2021, Winter 2022	Link
Heating and cooling in the home	Winter 2021, Winter 2022	Link
Attitudes towards heating in the home	Winter 2021, Winter 2022	Link
Replacing heating systems	Winter 2021, Winter 2022	Link
Insulation in the Home	Winter 2021, Winter 2022	Link
Attitudes towards solar panels in the home	Spring 2022	Link
Energy Performance Certificates (EPCs)	Winter 2021, Winter 2022	Link
Awareness of rental property energy standards	Spring 2022, Winter 2022	Link

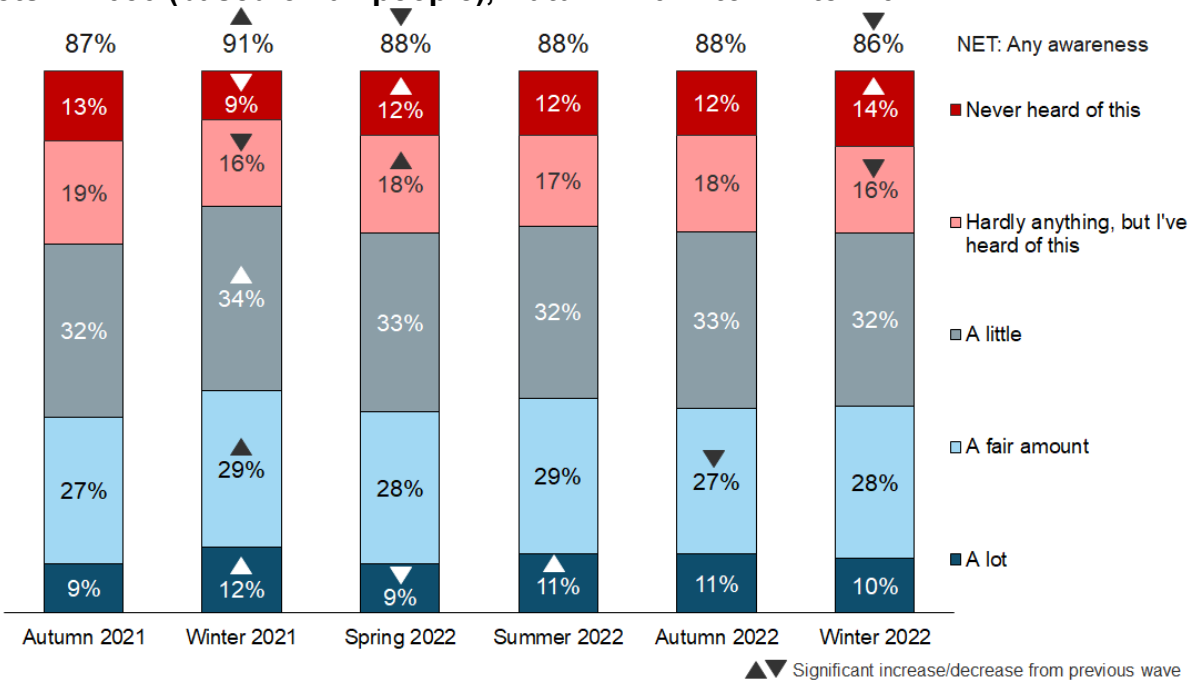
Awareness of heating changes to meet Net Zero targets and of low carbon heating

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 2022, after reading this explanation, 86% of people said they were aware of the need to change the way homes are heated to reach Net Zero targets (Figure 1.1), down slightly from 88% in Spring 2022 to Autumn 2022, and from 91% in Winter 2021. This change is explained by a slight increase in the proportion of those not aware (14% in Winter 2022 up from 12% in Spring to Autumn 2022) and a corresponding decrease in those who knew hardly anything about this (16% down from 18% in Autumn 2022). Reported levels of the extent of knowledge were otherwise broadly stable over time, with 38% saying they knew at least a fair amount and 48% saying that they knew a little or hardly anything about the need for changes in domestic heating to reach the Net Zero target.

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 2022



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) (Asked Quarterly)

In Winter 2022 there were similar patterns of difference by key demographics to those seen in earlier waves. There was a difference in overall awareness of domestic heating changes by

gender (90% of men compared with 83% of women) and men were also considerably more likely to report knowing at least a fair amount about the need to change the way homes are heated (47%, compared with 29% of women).

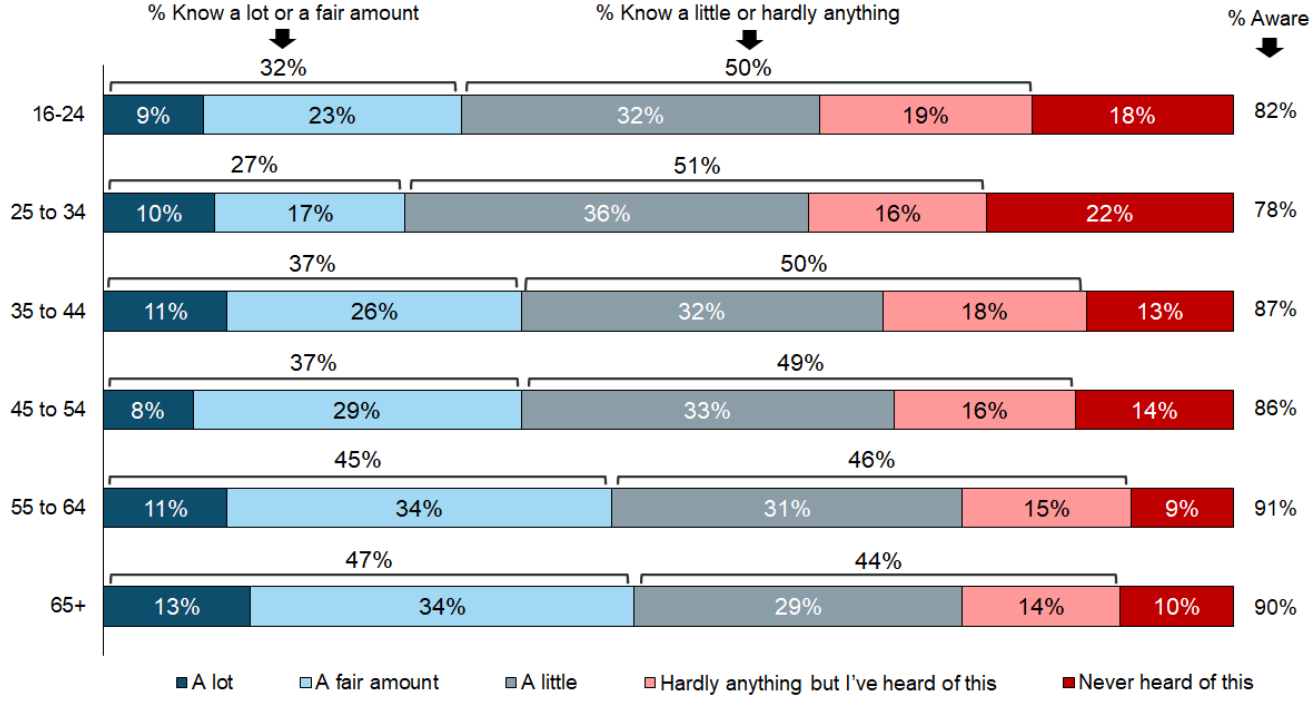
Overall awareness of the need for domestic heating changes was also higher among people living in owner-occupied homes (90% compared with 79% of people living in rented homes), with a similar differential in the proportion who said they knew at least a fair amount about this (43%, compared with 28% of renters).

The proportion of people who said they knew at least a fair amount about the need to change the way homes are heated was higher for people educated to degree level (53%, compared with 35% of those with another qualification and 21% of people with no qualifications).

By geography, the proportion reporting knowing at least a fair amount was higher in the East of England (44%), South West (43%) and South East (42%) compared with in Northern Ireland (31%) and Yorkshire and the Humber (30%).

Perceived levels of knowledge generally increased by age. The proportion reporting knowing at least a fair amount was lowest for those aged under 35 (32% of those aged 16 to 24 and 27% of those aged 25 to 34). This proportion then increased through the age bands to 47% 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 2022



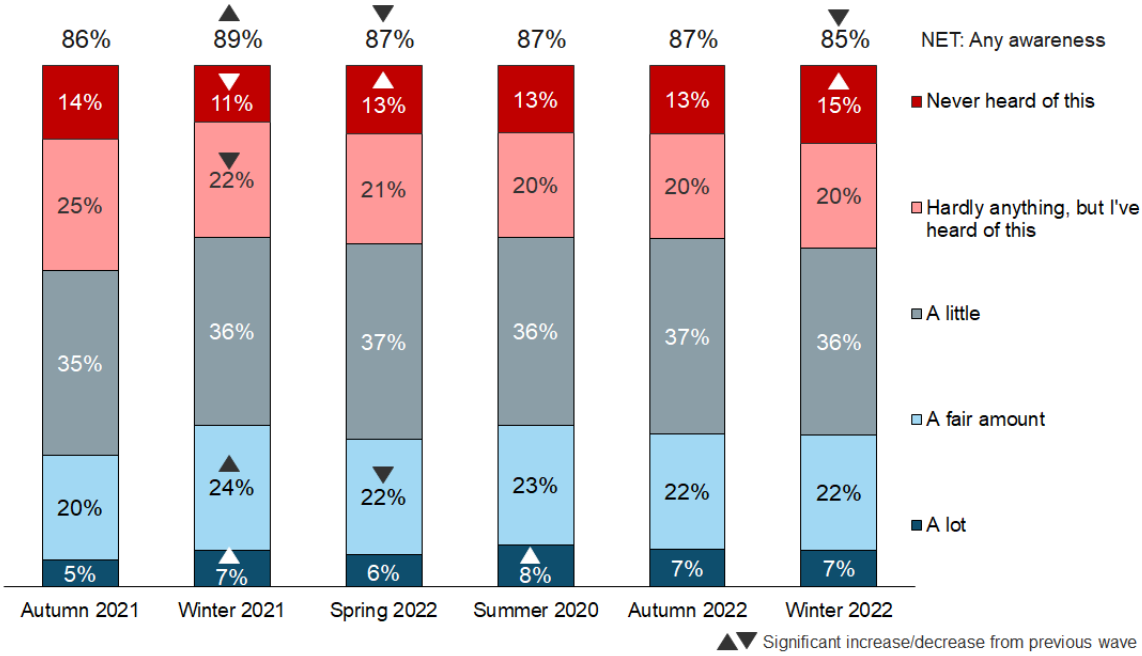
HEATHOMEKNOW. In the lead up to 2050, the way we heat almost all of our homes and buildings will need to change in order to reach the UK government's net zero target. Before today, how much if anything did you know about this?
Base: All wave respondents Winter 2022 – 16 to 24 (211), 25 to 34 (481), 35 to 44 (516), 45 to 54 (557), 55 to 64 (673), 65+ (1,087)

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.

In Winter 2022, after reading this explanation, 85% of people said they had heard of low-carbon heating systems, slightly lower than in Winter 2021 (89%) through to Autumn 2022 (87%). Around three in ten (29%) said they knew at least a fair amount about low-carbon heating systems. In Winter 2022, this comprised 7% saying they knew a lot and 22% saying they knew a fair amount (Figure 1.3).

Figure 1.3: Awareness of low-carbon heating systems (based on all people), Autumn 2021 to Winter 2022



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) (Asked Quarterly)

The proportion who reported knowing at least a fair amount about low-carbon heating systems was higher among men (38%, compared with 21% of women) and people educated to degree level (41%, compared with 26% of those with a lower qualification and 13% of people with no qualifications), and owner-occupiers (33% compared with 23% of renters). Levels of reported knowledge were however lower among younger people; the proportion who knew at least a fair amount was 20% among those aged 16-24 and 25-34 compared with between 29% and 35% in all other age groups.

The proportion knowing at least a fair amount about low carbon heating also varied by geography; it was highest in the East (38%) and the South West (37%) and lowest in Yorkshire and the Humber (20%) and Northern Ireland (19%).

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.
- **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.
- **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.
- **Solar thermal panels** - these capture heat from the sun to provide hot water, typically in a storage tank. This is **not the same as solar panels** which use energy from the sun to produce electricity.
- **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 2022, as in Winter 2021, awareness varied across the different types of heating systems (Figure 2.1).

Awareness was highest for solar thermal panels (76%); however, previous question testing has indicated that these may be confused with solar photovoltaic panels, so it is possible that this is an overestimate[1]. Awareness was also high for air source heat pumps (69%), ground source heat pumps (66%) and biomass boilers (59%), while around half had heard of hybrid heat pumps (49%) and heat networks (49%). People were least aware of hydrogen-ready boilers (34%).

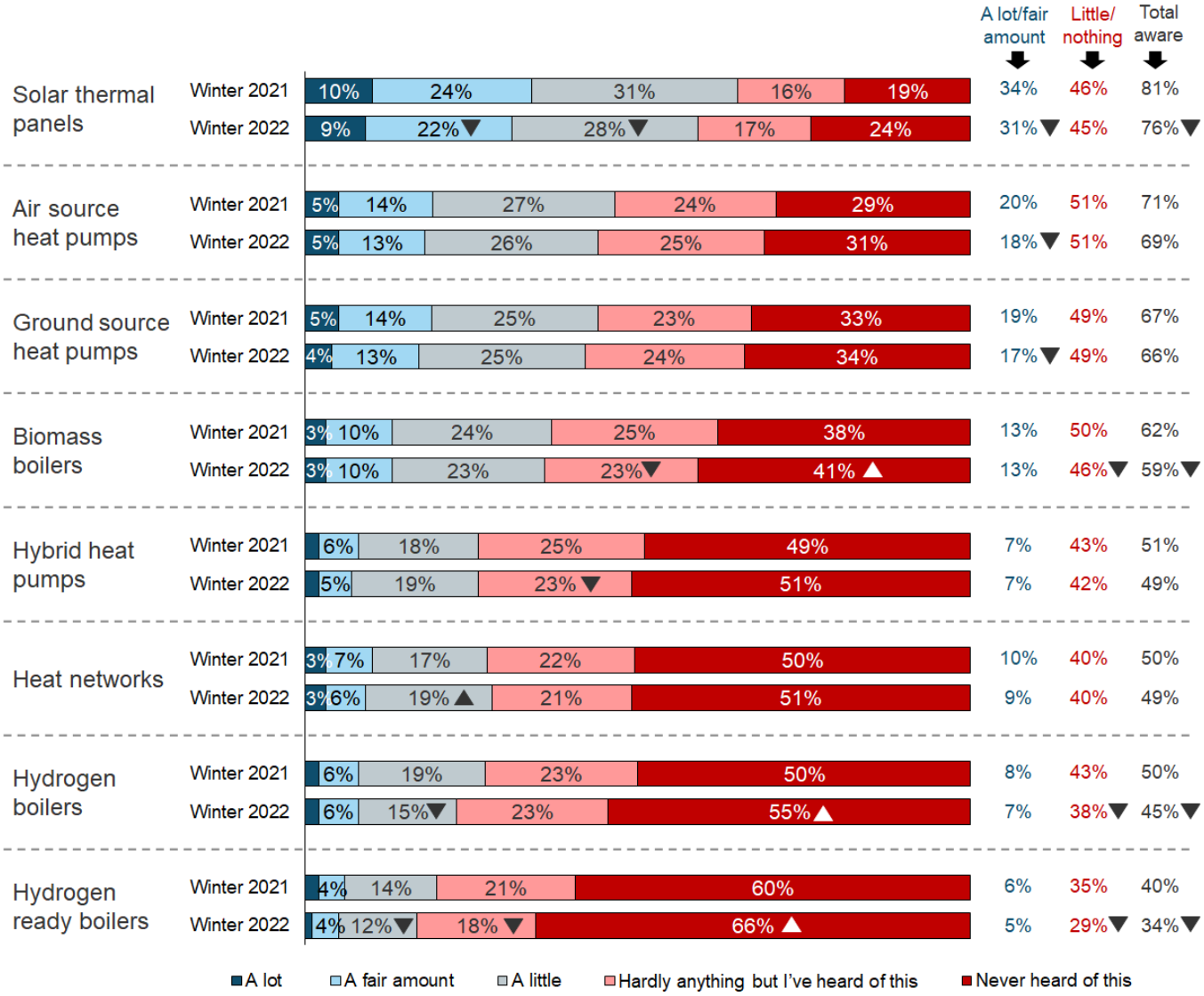
Between Winter 2021 and Winter 2022, there have been some decreases in overall levels of awareness of certain types of low carbon heating systems: solar thermal panels (awareness has fallen from 81% to 76%); biomass boilers (from 62% to 59%); hydrogen boilers (from 50% to 45%); and hydrogen-ready boilers (from 40% to 34%).

Levels of perceived knowledge about these types of low carbon heating system were considerably lower than the proportion claiming to have at least heard of them I, with the proportion stating that they knew at least a fair amount ranging from 5% (hydrogen-ready

[1] In the question wording, we explained that these were 'not the same as solar panels which use energy from the sun to produce electricity' although it is likely that some confusion remained.

boilers) to 31% (solar thermal panels). By type of heating system, the general pattern of extent of knowledge followed the same pattern as overall awareness. Between Winter 2021 and Winter 2022, there have been small declines in the level who say they knew at least a fair amount about solar thermal panels (from 34% to 31%), air source heat pumps (from 20% to 18%) and ground source heat pumps (from 19% to 17%).

Figure 2.1: Knowledge about specific low-carbon heating systems (based on all people), Winter 2021 and Winter 2022



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

As in Winter 2021, across all low carbon heating types, men and those with higher levels of education displayed higher levels of awareness and knowledge.

The age pattern, on the other hand, differed by type of heating system. The proportion who knew a fair amount or a lot about air source heat pumps increased by age (from 11% of 16 to 24 year olds to 25% of those aged 55-64). On the other hand, awareness of solar thermal

panels was highest for the youngest age groups (38% of 16 to 24 year olds compared with 31% overall).

As in Winter 2021, awareness and knowledge of low carbon heating systems was higher for those who had more knowledge of the concept of Net Zero. For example, 83% of those who were knew at least a fair amount about Net Zero were aware of air source heat pumps, compared with only 33% 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 five different low carbon systems the next time they needed to change their heating system or boiler[2].

In Winter 2022, at least two in ten people said they did not know enough about each of these heating systems to form a view on this, ranging from 21% who said they didn't know enough about solar thermal panels to 30% for hybrid heat pumps. (Figure 2.2).

Where people 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[3].

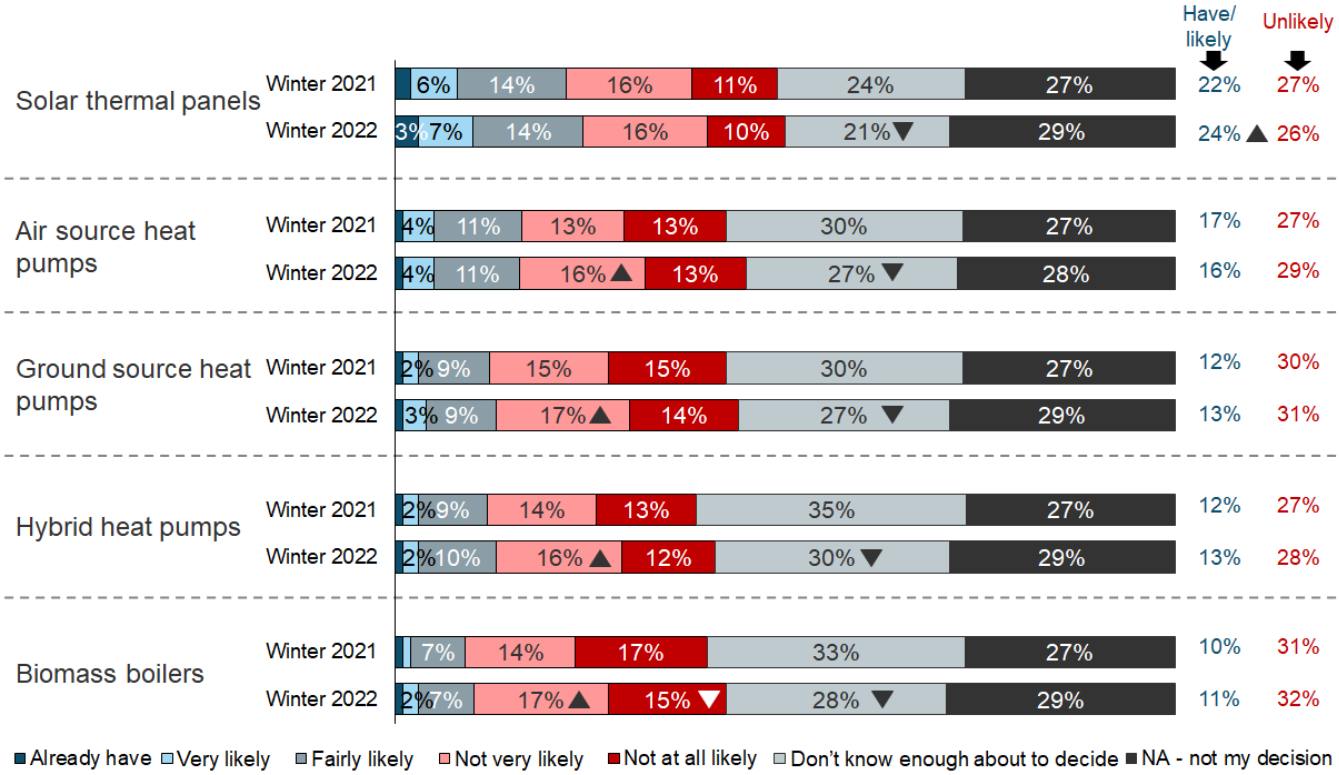
Around three in ten (between 26% and 32%) said that they were unlikely to install each of these. Including the very small proportions who had already installed these, people were most likely to say they would adopt solar thermal panels (24%). People were least likely to consider adopting biomass boilers (11%).

22% of all respondents were likely to install any type of heat pump (air source, ground source or hybrid) or already had a one installed. Not including those who already had a heat pump installed, 20% of all respondents said they were likely to install a heat pump of any type.

Only relatively small changes have been observed between Winter 2021 and Winter 2022. In general, people were slightly less likely to say they didn't know enough about a particular heating system to decide and were slightly more likely to say they were not very likely to install one.

[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.
[3] Although in the case of solar thermal panels, this difference was not significant.

Figure 2.2: Whether likely to install specific low-carbon heating systems next time they need to change (based on all people), Winter 2021 and Winter 2022



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 – Winter 2021: Air source heat pumps (3,677), Ground source heat pumps (3,656), Hybrid heat pumps (3,656), Biomass boilers (3,652), Solar thermal panels (3,655); Winter 2022: Air source heat pumps (3,533), Ground source heat pumps (3,520), Hybrid heat pumps (3,513), Biomass boilers (3,512), Solar thermal panels (3,522)

Around three in ten (29%) said that this was not their decision to make. This was mainly explained by around two thirds of renters (between 66% and 67%) saying that this was not their decision to make for each given type of low-carbon heating system, a figure which was much lower among people in owner-occupier households (between 8% and 10%). Figure 2.3 shows the same results based only on people living in owner-occupied households.

In Winter 2022, a high proportion of those living in owner-occupied households did not know enough about them to decide whether they would install a low carbon heating system in the future. This was highest for hybrid heat pumps (39%) and lowest for solar thermal panels (26%), although as in Figure 2.2 the proportion who selected this response fell in all cases between Winter 2021 and Winter 2022.

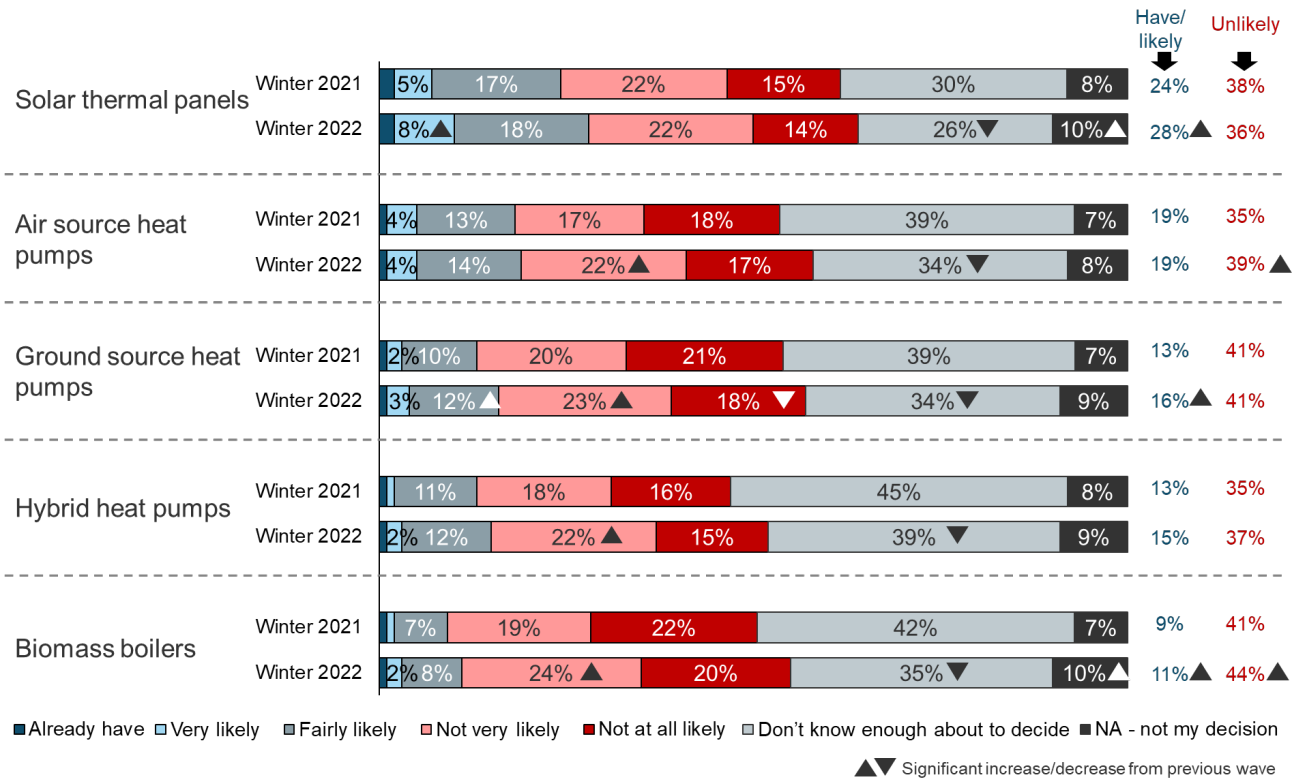
Amongst those who did express an opinion, a greater proportion said they were unlikely to change to a low carbon heating system than the proportion who said they were likely to do so. More than a third of those living in owner-occupier households (between 36% and 44%) said that they were unlikely to install each of these.

Those living in owner-occupier households were most likely to say they would consider installing solar thermal panels or already had them installed (28%), with 8% saying they would be very likely to do so. This subgroup were least likely to install a biomass boiler, or already have one installed (11%).

Between Winter 2021 and Winter 2022, among people living in owner-occupied homes, there were small increases in the proportion who said they already had or would be likely to install solar thermal panels, ground source heat pumps, and biomass boilers. However, there was also an increase in the proportion who said they would be unlikely to install biomass boilers and air source heat pumps.

24% of those in owner-occupier households said they would be likely to install any type of heat pump (whether air source, ground source or hybrid).

Figure 2.3: 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 and Winter 2022



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: Air source heat pumps (2,738), Ground source heat pumps (2,728), Hybrid heat pumps (2,730), Biomass boilers (2,725), Solar thermal panels (2,727); Winter 2022: Air source heat pumps (2,566), Ground source heat pumps (2,561), Hybrid heat pumps (2,554), Biomass boilers (2,554), Solar thermal panels (2,561)

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, 32% of men compared with 25% of women already had or would be likely to install solar thermal panels.

Older age groups were less likely to consider each system. For example, higher proportions of those aged 55 to 64 (37%) and over 65 (40%) responded that they were not very or not at all likely to install air source heat pumps compared with those in middle to younger age groups (proportions ranged from 14% to 29%).

Including those who had already installed them, people living in owner-occupier households who were very concerned about climate change were more likely, compared with those who were not concerned, to consider air source heat pumps (25% compared with 13%), ground source heat pumps (20% compared with 8%), hybrid heat pumps (18% compared with 11%) and solar thermal panels (34% compared with 21%).

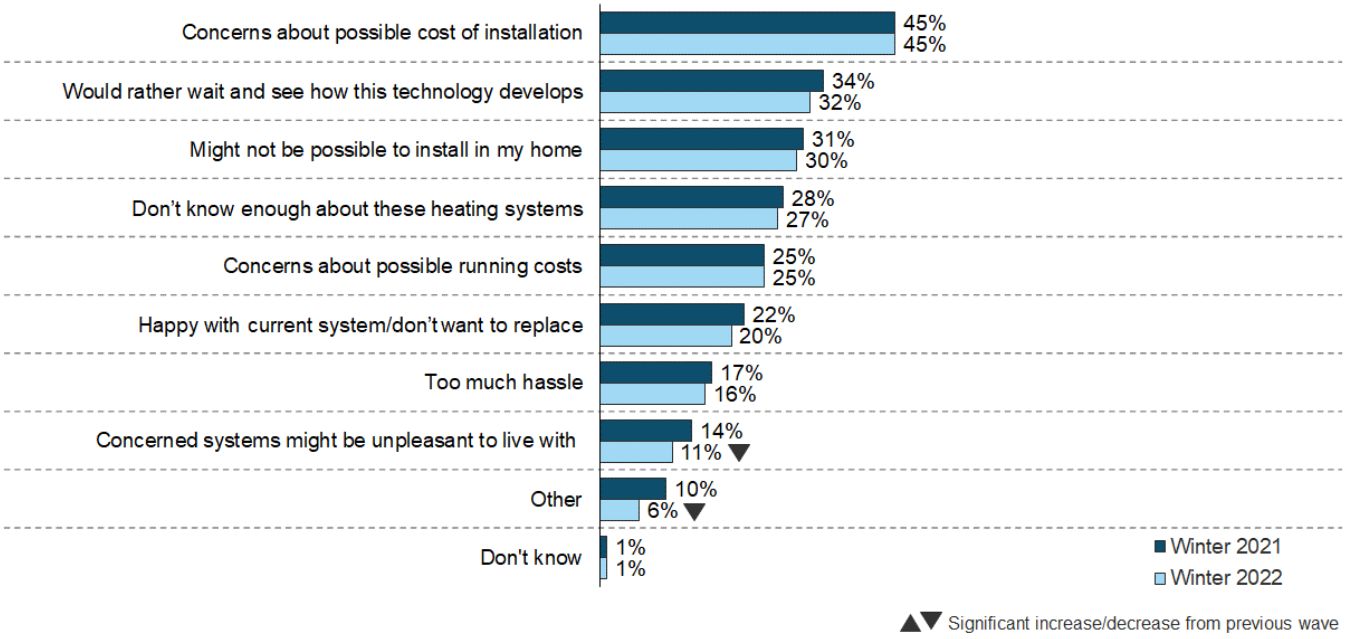
Overall, in Winter 2022, 57% of people living in owner-occupier households, said that they were unlikely to install at least one of the five different types of low carbon heating systems if they needed to replace their heating system (up from 56% in Winter 2021). This subgroup was asked their reasons for this (Figure 2.4).

In Winter 2022, the main barriers to changing to a low carbon heating system included concerns about the cost of installation (45%), a preference to wait to see how the technology develops in time (32%), or a perception that it might not be possible to install in their home (30%). The latter view was especially prevalent among those living in a flat or maisonette (41%).

The other barriers were mentioned by at least one in ten; these included not knowing enough about the heating systems (27%), concerns about running costs (25%), because they were happy with their existing system (20%), thinking it was too much hassle (16%), or due to concerns that it might be unpleasant to live with (for example, that it may be noisy or unsightly) (11%).

The findings for Winter 2022 remain broadly similar when compared with Winter 2021.

Figure 2.4: 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 and Winter 2022



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)

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 2022, 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 2.5). This combined proportion ranged from 54% for Statement 5 to 82% for Statement 4. For the first four statements there was an increase in the proportion that said that they neither agreed nor disagreed compared with Winter 2021.

Even among people who said they knew at least a little about low carbon heating systems, the level answering 'neither agree nor disagree' or 'don't know/don't have enough information' was still high, ranging from 44% for Statement 5 to 78% for Statement 4.

Reinforcing the results in Figure 2.4 which showed that the strongest barrier for rejecting low carbon systems was installation costs, people were considerably more likely to agree (38%) than disagree (2%) that 'low carbon heating systems are expensive to install'. They were, however, also more likely to agree (18%) than disagree (7%) that "low carbon systems are cheaper to run than conventional systems".

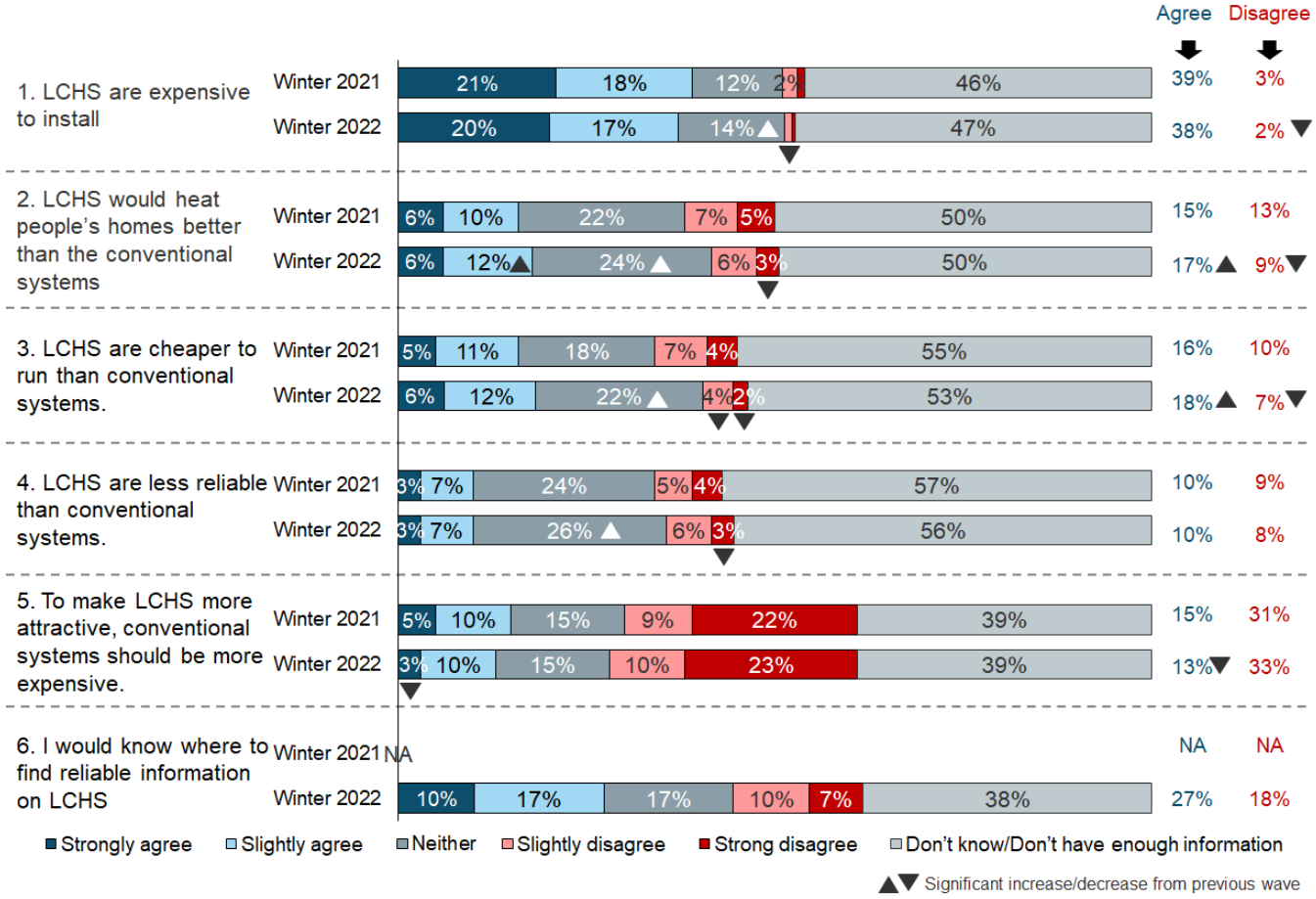
People remained over twice as likely to disagree (33%) than agree (13%) that "conventional heating systems should be made more expensive to make low carbon alternatives more attractive".

People were more inclined to agree (27%) than disagree (18%) that they "would know where find reliable information on low-carbon heating systems".

Views among those who felt able to offer an opinion were more evenly balanced when it came to reliability 'Low-carbon heating systems are less reliable than conventional systems' with similar proportions who agreed (10%) to those who disagreed (8%).

The patterns of findings in Winter 2022 remain similar to Winter 2021, although there have been some shifts suggesting people were slightly more positive about these technologies in Winter 2022. In Winter 2022, there was a slight increase in the proportion who agreed that these heating systems would heat homes better (from 15% in Winter 2021 to 17% in Winter 2022) and that they are cheaper to run (from 16% to 18%). People were however less likely to agree that the costs of conventional heating systems should rise to increase the appeal of low-carbon alternatives (from 15% in Winter 2021 to 13% in Winter 2022).

Figure 2.5: Attitudes towards low carbon heating systems (LCHS) (based on all people), Winter 2021 and Winter 2022



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: expensive to install (3,684), would heat people's homes better than the conventional systems (3,679), cheaper to run than conventional systems (3,680), less reliable than conventional systems (3,677), conventional systems should be more expensive (3,676); Winter 2022: expensive to install (3,557), would heat people's homes better than the conventional systems (3,553), cheaper to run than conventional systems (3,553), less reliable than conventional systems (3,550), conventional systems should be more expensive (3,556), know where to find information (3,551)

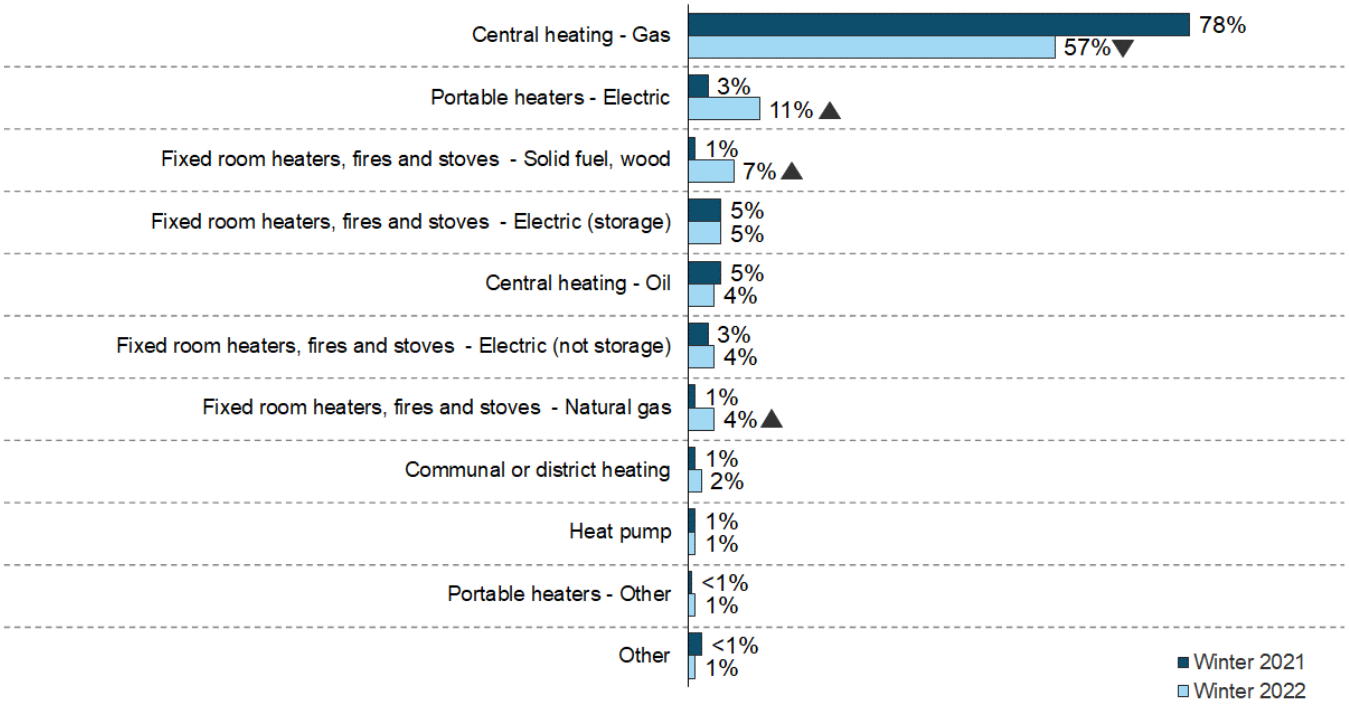
Those who were concerned about climate change were more likely than those who were not concerned to agree with statements 1, 2, 3, 5 and 6, and to disagree with statement 4.

Heating and cooling in the home

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

In Winter 2022, the main system for heating the home remained gas central heating (57%), however this was considerably lower than in Winter 2021 (78%). Instead, there are observed increases in the use of portable electric heaters (from 3% in Winter 2021 to 11% in Winter 2022), solid fuel and wood heaters (from 1% to 7%) and natural gas heaters (from 1% to 4%) (Figure 3.1). This suggests a shift in behaviour from a heating method that heats a larger space to those that can be used to target smaller spaces for heating.

Figure 3.1: Main method of heating home (based on all households), Winter 2021 and Winter 2022

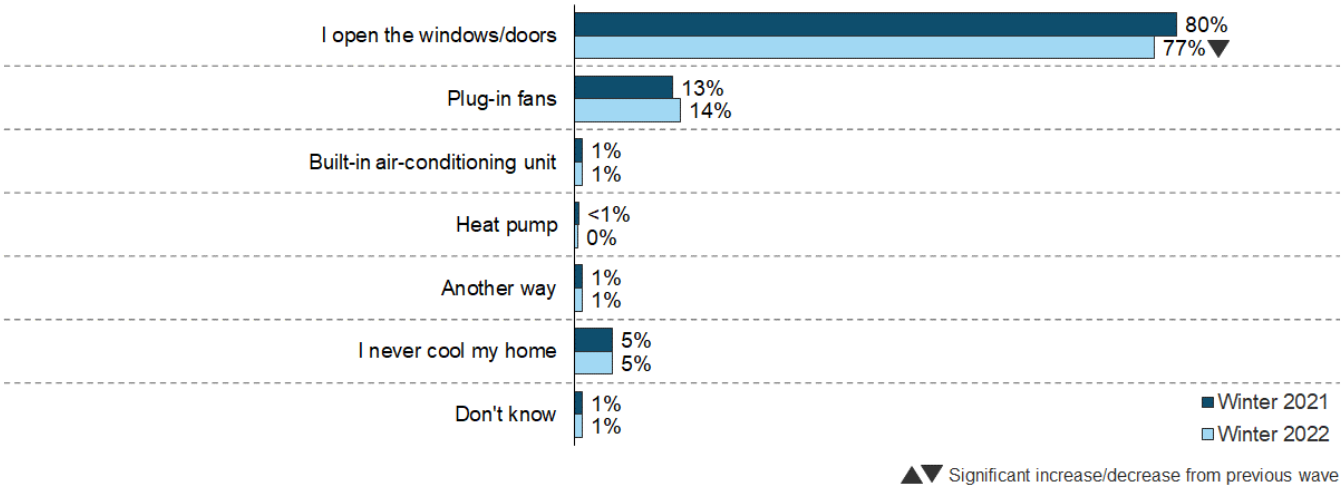


HEATMAIN. What is the main way you heat your home?
Base: All wave households – Winter 2021 (3,484), Winter 2022 (3,573)
Note: At this question, results are weighted to households (not individuals)

The decreased use of gas central heating was observed in both rented households (from 72% in Winter 2021 to 54% in Winter 2022) and owner-occupied households (from 82% to 60%).

In Winter 2022, people were asked how they mainly cool their homes when they need to (Figure 3.2). As in Winter 2021, people mainly opened windows and doors (77%) rather than using cooling equipment, although this proportion has decreased from 80% in Winter 2021.

Figure 3.2: Main method of cooling home (based on all individuals), Winter 2021 and Winter 2022



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

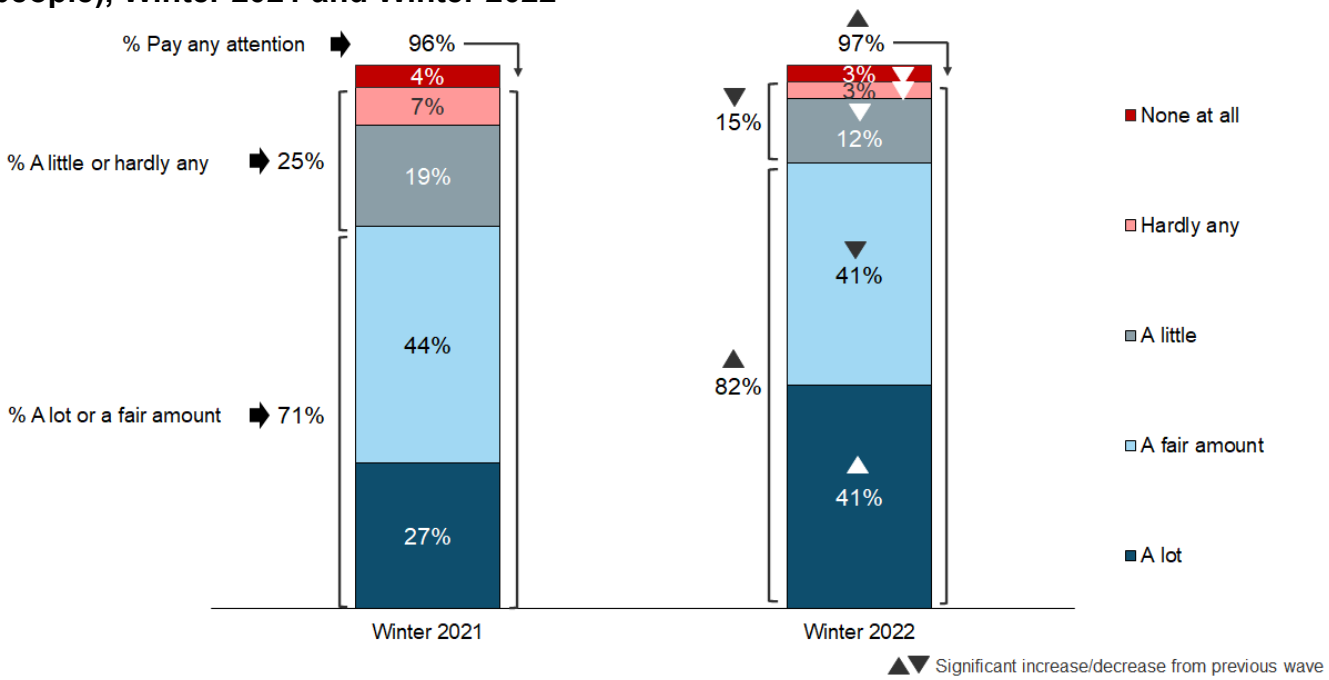
Attitudes towards heating in the home

Questions are also asked annually, in the Winter wave, about attitudes towards heating in the home.

In Winter 2022, 41% reported paying a lot of attention to the amount of heat used in their home, a considerable increase since Winter 2021, when this figure was 27% (Figure 4.1). Correspondingly, the proportion who said they pay a little or hardly any attention to this fell from 25% to 15% over this period.

These findings are likely to be a reflection of the increased energy prices (as well as increases in the cost of living more generally) which have occurred since Winter 2021, with considerable media attention focussed on this topic, including advice on ways to try to cut energy usage.

Figure 4.1: How much attention paid to amount of heat used in home (based on all people), Winter 2021 and Winter 2022



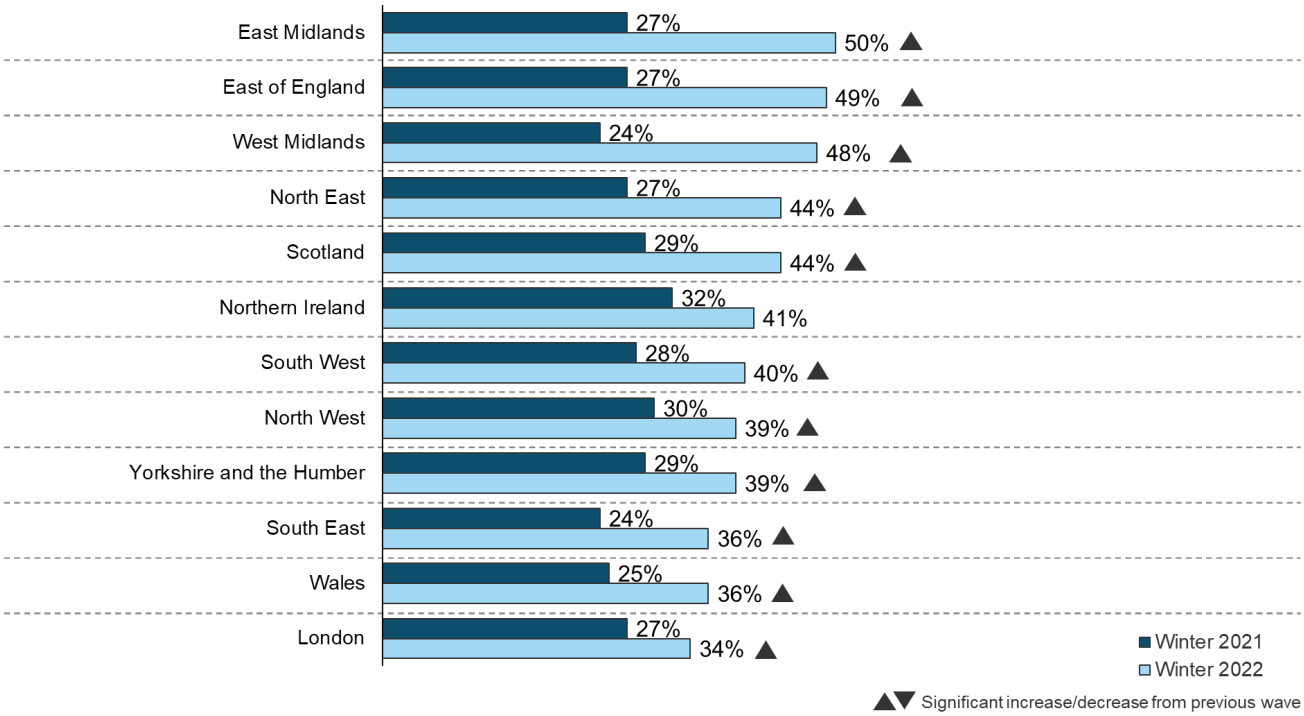
HEATUSE. How much attention do you pay to the amount of heat you use in your home?
Base: All wave respondents – Winter 2021 (3,701), Winter 2022 (3,571)

In Winter 2022 those aged 16 to 24 (55%) were less likely to pay at least a fair amount of attention to heat usage in the home than those aged 25 and over (between 82% and 88% across the age categories). This may reflect the fact that respondents in the 16 to 24 age group are more likely to have someone else as the decision maker in their household (64% compared to 21% overall). 64% of respondents whose household decision maker was someone else said they pay at least a fair amount of attention to heat usage, compared to 88% of those who were the household decision maker themselves.

As in Winter 2022, people who were concerned about climate change were much more likely than those who were not concerned to pay attention to the amount of heat used at home. Nine in ten (89%) of those who were very concerned about climate change paid either a lot of a fair amount of attention to heat use, compared with 81% of those who were fairly concerned, and 71% of those who were either not very or not at all concerned.

In Winter 2022 the proportion of respondents saying they were paying a lot of attention to heat use in the home was higher in the East Midlands (50%), East of England (49%) and West Midlands (48%) compared with the South East (36%), Wales (36%) and London (34%) (Figure 4.2). The increases on this measure seen in Figure 4.1 are reflected across the UK, but geographical variation was higher in Winter 2022[4].

Figure 4.2: Percentage paying a lot of attention to amount of heat used in home (based on all people) by International Territorial Level, Winter 2022 and Winter 2021

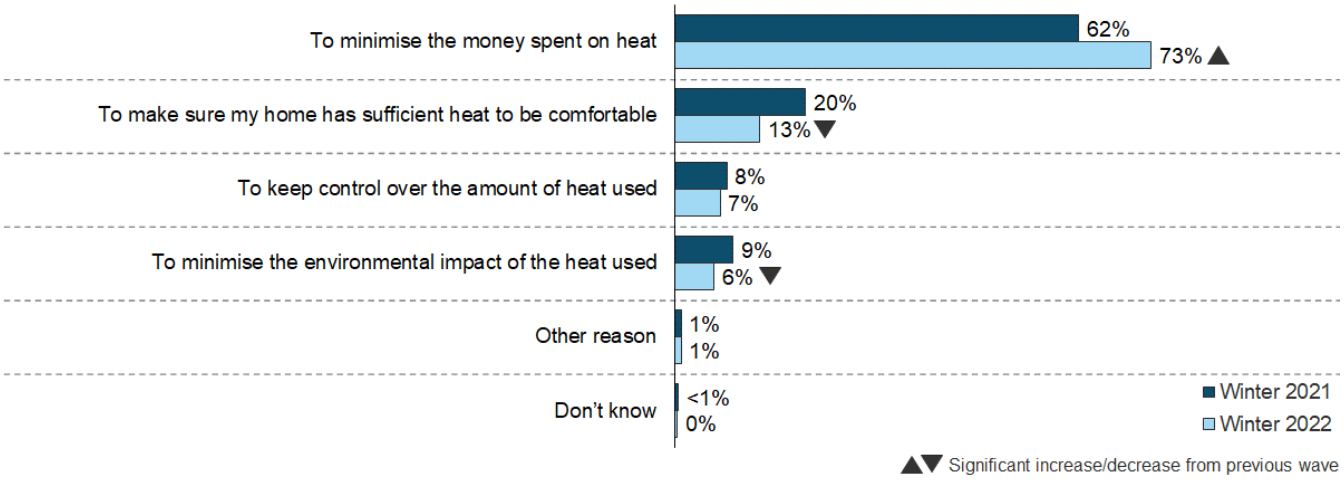


HEATUSE. How much attention do you pay to the amount of heat you use in your home?
Base: All wave respondents – Winter 2021/Winter 2022: North East (168/167), North West (386/417), Yorkshire and the Humber (300/305), East Midlands (260/274), West Midlands (334/294), East of England (345/341), London (367/358), South East (528/454), South West (380/327), Wales (228/161), Scotland (295/292), Northern Ireland (110/181)

Overall, 82% of people paid a lot or a fair amount of attention to the amount of heat used in their home; this subgroup were asked their reasons for doing this (Figure 4.3). In Winter 2022, 73% said they did so to minimise the amount of money they spent on heat, up substantially from 62% in Winter 2021. In contrast, lower proportions said this was to make sure they had sufficient heat to be comfortable (13% down from 20%), to keep control over the amount of heat used (7%) and to minimise the environmental impact (6% down from 9%). As noted earlier, the changes are likely to reflect the large rises in energy bills over the period between the two surveys.

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

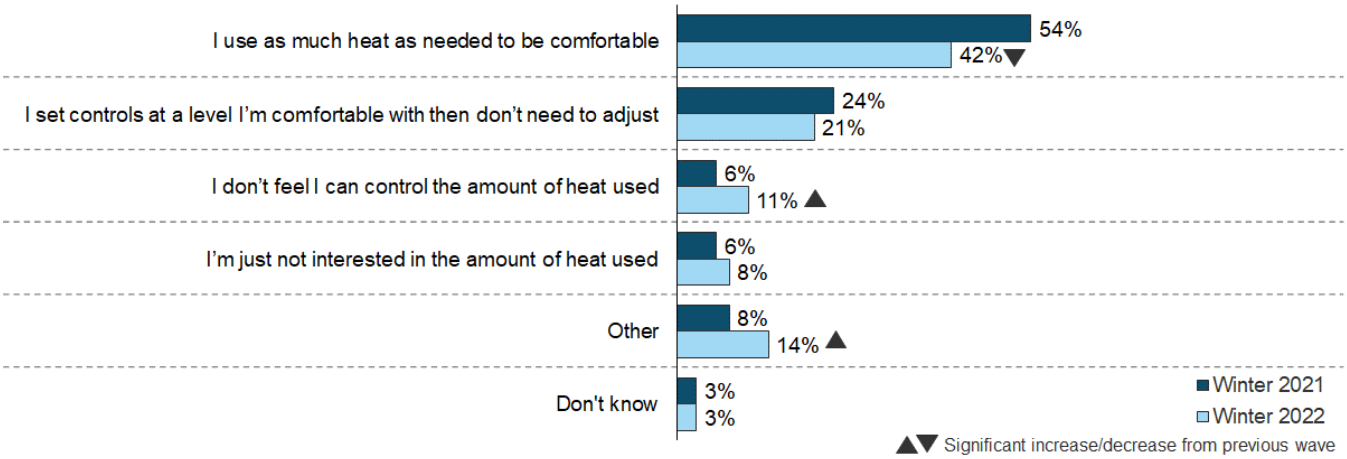
Figure 4.3: Reasons for paying attention to the amount of heat used (based on those who pay at least a fair amount of attention), Winter 2021 and Winter 2022



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)

Overall, 15% said they paid a little, hardly any or no attention at all to the amount of heat used and this group were also asked the reason for this (Figure 4.4). The most common reason was because they used as much heat as needed to be comfortable (42%) although this has fallen compared to Winter 2021 (54%). There was however an increase in the proportion saying they did not feel able to control the amount of heat used (11%, up from 6% in Winter 2021). Around a fifth (21%) said they set the controls at a level they are comfortable with and then don't need to adjust and 8% said they're just not interested in 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 and Winter 2022



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)

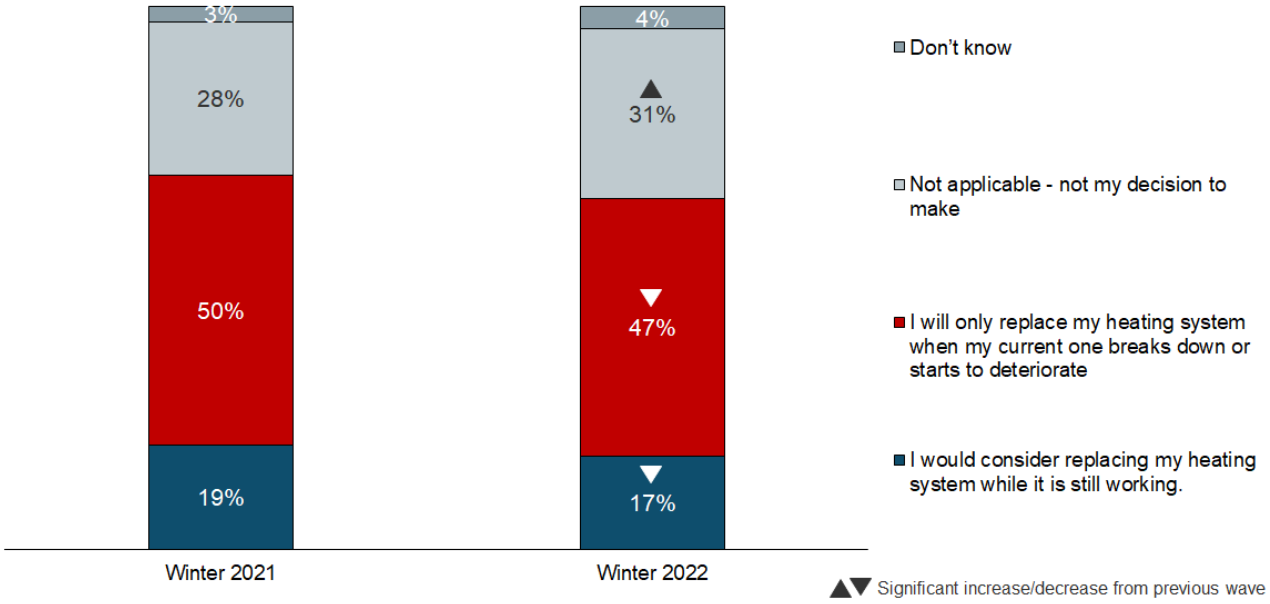
Replacing heating systems

Questions are also asked annually (in the Winter wave) about replacing heating systems.

Likelihood to replace heating system

In Winter 2022 almost half of people (47%) said they would only replace their heating system when their current one breaks down or starts to deteriorate, while 17% said they would consider replacing their heating system while it was working (Figure 5.1). Both proportions show a decrease from Winter 2021. Those that don't know whether they would replace their heating system has remained the same but there has been an increase since Winter 2021 in the proportion saying it was not their decision to make (31%, up from 28%).

Figure 5.1: Whether would replace heating system while it was still working (based on all people), Winter 2021 and Winter 2022



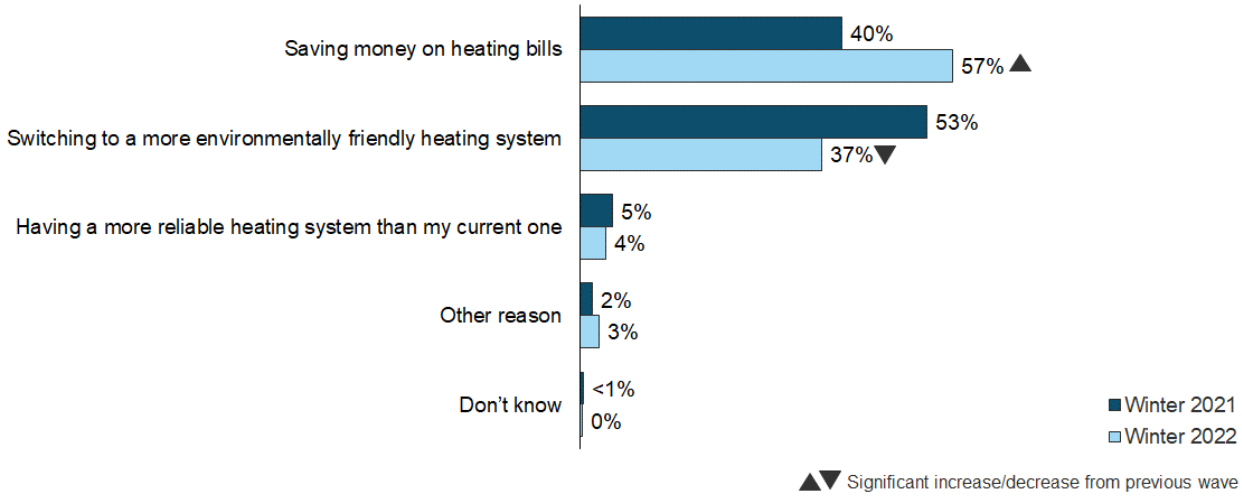
REPLACEHEAT. Now thinking about your heating system. Which one of these statements comes closest to your view?
Base: All wave respondents – Winter 2021 (3,702), Winter 2022 (3,570)

The propensity to consider replacing a heating system while it is still working was higher among people with higher levels of education (25% of degree-educated people compared with 8% of those with no qualifications), and owner-occupiers (23%) compared with renters (7%).

This was also higher among those who paid a lot or a fair amount of attention to heat use at home (19%, compared with 10% of those who paid a little, hardly any or no attention to heat use), and people concerned about climate change (25% of those who were very concerned, compared with 8% who were not concerned).

In Winter 2022, 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). Over half of this subgroup (57%) said this would be mainly to save money on energy bills, much higher than the 40% who chose this option in Winter 2021, with this reason displacing "switching to a more environmentally friendly heating system" as the key driver (37% down from 53% in Winter 2021). As noted above, these shifts are likely to reflect the large increases in energy prices and cost of living experienced by households in the UK since Winter 2021.

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 and Winter 2022



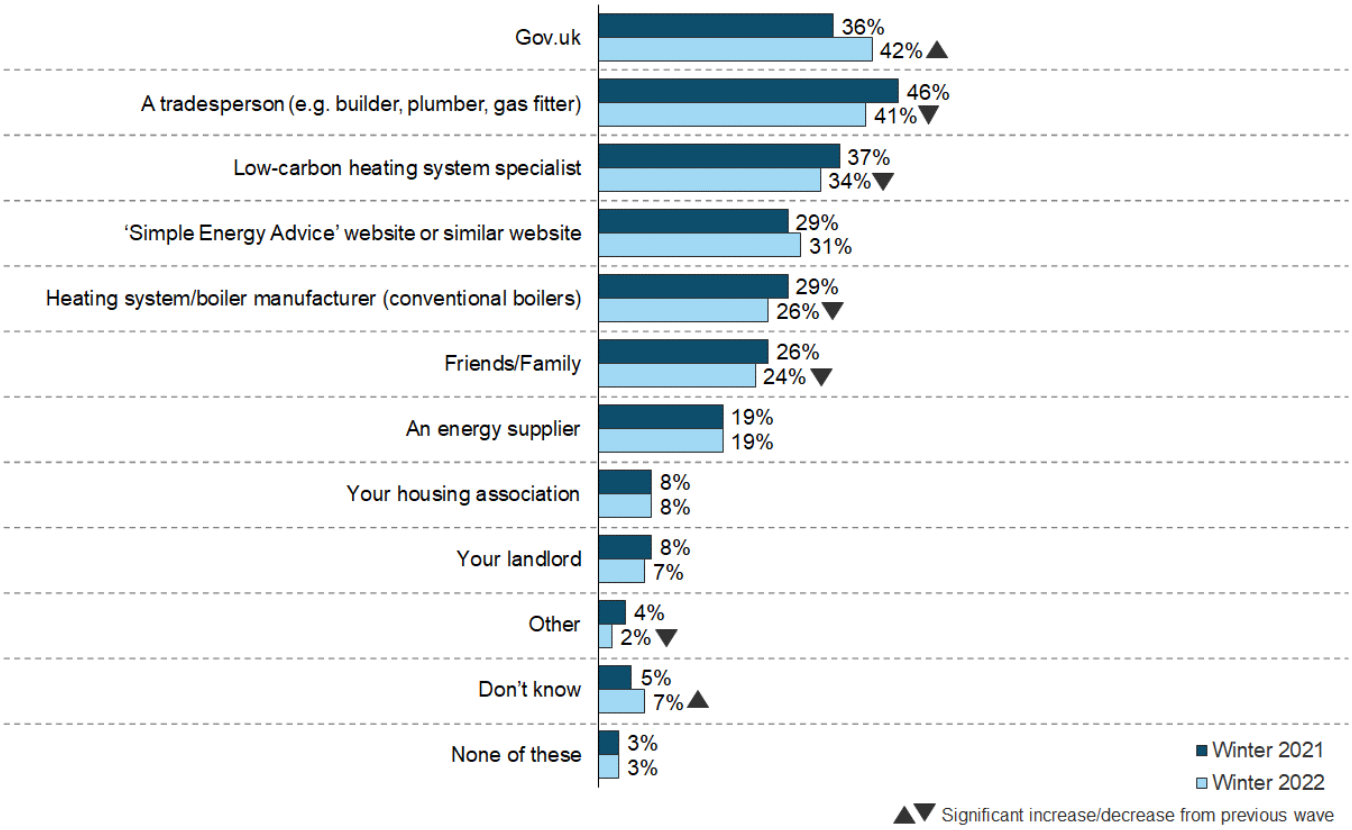
REPLACEIMP. Which one of these would be the most important consideration in changing your heating system?
Base: All wave respondents who would replace their heating system while it is still working – Winter 2021 (775), Winter 2022 (689)

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 home.

In Winter 2022, there have been shifts since Winter 2021 in trusted sources of advice, with Gov.uk becoming the most trusted source (from 36% in Winter 2021 to 42% in Winter 2022), ahead of tradespeople (from 46% to 41%), low-carbon heating specialists (from 37% to 34%) and heating manufacturers (from 29% to 26% in Winter 2022) (Figure 5.3).

Figure 5.3: Who would trust to provide advice on which heating system to install in home (based on all people), Winter 2021 and Winter 2022



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)

Gov.uk was more likely to be selected by those in age groups under 65 (proportions ranged from 41% to 46%) than those aged 65 and over (33%).

Insulation in the Home

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

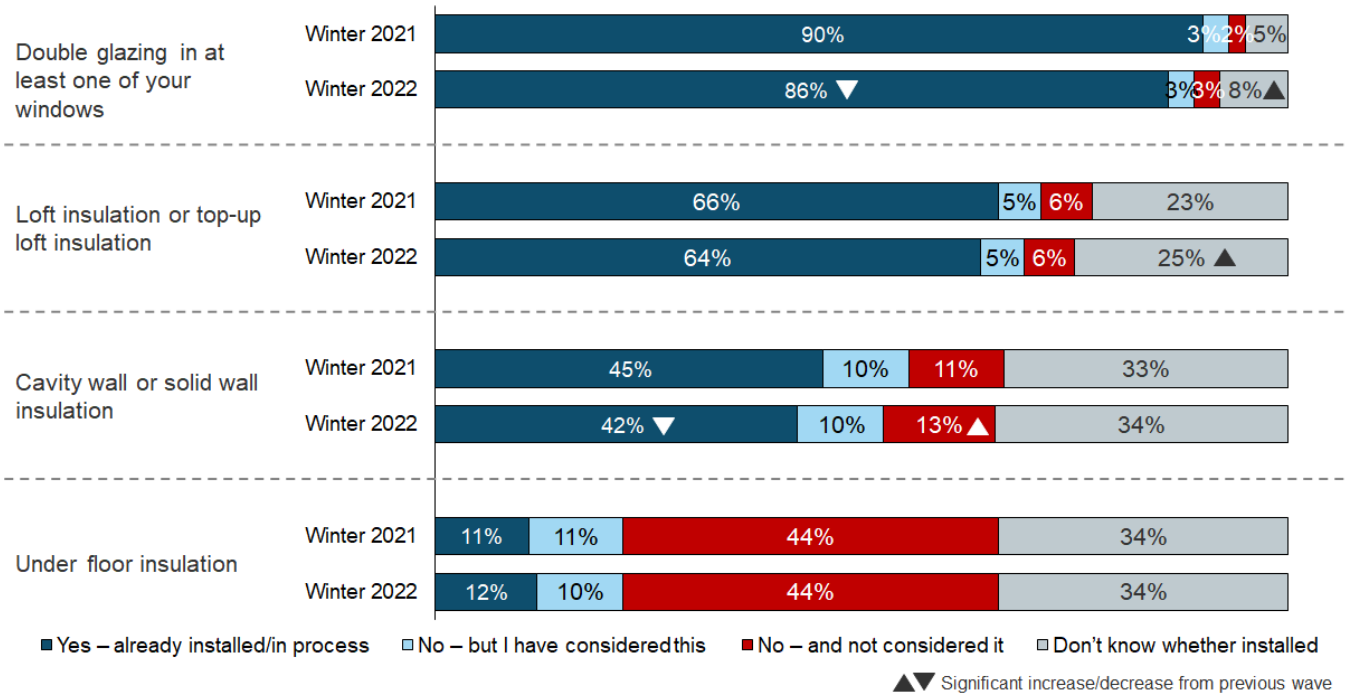
- Loft insulation or top-up loft insulation
- Double glazing in at least one window
- Cavity wall insulation or solid wall insulation
- Under floor insulation

Figure 6.1 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 6.2 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.

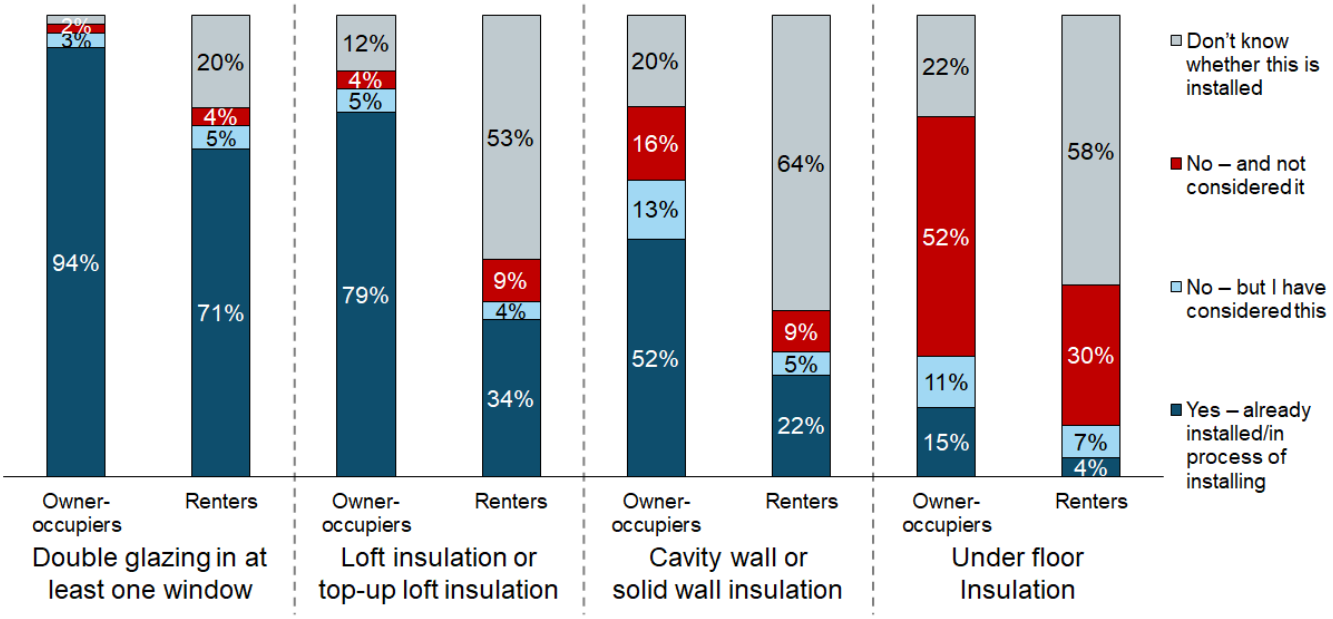
Around a third of all respondents did not know if their home had cavity or solid wall insulation (34%) or underfloor insulation (34%), while 25% did not know if their loft was insulated. The levels of ‘don’t know’ were smaller for those living in owner-occupier households although still a fifth of this 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 6.1: 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 6.2: Types of insulation already installed in home (based on owner-occupiers and renters), Winter 2022

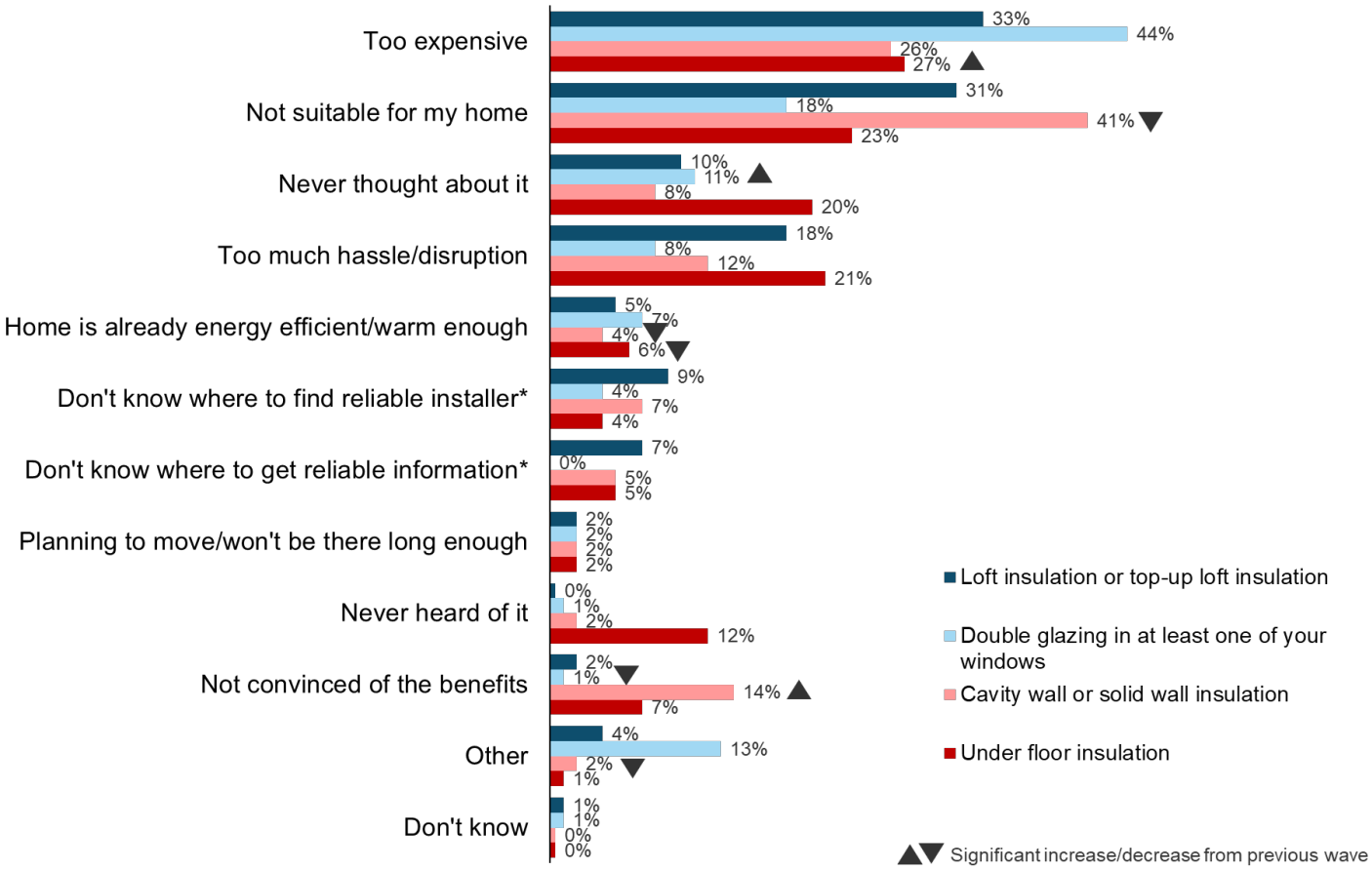


INSTALLA-E. Have any of these been installed in your home, even if not by you or your household?
Base: All wave owner-occupiers – Winter 2022: Loft insulation or top-up loft insulation (2,580), double glazing in at least one of your windows (2,585), cavity wall or solid wall insulation (2,560), under 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 this[5]. 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 6.3).

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 6.3: 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.

[5] 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'.

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 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%).

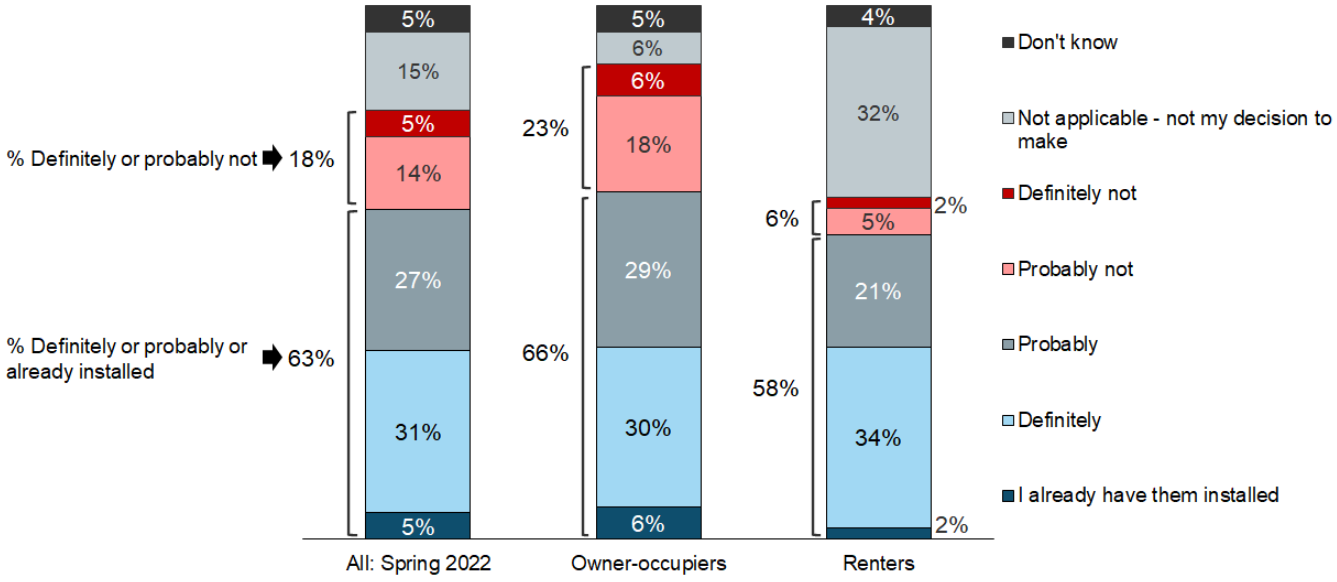
Attitudes towards solar panels in the home

In Spring 2022, people were asked about their propensity to install solar panels in their home in the next few years. The results are shown separately by tenure.

Two in three people living in owner-occupied homes (66%) said that they either already had or would be likely to consider installing solar panels in their home in the next few years, with 30% saying they would definitely consider this, 29% saying they would probably do so, and 6% who already had these installed (Figure 7.1). Almost a quarter (23%) of people living in owner-occupied homes said they probably wouldn't (18%) or definitely wouldn't (6%) do this.

Among renters, a third (32%) say that they wouldn't be in a position to make this decision, and as a result the likelihood of considering installing or already having these installed was lower (58%). Given that a large proportion of renters 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.

Figure 7.1: Likelihood to consider installing solar panels in the home to generate electricity by tenure (based on all respondents), Spring 2022



SOLARHOME. Would you consider having solar panels installed in your current home to generate electricity, in the next few years?
Base: Spring 2022 - All wave respondents (4,367); Owner-occupiers (3,285); Renters (963)

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 home[6]: people educated to degree level (72% compared with 57% of those with no qualifications); people aged 25 to 55 (74% compared with 62% of people aged 16 to 24, 67% of those aged 55 to 64 and 53% of those aged 65 or over); people who live in a house or bungalow (67% compared with 48% of people who live in flats); and people with higher level occupations (ranging from 70% of those in managerial and professional occupations to 54% of those in semi-routine or routine occupations).

[6] These percentages include those who had already had these installed in their home.

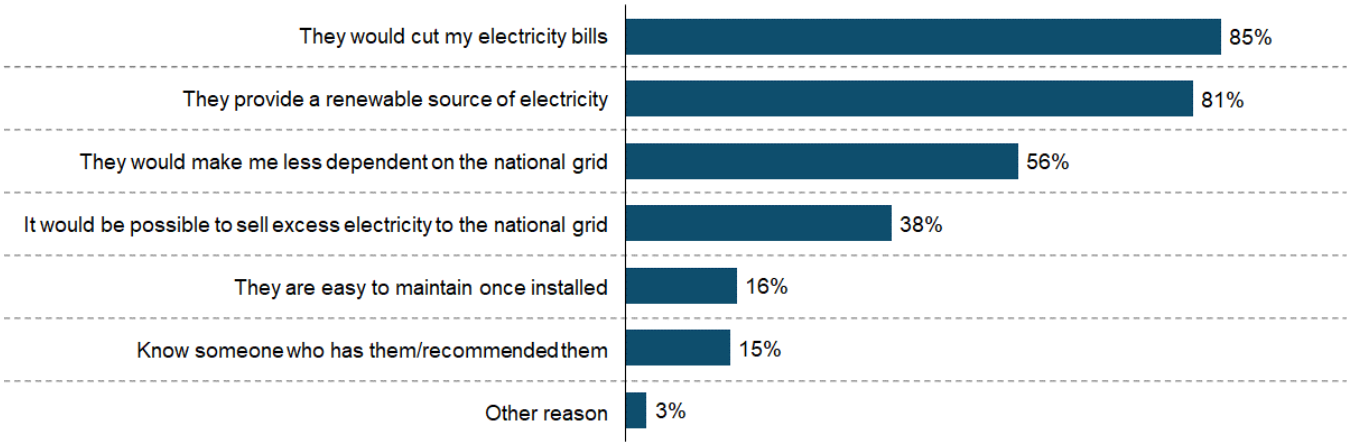
Reasons for being likely to install solar panels

People living in owner-occupied homes who didn't already have solar panels but said they were likely to install them in their home in the next few years were asked their reasons for this (respondents were presented with a list of possible reasons).

In Spring 2022, economic and environmental considerations both played a major role in propensity to install solar panels (Figure 7.2). The two main motivations for considering solar panels were to cut electricity bills (85%) and to provide a renewable source of electricity (81%).

Over half saw being less dependent on the national grid as a motivation (56%), with fewer choosing the ability to sell excess electricity to the grid (38%), ease of maintenance (16%), or being recommended them (15%) as motivations to install solar panels.

Figure 7.2: Reasons for considering installing solar panels in the home to generate electricity (based on owner-occupiers who would consider this), Spring 2022



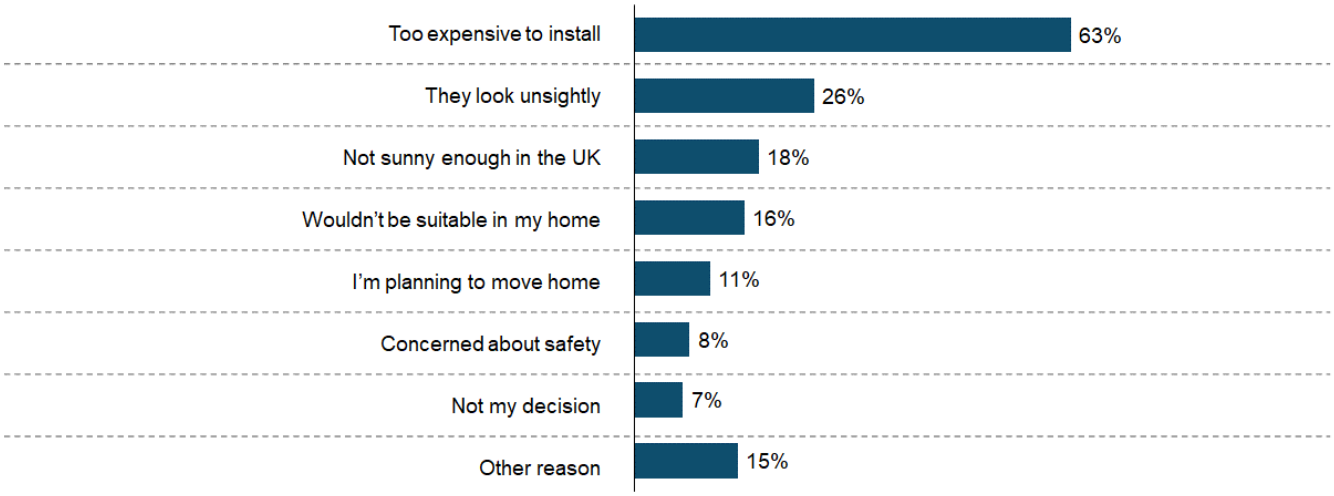
SOLARWHYINT. You said that you would consider installing solar panels. Why is this? Please select all that apply.
Base: All wave owner-occupiers who would consider this - Spring 2022 (1,921)

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 were asked their reasons for this (respondents were presented with a list of possible reasons).

In Spring 2022, expense was by far the main barrier for owner-occupiers who would not consider solar panels with 63% of this group saying they were too expensive to install (Figure 7.3). Other more minority objections include looking unsightly (26%), insufficient sun in the UK (18%), not suitable to install in their home (16%)[7] or a plan to move home (11%). A relatively high proportion (15%) mentioned other reasons not to install solar panels[8].

Figure 7.3: Reasons for not considering installing solar panels in the home to generate electricity (based on owner-occupiers who would not consider this), Spring 2022



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)

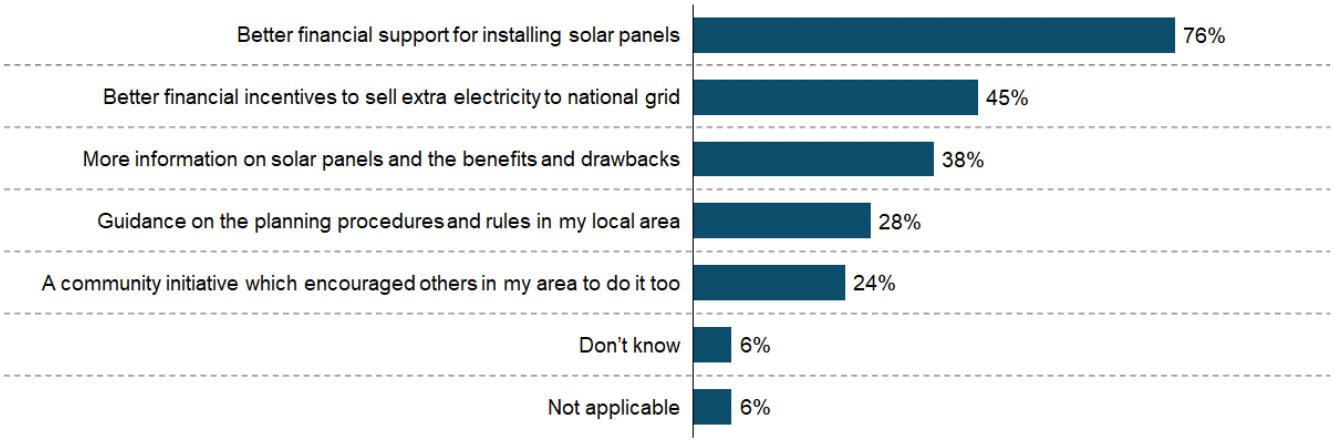
[7] While this figure may seem relatively low, it is worth noting that 91% of people living in owner-occupied homes live in a house or bungalow and only 8% live in a flat.
[8] Other reasons cited included a belief that technology is ineffective or inefficient, the respondent feeling they are too old, and the hassle of installation and upkeep.

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 7.4).

In Spring 2022, better financial support for installation was by the far the biggest encouragement factor: overall 76% selected this reason. Other people in this subgroup would be encouraged by incentives to sell electricity to the national grid (45%), and more information (38%). Fewer than three in ten would be encouraged by guidance on local planning rules (28%) or community initiatives (24%).

Figure 7.4: What would encourage people to install solar panels (based on owner-occupiers responsible for decision who have not yet installed panels), Spring 2022



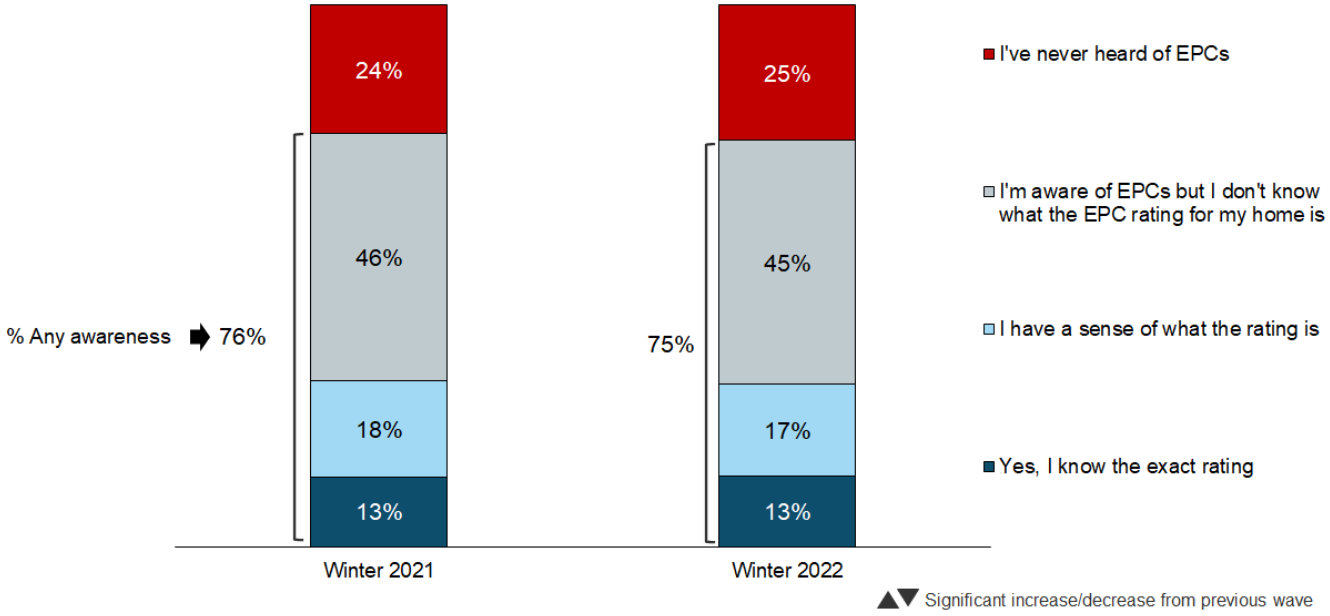
SOLARENC. Which, if any, of the following might make you more likely to consider installing solar panels? Please select all that apply.
Base: All wave owner-occupiers who have not already installed them excluding those who said it was not their decision to make – Spring 2022 (2,907)

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 2022 three quarters (75%) of the public were aware of EPCs. Just over one in ten (13%) knew the exact EPC rating of their home, and a further 17% had a sense of the rating for their home. Just under half (45%) said they were aware of EPCs but didn't know the rating for their home. There have been no changes in this measure since Winter 2021 (Figure 8.1).

Figure 8.1: Awareness of EPC rating for home (based on all people), Winter 2021 and Winter 2022



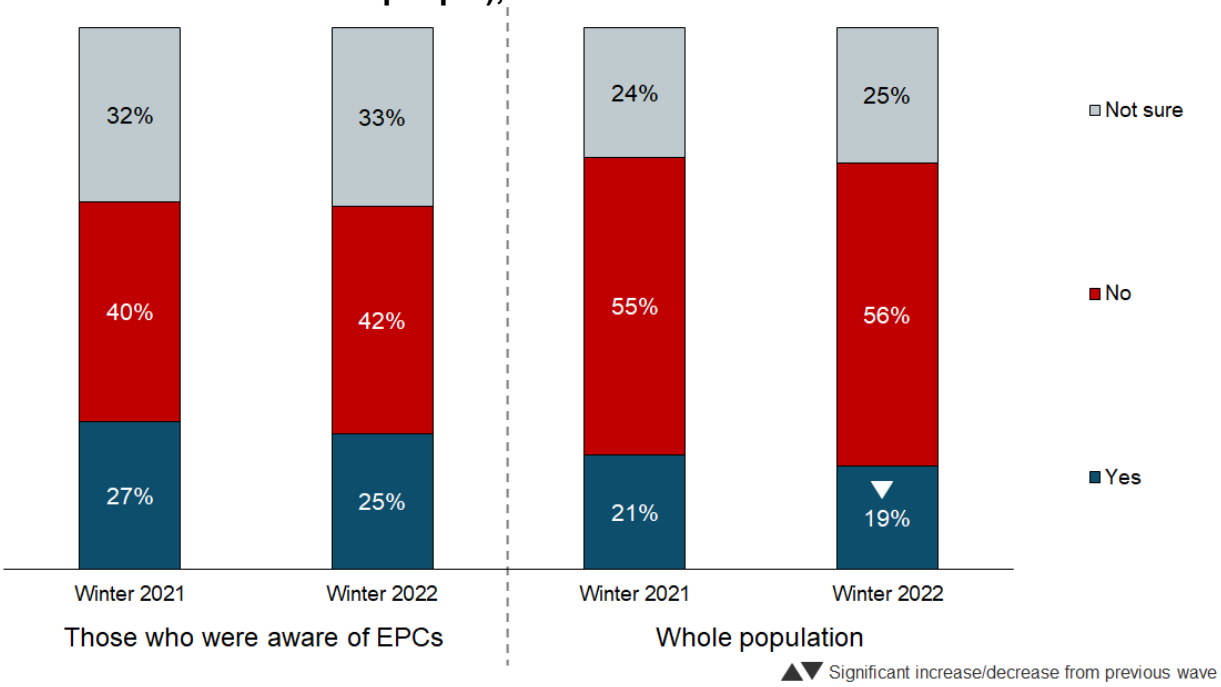
EPCKNOW. Do you know what the Energy Performance Certificate (EPC) rating for your home is?
Base: All wave respondents – Winter 2021 (3,700), Winter 2022 (3,569)

Based on tenure of their household, owner-occupiers were more likely than renters to have at least some awareness of EPCs (81%, compared with 66%) and to know the exact EPC rating of their home (14%, compared with 11% of renters).

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 8.2). A quarter (25%) of those who were aware of EPCs said they did recall seeing the

recommendations section in their EPC. Over four in ten (42%) had not seen this section, and 33% said they were not sure or could not remember whether they had seen it. When based on all people, 19% had seen the guidance section in their home's EPC which was down slightly from 21% in Winter 2021.

Figure 8.2: Awareness of recommendations section on EPC (based on those who were aware of EPCs and based on all people), Winter 2021 and Winter 2022



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); All wave respondents– Winter 2021 (3,684), Winter 2022 (3,569)

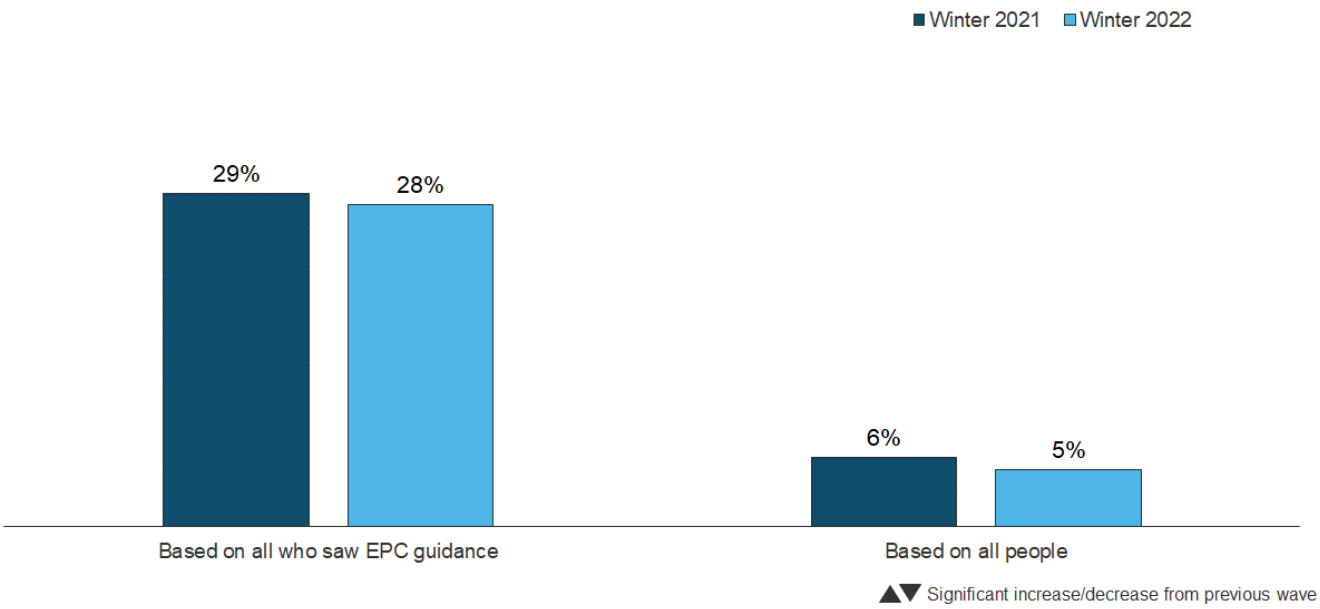
EPC Recommendations

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, 20% of those who had seen the recommendations said they had made large energy efficiency changes to their home in the last 12 months, while 40% said they had made small energy efficiency changes to their homes. This is consistent with Winter 2021.

Combining both small and large changes, 54% said they had made any changes based on recommendations they had seen, with this having decreased from 61% in Winter 2021. This proportion was higher among owner-occupiers (58%) than renters (42%).

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, 28% said they made these changes based on the EPC's recommendations. Based on all people, this equates to 5% of all people who made changes to their home as a result of seeing the energy efficiency recommendations in their home's EPC (Figure 8.3).

Figure 8.3: 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 2021 and Winter 2022



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) / All wave respondents – Winter 2021 (3,706), Winter 2022 (3,569)

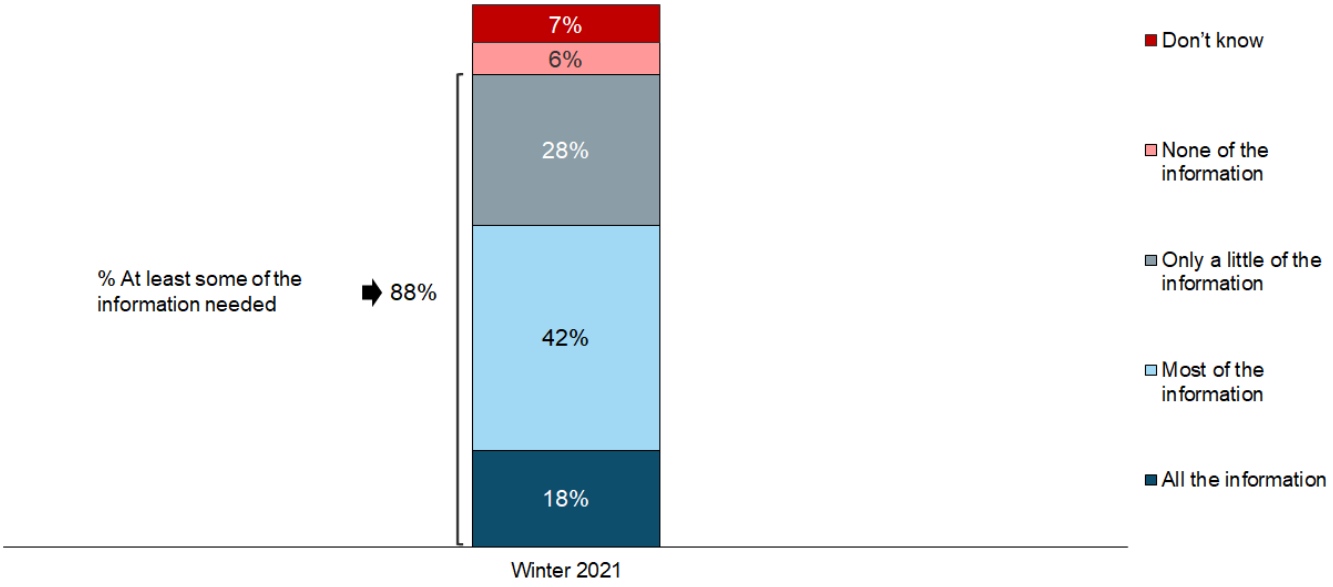
In Winter 2021[9], regardless of whether they were directly motivated by EPC guidance, all those who had seen the recommendations section of their EPC and subsequently made changes to

[9] This question was not asked in Winter 22

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 8.4). 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 8.4: 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)

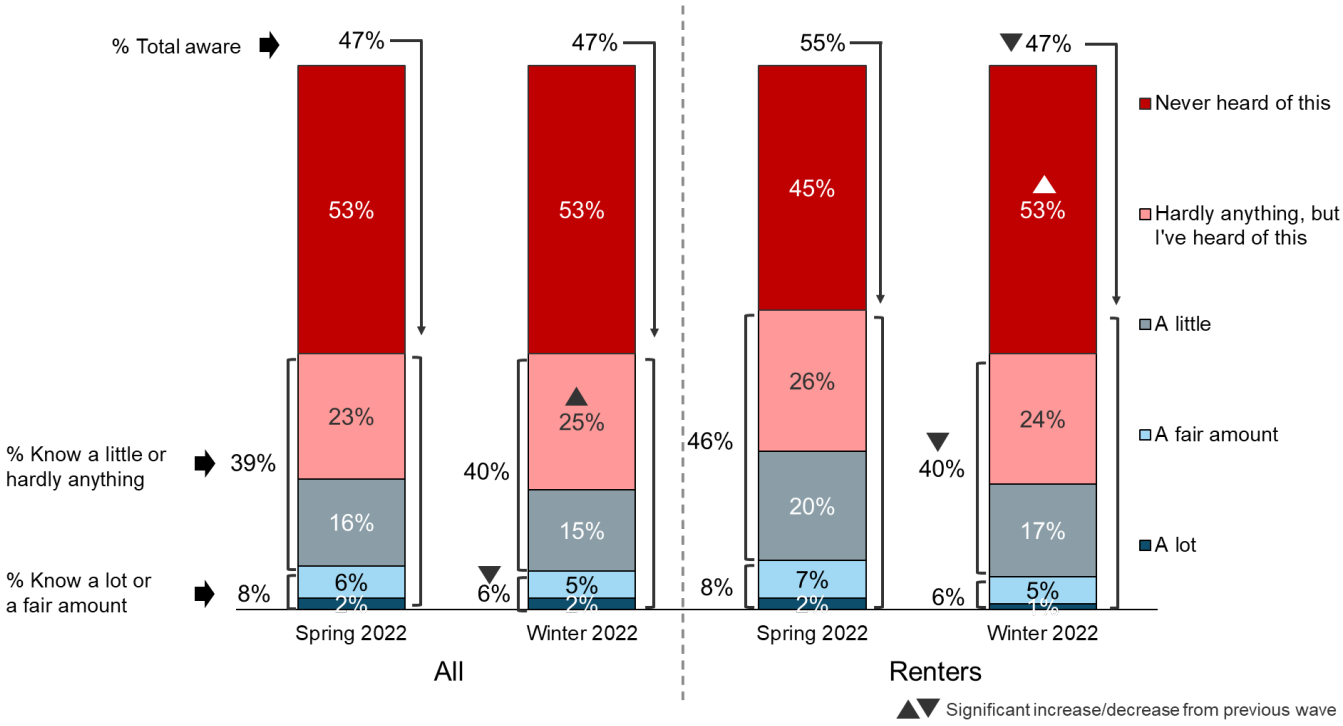
Awareness of rental property standards

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

In Winter 2022 just under half (47%) said they had at least some awareness of this, with 2% saying they knew a lot, 5% a fair amount, 15% a little and 25% hardly anything. Since Spring 2022 (Figure 9.1) the proportion of all respondents knowing at least a fair amount about minimum energy standards for rental properties has decreased from 8% to 6% in Winter 2022. In renters, overall awareness has also declined in Winter 2022 (47% down from 55%).

Awareness was higher among those living in owner-occupied (47%) and privately rented accommodation (50%) compared with those living in social rented housing (41%).

Figure 9.1: Awareness of energy efficiency standards in rental properties by tenure (based on all people), Spring 2022 and Winter 2022



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); Renters – Spring 2022 (966), Winter 2022 (869).

Awareness of minimum energy efficiency standards was higher among people educated to degree level (53% compared with 33% of people with no qualifications). Awareness was lower for people aged 65 and over (39% compared with proportions ranging from 46% to 54% for age groups under 65).

Awareness was also lower in the North West (41%), Scotland (39%) and Northern Ireland (34%) compared with in the West Midlands (53%), the South West (52%) and the East Midlands (51%).

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

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