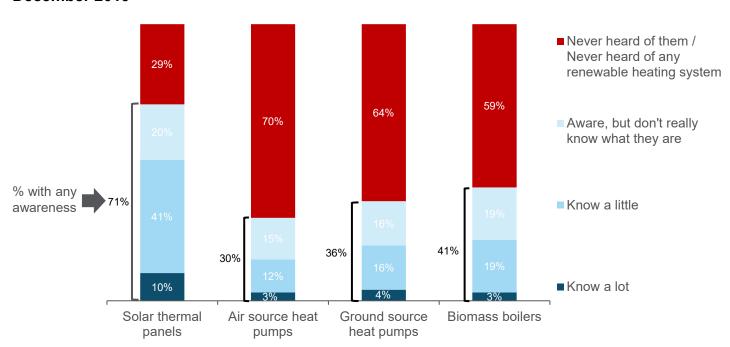
BEIS Public Attitudes Tracker (December 2019, Wave 32, UK)

6th February 2020 Official Statistics

As well as the quarterly questions on renewable energy, fracking and clean growth, the December 2019 wave of the tracker included an annual set of questions on heating.

- Overall, 17% of people had heard of heat networks, which was similar to previous waves. Awareness varied by region and was lowest in London (10%).
- Seven in ten people (71%) had some awareness of solar thermal panels but awareness of other renewable heating systems was low (Figure 1).
- Those aged 16 to 24 were least likely to pay attention to the amount of **heat used** with 55% saying they paid 'a lot' or 'a fair amount' of attention compared with between 70% and 78% among all other age groups.

Figure 1: Awareness of specific renewable heating systems (based on all people), December 2019



Base: All wave respondents – December 2019 (4,212). See full report for more details.

What you need to know about these statistics:

The results presented here are based on questions included in a face-to-face omnibus survey in December 2019. The survey uses a random location sampling approach which is a form of quota sampling. Further information on this sampling approach and the steps taken to minimise the risk of sample bias can be found in the Technical notes.

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Executive summary

The key findings for the December 2019 wave of the tracker are presented below.

Renewable energy

In December 2019, levels of support for renewable energy remained stable at 83%.
 Levels of support have remained between 74% and 85% since the question was first asked in March 2012.

Shale gas (fracking)

- In December 2019, awareness of fracking remained stable at 78%, with levels unchanged over the previous year.
- Opposition to fracking has increased from 21% in December 2013 to 41% in December 2019, while support has fallen from 27% to 10% over the same period. Opposition levels were highest among older ages groups.
- Nearly half (48%) of people said they neither supported nor opposed fracking.
- In December 2019, the most common reasons for opposing fracking were the loss and destruction of the natural environment (64%) and concern about the risk of earthquakes (46%).

Clean growth

• In December 2019, awareness of the concept of clean growth remained low at 17%, continuing the downward trend from a high of 28% in July 2018.

Condensing boilers

• In December 2019, those reporting that they had a condensing boiler reached a peak of 59%, up from 51% in December 2018.

Heat networks

- In December 2019, awareness of heat networks stood at 17%. Awareness has remained between 15% and 18% over the course of the tracker.
- Of those that had heard of heat networks, half (50%) said they were likely to join one if given the opportunity. Over half (55%) of those that were aware of heat networks were also positive about them.

Renewable heating systems

- In December 2019, awareness of renewable heating systems stood at 57%, a slight increase from 52% in December 2018. However, over the longer term, awareness has declined from a high point of 78% in December 2013.
- People were more aware of solar thermal panels (71%) than other renewable heating systems (41% were aware of biomass boilers, 36% were aware of ground source heat pumps, and 30% were aware of air source heat pumps).

 Among owner-occupiers who had heard of renewable heat measures but who did not want to install one, the most common barrier was cost (39%), followed by lack of knowledge about how these systems work (17%).

Heat usage in the home

- In December 2019, 72% of people said they paid 'a lot' or 'a fair amount' of attention to the amount of heat they used in their home, a similar proportion to previous waves. Those aged 16 to 24 were least likely to pay attention to the amount of heat used with 55% saying they paid 'a lot' or 'a fair amount' of attention compared with between 70% and 78% among all other age groups.
- The main reason given for paying attention to the amount of heat used in the home was to minimise the amount of money spent on heat (55%).
- The main reason given for not paying attention to the amount of heat used in the home was because people wanted to use as much heat as needed to be comfortable (54%).

Installing or replacing heating systems

- In December 2019, 64% of people said they would only replace their heating system when their current one breaks down or starts to deteriorate, with 13% saying they would consider replacing their heating system while it was still working.
- People would mainly change their heating system to save bills (37%) or to switch to a more environmentally friendly heating system (32%).
- Most people who were involved in the decision-making process about a new boiler or heating system found it easy to get the information they wanted (94%) and felt they had the right information to help them make a good decision (95%).
- When asked who they would most trust to provide advice about which heating system install in their home, the most common responses were a tradesperson (26%) or their friends and family (18%).

Introduction

The Public Attitudes Tracker (PAT) survey covers public attitudes towards Department for Business, Energy and Industrial Strategy (BEIS) policies such as energy, climate change, consumer rights, artificial intelligence and workers' rights. The survey began in March 2012 and runs four times a year. Questions on issues where attitudes are expected to shift more quickly or to be affected by seasonal changes are repeated quarterly; other questions are asked annually. The tracker is regularly reviewed to ensure that the data continue to offer valuable insight.

This report presents summary headline findings from December 2019 (Wave 32). Data for wave 32 were collected between 4 December and 22 December using face-to-face in-home interviews with a representative sample of 4,212 adults (aged 16 and over) in the UK. Interviews were carried out using the Kantar UK Omnibus, which uses a random location quota sampling method. Further information on this sampling approach and the steps taken to minimise the risk of sample bias can be found in the Technical notes.

This report makes references to other outputs that are published alongside this report. These are described below:

- Tables: This refers to the PDF crosstabulations for the current wave. This includes
 demographic and key question sub-group comparisons for all questions. These are also
 available in Excel.
- Excel Summary tables: This refers to the Excel Summary tables showing trends across all waves of the tracker.

All the questions included at wave 32 had been asked in at least one previous wave. Full details of the methodology are provided in the technical note.¹

The wave 32 questionnaire covered the following topics:

- Renewable energy
- Shale gas (fracking)
- Clean growth
- Condensing boilers
- Heat networks
- Renewable heating systems
- Heat usage in the home
- Installing or replacing heating systems

¹ Available at: https://www.gov.uk/government/publications/beis-public-attitudes-tracker-technical-note

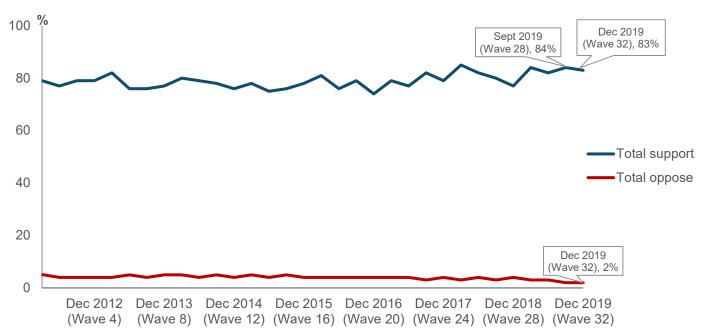
Headline findings

Energy infrastructure

Renewables

In December 2019, support for renewable energy remained steady at 83%. Levels of support have remained between 74% and 85% since the question was first asked in March 2012 (Figure 2). Opposition to renewable energy remained at its lowest point across the tracker at 2%, having previously fluctuated between 3% and 5% between March 2012 and June 2019 (Excel Summary Tables, Q15a).

Figure 2: Whether support or oppose renewable energy (based on all people), December 2012 to December 2019



Q3. Do you support or oppose the use of renewable energy for providing our electricity, fuel and heat?

Base: All wave respondents. (Asked quarterly). See technical appendix for base sizes.

Support for renewable energy differed by social grade (Table 1), with support highest among those in social grades AB (90%, compared with 73% in DE).

Shale gas (fracking)

In December 2019, awareness of the process used to extract shale gas known as fracking remained stable at 78% (Figure 3). Levels of awareness have now stayed the same for over a year. Over the longer term, levels of awareness have remained between 70% and 80% for just under six years, following a notable increase between June 2012 (42%) and March 2014 (75%). In December 2019, only a small proportion of people said they knew a lot about fracking (12%) and 22% said they had never heard of it. Just under two in ten (18%) were aware of fracking but did not really know what it was (Excel Summary Tables, Q15a).

100 Never heard of it 80 Aware of it but did not really know 60 what it was ■ Knew a little 40 about it 20 ■Knew a lot about it 0 June 2012 Dec 2013 Dec 2014 Dec 2015 Dec 2016 Dec 2017 Dec 2018 Dec 2019 (Wave 2) (Wave 8) (Wave 12) (Wave 16) (Wave 20) (Wave 24) (Wave 28) (Wave 32)

Figure 3: Awareness of fracking (based on all people), June 2012 to December 2019

Q15a. Before today, how much, if anything, did you know about hydraulic fracturing for shale gas, otherwise known as fracking?

Bases: All wave respondents – June 2012, March 2013, December 2013 to December 2019. (Asked quarterly.) See technical appendix for base sizes.

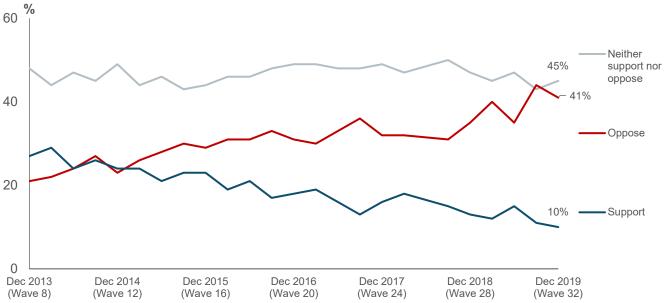
Awareness of fracking was highest among men (83%, compared with 74% of women), those aged 55 and over (90%, compared with 60% of those aged 16 to 24) and those in social grades AB (91%, compared with 62% of those in social grades DE). People living in London were least likely to be aware of fracking (55%, compared with 73% or more for all other regions) (Table 2).

There was a slight fall in the proportion of people who opposed fracking (either opposed or strongly opposed) in December 2019 to 41% (Figure 4), following a marked increase to 44% in September 2019. There is some volatility in the results between quarters but, over the course of the tracker, opposition to fracking has increased from a low of 21% when this question was first asked in December 2013.

Support for fracking remained low, with 10% of respondents in December 2019 saying they supported or strongly supported it. In line with the rise in opposition, support has decreased over the course of the tracker from 27% in December 2013.

Under half (45%) of respondents in December 2019 said they neither support nor oppose fracking. The proportion that neither support nor oppose fracking has remained between 43% and 50% over the course of the tracker (Excel Summary Tables, Q15b).

Figure 4: Whether support or oppose fracking (based on all people), December 2013 to December 2019



Q15b. From what you know, or have heard about, extracting shale gas to generate the UK's heat and electricity, do you support or oppose its use?

Bases: All wave respondents – Asked all waves from December 2013 to December 2019 apart from July 2018. See technical appendix for base sizes.

Older age groups were more opposed to fracking than younger groups. Half of respondents aged 55 and over (49% of those aged 65 and over and 50% of those aged 55 to 64) and 44% of those aged 45 to 54 opposed fracking, compared with 35% of those aged 25 to 34 and 28% of those aged 16 to 24 (Figure 4). Those aged 16 to 24 were also less likely to hold an opinion on fracking with 57% saying they neither support nor oppose fracking, compared with 37% among those aged 55 to 64 and 36% of those aged 65 and over. This may be a reflection that the older age groups are more likely to be homeowners and that younger age groups are more likely to be renters.

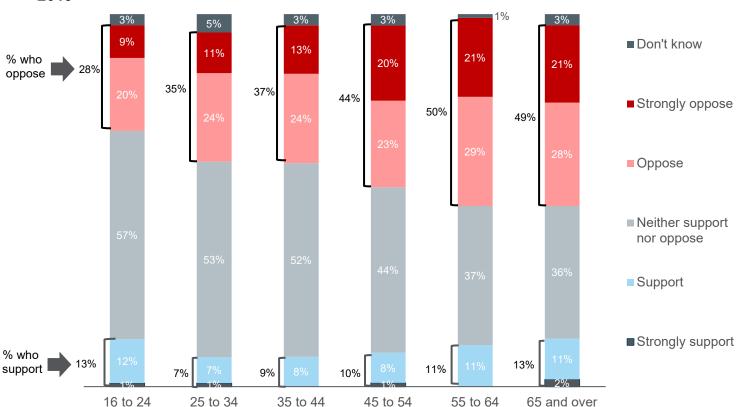


Figure 5: Whether support or oppose fracking by age (based on all people), December 2019

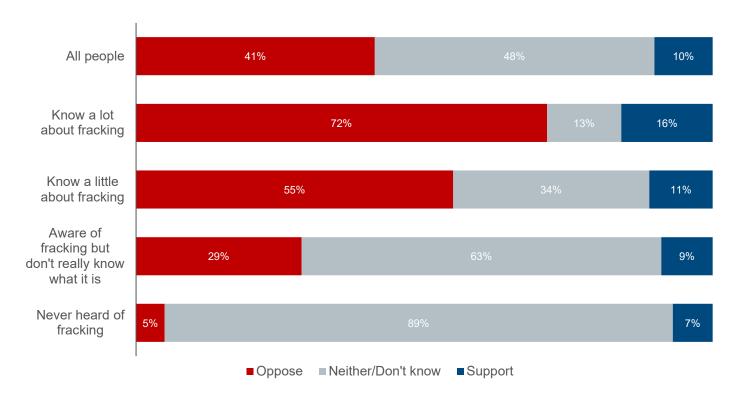
Q15b. From what you know, or have heard about, extracting shale gas to generate the UK's heat and electricity, do you support or oppose its use?

Base: All wave respondents aged 16 to 24 (509); 25 to 34 (713); 35 to 44 (568); 45 to 54 (544); 55 to 64 (592); 65 and over (1,286)

There are regional differences in the support and opposition to fracking with Northern Ireland (55%), Scotland (54%), the North West (50%), Wales (49%) and the South West (48%) most likely to oppose fracking. Levels of opposition for those living in all other regions were 40% or lower, with opposition lowest among those living in London (26%) (Table 3). This regional pattern in opposition to fracking has been observed in previous waves, although there is some volatility in the results between waves.

Levels of support for fracking differed based on how much people said they knew about it (Figure 6; Table 3). Those with greater knowledge of fracking were more likely to hold an opinion about it. Of those who said they knew a lot about fracking, 72% opposed it and 16% supported it. Those with less knowledge about fracking were much more likely to say they neither supported nor opposed it.

Figure 6: Levels of support of fracking by levels of fracking knowledge (based on all people), December 2019

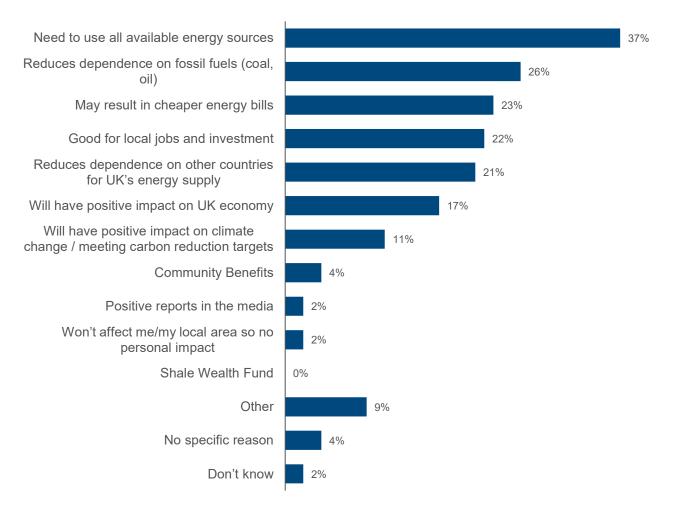


Q15b. From what you know, or have heard about, extracting shale gas to generate the UK's heat and electricity, do you support or oppose its use?

Base: All wave respondents (4,212); Know a lot (460); know a little (1,938), aware of it but don't really know what it is (795); never heard of it (1,019).

Respondents were asked why they supported or opposed fracking². In December 2019, the most common reasons for supporting fracking were: the need to use all available energy sources (37%); reducing the dependence on fossil fuels (26%); because it may result in cheaper energy bills (23%); being good for local jobs and investment (22%); and reducing the dependence from other countries for the UK's energy supply (21%) (Table 4; Figure 7).

Figure 7: Reasons for supporting fracking among those who support fracking, December 2019



Q15c. You said that you support hydraulic fracturing for shale gas, otherwise known as fracking. Why is this? [unprompted]

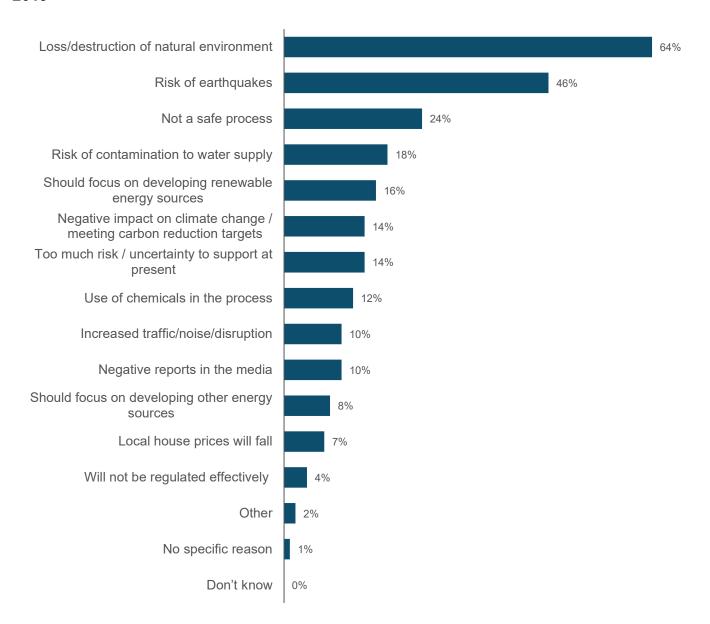
Base: All who support fracking - December 2019 (449).

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² Responses were collected unprompted (without showing respondents a list) and were coded by interviewers into a predefined list.

The main reasons for opposing fracking were the loss and destruction of the natural environment (64%), concern about the risk of earthquakes (46%), and concerns about the safety of the process (24%) (Figure 8) (Excel Summary Tables, Q15d).

Figure 8: Reasons for opposing fracking among those who oppose fracking, December 2019



Q15d. You said that you oppose hydraulic fracturing for shale gas, otherwise known as fracking. Why is this? [unprompted]

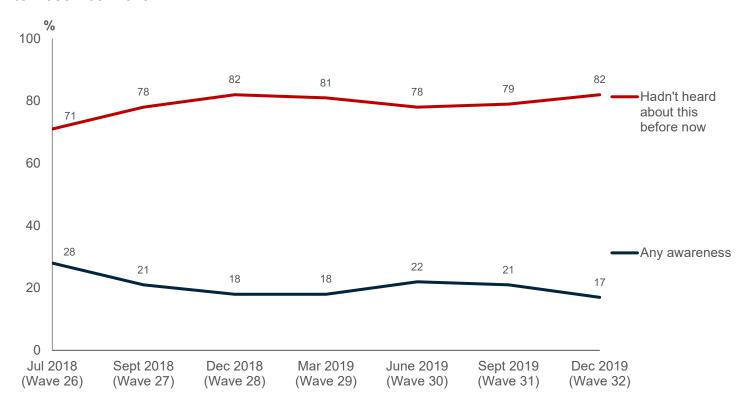
Base: All who oppose fracking - December 2019 (1,675).

The main reason for neither supporting nor opposing fracking was not knowing enough about it (78%).

Clean growth

In December 2019, awareness of the concept of "clean growth" reached a low of 17%, continuing a downward trend since the high of 28% in July 2018 (Figure 9; Excel Summary Tables, Q80). The proportion who were aware comprised 7% who had heard of the concept but knew hardly anything about it, 8% who knew a little about it, 2% who said they knew a fair amount and only 1% who knew a lot.

Figure 9: Awareness of the concept of "clean growth" (based on all people), July 2018 to December 2019



Q80. The Government has recently begun to promote the concept of "clean growth". Before today, how much, if anything, did you know about this concept?

Base: All wave respondents. (Asked quarterly). See technical appendix for base sizes.

Note: Awareness includes those who said they knew a lot about it, knew a fair amount about it, knew a little about it and knew hardly anything but had heard of it.

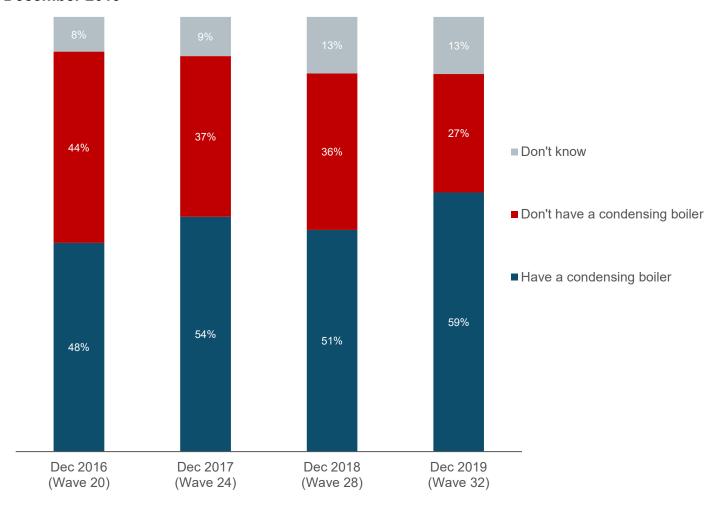
Awareness was higher among men (20%, compared with 14% of women) and those in social grades AB (20%, compared with 13% in social grades DE) (Table 58).

Heat

Condensing boilers

Those reporting that they had a condensing boiler reached a peak of 59% in December 2019, an increase from 51% in December 2018 and 54% in December 2017 (Figure 10; Excel Summary Tables, Q52).

Figure 10: Whether have a condensing boiler (based on all people), December 2016 to December 2019



Q52. As far as you know, do you have a condensing boiler in your home? If you're not sure, any gas boiler installed since 2006 will be condensing. Any oil boiler installed since 2008 will be condensing.

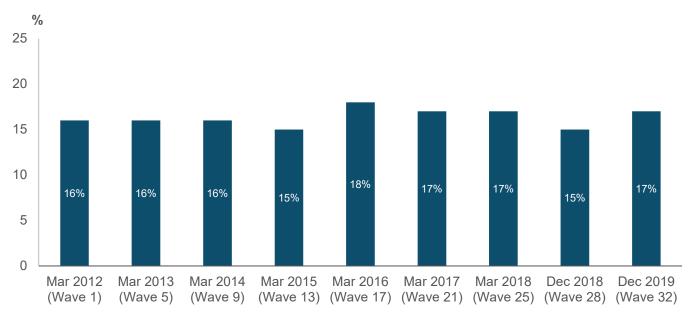
Base: All wave respondents. (Asked annually). See technical appendix for base sizes.

Those in social grades AB were more likely to report having a condensing boiler (68%, compared with 51% in social grades DE) (Table 37).

Heat networks

In December 2019, 17% said they had heard of heat networks (Figure 11). There has been relatively little variability on this measure over the course over the tracker, with awareness remaining between 15% and 18%.

Figure 11: Awareness of heat networks (based on all people), March 2012 to December 2019 ³



Q24. The next two questions are about heat networks, also called district heating. These are heating systems where heat is generated locally and then provided to yours and other homes, rather than being generated in your home. Have you ever heard of these networks?

Base: All wave respondents - March 2012 to December 2019 (Asked annually.) See technical appendix for base sizes.

Awareness of heat networks was higher among certain groups of the population. Awareness was higher among men (24%, compared with 10% of women); people aged 55 or over (23% of people aged 55 to 64 and 22% of people aged 65 and over, compared with 10% of people aged 16 to 24); those in social grades AB (24%, compared with 10% in social grades DE); and home owners (20%, compared with 13% of private renters and 10% of social renters) (Table 7). These differences are in line with the results for December 2018 when this question was last asked.

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³ Note that this question was asked every March on an annual basis. However, from wave 28 the question was asked as part of the December wave.

There were also regional differences in awareness (Figure 12). In December 2019, awareness was highest in East Midlands (23%) and Scotland (23%), and lowest in London (10%) (Table 7).

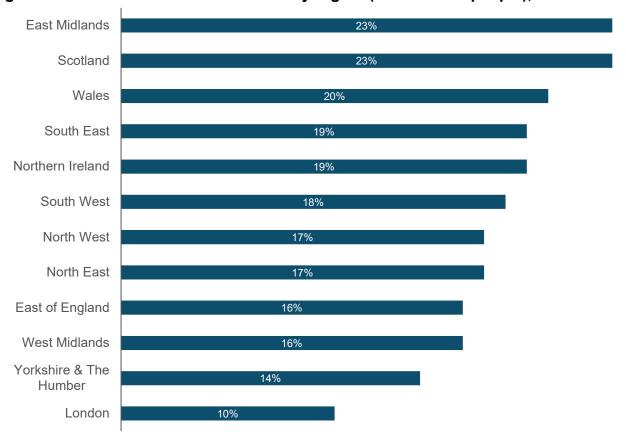


Figure 12: Awareness of heat networks by region (based on all people), December 2019

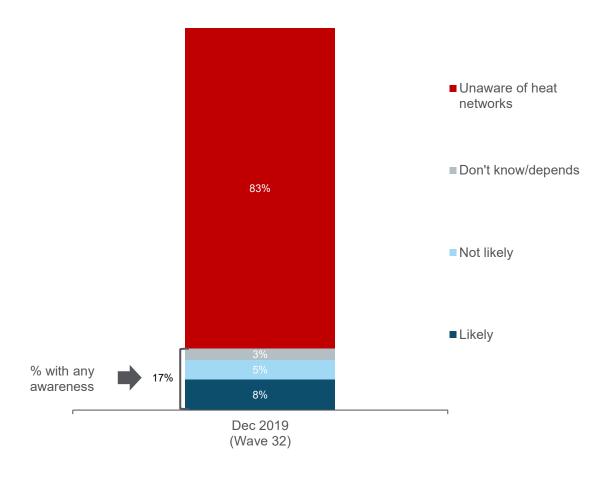
Q24. The next two questions are about heat networks, also called district heating. These are heating systems where heat is generated locally and then provided to yours and other homes, rather than being generated in your home. Have you ever heard of these networks?

Base: All wave respondents living in North East (172); North West (469); Yorkshire and The Humberside (367); East Midlands (281); West Midlands (375); East of England (414); London (499); South East (569); South West (356); Wales (218); Scotland (367); Northern Ireland (125).

In December 2019, of those who were aware of heat networks, half (50%) said they would be likely to join one if given the opportunity; this proportion remains unchanged from December 2018. A further 1% said they had already joined one.

Based on all people interviewed, this equates to 8% overall who say they would be likely to join a heat network (Table 9; Figure 13). There has been little change over the last four waves on this measure⁴

Figure 13: Likelihood of joining a heat network if given an opportunity (based on all people), December 2019:



Q25 How likely do you think you will be to join a heat network like this if you were given the opportunity? When answering, please assume you would pay no more than you do at present.

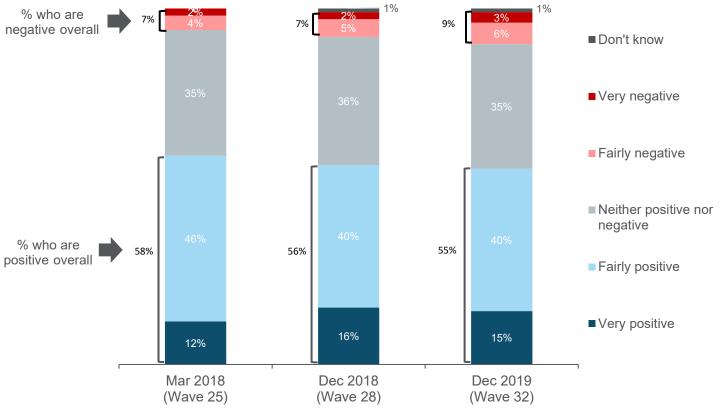
All wave respondents - December 2019 (Asked annually). See technical appendix for details.

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⁴ Before wave 21, the question was asked to everyone and therefore results collected before wave 21 cannot be compared with results collected from wave 21 onwards.

Of those aware of heat networks in December 2019, people were much more likely to be positive than negative (Figure 14). A little over half (55%) were positive about them, with 15% being very positive. Around one in 10 were negative (9%), while 35% gave a neutral opinion. These results are in line with all previous waves of the survey when this question was asked.

Figure 14 Positivity towards heat networks among those who have heard of heat networks, March 2018 to December 2019



Q25i. From what you know, or have heard about heat networks, generally how positive or negative would you say you are towards them?

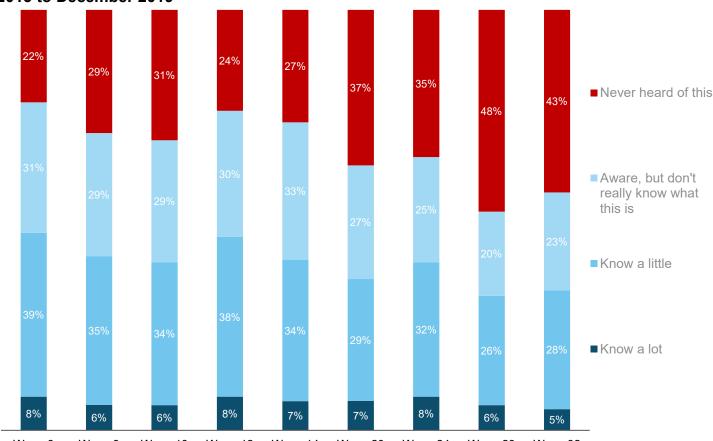
Base: All respondents who have heard of heat networks – March 2018 (331); December 2018 (595); December 2019 (683)

Renewable heating systems

In December 2019, nearly six in ten (57%) people were aware of renewable heating systems, although few felt well-informed (Figure 15). Overall, 5% said they knew a lot, 28% a little and 23% had heard of this but didn't really know anything about it.

Overall awareness in December 2019 was slightly higher than in December 2018 (a rise from 52% to 57%). However, over the longer term, awareness has generally declined from a high point of 78% in December 2013 (Figure 15).

Figure 15: Awareness of Renewable Heating Systems (based on all people), December 2013 to December 2019



Wave 8 Wave 9 Wave 10 Wave 12 Wave 14 Wave 20 Wave 24 Wave 28 Wave 32 (Dec 2013) (Mar 2014) (Jun 2014) (Dec 2014) (Jun 2015) (Dec 2016) (Dec 2017) (Dec 2018) (Dec 2019)

Q7_1. The next few questions are about renewable heating systems. By renewable heat we mean heating systems which use energy from biomass or the sun, or which use electricity to draw heat from the ground, water, or air to heat your home. How much would you say you know about renewable heating systems? This includes air source heat pumps, ground source heat pumps and biomass boilers.

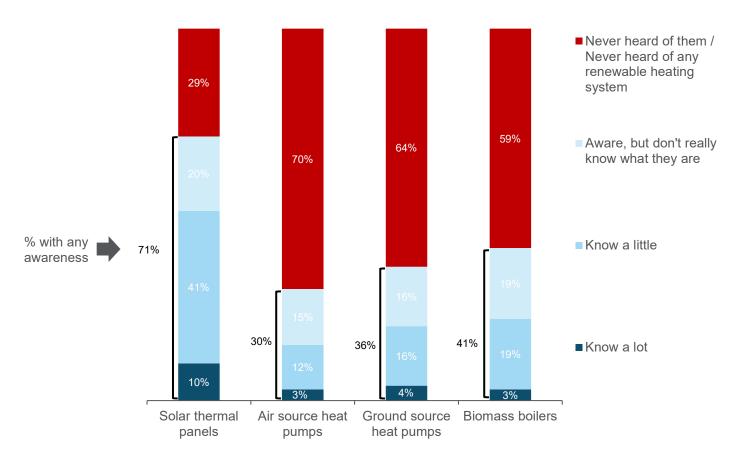
Base: All wave respondents – December 2013 – December 2019. (Asked annually). See technical appendix for details.

In December 2019, awareness was higher among men (64%, compared with 49% of women); those in social grades AB (70%, compared with 40% of those in social grades DE); and those who support renewable energy (61%, compared with 50% who oppose it) (Table 11).

By region, it is notable that awareness was highest in Northern Ireland (73%) and lowest in London (44%).

People were also asked about their awareness of specific renewable heating systems. In December 2019, awareness was highest for solar thermal panels (71%), while between three and four in ten people were aware of biomass boilers (41%), ground source heat pumps (36%) and air source heat pumps (30%) (Figure 16). Findings are in line with previous waves when these questions were asked in a comparable format.

Figure 16: Awareness of specific renewable heating systems (based on all people), December 2019



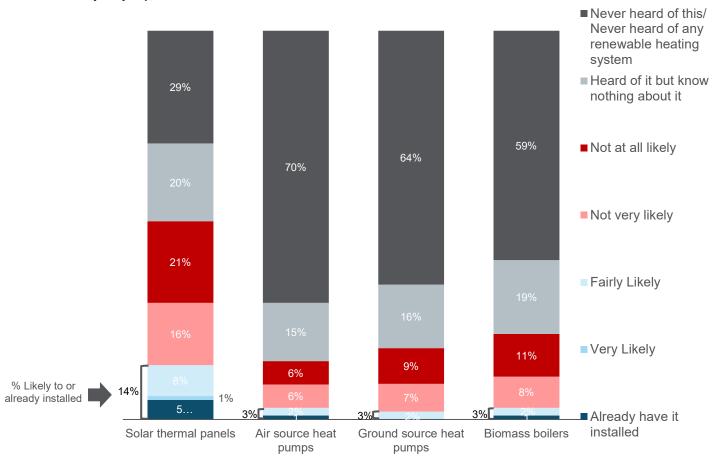
Q41. And how much would you say you know about solar thermal panels? By this we mean solar panels for hot water, not solar PV panels that generate electricity. / Q7_1A. And now thinking about three different types of renewable heating system...How much, if anything, do you know about... ...Air source heat pumps / ...Ground source heat pumps / ...Biomass boilers?

Note: The figures for Q7_1A have been rebased on all people. All those who were not routed into the question are included in the "Never heard of them / never heard of any renewable heating system" category.

Base: All wave respondents. (Asked annually). See technical appendix for base sizes.

In December 2019, the most common renewable heating system to have been installed in homes was solar thermal panels, with 5% of people having done so. In total, 14% had either already installed a solar thermal panel or considered themselves likely to do so in the next few years. In comparison, only 3% of people were either considering or had already installed each of the other renewable heating types.

Figure 17: Likelihood of installing renewable heat systems in the next few years (based on all people), December 2019⁵



Q41. And how much would you say you know about solar thermal panels? By this we mean solar panels for hot water, not solar PV panels that generate electricity. / Q7_1A. And now thinking about three different types of renewable heating system...How much, if anything, do you know about....Air source heat pumps / ...Ground source heat pumps / ...Biomass boilers? / Q42 Which, if any, of these do you currently have installed in your home? When answering, please think about whether or not this has been done to your home, even if the decision was not made by you personally / Q43. How likely do you think you would be to install an air source heat pump in your home over the next few years? / Q44. How likely do you think you would be to install a biomass boiler in your home over the next few years? / Q46. How likely do you think you would be to install solar thermal panels in your home over the next few years?

Note: The figures for Q43, Q44, Q45 and Q46 have been rebased on all people. All those who were not routed into the question are included in either the "Never heard of this" or "never heard of any renewable heating system" category.

Base: All wave respondents - December 2019 (4,212)

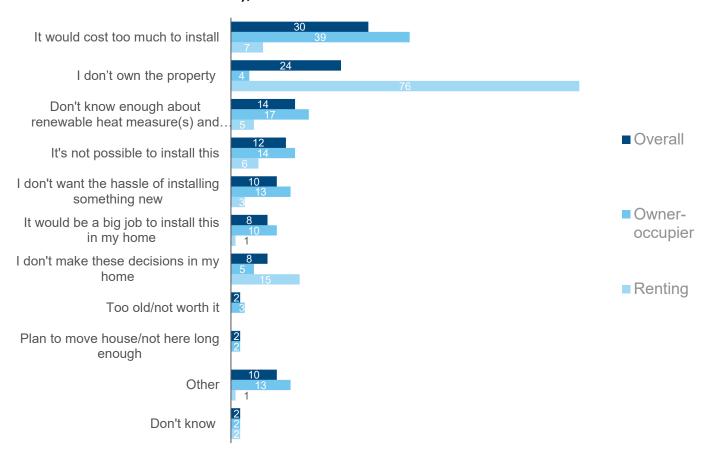
⁵ Only those who knew at least a little about each renewable heating system were asked how likely there were to install one. Results have been re-based on all respondents.

Those who had heard of at least one renewable heat measure but who said that they were unlikely to install any of them in the next few years were asked why this was the case⁶. The most common reasons given by this group were that it would cost too much to install (30%) and not being able to install them as they did not own the property (24%) (Figure 18).

Barriers to installation varied by tenure. Owner-occupiers were most likely to reject installation on account of cost (39%), due to lack of knowledge about how these systems work (17%), a perceived inability to install this in their home (14%) and because they think it would be too much effort, either wanting to avoid the hassle (13%) or thinking it would be too big a job to install this (10%).

Among those who were renting, the over-riding barriers were simply because they did not own the property (76%) or because they felt this wasn't their decision to make (15%) (Table 31).

Figure 18: Why respondents are unlikely to install any renewable heat measures in their home by tenure (among those who are aware of renewable systems but unlikely to install measures in their home), December 2019



Q51. Why are you unlikely to install any renewable heat measures in your home?

Base: All respondents who were aware of at least one renewable heat measure and unlikely to install measures in their home (1,883); Owner-occupier (1151); Renting privately or through social housing (714).

⁶ Responses were collected unprompted (without showing respondents a list) and were coded by interviewers into a predefined list.

Respondents who were aware of renewable heating systems were asked whether they agreed or disagreed with the following four statements:

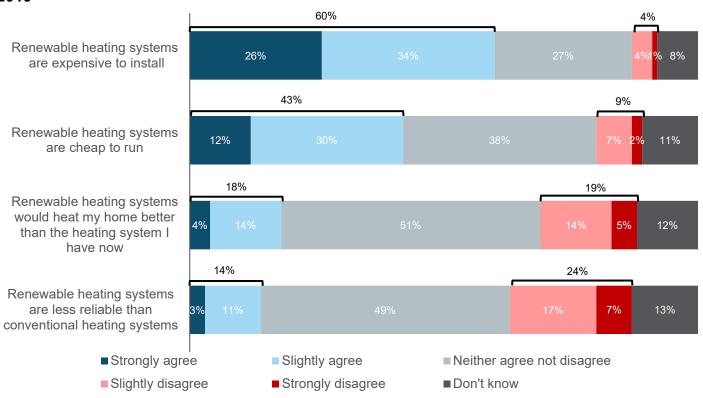
- Renewable heating systems are expensive to install
- A renewable heating system would heat my home better than the heating system I have now
- Renewable heating systems are cheap to run
- Renewable heating systems are less reliable than conventional heating systems (for example a gas or oil boiler)

The results for this question have been based on all owner-occupiers aware of renewable heating systems (Figure 19).

In December 2019, a large proportion of owner-occupiers said they neither agreed or disagreed with any of the statements or didn't know. This indicates that even when people have heard of these systems there is still a substantial lack of knowledge about how these systems work.

Among owner-occupiers aware of renewable heating, a much higher proportion agreed (60%) than disagreed (4%) that renewable heating systems would be expensive to install. However, this group was also more likely to agree (43%) than disagree (9%) that these systems would be cheap to run. Views were more mixed in relation to heating efficiency and reliability. Owner-occupiers aware of renewable heating were as likely to agree (18%) as they were to disagree (19%) that renewable heating would heat their home better. However, on balance this group were more inclined to think that renewable heating systems would improve reliability: they were more likely to disagree (24%) than agree (14%) that renewable heating would be less reliable.

Figure 19: Agreement with various statements regarding renewable heating systems (based on owner-occupiers who have heard of renewable heating systems), December 2019



Q7_3. How much do you agree or disagree with the following statements? ...a) Renewable heating systems are expensive to install / ...b) Renewable heating systems are cheap to run / ...c) Renewable heating systems are less reliable than conventional heating systems (for example a gas or oil boiler) d) A renewable heating system would heat my home better than the heating system I have now.

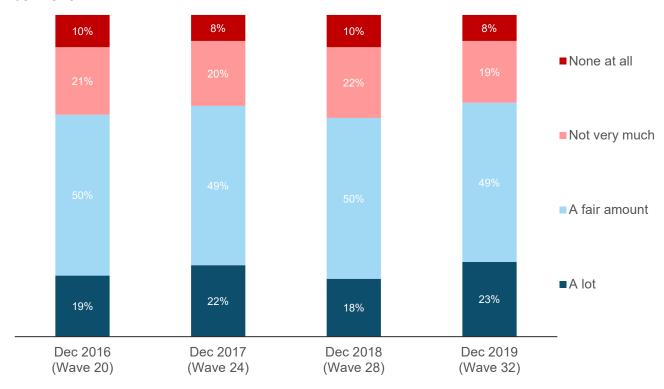
Base: All owner-occupiers who have at least heard of renewable heating systems - December 2019; Statements a,b,c (1,416); Statement d (899).

Heat usage in the home

Respondents were asked how much attention they pay to the amount of heat they use in their home.⁷

In December 2019, 23% said they paid a lot of attention to the amount of heat they used in their home, with a further half (49%) saying they paid a fair amount of attention. Around two in ten (19%) said they did not pay much attention and 8% did not pay any attention at all. These results show relatively little change from previous waves of the survey (Figure 20).

Figure 20: Attention paid to heat used in the home (based on all people), December 2016 to December 2019



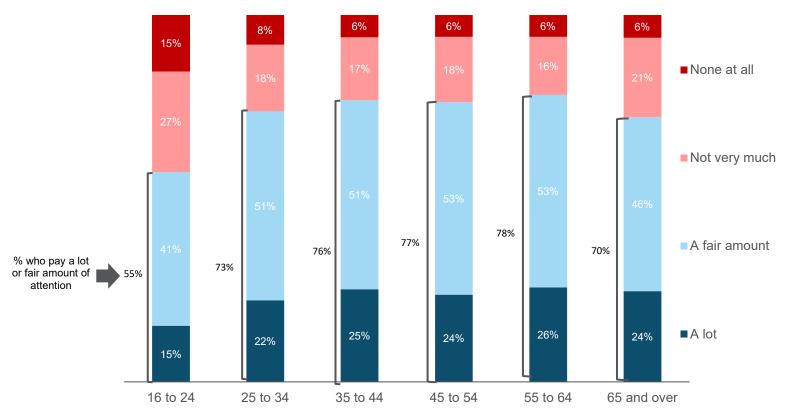
Q7_8. How much attention do you pay to the amount of heat you use in your home?

Bases: All wave respondents – see technical appendix for further details.

⁷ This question has been asked over six waves of the survey, dating back to September 2015. However, here we focus on the last four waves in which this question was asked, as all were conducted at the same time of year (December 2016, 2017, 2018 and 2019). Differences compared with earlier waves (September 2015 and March 2016) are likely to reflect seasonal differences in behaviour and so are excluded from our analysis.

Those aged 16 to 24 were least likely to pay attention to the amount of heat used (Figure 21; table 40) with 55% saying they paid a lot or a fair amount of attention compared with between 70% and 78% among all other age groups. This may be because those aged 16 to 24 are more likely to be living with their parents.

Figure 21: Attention paid to heat used in the home by age (among all people), December 2019

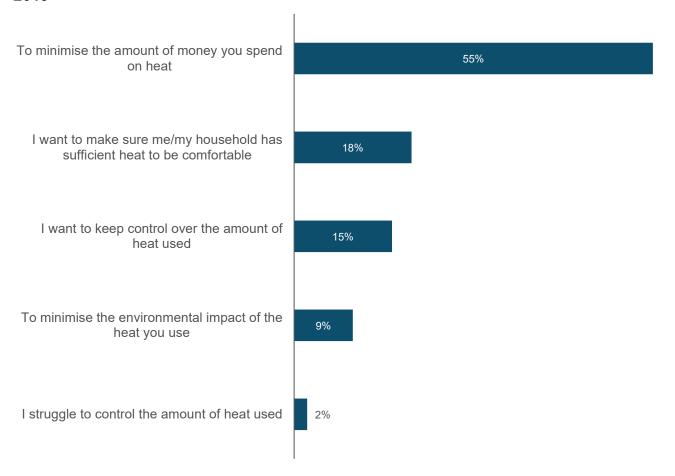


Q7 8. How much attention do you pay to the amount of heat you use in your home?

Base: All wave respondents aged 16 to 24 (509); 25 to 34 (713); 35 to 44 (568); 45 to 54 (544); 55 to 64 (592); 65 and over (1,286).

Those who paid a lot or a fair amount of attention to the amount of heat used in their home were asked their reasons for doing this (Figure 22)⁸. In December 2019, over half (55%) said this was to minimise the amount of money they spent, 18% said that this was to make sure they had enough heat to be comfortable, and a similar proportion said they wanted to keep control of the amount of heat used (15%). Less than one in ten (9%) said this was mainly done to reduce the environmental impact of the heat used. These results are similar to previous waves of the survey.

Figure 22: Reason for paying attention to amount of heat used in home among those who pay a lot or a fair amount of to the amount of heat used in their home, December 2019



Q7_9. You said 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 who pay a lot or a fair amount of attention to the amount of heat used in their home – December 2019 (3,017).

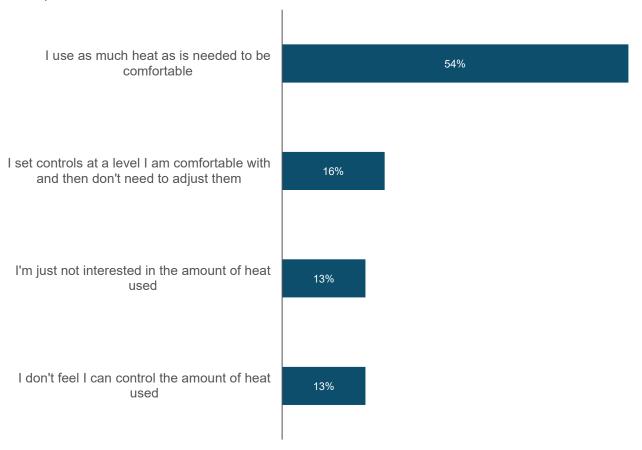
Those more likely to pay attention to the amount of heat used for environmental reasons included those aged 16 to 24 (13%, compared with 5% of those aged 65 and over) and those in social grades AB (11%, compared with 5% of those in social grades DE). (Table 41)

27

⁸ Responses were collected prompted; respondents were shown a list of options on screen to select from or they chose an 'other' response.

Those who said they did not pay much or any attention to the amount of heat used were also asked the reason for this (Figure 23)⁹. The most common response was that they used as much heat as needed to be comfortable (54%). These results are aligned with previous waves of the survey.

Figure 23: Reason for not paying attention to amount of heat used in home among those who pay no attention or not very much attention to the amount of heat used in their home, December 2019



Q7_10. You said you pay [not very much/no] attention to the amount of heat you use in your home. What is the main reason for this?

Base: All who pay not very much or no attention to the amount of heat used in their home – December 2019 (1,157).

28

⁹ Responses were collected prompted; respondents were shown a list of options on screen to select from or they chose an 'other' response.

Installing or replacing heating systems

In December 2019, 64% of people said they would only replace their heating system when their current one breaks down or starts to deteriorate (Figure 24). A further 13% said they would consider replacing their heating system while it was working, while 21% said this was not their decision to make due to renting or living with parents. The proportion of respondents who will only replace their heating system when their current one breaks down or deteriorates has gradually decreased from 70% in December 2016. This has coincided with an increase in the proportion of people who say that replacing their heating system was not their decision due to renting or living with parents.

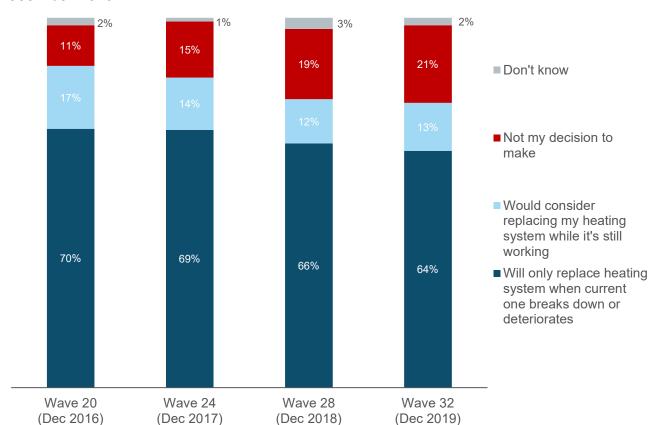


Figure 24: Plans for replacing heating system (based on all people), December 2016 to December 2019

Q7_11. Now thinking about your heating system. Which of the statements on this screen comes closest to your view?

Base: All wave respondents. (Asked annually). See technical appendix for base sizes

Those who said they would consider replacing a working heating system were asked their reasons for doing this (Table 44). 10 Just under four in ten (37%) said this was to save bills, while 32% said they would switch to a more environmentally friendly heating system. Just under three in ten (27%) said they would switch to have a more reliable heating system than their current one, an increase from 19% in December 2018. (Excel Summary Tables, Q7 12).

¹⁰ Responses were collected prompted; respondents were shown a list of options on screen to select from or they chose an 'other' response.

Just over two in ten people (21%) said they had a boiler or heating system installed in the last three years (Figure 25). The proportion of respondents who have said they had a boiler or heating system installed in the last three years has remained between 19% and 23% since the question was first asked in December 2017 (Excel Summary Tables, Q60).

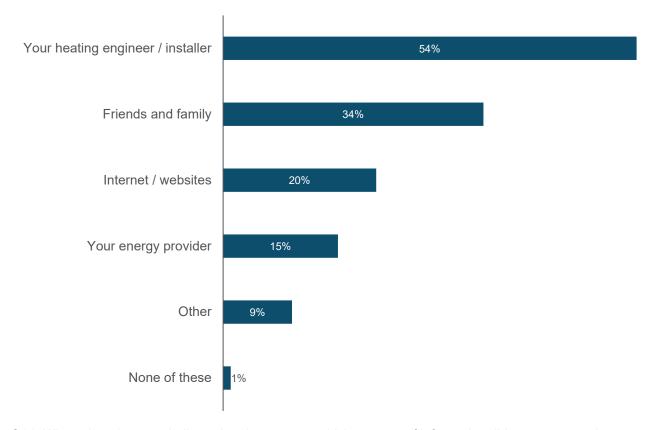
Owner occupiers (24%) were more likely than private renters (13%) and social renters (19%) to have installed a boiler or heating system in this period (Table 45).

Of those who have had a boiler or heating system installed in the last three years, most (68%) had installed it 1-3 years ago while around a third (31%) had installed it more recently (Table 46). Over nine in ten (94%) of those who had installed a new boiler or heating system said this was gas (Table 47).

Of those who had a new boiler or heating system installed, six in ten (61%) said they were involved in the decision-making process for choosing this (Table 48). Unsurprisingly, owner occupiers (77%) were much more likely to be involved in the decision-making process than private renters (15%) or social renters (12%).

Those involved in choosing a new boiler or heating system were asked which sources of information they used to make their decision (Figure 23). Over half (54%) said they sought information from their heating engineer or installer, 34% from friends and family, 20% from the internet, and 15% from an energy provider. These results were similar to previous waves of the survey.

Figure 25: Sources of information used to help make a decision when choosing new boiler or heating system (among those who had a new boiler or heating system installed in the last three years and were part of the decision-making process), December 2019



Q64. When choosing your boiler or heating system, which sources of information did you use to make your decision?

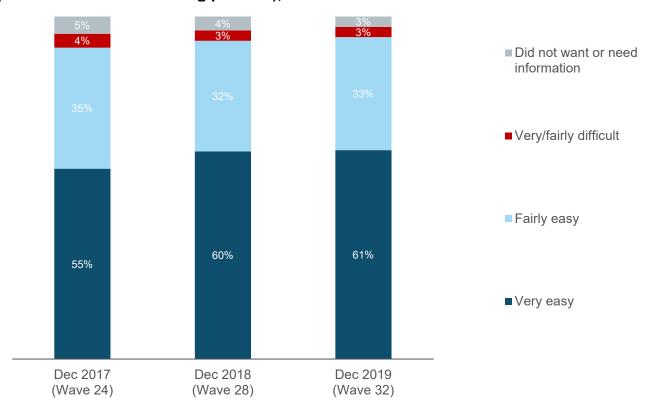
Base: All who had a new boiler or heating system installed in the last three years and were involved in the decision-making process for this – December 2018 (462).

Of those who said they had sought information from the internet, the most common websites used were Google (35%), Which? (11%) and British Gas (11%) (Table 50).

In December 2019, those who used each of these sources of information were then asked how helpful each source was in helping them to decide about which boiler or heating system to install. Almost all people found the internet (100%), friends and family (99%), and their heating engineer/installer (98%) either a fairly or very helpful source of information. Around nine in ten (89%) of those who used their energy provider as a source of information found them helpful. (Table 51).

In December 2019, almost all (94%) of those involved in the decision-making process about a new boiler or heating system said it was easy to get the information they wanted (61% very easy, 33% fairly easy) (Figure 26). These results have remained consistent since the question was first asked in December 2017.

Figure 26: Ease of finding information about a new boiler or heating system (among those who had a new boiler or heating system installed in the last three years and were part of the decision-making process), December 2017 to December 2019

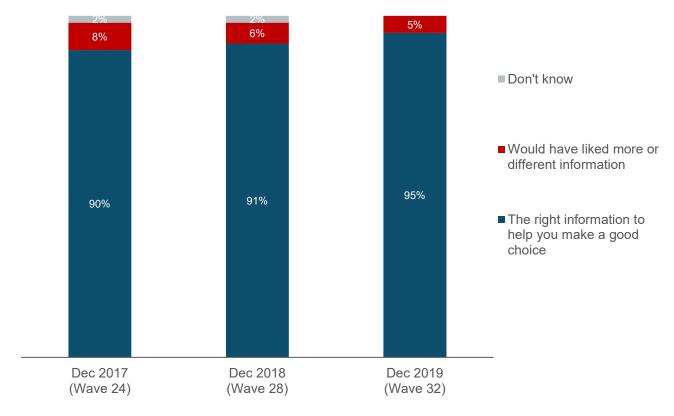


Q67. How easy or difficult did you find it to get the information you wanted about a new boiler of heating system?

Base: All who had a new boiler or heating system installed in the last three years and were involved in the decision-making process for this – December 2017 (235); December 2018 (419); December 2019 (462)

Those who were involved in the decision-making process about replacing their boiler or heating system were asked whether they felt they had the right information to help them make a good choice (Figure 27). Almost everyone (95%) said they did, a slight increase from when this question was last asked in December 2018 (91%).

Figure 27: Whether had the right information in order to make a good choice about a boiler or heating system (among those who had a new boiler or heating system installed in the last three years and were part of the decision-making process), December 2017 to December 2019



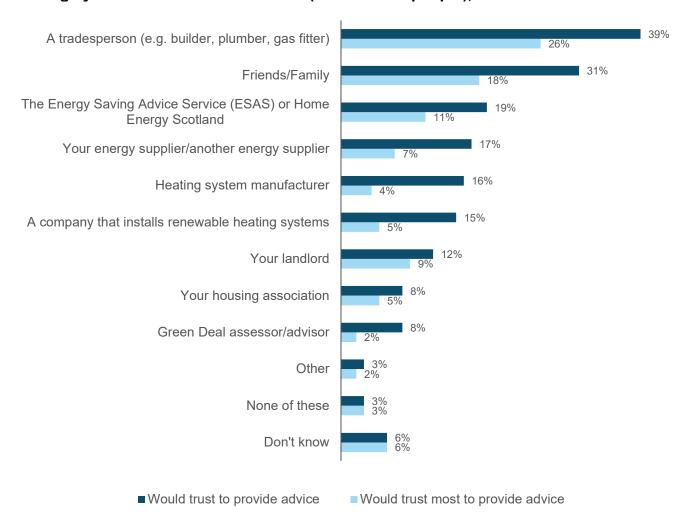
Q68. Do you feel you had the right information to help you make a good choice or would you have liked more or different information?

Base: All who had a new boiler or heating system installed in the last three years and were involved in the decision-making process for this – December 2017 (235); December 2018 (419); December 2019 (462).

People were asked who they would trust to provide advice about which heating system to install in their home. They were first asked to select all the people or organisations they would trust from a prompted list. If they selected more than one answer, they were then asked who they would trust most. Figure 28 presents both sets of responses.

In December 2019, 26% said the source they would trust the most to provide advice would be a tradesperson followed by their friends or family (18%). Around one in ten said they would have most trust in each of the Energy Saving Advice Service (ESAS) or Home Energy Scotland (11%), or their landlord (9%).

Figure 28: Sources people would trust at all and most to provide advice about which heating system to install in their home (based on all people), December 2019



Q7_7A. Which of the following would you trust to provide advice about which heating system to install in your home?

Q7_7B. And which one would you trust the most to provide advice about which heating system to install in your home?

Base: All wave respondents – December 2019 (4,212).

Unsurprisingly, private renters were far more likely to say they had the most trust in their landlord (36%), while social renters had the most trust in their housing association (30%). The results for owner-occupiers largely reflect the overall findings presented in Figure 28, with a tradesperson (34%) and friends and family (21%) most likely to be trusted (Table 38).

Technical information

Technical notes

The wave 32 report provides selected headline findings and highlights statistically significant differences at the 95% level between wave 32 and previous waves, and between sub groups for wave 32.

Percentages included on charts in this report may not add up to 100% due to rounding, the exclusion of some categories (e.g. 'Don't know' and 'Refused') and the option for more than one response to be selected at some questions. Similarly, percentages based on aggregating categories (for example 'strongly support' and 'support') may not always reflect the sum of the individual answer categories.

This report is not an exhaustive overview of the findings. Please refer to the accompanying Excel summary tables, Excel dataset and PDF/Excel cross tabulation tables to see full responses to all survey questions.

The results shown here for wave 32 are based on 4,212 face-to-face in-home interviews conducted with a representative sample of UK adults aged 16+. Fieldwork was conducted between 4 December and 22 December 2019 on the Kantar UK Omnibus, which uses a random location quota sampling method.

All the questions included at wave 32 had been asked in previous waves. These questions were jointly developed between BEIS and Kantar and refined through cognitive testing.

The representativeness of the data was controlled through sample design, fieldwork quotas and post-fieldwork weighting. Data were weighted for the following characteristics: sex, age, social grade, region and tenure. Results included here are based on weighted data.

This study is conducted using a random location sampling approach which is a form of quota sampling. With these types of sample, the accuracy of estimates is conditional on the assumption that the combined effects of sampling, fieldwork protocols, quota application, and weighting have successfully eradicated biasing selection effects on the data. However, this assumption is untestable without substantial – and impractical – expenditure on collecting benchmark data using a random probability sampling approach.

The steps we have taken to minimise the risk of bias are as follows.

- The sample is drawn from the Postcode Address File (PAF). To ensure that the sample points selected are representative of the geographic profile of the UK population, the sampling frame is stratified by region and ACORN.
- Interviewers are given a block of addresses to work for each sample point. Interviewers
 are instructed to contact addresses within their block systematically to obtain their target
 of interviews. The tight geographic control limits interviewer choice, and therefore
 reduces sample bias. Interviewing is spread across both evening, weekends and
 daytime to minimise the risk of bias towards the non-working population.
- Quotas are used to ensure a range of respondent types are recruited, and to combat the natural variation in response propensity (both contact and co-operation) among the local

population. For this study, interlocking quotas were set based on gender, presence of children and working status.

 The weighting scheme for this study has been designed to correct for observed imbalances in demographic variables which are associated with key survey outcomes.

The variables included in the weighting matrix (and the source of the benchmark statistics for waves 30-33) were as follows:

- Age by Gender ONS Mid-Year Population Estimates 2017
- Region (former Government Office Region) ONS Mid-Year Population Estimates 2017
- Social Grade Kantar TGI (Jan 18 Dec 18)
- Housing tenure ONS Annual Population Survey (Jan 18 Dec 18)

It should be noted that the weighting only corrects for observed bias (for the set of variables included in the weighting matrix) and there is a risk of unobserved bias. Furthermore, the raking algorithm used for the weighting only ensures that the sample margins match the population margins. There is no guarantee that the weights will correct for bias in the relationship between the variables.

More detailed information can be found in the technical note. This is available at: https://www.gov.uk/government/publications/beis-public-attitudes-tracker-technical-note

Fieldwork dates and sample sizes

Wave	Fieldwork dates	Sample sizes
Wave 1 (Mar 2012)	21 to 25 March 2012	2,121
Wave 2 (Jun 2012)	27 June to 1 July 2012	2,100
Wave 3 (Sep 2012)	26 to 30 September 2012	2,118
Wave 4 (Dec 2012)	12 December 2012 to 2 January 2013	2,107
Wave 5 (Mar 2013)	27 to 31 March 2013	2,051
Wave 6 (Jul 2013)	3 to 7 July 2013	2,124
Wave 7 (Sep 2013)	25 to 29 September 2013	2,103
Wave 8 (Dec 2013)	11 to 15 December 2013	2,110

Wave 9 (Mar 2014)	26 to 30 March 2014	2,040
Wave 10 (Jun 2014)	25 to 29 June 2014	2,087
Wave 11 (Sep 2014)	24 to 28 September 2014	2,103
Wave 12 (Dec 2014)	10 December 2014 to 8 January 2015	2,119
Wave 13 (Mar 2015)	18 to 29 March 2015	1,981
Wave 14 (Jun 2015)	24 to 28 June 2015	2,118
Wave 15 (Sep 2015)	23 to 27 September 2015	2,121
Wave 16 (Dec 2015)	9 to 13 December 2015	2,121
Wave 17 (Mar 2016)	23 to 27 March 2016	2,105
Wave 18 (Jun 2016)	29 June to 3 July 2016	2,114
Wave 19 (Sep 2016)	28 September to 2 October 2016	2,080
Wave 20 (Dec 2016)	14 to 18 December 2016	2,138
Wave 21 (Mar 2017)	29 March to 2 April 2017	2,180
Wave 22 (Jun 2017)	30 June to 4 July 2017	2,097
Wave 23 (Sep 2017)	27 September to 1 October 2017	2,105
Wave 24 (Dec 2017)	13 to 17 December 2017	2,078
Wave 25 (Mar 2018)	28 March to 6 April 2018	2,102
Wave 26 (Jul 2018)	11 to 17 July 2018	4,268 ¹¹
Wave 27 (Sep 2018)	19 to 30 September 2018	4,258
Wave 28 (Dec 2018)	5 to 16 December 2018	4,273

 $^{^{11}}$ The sample size increased to c. 4,200 from Wave 26 (July 2018) onwards to allow greater scope for regional analysis.

BEIS Public Attitudes Tracker (December 2019, Wave 32, UK)

Wave 29 (Mar 2019)	13 to 24 March 2019	4,224
Wave 30 (Jun 2019)	5 to 16 June 2019	4,231
Wave 31 (Sep 2019)	11 to 22 September 2019	4,201
Wave 32 (Dec 2019)	4 to 22 December 2019	4,212

Definitions

Base	The number of people answering a survey question.
Cognitive testing	An in-depth interviewing method to determine the reliability and validity of survey questions.
Condensing boilers	Water heating appliances that are run on either gas or oil, to improve energy efficiency.
Clean Growth	Growing national income while cutting greenhouse gas emissions.
Energy infrastructure	A term used to capture a range of different energy sources that are covered by the survey and the interconnections between them. This includes a range of renewable sources (on-shore and off-shore wind, solar, wave and tidal, and biomass), nuclear, shale gas, and carbon capture and storage as well as the pipeline and other interconnectors between them.
Fieldwork	The period where face-to-face interviews are conducted.
Heat networks	Heating systems where heat is generated locally and then provided to homes, rather than being generated within homes.
Omnibus survey	A method of quantitative survey research where data on a wide variety of subjects is collected during the same interview.
Quotas	A target number of interviews for a certain characteristic during survey fieldwork (e.g. age).
Random location quota sampling	A form of quota sampling that combines elements of random sampling and quota sampling. Once a random sample is drawn, interviewers are tasked with interviewing a range of sub-groups across different timing patterns based on a pre-agreed number of respondents.
Renewable heat	Heating systems that use renewable energy to provide heat, such as air source heat pumps, ground source heat pumps, biomass boilers and thermal solar panels.
Representativeness	Similarity of the sample profile to benchmark population statistics, such as the Office for National Statistics mid-year population estimates.
Sample size	The number of people included in the sample (a subset of the population).
Shale gas and fracking	Shale gas is natural gas found in shale, a non-porous rock which does not allow the gas to escape. Hydraulic fracturing or "fracking" is a process of pumping water at high pressure into shale to create narrow fractures which allow the gas to be released and captured. The gas can then be used for electricity and heating.
Social grade	Social grade is a classification system based on occupation. It contains the following categories:
	A: Higher managerial, administrative and professional

	B: Intermediate managerial, administrative and professional
	C1: Supervisory, clerical and junior managerial, administrative and professional
	C2: Skilled manual workers
	D: Semi-skilled and unskilled manual workers
	E: State pensioners, casual and lowest grade workers, unemployed with state benefits only
Statistical significance	A statistical test to determine whether relationships observed between two survey variables are likely to exist in the population from which the sample is drawn. We only report on findings that are statistically significant at the 95% level.
Survey outputs	The key deliverables from the survey. This includes:
	A key finding report, presenting summary headline findings from September 2019.
	Summary tables (Excel), showing trends across all waves of the tracker.
	An Excel dataset containing questionnaire variables, demographic variables and derived variables for further analysis. An SPSS version of the dataset is available upon request.
	Excel label data (CSV), containing labels for all variables.
	Excel numeric data (CSV), containing numeric values for all variables.
	Cross tabulation tables (PDF and Excel) for the current wave, including demographic and key question sub-group comparisons for all questions.
Weighting	An adjustment made to the data to ensure that survey results are representative of the target population (in this case, all UK adults).

Further information

Future updates to these statistics

Results from the Public Attitudes Tracker are published quarterly. The next release is scheduled to be published on 7 May 2020. Note that not all Tracker questions are included in each wave.

Revisions policy

The <u>BEIS statistical revisions policy</u> sets out the revisions policy for these statistics, which has been developed in accordance with the UK Statistics Authority <u>Code of Practice for Statistics</u>.

Uses of these statistics

These statistics are used by BEIS to guide BEIS policy, by many academics in their related studies and by the general public.

User engagement

Users are encouraged to provide comments and feedback on how these statistics are used and how well they meet user needs. Comments on any issues relating to this statistical release are welcomed and should be sent to: BEISPAT@beis.gov.uk.

The BEIS statement on <u>statistical public engagement and data standards</u> sets out the department's commitments on public engagement and data standards as outlined by the <u>Code</u> of Practice for Statistics.

Pre-release access to statistics

Some ministers and officials receive access to these statistics up to 24 hours before release. Details of the arrangements for doing this and a list of the ministers and officials that receive pre-release access to these statistics can be found in the <u>BEIS statement of compliance</u> with the Pre-Release Access to Official Statistics Order 2008.

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