Department for
Business, Energy
& Industrial Strategy

ENERGY AND CLIMATE CHANGE PUBLIC ATTITUDE TRACKER

Wave 23

November 2017

Introduction

In March 2012 the Department of Energy and Climate Change launched a tracking survey to understand and monitor public attitudes to the Department's main business priorities. On 14 July 2016, the Department of Energy and Climate Change (DECC) merged with the Department for Business, Innovation and Skills (BIS), to form the Department for Business, Energy and Industrial Strategy (BEIS). As such, the survey is now BEIS's Energy and Climate Change Public Attitudes Tracker (PAT). The PAT still consists of one annual survey every March and three shorter surveys, usually in June, September and December, which repeat a subset of questions where we think attitudes might shift with greater regularity or be influenced by seasonal factors. The tracker is regularly reviewed to ensure that the dataset continues to offer valuable insight. A list of the changes made to date, covering both question content and frequency, is included in the annex.

This report presents summary headline findings from September – October (Wave 23) and primarily makes comparisons with data from Wave 19 which was conducted at the same point last year (September – October 2016).

The twenty-third wave of data was collected between 27 September–1 October 2017 using face-to-face in-home interviews with a representative sample of 2,105 households in the UK. Data was collected using the Kantar TNS Omnibus, which uses a random location quota sampling method. The questionnaire was designed by BEIS and Kantar Public (formerly TNS BMRB) drawing on a number of questions from previous surveys. Questions were refined through cognitive testing. Full details of the methodology are provided in the technical note.

Tables with fieldwork dates and sample sizes for each wave and a complete list of changes to the question set and frequency in the past 12 months is included in the annex of this report.

Summary of headline findings

This summary provides selected headlines and highlights statistically significant differences between Wave 23 and previous waves. It is not an exhaustive overview of the findings. Please refer to the accompanying excel summary tables and excel dataset to see full responses to all survey questions:

https://www.gov.uk/government/collections/public-attitudes-tracking-survey

Energy Security

Levels of concern in relation to some aspects of the UK's future energy security have fallen compared with the last wave when these questions were asked (wave 21). There were drops in the proportion concerned that the UK is becoming too dependent on energy from other countries (66% to 59%), that the UK is not developing technology to use existing fossil fuels sufficiently (57% to 50%), and that UK supplies of fossil fuels are not sufficient to meet the UK's demand (59% to 51%).

Energy bills

Worries over paying for energy bills have remained at their lowest since the tracker began, with only 20% either very or fairly worried about paying their energy bills. The level of worry was lowest amongst those with household incomes over £50,000 (12%), 16-24 year olds (12%) and social grade AB (13%). It was highest amongst social renters (24%), 35-44 year olds (25%), those in social grade DE (27%), and those with household incomes up to £15,999 (26%).

Between wave 14 and wave 23, the proportion of respondents who were very or fairly worried about their energy bills has remained between 20% and 30%. In earlier waves of the survey, levels of worry were much higher. Half (48%) were very or fairly worried at the equivalent wave of fieldwork in 2013 (wave 7, September 2013).

The level of relative concern about energy bills versus other household bills has remained stable since last year. When comparing energy bills against other bills at Wave 23, 5% of respondents were more worried about energy bills than paying for food, transport, and housing costs. This is considerably lower than the peak of 14% in wave 8 of the tracker.

Energy suppliers and switching

Consumers' levels of trust in energy suppliers on a range of measures showed little change from recent waves. Respondents remained most likely to trust suppliers to provide a bill which accurately reflects energy use (72%), and to provide a breakdown of the components of their bill (72%). They were less likely to trust suppliers to provide impartial and accurate advice on energy efficiency measures (59%), give customers a fair deal

(58%), inform customers about the best tariff (55%) and to improve their home to make it more energy efficient, if asked to do this (54%).

The proportion of the public that plan to switch energy supplier in the next year has remained stable when compared with the same stage last year. At wave 23, 5% had firm plans to switch their supplier in the next year, whilst around a third (32%) felt that they 'may or may not switch supplier'. Six in ten (59%) stated that they would not be switching supplier. The most likely groups to have firm plans to switch in the next year were those with a household income above £50,000 (8%) and those aged 45-54 (8%). In comparison, those aged 16-24 (2%) were least likely to have plans to switch.

Energy saving and wasting

The proportion of people that claim to give a lot of thought to saving energy in the home has remained very stable over recent waves. Twenty five per cent of people claimed to give a lot of thought to saving energy at home, whilst 50% claimed to give it a fair amount of thought. The findings at wave 23 are very similar to those at all previous waves conducted at this point of the year.

Renewable energy

At wave 23, 82% of respondents expressed support for the use of renewable energy, a slight increase from 77% at wave 22, and 79% one year ago (wave 19). Opposition to renewables remained very low at 3%, with only 1% strongly opposed.

Support for a range of renewable energy developments remained high: 84% of respondents said they supported solar energy, 79% supported both off-shore wind and wave and tidal, 74% supported on-short wind, and 69% supported biomass,

Nuclear energy

Support for the use of nuclear energy has remained fairly stable over the course of the tracker. At wave 23, 33% supported nuclear energy compared with 25% who were opposed. Those with an annual household income of £50,000 or more (42%), males (40%), those aged over 65 (42%), and those in social grade AB (38%) were the most likely to support the use of nuclear energy.

Four in ten (40%) selected the neutral option at this question, to indicate that they neither support nor oppose the use of nuclear energy.

Radioactive waste

At wave 23, 14% said they knew a lot or a fair amount about the way the UK manages radioactive waste, whilst 86% knew not very much or nothing at all. These results are consistent with previous waves.

There was a slight increase in the proportion of respondents who claimed to have some knowledge of Geological Disposal Facilities (GDF), from 41% at wave 22 to 46% at wave 23. Most who were aware did not have a lot of knowledge; 23% said they were aware but did not really know what they were, and 20% knew little about them. Only 4% said they knew a lot about GDF. Self-assessed knowledge of GDF differs by gender, age and social group, with men (54%, compared with 38% for women), those who are aged 65 and over (62%, compared with 34% of 16-24 year olds) and those in social grades AB (57%, compared with 35% in social grades DE) more likely to claim knowledge of GDF.

Shale gas

Three quarters of the public were aware of fracking at wave 23 (78%). Awareness of fracking has remained very stable over the last three years of the tracker, following a significant increase between wave 2 (42%) and wave 8 (70%). However, despite many people being aware of fracking, only a small proportion claimed to have detailed knowledge. At wave 23, 13% claimed to know a lot about fracking, whilst 47% said they knew a little, and 18% were aware of it but didn't really know what it was. These findings have shown no change since wave 22 and have remained fairly consistent over the last three years. Awareness of fracking was higher among males (84%), for those in social grade AB (91%), aged over 65 (90%), with incomes over £50,000 (91%), and home owners (86%).

When asked whether they support or oppose extracting shale gas, half of the public (48%) neither supported nor opposed it, with a further 4% saying they did not know whether they supported or opposed. Of those who offered an opinion, more people were opposed to fracking (36%) than supported it (13%). Support for fracking is at its lowest point since the tracker began asking respondents about their opinions on the subject at wave 8.

Follow-up questions were asked to identify the most common reasons why people support or oppose fracking. The most common reasons for supporting fracking were the need to use all available energy sources (32%), being good for local jobs and investment (28%), potentially resulting in cheaper energy bills (26%), and to reduce dependence on other countries for the UK's energy supply (24%).

The most common reason for opposing fracking was the loss or destruction of natural environment (64%). Other commonly cited reasons included a view there is too much risk and uncertainty (30%), the risk of contamination to water supplies (28%), that it is generally not a safe process (25%), and that there is a risk of earthquakes (23%).

Smart Meters

There has been a small increase in awareness of smart meters between wave 21 (82%) and wave 23 (85%). At wave 23, almost three in ten (27%) reported they had a smart meter, whilst six in ten were aware of smart meters but did not own one (58%).

Ownership of smart meters was highest for those in social grade DE (33%) and social renters (35%). Awareness was higher for those with household incomes over £50,000 (92%), and those in social grade C1 (88%). There were also higher levels of awareness for age groups 45 to 54 (90%), 55-64 (89%) and 65+ (88%).

Technical notes

The results shown here are based on 2,105 face-to-face in-home interviews conducted with a representative sample of UK adults aged 16+. Fieldwork was conducted between 27th September 2017 and 1st October 2017 on the Kantar TNS Omnibus, which uses a random location quota sampling method. The questionnaire was designed by BEIS and Kantar Public drawing on a number of questions from previous surveys. Questions were 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.

Please refer to the full technical note at https://www.gov.uk/government/publications/public-attitudes-tracker-technical-note-on-use-of-wave-1-and-wave-2-datasets for further details.

Annex

Table 1. Fieldwork dates and sample sizes for each wave.

	Fieldwork dates	Sample size
Wave 1	21 - 25 March 2012	2,121
Wave 2	27 June - 1 July 2012	2,100
Wave 3	26 - 30 September 2012	2,118
Wave 4	12 December 2012 - 2 January 2013	2,107
Wave 5	27 - 31 March 2013	2,051
Wave 6	3 - 7 July 2013	2,124
Wave 7	25 - 29 September 2013	2,103
Wave 8	11 - 15 December 2013	2,110
Wave 9	26 - 30 March 2014	2,040
Wave 10	25 - 29 June 2014	2,087
Wave 11	24 - 28 September 2014	2,103
Wave 12	10 December 2014 - 8 January 2015	2,119
Wave 13	18 - 29 March 2015	1,981
Wave 14	24 - 28 June 2015	2,118
Wave 15	23 - 27 September 2015	2,121
Wave 16	9 -13 December 2015	2,121
Wave 17	23 March 2016 - 27 March 2016	2,105
Wave 18	29 June - 3 July 2016	2,114
Wave 19	28 September - 2 October 2016	2,080
Wave 20	14 – 18 December 2016	2,138
Wave 21	29 March – 2 April 2017	2,180
Wave 22	30 June – 4 July 2017	2,097

Wave 23	27 September – 1 October 2017	2,105

Table 2. Changes to question set and frequency

Question	Frequency
Q4) How often, if at all, do you personally do any of the following? a) Leave the lights on when you are not in the room b) Boil the kettle with more water than you are going to use c) Wash clothes at 30 degrees or lower d) Try to keep rooms that you are not using at a cooler temperature than those you are using e) Leave the heating on when you go out for a few hours	Q4_d and Q4_e asked in the Annual wave from wave 13.
Q7) Which answer best applies to you and your household at the moment with regards to the following measures to heat your home and/or provide hot water? • Installing a biomass boiler (this may involve burning wood logs, pellets or chips to provide central heating and/or hot water) • Installing an air source heat pump • Installing a ground source heat pump • Installing solar thermal panels (this means solar panels for hot water, not solar PV panels which generate electricity) • Replacing an older gas boiler with a more efficient condensing gas boiler • Installing a micro-CHP (combined heat and power) unit	Question removed after wave 17.
Q7_1) The next question is about renewable heat. 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. This does not include solar panels which produce electricity. How much would you say you know about renewable heat? • Knew a lot about it • Knew a little about it • Aware of it but did not really know what it was • Never heard of it	Moved to Bi-annual wave (winter) from wave 20 (published on an annual basis).
Q7_1A) How much, if anything do you know about the following types of renewable heating system… (air source heat pumps, ground	New question in wave 15. Moved to the Bi-annual wave

source heat pumps, biomass boiler)? • Know a lot • Know a little about it • Aware of it but did not really know what it is • Never heard of it	(winter) from wave 20 (published on an annual basis).Filtered to only ask those who say they know about renewable heating (from wave 20).
Q7_2) Thinking about these types of renewable heating system, how positive or negative would you say you are towards the idea of having a renewable heating system in your home? • Very positive • Fairly positive • Neither positive nor negative • Fairly negative • Very negative • Don't know	Question removed after wave 17.
Q7_3) And still thinking about renewable heating systems, how much do you agree or disagree with the following statement? • Strongly agree • Slightly agree • Neither agree nor disagree • Slightly disagree • Strongly disagree • Don't know	Moved to the Bi-annual Wave (winter) from Wave 20 (published on an annual basis). Filtered to only ask those who say they know about renewable heating (from Wave 20).
Q7_6) How confident are you that…? • A ground source heat pump would provide/provides enough heat to keep my home at a reasonable temperature • A ground source heat pump would be/is reliable • A ground source heat pump would be/is affordable • A ground source heat pump would be/is easy to use	Question removed after wave 17.
Q7_7a) Which of the following would you trust to provide advice about which heating system to install in your home? • A tradesperson (e.g. builder, plumber, gas fitter) • Heating system manufacturer	Moved to Bi-annual Wave (winter) from Wave 20 (published on an annual basis).

• Friends/Family • Your energy supplier/another energy supplier • Green Deal assessor / adviser • The Energy Saving Advice Service (ESAS) or Home Energy Scotland • Your housing association • Your landlord • A company that installs renewable heating systems • Other (specify) • None of these • Don't know	
Q7_7b) And which one would you trust the most to provide advice about which heating system to install in your home? (same answer options as in Q7_7a)	Moved to Bi-annual Wave (winter) from Wave 20 (published on an annual basis).
Q7_8) How much attention do you pay to the amount of heat you use in your home? • A lot • A fair amount • Not very much • None at all • Don't know	New question in Wave 15. Annual from March 2016. Moved to Bi-annual Wave (winter) from Wave 20 (published on an annual basis).
Q7_9) 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? • To minimise the amount of money you spend on heat • To minimise the environmental impact of the heat you use • I want to make sure me/my household has sufficient heat to be comfortable • I struggle to control the amount of heat used • I want to keep control over the amount of heat used • Other reason (please specify) • Both of these equally • Neither of these / for another reason • Don't know	New question in Wave 15. Moved to Bi-annual Wave (winter) from Wave 20 (published on an annual basis).
Q7_10) You said that you pay [not very much/ no] attention to the amount of heat you use in your home. What is the main reason for this? • I use as much heat as is needed to be comfortable	New question in Wave 15. Moved to Bi-annual Wave (winter) from Wave 20 (published on an

• I don't feel I can control the amount of heat used • I'm just not interested in the amount of heat used • I set controls at a level I'm comfortable with and then don't need to adjust them • Other reason (please specify) • Some/all of these reasons equally • None of these / for another reason • Don't know	annual basis).
Q7_11) Now thinking about your heating system. Which of the statements on this screen comes closest to your view? • I will only replace my heating system when my current one breaks down or starts to deteriorate • I would consider replacing my heating system while it is still working • Not my decision to make because I'm renting the property/living with parents • Don't know	New question in Wave 15. Moved to Bi-annual Wave (winter) from Wave 20 (published on an annual basis).
Q7_12) Which of these would be the more important consideration in changing your heating system? • Saving money on what you spend on bills at present • Switching to a more environmentally friendly heating system • Having a more reliable heating system than my current one • Both of these equally • Neither of these / for another reason (state) • Don't know	New question in Wave 15. Moved to Bi-annual Wave (winter) from Wave 20 (published on an annual basis).
Q7_13) Have you heard of the Domestic Renewable Heat Incentive? • Yes • No • Don't know	New question in Wave 15 (not asked in subsequent waves).
Q15c) You said that you support hydraulic fracturing for shale gas, otherwise known as fracking. Why is this? • Good for local jobs and investment • Reduces dependence from other countries for UK's energy supply • Reduces dependence on fossil fuels (coal, oil) • Need to use all available energy sources • Will have positive impact on climate change / meeting carbon reduction targets • May result in cheaper energy bills	New question in Wave 16. Quarterly from Wave 17.

• Will have positive impact on UK economy • Won't affect me/my local area so no personal impact • Positive reports in the media • Community benefits (included from Wave 19) • Shale Wealth Fund (included from Wave 19) • No specific reason (SINGLE CODE) • Other (specify) • Don't know	
Q15d) You said that you oppose hydraulic fracturing for shale gas, otherwise known as fracking. Why is this? • Loss/destruction of natural environment • Increased traffic/noise/disruption • Local house prices will fall • Use of chemicals in the process • Should focus on developing renewable energy sources • Should focus on developing other energy sources • Risk of contamination to water supply • Risk of earthquakes • Negative impact on climate change / meeting carbon reduction targets • Not a safe process • Will not be regulated effectively • Negative reports in the media • Too much risk / uncertainty to support at present • No specific reason (SINGLE CODE) • Other (specify) • Don't know	New question in Wave 16. Quarterly from Wave 17.
Q15e) You said that you neither support nor oppose hydraulic fracturing for shale gas, otherwise known as fracking. Why is this? • Don't know enough about it • Not interested in it • I can see the positives and negatives • Haven't made up my mind yet • Will have no impact on me • There are many vocal campaigns and I don't know what to believe • Have never heard of it • Other (specify) • Don't know	New question in Wave 17. Quarterly from Wave 17.
Q20a) Over the course of a year, which of these do you think uses the most energy in your home? • Large appliances (e.g. fridge, washing machine)	New question in Wave 15. Bi-annual from Wave 17.

• Small appliances (e.g. toasters, hair dryers, vacuum cleaners) • Technological appliances (TV, laptop, phone - including charging these) • Keeping the house warm with central or other heating • Hot water I use (e.g. for showering, washing up) • Don't know	
Q20b) Over the course of a year, which of these do you think uses the second most energy in your home? (same answer options as in Q20a)	New question in Wave 15. Bi-annual from Wave 17.
Q23a) I'm now going to ask you how concerned you are about various things happening in the future. When I talk about 'the future' I mean the next 10-20 years. When answering please think about how concerned you would be if this happened, rather than how likely you think it is to happen. So, how concerned, if at all, are you about... • Steep rises in energy prices in the future • UK supplies of fossil fuels not being sufficient to meet the UK's demand for them	Bi-annual
Q23b) And still thinking about the next 10-20 years, how concerned, if at all, are you about... • Power cuts becoming more frequent in the future • The UK becoming too dependent on energy from other countries • The UK not investing fast enough in alternative sources of energy • The UK not developing technology to use existing sources of fossil fuels sufficiently	Bi-annual
Q23c) You said that you are [very / fairly] concerned about the UK becoming too dependent on energy from other countries. When you gave this answer, were you thinking about specific energy types? • No specific sources • Oil • Gas • Electricity • Other source (specify) • Don't know	New question in Wave 16. Bi-annual from the Wave 17.
Q24a) Do you know what the Energy performance certificate (EPC) rating for your property is?	New question in Wave 15. Annual

• Yes, I know the exact rating • Yes, I have a sense of what the rating is • I'm aware of EPCs but I don't know what the EPC rating for my home is • I've not heard of EPCs	from Wave 17.
Q26a) How much, if anything, do you know about the way the UK currently manages radioactive waste? • A lot • A fair amount • Not very much • Nothing at all	Quarterly
Q26b) The next question is about Geological Disposal Facilities. These are deep underground facilities for the permanent disposal of radioactive waste. Before today, how much, if anything, did you know about the UK's plans to dispose of radioactive waste in Geological Disposal Facilities in the UK? • Knew a lot about them • Knew a little about them • Aware of them but don't really know what they are • Never heard of them	Quarterly
Q35) Which of these energy types do you think is most used by UK households overall? • Gas • Electricity (including renewable energy) • Petroleum • Bioenergy and waste • Solid fuels (wood, coal) • Other • Don't know	Piloted in Wave 16. Replaced with Q37, Q38 and Q39.
Q36) And which energy type do you think is second most used by UK households overall? (same answer options as Q35)	Piloted in Wave 16. Replaced with Q37, Q38 and Q39.
Q37) As far as you know, which of these are used as energy sources in your home – for example, to provide heating or to power appliances? Please exclude anything used outside of your home – for example fuel for vehicles. • Electricity	Replaced Q35 and Q36. Piloted in Wave 19.

• Natural gas (mains gas) • Bottled gas • Oil • Wood • Coal • Other • Don't know	
Q38) And over the course of the year, which of these types of energy do you think your household spends the most money on? (same answer options as Q37)	Replaced Q35 and Q36. Piloted in Wave 19.
Q39) And over the course of the year, which of these types of energy do you think your household spends the next most money on? (same answer options as Q37)	Replaced Q35 and Q36. Piloted in Wave 19.
Q8) Before today, had you heard of smart meters? IF YES ASK: Do you have one? • Yes, I have one • Yes, but I do not have one • No – I have never heard of them	Increased frequency to bi-annual from Wave 19.
Q9) Were you given an in-home energy display or energy monitor at the time your smart meter was installed? An in-home energy display is a portable device that displays current and how much it is costing or will cost. • Yes, I look at it every day • Yes, I look at it occasionally • Yes, but I never look at it • Yes, but I have never installed it • No, I was not offered one • No, I was offered one but refused it • Don't know	Question asked only in Wave 17.
Q41-51) See Wave 20 questionnaire for question text	New questions in Wave 20.
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.	New question in Wave 20.

• Yes – have a condensing boiler • No – don't have a condensing boiler • Don't know	
Q53) How likely do you think you are to install a condensing boiler in your home over the next few years? • Very likely • Fairly likely • Not very likely • Not at all likely • Don't know	New question in Wave 20.
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 that you would pay no more for your heating bills than you do at present. • Very likely • Fairly likely • Not very likely • Not at all likely • Already joined one • It depends • Don't know	From Wave 21, filtered to only ask those who say they know about heat networks.
Q25i) From what you know, or have heard about heat networks, generally how positive or negative would you say you are towards them? • Very positive • Fairly positive • Fairly negative • Very negative • Don't know	From Wave 21, filtered to only ask those who say they know about heat networks.
Q.7_13 Have you heard of the Domestic Renewable Heat Incentive? • Yes • No • Don't know	Question asked only in Wave 15 and 22.