



Department for  
Business, Energy  
& Industrial Strategy

# BEIS PUBLIC ATTITUDES TRACKER

Technical note (issued with wave 33)



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# Introduction

## Background

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 technical report is issued following wave 33 of the PAT (conducted in March 2020). The report provides background information about the survey and notes changes that have been made to the design over the last year (covering waves 30-33).

## Survey and policy changes

No structural changes were made to the survey or the survey deliverables for waves 30-33. The survey consisted of quarterly waves of similar length. The key deliverables the survey include:

- **A key findings report**, presenting summary headline findings from the current wave.
- **Summary tables (Excel)**, showing trends across all waves of the tracker.
- **An Excel data set 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.

## Coronavirus (COVID-19)

Fieldwork for wave 33 stopped early due to the outbreak of Coronavirus (COVID-19) in the UK, and the associated lockdown measures. As such, the sample size for this wave is lower than previous waves. Although the fieldwork took place before full lockdown measures had been implemented, it is unclear what effect the COVID-19 outbreak and associated media coverage during fieldwork may have had on public behaviours, attitudes and perceptions towards the topics covered in wave 33. These should be taken into consideration when using these the survey deliverables and results for analysis.

Full details of the weighting approach taken for wave 33 are provided in the Weighting section.

# Methodology and sampling

The PAT is conducted on the Kantar UK face-to-face omnibus, which uses a random location design, a high-quality form of quota sampling. This has been used for all 33 waves of the PAT completed to date, dating back to March 2012.

The Kantar face-to-face omnibus runs weekly and achieves c.2,060 interviews with a representative cross section of UK adults aged 16+. Data are weighted as necessary to ensure that the sample is representative of the UK population in terms of standard demographic characteristics. Waves 30 to 33 of the PAT have each been conducted over two consecutive omnibus waves, giving a sample size of approximately 4,200 per survey wave. As mentioned in the previous section, fieldwork for wave 33 stopped early due to the outbreak of Coronavirus (COVID-19) in the UK, and the associated lockdown measures. The sample size for wave 33 is lower than previous waves (see Fieldwork section).

The Kantar UK omnibus uses a random location sampling approach, with a unique sampling system developed by Kantar for this purpose. The principal distinguishing characteristic of random location sampling is that interviewers are given very little choice in the selection of respondents. Respondents in each interviewer assignment are drawn from a small set of homogenous streets. Quotas are set in terms of characteristics which are known to have a bearing on individuals' probabilities of being at home and so available for interview. Rules are given which govern the distribution spacing and timing of interviews.

This hybrid design combines a tightly controlled stratified random sample of areas with quota controls to ensure a representative sample. The steps in this process are given below.

- The UK is first divided into 1,260 Primary Sampling Units (PSUs), each comprising a set of whole council wards and each with an approximately equal population size.
- A representative set of 394 PSUs has been selected for the Omnibus survey to use in 2020. Those points are divided into two replicates (of 197 each). One set are used in one week. The other set are used in the next week. Issuing sequential waves of fieldwork systematically across the sampling frame increases geographical dispersion.
- Each week, one Census Output area (OA) is sampled at random from each PSU, with an adjacent OA selected if required to generate 200-250 addresses.
- A list of all addresses in the sample point is given to the interviewer who must then obtain 11 interviews.
- An interviewer may visit any address in his/her list and if there is no answer, he/she is not required to return (although they may choose to do so).

Interviews are conducted in respondents' homes using Computer Assisted Personal Interviewing (CAPI) technology by fully trained interviewers from Kantar's national field-force.

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, stratification is done by region. A representative set of Primary Sampling Units (PSUs) are selected for the omnibus survey to use in 2020.
- 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.
- 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, quotas were set based on gender, age and working status. It should be noted that the coronavirus outbreak interrupted fieldwork for wave 33 before the full omnibus wave was completed.<sup>1</sup>
- The weighting scheme for this study has been designed to correct for observed imbalances in demographic variables which are associated with key survey outcomes.

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<sup>1</sup> Minor adjustments were made to the Kantar face-to-face omnibus for 2020 which affected wave 33.

# Questionnaire

## Questionnaire design and cognitive testing

The original PAT questionnaire was designed by Kantar and BEIS. Many of the current survey questions have been asked since the early waves of the survey conducted from 2012. Where new topics are added to the survey, questions are jointly developed between Kantar and BEIS and refined through cognitive testing.

Cognitive testing was conducted prior to wave 30 (July 2018) to test new questions on artificial intelligence prior to adding them to the survey. Cognitive interviewing helps to identify any ambiguities on question or response wording and any words or phrases that are open to misunderstanding or misinterpretation. It does this through assessing the thought processes that respondents go through when trying to answer a question.

Each wave of cognitive testing consisted of two rounds, so that questions could be revised in response to any issues to emerge and re-tested. Approximately 15 interviews were conducted by members of Kantar for each wave of cognitive testing.

## Questionnaire structure

Where possible, the structure of the questionnaire follows previous waves. To minimise context effects, new topics are generally added to the end of the questionnaire, and new questions on existing topics to the end of the existing section.

A list of survey topics, the waves that they were included, whether the topic was existing or new (from wave 30 onwards), and a summary of the questions asked in each topic, is included in Table 1.

**Table 1: Survey topics and wave**

Survey topic	Waves included	Existing or new survey topic (from July 2018)	Summary of questions asked
Clean growth	Wave 30 (Jul 2019), Wave 31 (Sep 2019), Wave 32 (Dec 2019)	Existing (removed for Wave 33)	Awareness/ knowledge of “clean growth”.
Renewables	Wave 30 (Jul 2019), Wave 31 (Sep 2019), Wave 32 (Dec 2019), Wave 33 (Mar 2020)	Existing	Support/ opposition to renewables energy overall (asked quarterly) and for five different renewable sources (asked biannually at wave 31 and wave 33).  Three attitudinal questions asked in relation to

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			renewables. (asked annually at wave 33, last asked wave 29)
Shale gas	Wave 30 (Jul 2019), Wave 31 (Sep 2019), Wave 32 (Dec 2019), Wave 33 (Mar 2020)	Existing	Awareness/knowledge and support/ opposition to shale gas. Follow-up questions asked of those who support, oppose and are neutral on shale gas to ask reasons for this.
Shopping around for products and services	Wave 30 (Jul 2019)	Existing	Experience of shopping around in different sectors in the last 12 months.
Switching products and services	Wave 30 (Jul 2019)	Existing	Experience of switching suppliers in different sectors in the last 12 months.
Consumer rights	Wave 30 (Jul 2019)	Existing	Understanding of terms and conditions and privacy notices when buying products or services online and perception of consumer rights protection for different channels.
Consumer dispute resolution services	Wave 30 (Jul 2019)	Existing	Awareness of and attitudes towards consumer dispute resolution services.
Consumer problems	Wave 30 (Jul 2019)	Existing	Whether experienced a problem with providers in a range of different sectors and experience of trying to resolve problems.
Trust in consumer organisations	Wave 30 (Jul 2019)	Existing	Trust in a range of different consumer organisations.
Artificial intelligence	Wave 30 (Jul 2019)	New	Awareness/knowledge on AI.  Attitudinal questions and statements on AI.



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Energy sources	Wave 31 (Sep 2019), Wave 33 (Mar 2019)	Existing	Which energy sources are used in home.
Insulation	Wave 31 (Sep 2019)	Existing	Whether different types of insulation installed in home.  Reasons for not installing insulation (where this applies) – first asked at wave 27.
Energy performance certificates (EPCs)	Wave 31 (Sep 2019)	Existing	Awareness/knowledge of EPCs.  New questions asked on role of EPCs on making changes to homes to make them more energy efficient asked for first time at wave 27.
Energy standards for rental properties	Wave 31 (Sep 2019)	Existing	Knowledge about minimum energy standards for rental properties.
Workers' rights	Wave 31 (Sep 2019)	Existing	Background questions on employment status.  Knowledge about employment rights at work, information sources, and experience of problems to do with employment rights at work.
Radioactive waste	Wave 31 (Sep 2019)	Existing	Knowledge about how the UK currently manages radioactive waste and about geological disposal facilities.
Small modular reactors	Wave 31 (Sep 2019)	Existing	Awareness/ knowledge about small modular reactors.
Decommissioning oil and gas	Wave 31 (Sep 2019)	Existing	Awareness/ knowledge about decommissioning offshore oil and gas.
Condensing boilers	Wave 32 (Dec 2019)	Existing	Whether have a condensing gas boiler.

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Heat networks	Wave 32 (Dec 2019)	Existing	Awareness of heat networks, likelihood to join one and whether positive or negative about heat networks.
Renewable heating systems	Wave 32 (Dec 2019)	Existing	Awareness/knowledge about renewable heating systems overall and different types of renewable heating system.  Attitudes towards renewable heating systems.
Heat usage in the home	Wave 32 (Dec 2019)	Existing	Attention paid to heat used at home and reason for paying attention/not paying attention.
Installing or replacing heating systems	Wave 32 (Dec 2019)	Existing	Circumstances in which people would replace a boiler and motivation for replacing boiler.  Sources trusted to provide advice about which heating system to install in home.
Climate Change	Wave 33 (Mar 2020)	Existing	Level of concern about climate change and opinion on main cause of climate change.  New questions added on impact of climate change, changing behaviour, tackling climate change, trust in information sources and attitudes in relation to climate change at wave 29.
Energy security	Wave 33 (Mar 2020)	Existing	Level of concern over different aspects of future energy security in the UK.
Nuclear energy	Wave 33 (Mar 2020)	Existing	Whether support or oppose nuclear energy and attitudes in relation to nuclear energy.

Carbon capture and storage	Wave 33 (Mar 2020)	Existing	Awareness/knowledge and support/ opposition to carbon capture and storage.
Energy saving and wasting	Wave 33 (Mar 2020)	Existing	Level of thought given to saving energy at home and frequency of engaging in a range of energy saving or wasting behaviours.
Smart meters	Wave 33 (Mar 2020)	Existing	Awareness and ownership of a smart meter.
Energy bills	Wave 33 (Mar 2020)	Existing	Level of worry over paying for energy bills and other household bills.
Energy suppliers and switching	Wave 33 (Mar 2020)	Existing	Whether switched energy supplier in last year.  Trust in energy suppliers on different metrics.
Corporate trust and responsibility	Wave 33 (Mar 2020)	Existing	Trust in large financial and legal business on different aspects.
Office for Product Safety and Standards (OPSS)	Wave 33 (Mar 2020)	Existing	Awareness of OPSS (alongside other organisations), where heard about OPSS and trust in OPSS.
Net Zero	Wave 33 (Mar 2020)	New	Awareness/ knowledge of “Net Zero”.

## Question changes

Several questions have been changed or removed from the PAT in waves 30 to 33. A list of changes can be found in the Tables 2 and 3 below.

**Table 2: Question changes**

Question	Change
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Q200 (OPSS)	The answer category “5. Office for Fair Trading (OFT)” was replaced with “5. Competition and Markets Authority (CMA)”
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**Table 3: Questions no longer asked**

Question	Change
Q80 (Clean Growth)	This was question, which asked about awareness/knowledge of “Clean Growth”, is no longer asked in the survey (last asked at Wave 32, December 2019).

The final questionnaires used for each wave of the survey are published on <https://www.gov.uk/government/collections/public-attitudes-tracking-survey>

## Fieldwork

**Table 4: Fieldwork dates and sample sizes for each wave**

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

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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 <sup>2</sup>
Wave 27 (Sep 2018)	19 to 30 September 2018	4,258
Wave 28 (Dec 2018)	5 to 16 December 2018	4,273
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
Wave 33 (Mar 2019)	11 to 17 March 2020	1,851 <sup>3</sup>

<sup>2</sup> The sample size increased to c. 4,200 from Wave 26 (July 2018) onwards to allow greater scope for regional analysis.

<sup>3</sup> Fieldwork finished early due to the outbreak of COVID-19, leading to a smaller size for this wave.

# Data management, coding and weighting

## Data management

The data set is checked and cleaned each quarter. This includes:

- Routing checks on questionnaire variables
- Checks on all demographic variables
- Cleaning of variable names, variable labels and value labels
- Sense checks on all variables

Derived variables were created for analytical purposes.

## Coding

A small number of questions are included in the questionnaire with an 'other specify' code. Verbatim responses from the 'other' code are reviewed by Kantar during the data collection stage. Based on this several responses are back coded to existing codes and a small number of new codes are added to capture additional common responses.

## Data and reporting outputs

Following fieldwork at each wave, Kantar provides the following outputs:

- **A key findings report**, presenting summary headline findings from the current wave.
- **Summary tables (Excel)**, showing trends across all waves of the tracker.
- **An Excel data set 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

Results are weighted at the analysis stage to be representative of the UK adult population aged 16+. Data are weighted for the following characteristics: sex, age, social grade, region and tenure. The weight value is given in the final column of each database and any analysis of

the data should be based on the weighted value for each individual. The source for each weighting variable is provided below (Table 5).

**Table 5: Weighting sources**

Weighting variable	Source
Age	Office for National Statistics (ONS) Mid-year Population Estimates 2018
Gender	Office for National Statistics (ONS) Mid-year Population Estimates 2018
Social grade	Kantar TGI (Jan 18 - Dec 18)
Region	Office for National Statistics (ONS) Mid-year Population Estimates 2018
Tenure	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.

## Coronavirus (COVID-19)

Fieldwork for wave 33 stopped early due to the outbreak of Coronavirus (COVID-19) in the UK, and the associated lockdown measures. As such, the sample size for this wave is lower than previous waves.

There was a concern that there may have been other imbalances in the sample which could have meant that this wave would not be comparable with previous waves of the tracker. Therefore, additional checks were conducted to compare the demographic profile of the weighted wave 33 sample with the weighted profile of the preceding waves. This confirmed that the sample profile was broadly consistent with previous waves of the study, and that trend analysis would still be robust. The characteristics included in this check were:

- Marital Status
- Employment Status
- Presence of children in the household
- Household Size
- Property Type



- Main way property is heated
- Whether connected to mains gas in the property
- Whether uses mains gas
- Presence of pensioners in the household
- Whether anyone in the household has a long-standing illness, disability, or infirmity

## Analysis notes

The following points should be noted regarding the survey outputs produced for waves 26 to 29:

- Use of different outputs:
  - The Excel summary tables should be used to view and compare responses to questions over all waves of the survey based on all people asked each question.
  - The PDF/Excel cross tabulation tables should be used for viewing question responses at an overall, demographic and sub-group level for the current wave of the survey.
  - The Excel data sets should be used for conducting further analysis of survey results for the current wave of the survey. This allows users to look at any question and derived variable breakdowns that are not included in the PDF/Excel cross tabulation tables.
- The following variables have been removed from the Excel data set due to potential risk of disclosure:
  - Wave 30: Q121 (whether contacted anyone about problem with provider); Q122 (whether resolved problem directly with provider); Q123 (other actions in response to problem with provider); Q124 (reason for not using ombudsman or other dispute resolution service in response to problem with provider); exactage (exact age variable<sup>4</sup>); and Q28 (main way property is heated<sup>5</sup>).
  - Wave 31: Q32 (whether anyone in household has a long-standing illness, disability or infirmity); Q28 and exactage.
  - Wave 32: Q42 (renewable heating systems installed in home); Q28 and exactage.
  - Wave 33: Q28 and exactage.
- All data sets include several derived variables where questionnaire response options have been combined or questions have been re-based. These derived variables are included at the end of each data set and the variable labels are prefixed with 'DV'.

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<sup>4</sup> All data sets include four banded age variables: cage2, cage3, cage7 and cage8.

<sup>5</sup> An aggregated version of this variable is included in data sets for all waves (q28\_net).

## Significance testing

Strictly speaking, significance tests can only be applied to probability samples and are not applicable to quota-based designs. However, it can be assumed that the variance of a random location sample is similar to that of an equally specified probability sample. Therefore, we use significance testing (based on a 95% confidence interval) in the following ways in the survey analysis and outputs:

- To flag significant changes between waves in the Excel summary tables.
- To flag significant differences between sub-groups at each wave in the PDF cross tabulation tables for each wave.
- To inform the analysis included in the summary report produced for each wave.



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