

# Technical Overview

## Winter 2024, UK

13 March 2025

Official Statistics

This note covers technical information about the Public Attitudes Tracker (PAT) survey completed in Winter 2024. More detailed technical information on the survey series, including details of the new data collection methodology adopted in Autumn 2021 and previous methodologies, is available in the annual [Technical Report](#).

Alongside this Technical Overview, we have also provided: individual topic reports covering results from the survey grouped by theme; a set of tables showing the time series for questions asked on multiple occasions since Autumn 2021; a set of tables containing crosstabulations for headline questions by gender, age, highest qualification and geography, and the questionnaire that details both online and paper formats.

## Overview

This report presents a technical overview of the Winter 2024 survey wave conducted by DESNZ. The results from this wave are based on a representative sample of 3,214 adults aged 16 or over in the UK. Data collection ran from 7 November to 12 December 2024.

From Autumn 2021, the PAT survey moved to a 'push-to-web' survey method referred to as Address Based Online Surveying (ABOS). The Winter 2024 wave of the PAT is the twelfth wave of the new time series following this change in methodology. Significant changes affecting both survey sample and mode mean that the results from this wave are not directly comparable with results collected via surveys conducted using the previous methodology.

Between Autumn 2021 and Summer 2023, surveys were conducted every quarter, although there was no data collection in Autumn 2023. From Spring 2024, the survey moved to a triannual design with waves conducted every Spring, Summer and Winter.

Earlier waves have been conducted as follows:

- Autumn 2021 (15 September to 17 October 2021)
- Winter 2021 (24 November to 22 December 2021)
- Spring 2022 (24 February to 24 March 2022)
- Summer 2022 (9 June to 7 July 2022)
- Autumn 2022 (1 September to 3 October 2022)
- Winter 2022 (17 November to 19 December 2022)
- Spring 2023 (9 March to 6 April 2023)
- Summer 2023 (9 June to 10 July 2023)
- Winter 2023 (7 November to 11 December 2024)
- Spring 2024 (18 March to 22 April 2024)
- Summer 2024 (11 July to 15 August 2024)

## Winter 2024 survey

The Winter 2024 questionnaire covered the following topics:

- Net Zero
- Climate change
- Renewables
- Great British Energy
- Nuclear energy
- New electricity network infrastructure
- Low carbon heating systems
- Heating and cooling in the home
- Energy Performance Certificates
- Smart meters and ‘time of use’ electricity tariffs
- Smart electric vehicle charging
- Demographic and classification questions

## Changes to the survey in Winter 2024

A list of changes to the Winter 2024 questionnaire in comparison to previous Winter questionnaire versions is provided below. This includes the addition of questions on new topics and some changes to existing questions.

### New questions:

- Two new questions were added on attitudes towards the UK’s role as a global leader in tackling climate change.
  - ICFKNOW
  - ICFIMPORT
- Two new questions were added on awareness of Great British Energy<sup>1</sup> and its functions.
  - GBEKNOW
  - GBEFUNCTIONA-C
    - The following functions were included
      - Supplying electricity and gas to your home
      - Owning, managing and operating clean power projects (for example, wind farms)
      - Conducting research into new renewable techniques
- A new question was added on the importance of different types of information during the planning phase of new electricity network infrastructure.
  - INFRA2IMP

### Adapted questions:

- Minor wording and/or formatting changes.
  - CCHEARD

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<sup>1</sup> To find out more about Great British Energy (GBE), the founding statement can be found here: <https://www.gov.uk/government/publications/introducing-great-british-energy/great-british-energy-founding-statement>. At the time of drafting this report the GBE Bill has just passed the third reading stage in the House of Lords, latest updates on the bill can be found here: <https://bills.parliament.uk/bills/3738>.

- Examples of social media updated to include YouTube and to update 'Twitter' to 'X (formerly Twitter)'.
- Removal of response options.
  - INFRAKNOW
    - The 'don't know' response option was removed, as awareness questions typically do not include this option.

#### **Addition of new response options based on open-ended responses:**

- LCNOWHY
  - A new option, 'Concerns for the environment', was added from the open text data collected in 'Other'.
- TRUSTHEAT
  - A new option, 'Conducting my own research (for example, online searches, reading reviews)', was added from the open text data collected in 'Other'.
- WHYNOSMARTT
  - A new option, 'It's not suitable for me to use energy off-peak', was added from the open text data collected in 'Other reason'.

Please refer to the Winter 2024 questionnaire for full question wording.

## Survey definitions

In the report, where we refer to 'Awareness' this encompasses all respondents who said they had heard of a particular concept or technology, including those who said 'hardly anything but I've heard of this', 'a little', 'a fair amount' or 'a lot'. 'Knowledge' is confined to those who said that they knew 'a fair amount' or 'a lot'.

## Address Based Online Surveying (ABOS) data collection

ABOS is a type of 'push-to-web' survey method.

The basic ABOS design uses a **stratified random sample of addresses** drawn from the Royal Mail's postcode address file. An invitation letter is sent to each selected address, containing username(s) and password(s) plus the URL of the survey website. Sampled individuals can log on using this information and complete the survey online. Once the questionnaire is complete, the specific username and password cannot be used again, ensuring data confidentiality from others with access to this information.

One reminder letter is sent to each sampled address where no response has been achieved by a designated cut-off date.

Paper questionnaires ensure coverage of the offline population and are especially effective with sub-populations that respond to online surveys at lower-than-average levels. However, paper questionnaires have measurement limitations that constrain the design of the online questionnaire and add considerably to overall cost. For the DESNZ PAT, **paper questionnaires are used in a limited and targeted way**, to optimise rather than maximise response.

To ensure the survey was accessible to the offline population, some mailings included paper questionnaire alternatives based on addresses where external data indicated that all residents were aged 65 or over. Paper questionnaires were also available on request.

## Winter 2024 sample design

The sampling was designed to yield a respondent sample that was representative with respect to geography, neighbourhood deprivation level, and age group.

Table 1 shows the (initially issued) sample structure with respect to the major strata. Higher sampling fractions were applied to the three least populous International Territorial Level (ITL)<sup>2</sup> (NE England, Northern Ireland and Wales) so that the expected number of completed questionnaires was at least 200 in each one.

**Table 1: Addresses issued by area deprivation and household age structure: Winter 2024**

Expected household age structure	Most deprived	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	Least deprived
All <=35	1,465	1,321	995	674	516
Other	3,190	3,063	2,417	2,988	2,734
All >=65	562	536	532	518	492

## Winter 2024 Fieldwork

The data collection took place from 7 November to 12 December 2024.

All resident adults aged 16+ at each sampled address were invited to complete the survey, although for practical reasons the number of logins was limited to up to four adults per household, with more available on request. The number of logins was based on the estimated number of adults living in the household, based on external data. In Winter 2024, the mean number of logins per address was 2.8.

- 17,604 invites were sent out initially and 15,089 reminders were sent in the third week of fieldwork. A further 4,399 invites were sent at the start of the fourth week of fieldwork in order to boost the number of responses and to reach the response rate target.
- 243 cases were identified as invalid based on quality assurance checks and were removed from the dataset, representing 7% of initially achieved cases.
- The achieved sample size (after data cleaning) was 3,214 individuals, of which 2,742 (85%) were completed online and 472 (15%) on paper.
- The household response rate was 11.7% and the estimated individual response rate was 8.4%.
- The average (median) time to complete the survey online was 15 minutes and 21 seconds.

<sup>2</sup> <https://www.ons.gov.uk/aboutus/whatwedo/programmesandprojects/europeancitystatistics>

## Winter 2024 Weighting

Weighting was used to compensate for differences in both sampling probability and response probability. The DESNZ PAT weighting matrix includes nine variables (sex, age group, highest educational qualification, working status, ethnic group, internet use, region, housing tenure, and household size). For more detailed information please see the latest published [Technical Report](#). Several of these are intersected with age group to ensure a consistent weighted sample distribution per age group per wave, although most are marginal controls on the sample distribution.

## Further information

### Future updates to these statistics

The next release will cover Spring 2025 and is scheduled to be published on 3 July 2025. Note that not all tracker questions are included in each wave.

### Revisions policy

The [Department's statistical revisions policy](#) sets out the revisions policy for these statistics, which has been developed in accordance with the UK Statistics Authority [Code of Practice for Statistics](#)

### Related Statistics

There are various other surveys which seek the general public's opinion on topics related to those covered by the DESNZ Public Attitudes Tracker. These include:

#### [National Travel Attitudes Study \(NTAS\)](#)

The Department for Transport publishes a wide range of reports on the public's attitude to various modes of transport

#### [Transport and Transport Technology: Public Attitudes Tracker](#)

The Department for Transport also publishes an attitudes tracker to monitor trends in public attitudes to and awareness of transport technologies in England

#### [The English Housing Survey](#)

The English Housing Survey is a continuous national survey commissioned by the Department for Levelling up, Housing and Communities (formerly Ministry of Housing, Communities and Local Government). It collects information about people's housing circumstances and the condition and energy efficiency of housing in England

#### [Opinions and Lifestyle Survey](#)

The Office for National Statistics publishes a monthly survey covering topics relating to people's experience of daily life and events, including questions on climate change

A wealth of energy statistics, which provide context for the attitude data collected by the PAT are available on the [Statistics at DESNZ](#) website.

## Uses of these statistics

These statistics were commissioned by DESNZ to guide departmental policy, and are also used by other government departments, academics, ministers and the general public. Some examples on the uses of previous waves of the PAT include:

- Understanding public awareness of key DESNZ policies such as the concept of Net Zero.
- Monitoring public attitudes to climate change and government policies associated with this and understanding how concern varies between demographic groups.
- Measuring public understanding and acceptability of different clean energy sources which contribute to the Government's target to deliver Clean Power by 2030.

## 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: [PAT@energysecurity.gov.uk](mailto:PAT@energysecurity.gov.uk)

The Department's statement on [statistical public engagement and data standards](#) sets out the department's commitments on public engagement and data standards as outlined by the [Code 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 Department's [statement of compliance](#) with the Pre-Release Access to Official Statistics Order 2008.

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