

DESNZ/BEIS Public Attitudes Trackers: Technical Report for Waves 5 to 8 Autumn 2022 to Summer 2023, UK

21 September 2023

Official Statistics

Summary

The BEIS Public Attitudes Tracker (PAT) survey measured public awareness, attitudes and behaviours relating to policies such as energy, climate change, consumer rights, artificial intelligence and workers' rights, which were the remit of the former Department for Business, Energy and Industrial Strategy (BEIS). Following its creation in February 2023, responsibility for the survey switched to the Department for Energy Security and Net Zero (DESNZ) and it was rebranded as the DESNZ Public Attitudes Tracker.

This technical report covers methodological information about the four quarterly PAT survey waves completed between Autumn 2022 and Summer 2023. The Autumn and Winter 2022 waves were run under BEIS while the Spring and Summer 2023 waves were run under DESNZ.

This report describes the data collection model, the sampling approach, the questionnaire structure and development process, the fieldwork method and performance, the data processing approach, the weighting design and the reporting outputs. It also covers changes between waves, including following the move to DESNZ.

Contents

DESNZ/BEIS Public Attitudes Trackers: Technical Report for Waves 5 to 8 Autumn 2022 to Summer 2023, UK.....	1
Summary	1
Introduction.....	4
Background	4
Previous tracker survey series	4
New tracker survey series.....	5
Comparisons with previous tracker series.....	5
Interpretation of findings and further resources.....	6
Survey objectives	7
Details of the data collection model	7
Sampling.....	8
Sample design: addresses.....	8
Sample design: individuals within sampled addresses	9
Questionnaire	9
Questionnaire design	9
Cognitive testing	10
Questionnaire structure.....	11
Questions added and removed	13
Winter 2022:.....	13
Spring 2023:.....	13
Summer 2023:	14
Definitions	15
Fieldwork	17
Contact procedures.....	17
Fieldwork performance.....	20
Response Burden	22
Data processing.....	22
Data management	22
Quality checking.....	22
Data checks and edits.....	24
Coding.....	24
Data outputs.....	25
Weighting.....	28
Reporting and data.....	30

DESNZ/BEIS Public Attitudes Trackers (Autumn 2022 to Summer 2023, UK)

Data delivery	30
Reporting outputs.....	30
Significance testing	30
Summary of changes.....	31
Autumn 2022 wave	31
Winter 2022 wave	32
Spring 2023 wave	32
Summer 2023 wave	32
Research and statistical term definitions	33
Appendix A – Survey invitation letters	35
Overview	35
Refinements to the invitation letters	35
Further information	57
Future updates to these statistics	57
Revisions policy	57
Related Statistics	57
Uses of these statistics	58
User engagement	58
Pre-release access to statistics.....	58
Contact.....	58

Introduction

The BEIS Public Attitudes Tracker (PAT) survey measured public awareness, attitudes and behaviours relating to policies such as energy, climate change, consumer rights, artificial intelligence and workers' rights, which were the remit of the former Department for Business, Energy and Industrial Strategy (BEIS). Following its creation in February 2023, responsibility for the survey switched to the Department for Energy Security and Net Zero (DESNZ) and it was subsequently rebranded as the DESNZ Public Attitudes Tracker.

This technical report covers methodological information about the four quarterly PAT survey waves completed between Autumn 2022 and Summer 2023. It provides information about the background to the study and its objectives, as well as details of the research methodology. More specifically, this technical report describes the data collection model, the sampling approach, the questionnaire structure and development process, the fieldwork method and performance, the data processing approach, the weighting design and the reporting outputs.

Background

In the second year of the new PAT series, four waves were completed. The first of these waves was conducted in Autumn 2022 (1 September to 3 October), the second wave was conducted in Winter 2022 (17 November to 19 December 2022), the third wave in Spring 2023 (9 March to 6 April) and the fourth wave in Summer 2023 (9 June 2023 to 10 July 2023). These waves build upon the four waves conducted in the first year of the new PAT series and, accordingly, the new PAT series now encompasses a total of eight waves.

The Autumn 2022 and Winter 2022 PAT surveys were branded as the BEIS Public Attitudes Tracker. The Spring 2023 and Summer 2023 PAT surveys were branded as the DESNZ Public Attitudes Tracker.

Before Autumn 2021, other tracker surveys had been conducted covering many of the same topics. However, these earlier surveys were conducted using a different methodology. Significant changes affecting both survey sample and mode mean that the results from the new PAT series are not directly comparable with results collected via surveys conducted using the previous methodology. A brief explanation of the differences between the previous tracker surveys and the new tracker survey is provided below.

Previous tracker survey series

The Public Attitudes Tracker began in March 2012 in the Department for Energy and Climate Change, which subsequently merged with the Department for Business, Innovation and Skills to form the Department for Business, Energy and Industrial Strategy in 2016. The survey was run on a quarterly basis with a total of 37 waves of data collection conducted between 2012 and 2021.

Until March 2020, the survey was conducted using in-home interviews via the Kantar UK face-to-face Omnibus, which employed a random location quota sampling method. However, in March 2020, the survey methodology changed due to the impacts of Covid-19 when face-to-

face fieldwork in the UK was halted¹. Between March 2020 and March 2021, the survey fieldwork was instead conducted via the Kantar online omnibus. Given this break in the time series, no direct comparisons were made between the surveys conducted on the Kantar online panel survey and the surveys conducted using the face-to-face omnibus.

The online panel methodology was set up at short notice and was always regarded as an interim methodology given its limitations in terms of sample representativeness and potential panel conditioning. In November 2020, BEIS undertook a review and consultation to plan for the longer-term future of the survey.

New tracker survey series

In Summer 2021, BEIS recommissioned the survey with the aim of creating a new time series based on a methodology which will allow more robust tracking of measures over the longer-term. This was in the context of continued uncertainty about the feasibility of face-to-face data collection.

The new survey series, beginning in Autumn 2021, uses Address Based Online Surveying (ABOS), a cost-effective method of surveying the general population using random sampling techniques. ABOS is a 'push to web' methodology where the primary method of data collection is online, but respondents are also able to complete a paper version of the questionnaire which enables participation among the offline population. Full details of the ABOS methodology are covered in the section ['Details of the data collection model'](#).

Comparisons with previous tracker series

It should be noted that changes in methodology can lead to both selection effects (that is differences due to the different sampling methods employed) and measurement effects (that is differences due to the different interview modes). Although attempts have been made to reduce the selection effects between surveys, the results from the new time series spanning the eight waves from Autumn 2021 to Summer 2023 should not be directly compared with previous waves where data was collected either face-to-face (waves 1 to wave 33) or via an online panel (waves 33 to 37).

However, results from the Autumn 2021 to Summer 2023 surveys are comparable with one another. While it is possible that the switch from BEIS to DESNZ branding from the Spring 2023 wave onwards could have had some impact on the trends recorded by the survey series, it appears that any such effects are minimal. The ['Summary of changes'](#) section outlines minor differences in the conduct of the survey in each of the four most recent PAT survey waves, but these are not of a magnitude which would undermine the new time series.

When it comes to measurement effects, differences in results could be caused by a number of factors (see below). Measurement effects cannot be ameliorated by weighting, although it is

¹ Fieldwork in March 2020 was conducted in two stages. The survey was initially run on the Kantar Public face-to-face Omnibus but stopped early due to the outbreak of COVID-19 and the start of the lockdown. The findings, based on a truncated face-to-face sample, were published in May 2020 <https://www.gov.uk/government/statistics/beis-public-attitudes-tracker-wave-33>. The remainder of this wave was conducted on the Kantar Public online omnibus to trial the online omnibus approach and to compare the results with the face-to-face survey.

sometimes possible to estimate their direction and scale and (at least partially) account for them in analysis.

Some examples of measurement effects:

- Face-to-face and telephone interviewers can provide motivation or clarification when required; this cannot truly be replicated online.
- People who would not disclose sensitive personal information or socially undesirable opinions/behaviours to an interviewer may be more willing to provide this information online.
- Where a response scale is used (for example, running from “strongly agree” to “strongly disagree”), interview respondents are generally more likely to select a ‘strong’ response – at either end of the scale – than they would if they were completing the survey online.
- For logistical reasons, when changing from face-to-face to self-completion modes, the questionnaire has to be adapted slightly and this can affect measurement:
 - Long questions or response lists are not suitable for smartphone presentation and will need to be edited in some cases.
 - Unprompted questions (‘do not show screen’) have to be converted into prompted versions for online presentation which will limit compatibility.
 - Presentation of “don’t know” answer codes. In interviewer-assisted modes (face-to-face and telephone) these are usually collected as spontaneous codes, meaning the interviewer will only select these if the respondent mentions it. However, on paper and online self-completion these codes have to be available more explicitly for respondents.

Interpretation of findings and further resources

In the published reports for the new PAT series, differences between groups are only reported at the 95% confidence interval level (that is, the difference is statistically significant at the .05 level). Further information about significance testing is provided later in this Technical Report.

Results from the survey are published in individual topic reports covering results from each of the four waves of the survey grouped by theme. We have also published the online and paper questionnaires for each wave. From Spring 2022 onwards, in response to requests from users, we have published a set of tables showing the time series for questions asked quarterly or biannually and headline questions asked annually. We also started publishing a quarterly set of tables containing crosstabulations for headline questions by gender, age, highest qualification and region. An Excel formatted (.xlsx) database containing anonymised respondent-level data was published for each wave of the new PAT series up to Spring 2022, alongside anonymised respondent-level CSV files. Datasets are now deposited at the Secure Research Service.

Survey objectives

The DESNZ (and formerly BEIS) Public Attitudes Tracker aims to continue building a better understanding of public awareness, attitudes and behaviours relating to DESNZ/BEIS policies in order to provide robust and reliable evidence for policy development, and to see how these measures shift over time. Data is collected from a representative sample of the UK population, so that the results fairly represent the views of the wider population.

The main objectives of the new PAT series are:

- To provide departments with attitudinal data on DESNZ (and formerly BEIS) priorities
- To understand how DESNZ (and formerly BEIS) policies affect different groups
- To provide robust evidence for early policy development
- To monitor changes in public attitudes and awareness over time
- To establish a robust methodology for tracking change, which is future-proofed, ensuring comparable data collection over time.

Understanding public attitudes and awareness is essential in developing effective and targeted policies. Findings from this work help DESNZ (and formerly BEIS) stay abreast with where the public are in relation to the Department's priorities and can perform a high-level evaluative and communication purpose. Owning public attitudes data also allows the Department to respond effectively to research published by external stakeholders.

Details of the data collection model

Address Based Online Surveying (ABOS) is a type of 'push-to-web' survey method.

The basic ABOS design is simple: a stratified random sample of addresses is drawn from the Royal Mail's postcode address file and an invitation letter is sent to each one, 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 as they might any other web survey. Once the questionnaire is complete, the specific username and password cannot be used again, ensuring data confidentiality from others with access to this information.

It is usual for at least one reminder to be sent to each sampled address and it is also usual for an alternative mode (usually a paper questionnaire) to be offered to those who need it or would prefer it. It is typical for this alternative mode to be available only 'on request' at first. However, after nonresponse to the web survey invitation, this alternative mode may be given more prominence.

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 also add considerably to overall cost. For the DESNZ/BEIS PAT, paper questionnaires are used in a limited and targeted way, to optimise rather than maximise response.

Sampling

Sample design: addresses

The address sample design was intrinsically linked to the data collection design (see the section ‘Contact procedures’) and was designed to yield a respondent sample that is representative with respect to geography, neighbourhood deprivation level, and age group. This approach limits the role of weights in the production of unbiased survey estimates, narrowing confidence intervals compared with other designs.

The samples were drawn in three-wave combinations: the first covered the Autumn 2022, Winter 2022 and Spring 2023 waves, while the second covered the Summer 2023 wave as well as the future Autumn 2023 and Winter 2023 waves.

The principles underpinning the sample design remained the same throughout and are described below.

First, a stratified master sample of addresses in the UK was drawn from the Postcode Address File (PAF) ‘small user’ subframe. Before sampling, the PAF was stratified by ITL1 region (12 strata) and, within region, by neighbourhood deprivation level (5 strata). A total of 60 strata were constructed in this way. Furthermore, within each of the 60 strata, the PAF was sorted by (i) local authority, (ii) super output area, and finally (iii) by postcode. This ensured that the master sample of addresses was geographically representative within each stratum.

Each master sample of addresses was augmented by data supplier CACI. For each address in the master sample, CACI added the expected number of resident adults in each ten-year age band. Although this auxiliary data will have been imperfect, Kantar Public’s investigations have shown that it is reasonably effective at identifying households that are mostly young or mostly old. Once this data was attached, the master sample was additionally stratified by expected household age structure based on the CACI data: (i) all aged 35 or younger (14% of the total); (ii) all aged 65 or older (22% of the total); (iii) all other addresses (64% of the total).

From each master sample, Kantar Public drew three stratified random sub-samples to cover three waves of the PAT. One in five of these addresses was allocated to a reserve pool and the addresses in each master sample that were not allocated to *any* wave formed a wider reserve pool. The conditional sampling probability in each stratum was varied to compensate for (expected) residual variation in response rate that could not be ‘designed out’, given the constraints of budget and timescale. The underlying assumptions for this procedure were updated wave by wave as evidence accumulated.

In total, across the four waves covered by this report 90,904 addresses were issued: 22,012 in Autumn 2022; 22,007 in Winter 2022; 22,477 in Spring 2023; and 24,408 in Summer 2022 (including a reserve sample of 2,978)².

Figure 1 shows the issued sample structure with respect to the major strata, combining all four surveys together³.

² See ‘[Fieldwork numbers and response rates](#)’ section

³ In addition, higher sampling fractions were applied to the three least populous ITL1 regions (NE England, Wales and N Ireland) so that the expected number of completed questionnaires was at least 220 in each one.

Figure 1: Address issue by area deprivation and household age structure: Autumn 2022 through Summer 2023 surveys

Expected household age structure	Most deprived	2 nd	3 rd	4 th	Least deprived
All <=35	6,072	4,730	3,160	2,269	1,668
Other	18,739	13,130	10,887	9,731	7,359
All >=65	3,193	2,894	2,641	2,321	2,110

Sample design: individuals within sampled addresses

All resident adults aged 16 and over were invited to complete the survey. In this way, the PAT avoided the complexity and risk of selection error associated with remote random sampling within households.

However, for practical reasons, the number of logins provided in the invitation letter was limited. The number of logins varied between two and four, with this total adjusted in reminder letters to reflect household data provided by prior respondent(s). Addresses that CACI data predicted contained only one adult were allocated two logins; addresses predicted to contain two adults were allocated three logins; and other addresses were allocated four logins. The majority of addresses were given either two or three logins. Paper questionnaires were available on request to those who are offline, not confident online, or unwilling to complete the survey this way. Furthermore, some addresses were sent a paper questionnaire at the initial point of contact – further details are provided in the [‘Contact procedures’](#) section.

Questionnaire

Questionnaire design

The starting point for developing questions at each wave was to review questions from the first year of the new PAT survey series which ran from Autumn 2021 to Summer 2022, maintaining consistency unless issues with the previous questions had been identified or the policy context had changed. New questions were also developed to address any new policy priorities.

In the current PAT survey series, all questions need to be designed for mixed-mode surveying, with questions suitable for both online and paper-based presentation. The main considerations when designing questions are set out below.

Mixed mode adaptation

The aim is to ensure that questions are presented consistently across modes to avoid mode effects and to ensure that data collected from the two modes can be merged. The starting principle is to design questions to be ‘unimodal’, that is to use a standard question format

across modes. However, in some cases, and especially where the question format was non-standard, we took an 'optimode' approach to designing questions. This refers to a more flexible approach where the design is optimised to suit mode, but also ensuring consistency in outputs. The documented questionnaires indicate where question formatting or routing differs by mode.

The main mode-based considerations were as follows:

- Question order and routing were aligned between modes by ordering questions in a way which provided simple navigation on paper. Routing instructions were added explicitly on the paper version. However, in some cases, the filter was widened for postal respondents (for example widened to 'ask all' with an added 'not applicable' option) which avoided the need for complex visual routing. Where this occurred, data editing was later applied to ensure equivalence across modes.
- Grid-style questions often required the need for different presentation by mode, with paper-based questions set up as more traditional static grids, while online these were presented more dynamically to better suit navigation on laptop, tablet and smartphone screens.
- Where a question required a long list (for example more than 12 items), this was retained as a long list on paper, but for online this was split into two or more lists to better suit web-based presentation.
- All response lists were presented in a fixed order (as opposed to randomised or rotated) to ensure mode equivalence for online and paper.

Use of scales

Where scales are used across different items in the questionnaires (e.g., 5-point scales for knowledge/awareness, agree/disagree and support/oppose) these are standardised to ensure consistent presentation throughout.

Demographic questions

Wherever possible, these were based on ONS harmonised⁴ versions of questions at the time of setting up the first wave of the new survey series.

Cognitive testing

Cognitive interviewing helps to identify problems in question 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.

Cognitive testing was used to test and refine proposed new questions before adding them to the Tracker. Cognitive testing was conducted in advance of the Spring 2023 and Summer 2023 waves.

⁴ <https://analysisfunction.civilservice.gov.uk/government-statistical-service-and-statistician-group/gss-support/gss-harmonisation-support/harmonised-standards-and-guidance/>

The cognitive testing in advance of the Spring 2023 wave included questions on energy bills, electricity network infrastructure, perceptions of the science, technology and innovation sector, business regulation and support, renewable energy sources and Net Zero.

The cognitive testing ahead of the Summer 2023 wave included questions on low carbon heating, sources of information on climate change, trust in information sources, expectations that the UK will meet Net Zero targets, knowledge of how to reduce energy consumption, electricity tariffs, smart meters and smart heating systems, cooking appliances and energy bills.

Each of these stages of cognitive testing involved 10 interviews with adults aged 16+ spread across relevant demographics such as age, gender, region, education level, and tenure. Interviews were carried out by members the project team and other researchers trained in cognitive testing techniques.

Questionnaire structure

As far as possible at each wave, repeat questions are included with a similar placement, and with a similar preceding context, to minimise context effects. Quarterly questions are always asked at the beginning of the survey (after the opening demographics) to ensure that these are not impacted by other questions which may affect knowledge or attitudes towards these key topics.

A list of survey topics and the waves where these are included is included in Figure 2. Questions are broken down by theme, in line with the coverage in each topic-based report.

Figure 2: Survey topics and the waves in which each topic was included

	Autumn 2022	Winter 2022	Spring 2023	Summer 2023
Net zero and climate change				
Awareness of Net Zero	✓	✓	✓	✓
Concern about Climate Change	✓	✓	✓	✓
Behaviours to tackle climate change				✓
Trust in information sources				✓
Attitudes towards climate change				✓
Expected financial impacts of Net Zero				✓
Likelihood of meeting Net Zero targets				✓
Energy Infrastructure and Energy Sources				
Support for renewable energy	✓	✓	✓	✓
Support for different types of renewables	✓		✓	
Attitudes towards renewable energy			✓	
Attitudes towards solar/wind farm in local area			✓	
Awareness of and support for fusion energy	✓		✓	
Attitudes towards fusion energy	✓			
Awareness and support for shale gas	✓			

	Autumn 2022	Winter 2022	Spring 2023	Summer 2023
Awareness of small modular reactors	✓			
Attitudes towards nuclear energy		✓		
Support for nuclear energy		✓		
Awareness and support for carbon capture and storage	✓		✓	
Awareness of hydrogen			✓	
Concerns about and attitudes towards energy security				✓
Use of UK vs imported oil and gas				✓
Awareness of need for new electricity infrastructure				✓
Support for new electricity infrastructure in local area				✓
Heat and energy in the home				
Awareness of heating changes to meet Net Zero targets and of low carbon heating	✓	✓	✓	✓
Awareness of and likelihood of installing specific low carbon heating systems		✓		
Attitudes towards low carbon heating systems		✓		
Heating and cooling in the home		✓		
Attention paid to heat used in the home		✓		
Replacing heating systems		✓		
Trusted sources of advice on heating systems		✓		
Insulation in the home		✓		
Likelihood of installing solar panels			✓	
Energy Performance Certificates (EPCs)		✓		
Awareness of rental property standards		✓		
Energy bills and tariffs				
Smart Meters				✓
Energy use in the home			✓	✓
Knowledge about ways to reduce energy use				✓
Energy efficiency in the home				✓
Energy bill payment methods				✓
Concern about paying energy bills			✓	✓
Actions taken as a result of increasing bills				✓
Attitudes towards government support for energy bills				✓
Perceived impact of renewables on energy bills			✓	
Satisfaction with energy suppliers			✓	
Consumer issues				
Use of online retailers and services	✓			

	Autumn 2022	Winter 2022	Spring 2023	Summer 2023
Understanding Terms and Conditions	✓			
Knowledge of consumer protection	✓			
Awareness of consumer dispute resolution services	✓			
Awareness and trust of consumer organisations	✓			
Shopping around and purchasing in last 12 months		✓		
Switching		✓		
Consumer problems			✓	
Workers' rights				
Knowledge of employment rights	✓			
Problems with employment rights at work	✓			
National Minimum Wage Naming Scheme	✓			

The full questionnaires from each survey wave are published alongside the survey results for each wave.

Questions added and removed

In all waves except for Autumn 2022, a few new questions have been added as well as removed to reflect the changing needs of BEIS/DESNZ.

Winter 2022:

- Question added:
 - The question RENTALSTAND, 'How much, if anything, do you know about the minimum energy efficiency standards for rental properties', was added from Spring 2022.
- Questions removed:
 - Two questions were removed in the EPC section (EPCWHYNOT and EPCINFORM).

Spring 2023:

- Questions added:
 - A new question was added to the 'Energy Bills' module: COSTACTIONS, 'Which, if any, of the following actions have you taken in recent months because of the increase in the cost of your energy bills?'
 - Two questions asked in Spring 2022 were removed from the 'Energy Bills' module: ENERGSWITCH, 'Thinking about your gas and electricity supplier, when, if at all, did your household last switch supplier? Please include switches which you were forced to make if your energy supplier closed down' and

ENERGBUST, 'And when your household last switched supplier, was this by choice or were you forced to switch as your supplier closed down?'

- Questions removed:
 - RENTALSTAND and SMARTMET were asked in different waves (Winter 2022 and Summer 2022 respectively) and were therefore removed from Spring 2023.

Summer 2023:

- Questions added:
 - A new set of questions was added on Net Zero:
 - NZTRANSIT, 'What impact do you think the UK's transition to Net Zero might have on the UK economy?' (in both the short and long term)
 - NZFINANCE, 'And what impact do you think that the UK's transition to Net Zero might have on your regular living expenses (for example energy, food, travel)? (in both the short and long term)
 - NZCONF, 'How confident are you that the UK is on track to meet its Net zero target by 2050?'
 - A new question was added to the set on energy security':
 - ENSECOWN, 'How much do you agree or disagree with the following statement? The UK should produce less of its own oil and gas, even if that means we need to buy more fuel from other countries.'
 - A new set of questions on building electricity network infrastructure was added:
 - INFRAKNOW, 'Before today how much, if anything, did you know about the need to build more electricity network infrastructure as part of the UK's transition to low carbon and renewable energy?'
 - INFRAHAPP. 'Now imagine that there are plans for new electricity network infrastructure to be constructed in your local area. This could include building a substation and large visible steel pylons supporting overhead power lines. How happy or unhappy would you be about this?'
 - INFRAWHYHAPP, 'You said you would be very or fairly happy for electricity network infrastructure to be built in your local area. Why is this?'
 - INFRAWHYNO, 'You said you would be very or fairly unhappy for electricity transmission network infrastructure to be built in your local area. Why is this?'
 - A subset of the questions on energy saving and wasting, ENSAVFREQ, which were asked in Spring 2022 and 2023, were repeated in Summer 2023:
 - 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
 - New questions were added to the set of questions on 'Energy Bills' covering energy efficiency and energy use:
 - BILLPAY, 'How does your household usually pay for the energy supplied to your home? If you pay using different methods for electricity and gas, please select both.'
 - ENSUFFIC2Y, 'Which of these statements comes closest to your view? Compared to two years ago, I use energy... (answers on a scale from much more efficiently to much less efficiently)
 - ENCHANGE2Y, 'And within the last two years, have you made any of the following changes to your home to reduce your energy use at home?'

- ENCHANGEREASON, ‘And did you make these changes as a result of a rise in energy prices?’
 - ENEFFKNOW, ‘How much would you say you know about the most effective ways to reduce energy use in your home?’
 - ENEFFMORE, ‘And do you feel you know enough about the most effective ways to reduce energy use in your home, or would you like to know more?’
 - GOVSUPPORTEN, ‘Which of the following statements comes closest to your viewpoint? If energy prices were to remain high....’ (answer list relating to amount and basis of support that government should provide to households)
- Questions removed:
 - All questions from the ‘Artificial Intelligence’ module were removed (AIKNOW, AILEVEL, AIPOSNEG, AITYPEKNOWA-AITYPEKNOWE and AISUPPORTA-AISUPPORTE).
 - Most questions from the ‘Electricity Use’ module were removed (TOUTAWARE1, TOUTAWARE2, TARIFFTYPE, WHICHTOU, TOUTLIKELY and WHYNOTOUT), except for SMARTMET which was moved to the ‘Energy Bills’ module.
 - All questions from the ‘Vehicle Use’ module were removed (VEHICOWN, VEHICTYPE, HYBRIDTYPE and EVSMARTKNOW).
 - All questions from the ‘Use of Appliances at Home’ module were removed (SMAPPKNOW and SMAPPLIKELY).
 - All questions from the ‘Attitudes towards Business and Trade’ were removed (CORPTRUSTA-E, BIZRATEA-B and BREXITCHANGEA-C).

Definitions

The table below sets out the key terms used within the questionnaires and gives a brief definition for each term.

Figure 3: Definitions of terms used in questionnaires

Term	Definition
Carbon capture and storage (CCS)	Carbon capture and storage is a technology that stops greenhouse gases entering the atmosphere. It typically involves capturing carbon dioxide (CO ₂) emissions from power stations or industrial facilities where emissions are high. The CO ₂ is then piped to offshore underground storage sites, where it can be safely and permanently stored.
Climate change / Global warming	Long-term shift in the planet’s weather patterns and rising average global temperatures.
Consumer dispute resolution services	Independent organisations which help people resolve a consumer dispute, such as an ombudsman.
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

Term	Definition
	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.
Energy Performance Certificate (EPC)	An Energy Performance Certificate (EPC) measures the energy efficiency of a property and is needed whenever a property is built, sold or rented. The certificate includes recommendations on ways to improve the home's energy efficiency.
Energy tariffs	The pricing plan for energy used (e.g., for electricity and gas).
Energy security	Energy security relates to the uninterrupted availability of energy sources at an affordable price and the associated impacts of these factors on national security.
Fusion Energy	Fusion energy is an experimental technology that works by fusing together atoms in order to release energy. The UK is exploring whether this technology could be used to generate zero carbon electricity.
Hydrogen	Hydrogen is used as a fuel in some industrial processes. It is not naturally available, which means it needs to be produced from other sources, such as natural gas, nuclear power, or renewable power like solar and wind, to be used as a fuel. When produced in an environmentally friendly way, hydrogen can help reduce the carbon emissions in industries, power generation, heavy transport (such as buses, lorries, shipping and aircraft) and potentially home heating.
Low carbon heating systems	Heating systems that use energy from low-carbon alternatives such as hydrogen, the sun, or heat pumps which draw heat from the ground, air or water to heat homes.
Net Zero	<p>Net Zero means that the UK's total greenhouse gas (GHG) emissions would be equal to or less than the emissions the UK removed from the environment. This can be achieved by a combination of emission reduction and emission removal.</p> <p>A new Net Zero target was announced by the Government in June 2019, which requires the UK to bring all greenhouse gas emissions to Net Zero by 2050.</p>
Nuclear Energy	<p>Nuclear power is the use of nuclear reactions to produce electricity. This source of energy can be produced in two ways: fission – when nuclei of atoms split into several parts; or fusion – when nuclei fuse together.</p> <p>Fission is the process which occurs in nuclear power stations across the UK. Fusion is an experimental technology which the</p>

Term	Definition
	UK is exploring as a possibility to produce zero carbon electricity.
Renewable energy	Renewable energy technologies use natural energy resources that are constantly replaced and never run out to make electricity. Fuel sources include wind, wave, biomass and solar.
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.
Shopping around	In the context of consumer purchases, comparing different products, services, deals or providers.
Small Modular Reactors	These are a type of nuclear fission reactor, similar to existing nuclear power stations, but on a smaller scale. They can be used for electricity generation, to provide industry with heat and power, or to provide energy to UK communities. not connected to the national gas grid.
Smart meters	Smart meters are a type of gas and/or electricity meter which automatically send meter readings to your energy supplier and usually come with a monitor or screen (digital in-home display), that provides information about your energy usage. Smart meters also allow prepayment customers to top up their credit online and over the phone.
Switching	In the context of consumer purchases, changing provider or contract for products or services.

Fieldwork

Contact procedures

All sampled addresses are initially sent a letter inviting them to take part in the survey. Letters are sent by 2nd class franked mail in a white C5 window envelope. The envelope had an ‘On Her Majesty’s Service’ logo printed on it; since 15 November 2023, the ‘On His Majesty’s Service’ logo has been utilised due to the passing of Her Majesty The Queen. As discussed further below, some envelopes also include paper questionnaires, giving the respondent the option either to complete the survey online or by filling in paper questionnaires.

The letter contains the following information:

DESNZ/BEIS Public Attitudes Trackers (Autumn 2022 to Summer 2023, UK)

- A brief description of the survey and its connection to DESNZ (and formerly BEIS)
- The URL of the survey website (<https://www.patsurvey.co.uk>) and details of how to log in to the survey
- A QR code that can be scanned to access the online survey
- Log-in details for the required number of household members (up to four)
- An explanation that participants will receive a £5 gift voucher
- Information about how to contact Kantar Public in case of any queries
- The reverse of the letter featured responses to a series of Frequently Asked Questions.
- Those whose envelopes do not include paper questionnaire(s) are told that they may request paper questionnaires
- Those whose envelopes do include postal questionnaire(s) are told that they may either complete the survey online or by filling in the enclosed paper questionnaire

A privacy notice is also provided for those whose envelopes include a postal questionnaire.

Respondents with addresses in Wales are sent a Welsh language version of the letter alongside the English language version.

Copies of the invitation and reminder letters for the Summer 2023 wave and the survey FAQs, are included in Appendix A.

Figure 4 summarises the contact design within each stratum, showing the number of mailings and type of each mailing: push-to-web (W) or mailing with paper questionnaires included alongside the web survey login information (P). For example, 'WP' means an initial push-to-web mailing without any paper questionnaires followed by a second mailing with paper questionnaires included alongside the web survey login information.

The four-week timescale of each wave of the PAT – as well as the available budget – limits the maximum number of mailings to each address to two, a fortnight apart. There was also a limit on the number of mailings that included a paper questionnaire alternative. They were included in one of the mailings to sampled addresses where the CACI data indicated that every resident would be aged 65 or older. These addresses comprised 14% of the sampled total.

Figure 4: Data collection design by stratum (Area deprivation quintile group and Expected household age structure)

Expected household age structure	Most deprived	2 nd	3 rd	4 th	Least deprived
All <=35	WW	WW	WW	WW	WW
Other	WW	WW	WW	WW	WW
All >=65	WP	P	P	P	P

An unexpectedly weaker response in the Summer 2023 wave forced some revision to this general plan as well as the release of a small reserve sample. The implemented data collection design for the initially issued ('main') sample is shown in Figure 4a, while the design for the reserve sample is shown in Figure 4b.

Figure 5a: Data collection design by stratum (Summer 2023, main sample issue, n=21,430)

Expected household age structure	Most deprived	2 nd	3 rd	4 th	Least deprived
All <=35	WW	WW	WW	WW	WW
Other	WW	WW	WW	WW	WW
All >=65	WP	PW	PW	PW	PW

Figure 6b: Data collection design by stratum (Summer 2023, reserve sample issue, n=2,978)

Expected household age structure	Most deprived	2 nd	3 rd	4 th	Least deprived
All <=35	W	W	W	W	W
Other	W	W	W	W	W
All >=65	W	n/a	n/a	n/a	n/a

Fieldwork performance

Fieldwork dates

Fieldwork for each wave of the survey is run over a period of approximately one month. Figure 5 summarises the specific fieldwork dates for each survey wave.

Figure 7: Fieldwork dates

Wave	Fieldwork dates
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

Fieldwork numbers and response rates

A target of 4,000 complete interviews is set for each wave of the PAT. There remains some variability in response rate from wave to wave.

Postal strike action and the suspension of data collection on the day of the Queen’s funeral may have impacted the response to the Autumn 2022 wave, though the end date was slightly extended (from 29 September to 3 October) to compensate for the fieldwork interruptions.

Response rates in Winter 2022 were lower than in the equivalent Winter 2021 wave due to postal strike action during fieldwork on 24-25 November, 28 November, 30 November and 9, 11, 14, 15, 23 and 24 December. This disruption impacted on the timeliness of survey mailings and may also have deterred people from completing and/or returning the paper questionnaires.

All waves from Autumn 2022 to Summer 2023 achieved a total sample size within a maximum of 10% of the target sample size.

Figure 6 summarises the sample sizes by data collection method at each wave.

Figure 8: Sample sizes by data collection method

Wave	Total sample sizes (adults aged 16+)	CAWI completes	CAWI completes as percentage of total wave completes	Paper completes	Paper completes as percentage of total wave completes
Autumn 2022	4,161	3,435	83%	726	17%
Winter 2022	3,574	3,047	85%	527	15%
Spring 2023	4,410	3,702	84%	708	16%
Summer 2023	4,003	3,331	83%	672	17%
Total	16,148	13,515	84%	2,633	16%

In total, there were 16,148 respondents across all four waves, a conversion rate (responses/issued addresses) of 0.18.

This can be converted into an individual level standardised response rate of 10.2% if it is assumed that (i) 92% of sampled addresses are residential, and (ii) an average of 1.89 adults live in the residential addresses. These assumptions are well-evidenced in general but not known with certainty for the particular sample that was drawn.

Using the same assumptions, the standardised household response rate (at least one response) was 14.0%. On average, 1.38 responses were received from each responding household.

Incentives

Each respondent who completes the survey receives a £5 gift voucher incentive. Those who complete a postal questionnaire are mailed a £5 Love2shop voucher. In the Autumn 2022 Wave, respondents who complete the survey online are able to claim their voucher via the online 'Perks Plus' platform, which allows respondents to choose from a range of vouchers. From the Winter 2022 Wave onwards, respondents are able to claim their voucher via the online 'Merit Incentives' platform.

Survey length

Figure 7 shows the average (median) time taken to complete the survey in each wave, based on those completing the survey online. Timings for those completing the paper version of the survey are not available – however, the questionnaire content for both data collection methods is largely mirrored and completion lengths are likely to be broadly similar.

Figure 9 Median length of each survey wave for those completing online

Wave	Median interview length
Autumn 2022	15 minutes 20 seconds
Winter 2022	16 minutes 23 seconds
Spring 2023	14 minutes 58 seconds
Summer 2023	15 minutes 27 seconds

Response Burden

The GSS has a policy of monitoring and reducing statistical survey burden to participants where possible, and the burden imposed should be proportionate to the benefits arising from the use of the statistics. As a producer of statistics, DESNZ (formerly BEIS) is transparent in its approach to monitoring and reducing the burden on those providing their information, and on those involved in collecting, recording and supplying data.

The response burden of a survey is calculated by multiplying the number of responses to the survey in each wave by the median time spent completing the survey per wave.

Based on the number of respondents (Figure 6) and median interview length (Figure 7), the response burden of interviews which fulfilled the quality check standards for this survey this year was estimated at 4,170 hours and 5 minutes. This assumes that the median survey completion time for postal questionnaires was the same as the median completion time for online questionnaires. This is a reduction on the first year of the survey, when the total response burden was estimated at 4,682 hours and 6 minutes.

Data processing

Data management

Due to the different structures of the online and paper questionnaires, data management was handled separately for each mode. Online questionnaire data were collected via the web script and, as such, were much more easily accessible. By contrast, paper questionnaires were scanned and converted into an accessible format.

For the final outputs, both sets of interview data were converted into IBM SPSS Statistics, with the online questionnaire structure as a base. The paper questionnaire data was converted to the same structure as the online data so that data from both sources could be combined into a single SPSS file.

Quality checking

Initial checks were carried out to ensure that paper questionnaire data had been correctly scanned and converted to the online questionnaire data structure.

Once any structural issues had been corrected, further quality checks were carried out to identify and remove any invalid interviews. To do this, a range of ‘potential invalid interview’ flags were created and applied to the data.

Any cases that were allocated a duplicate flag, a super-speeding flag, an extreme straightlining flag, or a flag which indicates that they were missing the ‘confirmation of accuracy’, were immediately removed.

Any cases allocated three or more of the other flags were also removed. So, for example, a case which had a minimum interviews flag, plus a missing demographic flag, plus a moderate straightlining flag, would also be removed.

The quality checks are as seen in Figure 8.

Figure 10: Potential invalid interview checks

Type	Process
Duplicate on Individual Serial	Check for duplicate serials. Manually review the flagged cases and decide whether it is a duplicate based on demographics, email addresses used to claim Perks Plus or Merit incentives and respondent name. If so, flag for removal. Otherwise attach a new, unique serial.
Minimum interviews	Flag households where there are more interviews than the minimum reported number of people in that household (different respondents from the same household may report a different number of household members).
Maximum interviews	Flag households where there are more interviews than the maximum reported number of people in that household (different respondents from the same household may report a different number of household members). Manually review these flagged households and decide whether there are any duplicates based on demographics, email addresses used to claim Perks Plus or Merit incentives and respondent name. Flag any duplicates for removal.
Super speeding	Allocate a super speeding flag to any interviews with a length of less than 5 minutes and remove from dataset.
Moderate Speeding	Allocate a moderate speeding flag to interviews which took longer than 5 minutes to complete but were still in the lowest 10 th percentile of interview length.
Missing demographic information	Only for PAPI questionnaires. Attach a missing demographic flag if more than one variable is missing from: ageband; gender; numadults; ethnic; and tenure.
Moderate straightlining of grids	Apply a moderate straightlining flag if more than half of the answered grids have been straightlined (i.e., the same response code is given for each item in the grid).

Type	Process
Extreme straightlining of grids	Apply an extreme straightlining flag if all answered grids were straightlined and remove from dataset.
Have not ticked the “confirmation of accuracy” box	Flag for removal if a CAWI respondent has not typed in their name to verify that ‘I confirm that all of my answers were given honestly and represent my own views’. Flag for removal if a PAPI respondent has not signed to verify that ‘I confirm that I answered the questions as accurately as possible and that the answers reflect my own personal views’.

The following number of invalid cases was identified in each survey wave:

- Autumn 2022: 207 invalid cases (4.7% of all cases)
- Winter 2022: 197 invalid cases (5.2% of all cases)
- Spring 2023: 312 invalid cases (6.6% of all cases)
- Summer 2023: 272 invalid cases (6.4% of all cases)

Data checks and edits

Upon completion of the general quality checks described above, more detailed data checks were carried out to ensure that the right questions had been answered according to questionnaire routing. Unless a programming error has been made, this is correct for all online completes, as routing is programmed into the scripting software. However, data edits were required for paper completes. Data is also checked against the raw topline data outputs and checks are also implemented to verify that any weighting has been correctly applied.

There were three main types of data edit, both affecting the paper questionnaire data:

- If a paper questionnaire respondent had mistakenly answered a question that they weren’t supposed to, their response in the data was allocated a ‘SYSMIS’ value.
- If a paper questionnaire respondent had neglected to answer a question that they should have, they were assigned a response in the data of “-4: Not answered (Paper)”.
- If a paper questionnaire respondent selected multiple responses to a single-coded question, their answers to that question were excluded from the data and they were instead allocated a response in the data of “-5: Multiple options chosen (Paper)”.

Other minor edits were made on a question-specific basis, to ensure that there were no mutually exclusive combinations of responses for paper completes (e.g., ‘none of these’ being recorded alongside a specific response code).

Coding

Post-interview coding was undertaken by members of the Kantar Public coding department. The coding department coded any verbatim responses recorded in ‘other specify’ questions.

If the open-ended response corresponded to one of the pre-coded categories for a given question, the coding team would reallocate the open-ended response to the relevant pre-coded category and the response was removed from the 'other' category.

The threshold for adding a new response code to the reported data is met when 1% of the wave respondents provide open-ended answers which can be meaningfully grouped together (equivalent to around 40 responses from the target wave total of 4,000). This threshold was not met in any of the waves from Autumn 2022 to Summer 2023 - no new codes were therefore added under this criteria.

Data outputs

Once the checks were complete a final SPSS data file was created that only contained valid interviews and edited data. Individual SPSS data files were created for each of the four PAT waves from Autumn 2022 to Summer 2023.

Based on these SPSS datasets, data tables in an Excel format were produced for each PAT wave. There are no combined wave databases for the current PAT series.

Key sub-group reporting variables

The variables which are the main focus of sub-group reporting in the PAT survey series cover a range of demographic and profiling measures. These are created using a consistent specification in each wave, as outlined in Figure 9.

Figure 11: Sub-group reporting variable specification

Top level grouping	Detailed grouping	Definition
Gender	Male	GENDER=1
Gender	Female	GENDER=2
Gender	Prefer to self-describe	GENDER=3
Age	16 to 24	AGE>=16 AND <=24 OR AGEBAND=1 AND 2
Age	25 to 34	AGE>=25 AND <=34 OR AGEBAND=3
Age	35 to 44	AGE>=35 AND <=44 OR AGEBAND=4
Age	45 to 54	AGE>=45 AND <=54 OR AGEBAND=5
Age	55 to 64	AGE >=55 AND <=64 OR AGEBAND=6
Age	65+	AGE>= 65 OR AGEBAND=7 AND 8
Highest qualification	Degree level or above	HIGHQUAL=1
Highest qualification	Another kind of qualification	HIGHQUAL=2

Top level grouping	Detailed grouping	Definition
Highest qualification	No qualifications	HIGHQUAL=3
Tenure	Owner	TENURE=1,2,3
Tenure	Renter	TENURE=4
Rental type	Social renter	LANDLORD=1,2
Rental type	Private renter	LANDLORD=7
Rental type	Other type of renter	LANDLORD=3,4,5,6
Property type	A house or bungalow	ACCOMTYPE_COMB = 1,2,3
Property type	Flat	ACCOMTYPE_COMB = 4,5,6,7
Property type	Other	ACCOMTYPE_COMB = 8,9
GOR	North East	GOR=1
GOR	North West	GOR=2
GOR	Yorkshire & Humber	GOR=3
GOR	East Midlands	GOR=4
GOR	West Midlands	GOR=5
GOR	East of England	GOR=6
GOR	London	GOR=7
GOR	South East	GOR=8
GOR	South West	GOR=9
GOR	Wales	GOR=10
GOR	Scotland	GOR=11
GOR	Northern Ireland	GOR=12
Number of adults in household	1	NUMADULTS=1
Number of adults in household	2	NUMADULTS=2
Number of adults in household	3+	NUMADULTS>=3
Number of children in household	None	ChildHH=1
Number of children in household	1	CHILDHH=2
Number of children in household	2+	ChildHH>=3
Household decision maker	Respondent	HHRESP=1 OR NUMADULTS=1

Top level grouping	Detailed grouping	Definition
Household decision maker	Joint	HHRESP = 3
Household decision maker	Someone else	HHRESP=2
Current working status	Working full time (30+ hours a week)	WORKSTAT=1
Current working status	Working part time (less than 30 hours a week)	WORKSTAT=2
Current working status	Unemployed and available for work	WORKSTAT=6
Current working status	Wholly retired from work	WORKSTAT=7
Current working status	Full-time education at school, college or university	WORKSTAT=8
Current working status	Looking after home or family	WORKSTAT=9
Current working status	Permanently sick or disabled	WORKSTAT=10
Current working status	Other	WORKSTAT=3, 5, 11
Ethnicity	White	ETHNIC=1,2,3,4
Ethnicity	Mixed or multiple ethnic groups	ETHNIC=5,6,7,8
Ethnicity	Asian or Asian British	ETHNIC=9,10,11,12,13
Ethnicity	Black or Black British	ETHNIC=14,15,16
Ethnicity	Other ethnic group	ETHNIC=17,18
NS-SEC	Managerial, administrative, and professional occupations	(OCCUPATION=1,8 AND EMPSTATUS=1,2,3,4,5,6,7) OR (OCCUPATION=2 AND EMPSTATUS=1,4,5,6) OR (OCCUPATION=3,7 AND EMPSTATUS=1,4,5,6,7) OR (OCCUPATION=4 AND EMPSTATUS=1,4,5) OR (OCCUPATION=5,6 AND EMPSTATUS=1,4,5)
NS-SEC	Intermediate occupations	(OCCUPATION=2 AND EMPSTATUS=7)
NS-SEC	Small employers and own account workers	(OCCUPATION=2 AND EMPSTATUS=2,3) OR (OCCUPATION=3,7 AND

Top level grouping	Detailed grouping	Definition
		EMPSTATUS=2,3) OR (OCCUPATION=4 AND EMPSTATUS=2,3) OR (OCCUPATION=5,6 AND EMPSTATUS=2,3)
NS-SEC	Lower supervisory and technical occupations	(OCCUPATION=4 AND EMPSTATUS=6,7) OR (OCCUPATION=5,6 AND EMPSTATUS=6)
NS-SEC	Semi-routine and routine occupations	(OCCUPATION=5,6 AND EMPSTATUS=7)
NS-SEC	Never worked	JOBEVER=2
Mode	CAWI	CAWI_PAPI = 1
Mode	PAPI	CAWI_PAPI = 2

Weighting

PAT data was weighted separately for each survey wave.

The PAT is largely used to collect data at the person-level but there are a small number of questions where the respondent is asked about the household as a whole or is asked to give an opinion on a household-level matter. The details of these two types of weights are provided below.

Individual weight

A three-step weighting process was used to compensate for differences in both sampling probability and response probability:

Step 1: An address design weight was created equal to one divided by the sampling probability; this also served as the individual-level design weight because all resident adults could respond.

Step 2: The expected number of responses per address was modelled as a function of data available at the neighbourhood and address levels. The step two weight was equal to one divided by the predicted number of responses.

Step 3: The product of the first two steps was used as the input for the final step to calibrate the sample. The responding sample was calibrated to the contemporary Labour Force Survey (LFS)⁵ with respect to (i) sex by age, (ii) educational level by age, (iii) ethnic group, (iv) housing

⁵ April-June 2022 for the Autumn 2022 survey; July-September 2022 for the Winter 2022/3 survey; October-December 2022 for the Spring 2023 survey; and January-March 2023 for the Summer 2023 survey.

tenure, (v) region, (vi) employment status by age, (vii) the number of co-resident adults, and (viii) internet use by age.⁶

The statistical efficiency of the individual-level weights was 72% (Autumn 2022), 72% (Winter 2022/3), 73% (Spring 2023), and 70% (Summer 2023).⁷

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.

Finally, because the new methodology employs a random sampling technique, the weighting procedure is different from those used for the face-to-face surveys (up to wave 33) and online panel surveys (waves 33-37) in the original PAT series. However, the objective – elimination of sample bias – was the same.

Household weight

The household weight is used for questions which are best interpreted at a household level, for example factual questions such as main method of heating the home, and whether the household has a smart meter. Note, household weights were not used in the Autumn 2022 and Spring 2023 surveys.

The full list of household-weighted variables is:

- HEATMAIN
- SMARTMET
- BILLPAY

The COOLMAIN variable was household-weighted in Winter 2021, but in the Winter 2022 wave, it was person-weighted.

To analyse household-level survey data, it makes sense to convert the weighted sample of adults aged 16+ into a weighted sample of households.

This was achieved in two steps:

Step 1: The person-level weight of each respondent was divided by the reported number of adults aged 16+ in that respondent's household (that is, the number of survey-eligible residents). This provisional weight was used as the input weight for step 2.

Step 2: A household-level calibration procedure was carried out using the contemporary LFS household-level dataset as the benchmark. Household totals were obtained for (i) housing tenure, (ii) region, (iii) the number of adults aged 16+ in the household, and (iv) the number of children aged under 16 in the household.

⁶ Internet use by age was based on LFS data from January-March 2021, as this data is only collected in these months. This release has now been [discontinued](#), so the 2021 data was retained for all four surveys.

⁷ The statistical efficiency is the size of the effective sample size as a proportion of the actual sample size, taking only weighting into account (i.e., ignoring the effects of sample stratification and clustering by household).

This approach to constructing the household-level weight has the advantage of making use of data from all respondents. The unweighted base is therefore the same for both person-level and household-level estimates. However, multiple respondents reporting about the same household are likely to provide very similar answers. The practical consequence is that the *statistically effective sample size* for household-level estimates will be *smaller* than for person-level estimates, even if the unweighted base is the same.

Reporting and data

Data delivery

Any respondent-level data is transmitted using Kiteworks software, which provides a highly secure and trackable means of transferring sensitive data. Kiteworks employs AES-256 encryption at rest and TLS 1.2 encryption when the data is in transit.

Reporting outputs

The following reporting outputs were published for the PAT waves from Autumn 2022 to Summer 2023:

- Individual topic reports covering results grouped thematically for each wave e.g., 'Net Zero and Climate Change' or 'Energy Infrastructure and Energy Sources' (.pdf formatted)
- A technical overview of the methodology for each wave (.pdf formatted)
- The online and paper questionnaire for each wave (.pdf formatted)
- Tabulations showing the time series for questions asked quarterly or biannually and headline questions asked annually where these have now been included more than once (.xlsx formatted)
- Tabulations showing key questions from each wave cross-tabulated against gender, age, highest qualification and region (.xlsx formatted)

Significance testing

Significance testing is a statistical process which shows whether differences between sub-samples, or over time, are likely to be real (as opposed to being an artefact of the confidence intervals which are usually inherent in any sample survey).

Significance tests were applied throughout the reporting of the current PAT series and the commentary in the published reports focused on those differences which were statistically significant at the 95% confidence level.

Details of how the significance testing was conducted are outlined below.

Within-wave significance testing

The significance tests for any within wave comparisons (e.g., comparing response data for men with response data for women) were automatically conducted within the Dimensions software package which Kantar Public uses to produce data tabulations.

The software uses a column proportions test which looks at the rows of a table independently and compares pairs of columns, testing whether the proportion of respondents in one column is significantly different from the proportion in the other column.

The column proportions test is performed separately for each relevant pair of columns within each relevant row. The tests were conducted at the 95% confidence level and the weighted base size and unrounded percentages were used as the input values for within-wave significance testing.

Cross-wave significance testing

Significance testing for differences between waves of data was conducted manually using a two-tailed t-test, based on the proportion of respondents giving the response in question at each wave. This significance testing was again conducted at the 95% confidence level. The unweighted base size and rounded percentages were used as the input values for cross-wave significance testing.

Summary of changes

There have been some minor differences in the PAT methodology employed in each of the waves from Autumn 2022 to Summer 2023. These changes are not of a magnitude that is likely to have impacted on the validity of the data series across these four waves. The weights applied to the data in each wave serve to mitigate any impacts that the slight changes in the profile of addresses invited to participate in each wave may have had.

New questions have been added to the survey in certain waves, which are outlined in the [‘Questions added and removed’](#) subsection. The questionnaire content also varies from wave to wave, as outlined in the [‘Questionnaire structure’](#) section – this is a fundamental part of the research design for the PAT.

The key differences in approach for each wave are outlined below.

Autumn 2022 wave

As outlined in the [‘Fieldwork performance’](#) section, there was some disruption to the survey arising from postal service strikes and the queen’s funeral which extended the fieldwork period slightly.

Minor adaptations were made to some existing PAT survey questions:

- In the workers’ rights module:
 - The responses for DISPUTE1 – DISPUTE3 were changed from ‘I was unfairly dismissed’ to ‘Been unfairly dismissed’
- In the consumer issues module:
 - Two additional responses were added to CONSUMERORGS
 - Consumer Scotland
 - Consumer Council for NI
 - One additional response was added to CDRKNOW
 - Resolver
 - Change to wording in CONPROTECT1 and CONPROTECT2

- In Autumn 2021 the question text was as indicated below
 - Which of the following do you think offers the best protection in terms of your consumer rights...
 1. ...When you buy from a store on the high street
 2. ...When you buy from the website of a high street retailer
 3. ...Or is there no difference?
 4. Depends on the shop/site
 5. Don't know

Winter 2022 wave

As outlined in the ['Fieldwork performance'](#) section, there was some disruption to the survey arising from postal service strikes. This extended the fieldwork period and lowered the survey response.

Minor adaptations were made to the questionnaire:

- In the 'Heat and Energy in the home' module:
 - the response list for WHYNOINSTA-WHYNOINSTE was modified to include additional response options:
 - Don't know where to get reliable information
 - Don't know where to find a reliable installer
- In the 'Low carbon heating module':
 - The list of statements at LOWCARBATT1-6 was modified to include an additional statement: 'I would know where to find reliable information on low-carbon heating systems'

The responses for COOLMAIN were weighted to the individual instead of by household.

Spring 2023 wave

The branding of the survey was switched from BEIS to DESNZ from the Spring 2023 wave onwards. While it is possible that this may have impacted on the profile of people responding to the survey and/or the answers they provided, there were no obvious impacts on the trend data.

Minor adaptations were made to some existing PAT survey questions:

- An additional code was included at WHYOPPCCS: 'I don't think it would be a long-term solution'
- An additional code was included at WINDWHYNO: 'I'm concerned about safety'
- An additional code was included at WINWHYHAPP: 'I think it would benefit the local community'

Summer 2023 wave

In the Summer 2023 wave, there were a relatively large number of new and deleted questions, reflecting the developing policy priorities of the new DESNZ department. For more information, refer to the ['Summer 2023'](#) subsection of 'Questions added and removed'.

Adaptations to existing PAT survey questions included:

- Two codes were removed from the question ENSAVFREQ in the 'Energy Bills' module. These were: 'Try to keep rooms that you are not using at a cooler temperature than those you are using' and 'Leave the heating on when you go out for a few hours'.

Research and statistical term definitions

The table below sets out the key terms used within this report and gives a brief definition for each term.

Figure 12: Definitions of research and statistical terms

Term	Definition
ABOS (Address Based Online Surveying)	A 'push to web' survey methodology where letters are sent to a sample of home addresses inviting household members to complete the survey online. However, householders are also given the option to complete a paper version of the questionnaire which enables participation among the offline population.
Base	The number of people answering a survey question. In the PAT, the base number varies slightly between questions asked to equivalent subgroups. This is because of the ABOS methodology which includes a mixture of online and paper responses. On paper it is possible to leave a question blank or answer multiple responses at a single-coded question; in these situations, the answers are removed from the overall base.
CAWI	Computer-assisted web interviewing.
Fieldwork	The period of time over which data are collected for a survey (whether by face-to-face interviews, online completions or paper-based questionnaire completions).
NS-SEC	National Statistics Socio-Economic Classification. The PAT survey uses the self-coded method of deriving NS-SEC which classifies people into six categories: <ol style="list-style-type: none"> 1. Managerial, administrative and professional occupations 2. Intermediate occupations 3. Small employers and own account workers 4. Lower supervisory and technical occupations 5. Semi-routine and routine occupations 6. Never worked

Term	Definition
Omnibus survey	A method of quantitative survey research where data on a variety of subjects submitted by a range of funders is collected during the same interview.
Privacy notices	Information provided by a service provider to inform users how they will use their personal information.
Random location quota sampling	<p>A hybrid form of sampling that combines elements of quota sampling and random probability sampling. The principal distinguishing characteristic of random location sampling is that interviewers are given very little choice in the selection of respondents.</p> <p>A random sample of geographical units is drawn (usually postcode sectors) and respondents in each interviewer assignment are then drawn from a small set of homogenous streets within these. 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.</p>
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).
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.

Appendix A – Survey invitation letters

Overview

Copies of the advance letters and reminders from the Summer 2023 wave are included in this appendix. As outlined below, there were some refinements to the letter design between the waves.

Addresses were sent survey invitation letters. Reminder letters were also sent as necessary. Letters that invited addresses to participate online were slightly different to those which included a postal questionnaire alongside the invitation letter.

The number of online survey logins provided to each address varied between two and four. The example letters in this appendix show the variants which included two logins.

Each advance letter included a description of the survey content. These descriptions varied each wave, as follows:

Autumn 2022: The study covers a range of topics including climate change, energy sources, workers' rights and consumer rights, and will inform key decisions made by the government and other public sector organisations.

Winter 2022: The study covers a range of topics including heating in the home, climate change, and consumer issues, and will inform key decisions made by the government and other public sector organisations.

Spring 2023: The study covers a range of topics including energy bills, climate change and consumer issues, and will inform key decisions made by the government and other public sector organisations.

Summer 2023: The study covers a range of topics including climate change, energy sources, and energy bills, and will inform key decisions made by the government and other public sector organisations.

Refinements to the invitation letters

The wording of the Winter 2021 invitation letter was amended so that the invitation appeared more personal. Whereas the Autumn 2021 letter opened with text saying, 'This is an invitation to take part in the BEIS Public Attitudes Tracker', the Winter 2021 letter opened with text saying, 'I am writing to invite you to take part in the BEIS Public Attitudes Tracker, an official Government study'. This approach was maintained in future waves, but BEIS was changed to DESNZ in the Spring 2023 and Summer 2023 waves.

The layout of the invitation letter was also amended from the Winter 2021 wave onwards – bullet points were added to the body text, with the aim of making it easier for respondents to take in the key points.

Text explaining that 'Your household is part of a scientific sample of 19,000 households, designed to reflect the UK population as a whole' was also added to the Winter 2021 letter.

DESNZ/BEIS Public Attitudes Trackers (Autumn 2022 to Summer 2023, UK)

From Spring 2022 wave onwards, the text was updated to 'Your household is part of a scientific sample of over 20,000 households, designed to reflect the UK population as a whole'.

A QR code was added to the Spring 2022 invitation letter, allowing respondents to access the online questionnaire by simply scanning the code. This approach has continued ever since.

The information in the respondent FAQs, which is included alongside each letter, remained consistent across all four waves. The only changes made were the switch from 'Perks' to 'Merit' under the 'How do you collect the voucher?' FAQ from Winter 2023 onwards and from BEIS to DESNZ from Spring 2023 onwards.

DESNZ/BEIS Public Attitudes Trackers (Autumn 2022 to Summer 2023, UK)

Summer 2023 – Online English language invitation letter

See next page.



Department for
Energy Security
& Net Zero

Department for Energy Security & Net Zero (DESNZ)
1 Victoria Street
London, SW1H 0ET



00001
00000

Address1
Address2
Address3
Address4
Address5
Address6
Address7
Postcode

XX/XX/2023

The Department for Energy Security and Net Zero Public Attitudes Tracker

Have your say, inform key decisions

I am writing to invite you to take part in the DESNZ Public Attitudes Tracker, an official Government study.

- The study is being carried out by the research company **Kantar Public**, on behalf of the **Department for Energy Security & Net Zero**.
- Your household is part of a scientific sample of **over 20,000 households**, designed to reflect the UK population as a whole.
- The study covers a range of topics including climate change, energy sources, and energy bills, and will inform key decisions made by the government and other public sector organisations.
- The survey takes around 15 to 20 minutes to complete. You can take part using a computer or mobile device **online**. If you require a **paper version**, please use the contact details in the box at the bottom of this letter.
- We will give everyone who takes part a **£5 gift voucher** as a thank you.

It is easy to take part. Simply go online to **www.patsurvey.co.uk** (or scan the QR code below) and log in using one of the reference numbers and password details provided. Up to two people aged 16 or over can take part in your household. Each set of login details can only be used once.

Person 1

Ref No:
IndividualSerial1
Password: Pass1

Person 2

Ref No:
IndividualSerial2
Password: Pass2



The closing date for the survey is **Wednesday 5th July 2023**.

I hope you enjoy the survey and the opportunity to express your thoughts and opinions on these important issues.

Thank you in advance for your help.

Yours faithfully,

Jane Chandler - Chief Statistician
Department for Energy Security and Net Zero
HM Government

This study is being carried out on behalf of the Government by Kantar Public, an independent social research organisation. If you would like to talk to someone about the study or if you require a postal version of the questionnaire, please contact Kantar Public between 9am-5pm on Monday to Friday, via the email address or information line below.

✉ patsurvey@kantar.com

☎ Information line: 0800 051 0887

Summer 2023 – Postal English language invitation letter

See next page.



Department for
Energy Security
& Net Zero

Department for Energy Security & Net Zero (DESNZ)
1 Victoria Street
London, SW1H 0ET



00001
00000

Address1
Address2
Address3
Address4
Address5
Address6
Address7
Postcode

XX/XX/2023

The Department for Energy Security and Net Zero Public Attitudes Tracker

Have your say, inform key decisions

I am writing to invite you to take part in the DESNZ Public Attitudes Tracker, an official Government study.

- The study is being carried out by the research company **Kantar Public**, on behalf of the **Department for Energy Security & Net Zero**.
- Your household is part of a scientific sample of **over 20,000 households**, designed to reflect the UK population as a whole.
- The study covers a range of topics including climate change, energy sources, and energy bills, and will inform key decisions made by the government and other public sector organisations.
- The survey takes around 15 to 20 minutes to complete. You can take part using a computer or mobile device **online**.
- We will give everyone who takes part a **£5 gift voucher** as a thank you.

It is easy to take part. Simply go online to www.patsurvey.co.uk (or scan the QR code below) and log in using one of the reference numbers and password details provided. Up to two people aged 16 or over can take part in your household. Each set of login details can only be used once.

Person 1

Ref No:
IndividualSerial1
Password: Pass1

Person 2

Ref No:
IndividualSerial2
Password: Pass2



Alternatively, I have included two paper questionnaires with this letter as well as a pre-paid envelope to return the completed questionnaires to us. I have also included a paper copy of the survey privacy notice. If you require further paper questionnaires, please use the contact details in the box at the bottom of this letter.

The closing date for the survey is **Wednesday 5th July 2023**.

I hope you enjoy the survey and the opportunity to express your thoughts and opinions on these important issues.

Thank you in advance for your help.

Yours faithfully,

Jane Chandler - Chief Statistician
Department for Energy Security and Net Zero
HM Government

This study is being carried out on behalf of the Government by Kantar Public, an independent social research organisation. If you would like to talk to someone about the study or if you require a postal version of the questionnaire, please contact Kantar Public between 9am-5pm on Monday to Friday, via the email address or information line below.

✉ patsurvey@kantar.com

☎ Information line: 0800 051 0887

Summer 2023 – Online Welsh language invitation letter

See next page.



Department for
Energy Security
& Net Zero

Department for Energy Security & Net Zero (DESNZ)
1 Victoria Street
London, SW1H 0ET



Address1
Address2
Address3
Address4
Address5
Address6
Address7
Postcode

XX/XX/2023

Traciwr Agweddau Cyhoeddus Yr Adran dros Ddiogelwch Ynni a Sero Net Dweud eich dweud, llywio penderfyniadau allweddol

Dyma wahoddiad i gymryd rhan yn y Traciwr Agweddau Cyhoeddus DESNZ, astudiaeth swyddogol gan y Llywodraeth

- Mae'r arolwg yn cael ei gynnal ar ran yr **Adran dros Ddiogelwch Ynni a Sero Net** gan **Kantar Public**, asiantaeth ymchwil annibynnol.
- Mae eich cartref yn rhan o sampl wyddonol o **dros 20,000** o gartref, a gynlluniwyd i adlewyrchu poblogaeth y DU gyfan.
- Mae'r astudiaeth yn ymdrin ag amrywiaeth o bynciau gan gynnwys newid yn yr hinsawdd, f ynonellau ynni, a biliau ynni, a bydd yn llywio penderfyniadau allweddol a wneir gan y llywodraeth a sefydliadau eraill yn y sector cyhoeddus.
- Mae'r arolwg yn cymryd tua 15 i 20 munud. Os na allwch gwblhau'r arolwg **ar-lein**.
- Fel diolch am gymryd rhan, bydd pob person sy'n ei gwblhau yn derbyn **taleb siopa gwerth £5**.

Mae'n hawdd cymryd rhan. Yn syml, ewch ar-lein i **www.patsurvey.co.uk** (neu sganiwch y cod QR isod) a mewngofnodwch gan ddefnyddio un o'r cyfeiriadau a'r manylion cyfrinair a ddarparwyd. Gall hyd at ddau o bobl 16 oed neu'n hŷn gymryd rhan yn eich cartref. Dim ond unwaith y gellir defnyddio pob set o fanylion mewngofnodi.

Person 1

Ref No:
IndividualSerial1
Password: Pass1

Person 2

Ref No:
IndividualSerial2
Password: Pass2



Dyddiad cau'r arolwg yw **Dydd Mercher 5 Gorf ennaf 2023**.

Gobeithio y gwnewch chi fwynhau'r holiadur a'r cyf e i fynegi eich meddyliau a'ch barn ar y materion pwysig hyn.

Diolch ymlaen llaw am eich help.

Yn gywir,

Jane Chandler - Chief Statistician
Department for Energy Security and Net Zero
HM Government

Mae'r astudiaeth hon yn cael ei chynnal ar ran y Llywodraeth gan Kantar Public, sefydliad ymchwil cymdeithasol annibynnol. Os hof ech chi siarad â rhywun am yr astudiaeth neu os oes angen fersiwn bost o'r holiadur amoch chi, cysylltwch â Kantar Public rhwng 9am-5pm o ddydd Llun i ddydd Gwener, drwy'r cyfeiriad e-bost neu'r llinell wybodaeth isod.

✉ patsurvey@kantar.com

📞 Information line: 0800 051 0887

Summer 2023 – Postal Welsh language invitation letter

See next page.



Department for
Energy Security
& Net Zero

Department for Energy Security & Net Zero (DESNZ)
1 Victoria Street
London, SW1H 0ET



Address1
Address2
Address3
Address4
Address5
Address6
Address7
Postcode

XX/XX/2023

Traciwr Agweddau Cyhoeddus Yr Adran dros Ddiogelwch Ynni a Sero Net

Dweud eich dweud, llywio penderfyniadau allweddol

Dyma wahoddiad i gymryd rhan yn y Traciwr Agweddau Cyhoeddus DESNZ, astudiaeth swyddogol gan y Llywodraeth

- Mae'r arolwg yn cael ei gynnal ar ran yr **Adran dros Ddiogelwch Ynni a Sero Net** gan **Kantar Public**, asiantaeth ymchwil annibynnol.
- Mae eich cartref yn rhan o sampl wyddonol o **dros 20,000** o gartref, a gynlluniwyd i adlewyrchu poblogaeth y DU gyfan.
- Mae'r astudiaeth yn ymdrin ag amrywiaeth o bynciau gan gynnwys newid yn yr hinsawdd, f ynonellau ynni, a biliau ynni, a bydd yn llywio penderfyniadau allweddol a wneir gan y llywodraeth a sefydliadau eraill yn y sector cyhoeddus.
- Mae'r arolwg yn cymryd tua 15 i 20 munud. Os na allwch gwblhau'r arolwg **ar-lein**.
- Fel diolch am gymryd rhan, bydd pob person sy'n ei gwblhau yn derbyn **taieb siopa gwerth £5**.

Mae'n hawdd cymryd rhan. Yn syml, ewch ar-lein i **www.patsurvey.co.uk** (neu sganiwch y cod QR isod) a mewngofnodwch gan ddefnyddio un o'r cyfeiriadau a'r manylion cyfrinair a ddarparwyd. Gall hyd at ddau o bobl 16 oed neu'n hŷn gymryd rhan yn eich cartref. Dim ond unwaith y gellir defnyddio pob set o fanylion mewngofnodi.

Person 1

Ref No:
IndividualSerial1
Password: Pass1

Person 2

Ref No:
IndividualSerial2
Password: Pass2



Fel Arall, rwyf wedi cynnwys dau holiadur papur gyda'r llythyr hwn yn ogystal ag amlen ragdaledig i ddychwelyd yr holiaduron wedi'u cwblhau atom. Rwyf hefyd wedi cynnwys copi papur o hysbysiad preifatrwydd yr arolwg. Os oes angen mwy o holiaduron papur amoch, defnyddiwch y manylion cyswllt yn y blwch.

Dyddiad cau'r arolwg yw **Dydd Mercher 5 Gorffennaf 2023**.

Gobeithio y gwnewch chi fwynhau'r holiadur a'r cyfeir i fyny eich meddyliau a'ch barn ar y materion pwysig hyn.

Diolch ymlaen llaw am eich help.

Yn gywir,

Jane Chandler - Chief Statistician
Department for Energy Security and Net Zero
HM Government

Mae'r astudiaeth hon yn cael ei chynnal ar ran y Llywodraeth gan Kantar Public, sefydliad ymchwil cymdeithasol annibynnol. Os hoffech chi siarad â rhywun am yr astudiaeth neu os oes angen fersiwn bost o'r holiadur amoch chi, cysylltwch â Kantar Public rhwng 9am-5pm o ddydd Llun i ddydd Gwener, drwy'r cyfeiriad e-bost neu'r llinell wybodaeth isod.

✉ patsurvey@kantar.com

📞 Information line: 0800 051 0887

Respondent FAQs – English language

See next page.



Why did we choose your address?

As it is not possible to ask everyone to take part in the survey, we select a sample of addresses to represent the entire country. Your address was chosen at random from a list of private addresses held by the Royal Mail.



Who is conducting the survey?

The survey is being conducted on behalf of the Department for Energy Security & Net Zero (DESNZ) by **Kantar Public**, an independent research agency.

More information about the survey is available online at www.patsurvey.co.uk



Is this survey confidential?

Yes. The information that is collected will only be used for research and statistical purposes. Your contact details are kept separate from your answers and will not be passed on to any other organisation.

Data from the survey will be shared with DESNZ for the purpose of producing and publishing statistics. The data shared with DESNZ won't contain your name or contact details, and no individual or household will be identifiable from the results. Your answers will be combined with others that take part in the survey. You will not receive any 'junk mail' as a result of taking part.



Why are your views important?

We need people from all age groups and backgrounds to take part. Your views are important to us as without them we may not have a representative picture of people's views from across the country.



Data protection

All information will be processed in accordance with the MRS Code of Conduct, and in compliance with the Data Protection Act 2018 and UK General Data Protection Regulation for the performance of official authority and public interest and will only be held for as long as it is being used to produce statistics.

Further information about the way we handle your personal data can be found at www.patsurvey.co.uk

Should you have any specific concerns or queries please contact: dataprotection@energysecurity.gov.uk and quote 'DESNZ Public Attitudes Tracker'.



What do you need to do?

Up to four people aged 16 or over in your household simply need to go to www.patsurvey.co.uk, enter one of the reference numbers and associated passwords provided and complete the questionnaire **by the date shown on the front of the letter.** Additional logins can be requested by contacting patsurvey@kantar.com. If you would like to take part but are unable to complete the survey online, please contact the Kantar Public Information Line and a paper version of the questionnaire will be sent to you along with a pre-paid envelope.



How do you collect the voucher?

As a thank you for taking part, everyone who participates will be offered a shopping voucher after completing the survey. This will be provided by the online platform 'Merit'. Once you have completed the online, there will be a link to the 'Merit' website where you will be able to choose from a range of different vouchers. Instructions will be provided at the end of the survey, and you can claim your voucher instantly.



How will the information be used?

The information collected in this survey will be used to inform important decisions that affect the way we all live and work. Your attitudes, opinions, and experiences will help government departments to create policy which reflects the needs of people like you across the country. The information will also be used to produce and publish statistics which are used by a wide range of charities, academics, and other public sector bodies.

To learn more about the DESNZ Public Attitudes Tracker, please visit www.patsurvey.co.uk and click "Find out more".



What are your rights?

Completion of this survey is voluntary. We will ask for details such as your views on a range of topics. We will also ask you for sensitive information such as your age and ethnicity, but you don't have to answer these questions. You may withdraw from participation in the study at any time.

For more information see: www.ico.org.uk/for-the-public

If you are not happy with the way we are processing your data, you have the right to lodge a complaint with the Information Commissioner's Office about our practices at: www.ico.org.uk/concerns

Respondent FAQs – Welsh language

See next page.



Pam wnaethon ni ddewis eich cyfeiriad?

Gan nad yw'n bosib gofyn i bawb gymryd rhan yn yr arolwg, rydym yn dewis sampl o gyfeiriadau i gynrychioli'r wlad gyfan. Dewiswyd eich cyfeiriad ar hap o restr o gyfeiriadau preifat a gedwir gan y Post Brenhinol.



Pwy sy'n cynnal yr arolwg?

Mae'r arolwg yn cael ei gynnal ar ran yr Adran dros Ddiogelwch Ynni a Sero Net (DESNZ) gan Kantar Public, asiantaeth ymchwil annibynnol. Mae rhagor o wybodaeth am yr arolwg ar gael ar-lein yn www.patsurvey.co.uk



A yw'r arolwg hwn yn gyfrinachol?

Ydy. Dim ond at ddibenion ymchwil ac ystadegol y bydd y wybodaeth a gesglir yn cael ei defnyddio. Mae eich manylion cyswllt yn cael eu cadw ar wahân i'ch atebion ac ni fyddant yn cael eu trosglwyddo i unrhyw sefydliad arall.

Bydd data o'r arolwg yn cael ei rannu â DESNZ at ddibenion cynhyrchu a chyhoeddi ystadegau. Nid yw'r data a rennir â DESNZ yn cynnwys eich enw na'ch manylion cyswllt, ac ni fydd modd adnabod unrhyw unigolyn nac aelwyd o'r canlyniadau. Bydd eich atebion yn cael eu cyfuno ag eraill sy'n cymryd rhan yn yr arolwg. Ni fyddwch yn derbyn unrhyw 'bost sothach' o ganlyniad i gymryd rhan.



Pam mae eich barn yn bwysig?

Mae arnom angen i bobl o bob grŵp oedran a chefnidir gymryd rhan. Mae eich barn yn bwysig i ni oherwydd hebddyn nhw efallai na fydd gennym ni lun cynrychioliadol o farn pobl o bob cwr o'r wlad.



Diogelu data

Bydd yr holl wybodaeth yn cael ei phrosesu yn unol â Deddf Diogelu Data 2018 a Rheoliad Diogelu Data Cyf redinol y DU ar gyfer perf ormiad awdurdod swyddogol a

budd y cyhoedd a dim ond cyhyd â'i bod yn cael ei defnyddio i gynhyrchu ystadegau y bydd yn cael ei chadw.

Mae rhagor o wybodaeth am y f ordd rydym yn trin eich data personol ar gael yn www.patsurvey.co.uk

Os oes gennych unrhyw bryderon neu ymholiadau penodol, cysylltwch â: dataprotection@energysecurity.gov.uk a dyfynnwch 'DESNZ Traciwr Agweddau Cyhoeddus'.



Beth sydd angen i chi ei wneud?

Gall hyd at bedwar o bobl 16 oed neu drosodd yn eich cartref gwblhau'r arolwg.

Ar-lein: Rhaid i chi fynd i www.patsurvey.co.uk, nodi un o'r cyfeirnodau a'r cyfrineiriau cysylltiedig a ddarperir a chwblhau'r holiadur erbyn y dyddiad a ddangosir ar du blaen y llythyr. Gellir gofyn am fewngofnodi ychwanegol trwy gysylltu â patsurvey@kantar.com.

Os na allwch gwblhau'r arolwg ar-lein a bod angen fersiwn bapur o'r holiadur arnoch, defnyddiwch y manylion cyswllt yn y blwch isod.

Cymraeg: Os hof ech gymryd rhan yn Gymraeg, cyfeiriwch at ein manylion cyswllt ar f aen y llythyr hwn.



Sut ydych chi'n casglu'r daleb?

Ar-lein: Fel diolch am gymryd rhan, bydd pawb sy'n cymryd rhan yn cael cynnig taleb siopa ar ôl cwblhau'r arolwg. Darperir hwn gan y platf orm

ar-lein 'Merit'. Ar ôl ichi gwblhau'r arolwg ar-lein, bydd doler i'r wefan 'Merit' lle byddwch yn gallu dewis o ystod o dalebau gwahanol. Darperir cyfarwyddiadau ar ddiwedd yr arolwg, a gallwch hawlio'ch taleb ar unwaith.



Sut fydd y wybodaeth yn cael ei defnyddio?

Gall hyd at bedwar o bobl 16 oed neu drosodd yn eich cartref gwblhau'r arolwg. Llenwch un o'r holiaduron papur rydyn ni wedi'u darparu ac yna ei ddychwelyd atom gan ddefnyddio'r amlen ragdaledig erbyn y dyddiad a ddangosir ar du blaen y llythyr hwn. Os oes angen mwy o holiaduron arnoch, cyfeiriwch at ein manylion cyswllt ar du blaen y llythyr hwn.

Mae rhagor o wybodaeth am yr arolwg ar gael ar-lein yn www.patsurvey.co.uk



Beth yw eich hawliau?

Mae cwblhau'r arolwg hwn yn wirfoddol. Byddwn yn gofyn am fanylion megis eich barn ar ystod o bynciau. Byddwn hefyd yn gofyn i chi am wybodaeth sensitif megis eich oedran a'ch ethnigrwydd, ond does dim rhaid i chi ateb y cwestiynau hyn.

Am ragor o wybodaeth gweler: www.ico.org.uk/for-the-public

Os nad ydych yn hapus â'r f ordd rydym yn prosesu'ch data, mae gennych hawl i gyfwyno cwyn i Swyddfa'r Comisiynydd Gwybodaeth am ein harferion yn: www.ico.org.uk/concerns

Online reminder letter example – English language (Summer 2023)

See next page.



Department for
Energy Security
& Net Zero

Department for Energy Security & Net Zero (DESNZ)
1 Victoria Street
London, SW1H 0ET



00001
00000

Address1
Address2
Address3
Address4
Address5
Address6
Address7
Postcode

XX/XX/2023

The Department for Energy Security and Net Zero Public Attitudes Tracker

Have your say, inform key decisions

We recently invited your household to take part in the DESNZ Public Attitudes Tracker, an official Government study. Our records suggest that the survey has not yet been completed by all adults in your household. We are writing again because of the importance of your household in helping us to gather accurate information.

This is your opportunity to make your views heard on a wide range of issues that affect the way people live and work across the UK. Each person who completes the survey will receive a £5 shopping voucher to thank them for their time.

It is easy to take part. Simply go online to www.patsurvey.co.uk (or scan the QR code below) and log in using one of the reference numbers and password details provided. Up to two people aged 16 or over can take part in your household. Each set of login details can only be used once.

Person 1

Ref No:
IndividualSerial1
Password: Pass1

Person 2

Ref No:
IndividualSerial2
Password: Pass2



The closing date for the survey is **Wednesday 5th July 2023**.

You can choose to redeem your voucher from a range of retailers.

The survey takes around 15 to 20 minutes and can be completed on a laptop, tablet or smartphone. If you need more login details, or are unable to complete the survey online and require a paper version of the questionnaire, please use the contact details in the box below. If you request a paper version of the questionnaire, we will also provide you with a paper copy of the survey privacy notice.

Thank you for taking the time to tell us about your views and contributing to an official government study.

Yours faithfully,

Jane Chandler - Chief Statistician
Department for Energy Security and Net Zero
HM Government

This study is being carried out on behalf of the Government by Kantar Public, an independent social research organisation. If you would like to talk to someone about the study or if you require a postal version of the questionnaire, please contact Kantar Public between 9am-5pm on Monday to Friday, via the email address or information line below.

✉ patsurvey@kantar.com

☎ Information line: 0800 051 0887

Postal reminder letter example – English language (Summer 2023)

See next page.



Department for
Energy Security
& Net Zero

Department for Energy Security & Net Zero (DESNZ)
1 Victoria Street
London, SW1H 0ET



00001
00000

Address1
Address2
Address3
Address4
Address5
Address6
Address7
Postcode

XX/XX/2023

The Department for Energy Security and Net Zero Public Attitudes Tracker

Have your say, inform key decisions

We recently invited your household to take part in the DESNZ Public Attitudes Tracker, an official Government study. Our records suggest that the survey has not yet been completed by all adults in your household. We are writing again because of the importance of your household in helping us to gather accurate information.

This is your opportunity to make your views heard on a wide range of issues that affect the way people live and work across the UK. Each person who completes the survey will receive a £5 shopping voucher to thank them for their time.

It is easy to take part. Simply go online to www.patsurvey.co.uk (or scan the QR code below) and log in using one of the reference numbers and password details provided. Up to two people aged 16 or over can take part in your household. Each set of login details can only be used once.

Person 1

Ref No:
IndividualSerial1
Password: Pass1

Person 2

Ref No:
IndividualSerial2
Password: Pass2



The closing date for the survey is **Wednesday 5th July 2023**.

You can choose to redeem your voucher from a range of retailers.

The survey takes around 15 to 20 minutes and can be completed on a laptop, tablet or smartphone. In case you are unable to complete the survey online, we have enclosed two paper copies of the questionnaire with a pre-paid envelope. We have also included a paper copy of the survey privacy notice. If you need more login details or paper questionnaires, please use the contact details in the box.

Thank you for taking the time to tell us about your views and contributing to an official government study.

Yours faithfully,

Jane Chandler - Chief Statistician
Department for Energy Security and Net Zero
HM Government

This study is being carried out on behalf of the Government by Kantar Public, an independent social research organisation. If you would like to talk to someone about the study or if you require a postal version of the questionnaire, please contact Kantar Public between 9am-5pm on Monday to Friday, via the email address or information line below.

✉ patsurvey@kantar.com

☎ Information line: 0800 051 0887

Online reminder letter example – Welsh language (Summer 2023)

See next page.



Department for
Energy Security
& Net Zero

Department for Energy Security & Net Zero (DESNZ)
1 Victoria Street
London, SW1H 0ET



Address1
Address2
Address3
Address4
Address5
Address6
Address7
Postcode

XX/XX/2023

Traciwr Agweddau Cyhoeddus Yr Adran dros Ddiogelwch Ynni a Sero Net Dweud eich dweud, llywio penderfyniadau allweddol

Yn ddiweddar, gwnaethom wahodd eich cartref i gymryd rhan yn y Traciwr Agweddau Cyhoeddus DESNZ, astudiaeth swyddogol gan y Llywodraeth. Mae ein cofnodion yn awgrymu nad yw'r arolwg wedi'i gwblhau eto gan bob oedolyn yn eich cartref. Rydym yn ysgrifennu eto oherwydd pwysigrwydd eich cartref wrth ein helpu i gasglu gwybodaeth gywir.

Dyma'ch cyf e i leisio'ch barn ar ystod eang o faterion sy'n ef eithio ar y f ordd y mae pobl yn byw ac yn gweithio ledled y DU. Bydd pob person sy'n cwblhau'r arolwg yn derbyn taleb siopa gwerth £5 i ddiolch iddynt am eu hamser.

Mae'n hawdd cymryd rhan. Yn syml, ewch ar-lein i www.patsurvey.co.uk (neu sganiwch y cod QR isod) a mewngofnodwch gan ddefnyddio un o'r cyfeiriadau a'r manylion cyfrinair a ddarparwyd. Gall hyd at ddau o bobl 16 oed neu'n hŷn gymryd rhan yn eich cartref. Dim ond unwaith y gellir defnyddio pob set o fanylion mewngofnodi.

Person 1

Ref No:
IndividualSerial1
Password: Pass1

Person 2

Ref No:
IndividualSerial2
Password: Pass2



Dyddiad cau'r arolwg yw **Dydd Mercher 5 Gorf ennaf 2023**. Gallwch ddewis ad-dalu'ch taleb gan ystod o fanwerthwyr.

Mae'r arolwg yn cymryd tua 15 i 20 munud a gellir ei gwblhau ar liniadur, llechen neu f ôn clyfar. Os oes angen mwy o fanylion mewngofnodi arnoch, neu os na allwch gwblhau'r arolwg ar-lein a bod angen fersiwn papur o'r holiadur arnoch, defnyddiwch y manylion cyswllt yn y blwch isod. Os gofynnwch am fersiwn papur o'r holiadur, byddwn hefyd yn darparu copi papur o hysbysiad preifatrwydd yr arolwg i chi.

Diolch i chi am gymryd yr amser i ddweud wrthym am eich barn a chyfrannu at astudiaeth swyddogol y Llywodraeth.

Yn gywir,

Jane Chandler - Chief Statistician
Department for Energy Security and Net Zero
HM Government

Mae'r astudiaeth hon yn cael ei chynnal ar ran y Llywodraeth gan Kantar Public, sefydliad ymchwil cymdeithasol annibynnol. Os hof ech chi siarad â rhywun am yr astudiaeth neu os oes angen fersiwn bost o'r holiadur arnoch chi, cysylltwch â Kantar Public rhwng 9am-5pm o ddydd Llun i ddydd Gwener, drwy'r cyfeiriad e-bost neu'r llinell wybodaeth isod.

✉ patsurvey@kantar.com

☎ Information line: 0800 051 0887

Postal reminder letter example – Welsh language (Summer 2023)

See next page.



Department for
Energy Security
& Net Zero

Department for Energy Security & Net Zero (DESNZ)
1 Victoria Street
London, SW1H 0ET



Address1
Address2
Address3
Address4
Address5
Address6
Address7
Postcode

XX/XX/2023

Traciwr Agweddau Cyhoeddus Yr Adran dros Ddiogelwch Ynni a Sero Net Dweud eich dweud, llywio penderfyniadau allweddol

Yn ddiweddar, gwnaethom wahodd eich cartref i gymryd rhan yn y Traciwr Agweddau Cyhoeddus DESNZ, astudiaeth swyddogol gan y Llywodraeth. Mae ein cofnodion yn awgrymu nad yw'r arolwg wedi'i gwblhau eto gan bob oedolyn yn eich cartref. Rydym yn ysgrifennu eto oherwydd pwysigrwydd eich cartref wrth ein helpu i gasglu gwybodaeth gywir.

Dyma'ch cyf e i leisio'ch barn ar ystod eang o faterion sy'n ef eithio ar y f ordd y mae pobl yn byw ac yn gweithio ledled y DU. Bydd pob person sy'n cwblhau'r arolwg yn derbyn taleb siopa gwerth £5 i ddiolch iddynt am eu hamser.

Mae'n hawdd cymryd rhan. Yn syml, ewch ar-lein i www.patsurvey.co.uk (neu sganwch y cod QR isod) a mewngofnodwch gan ddefnyddio un o'r cyfeiriadau a'r manylion cyfrinair a ddarparwyd. Gall hyd at ddau o bobl 16 oed neu'n hŷn gymryd rhan yn eich cartref. Dim ond unwaith y gellir defnyddio pob set o fanylion mewngofnodi.

Person 1

Ref No:
IndividualSerial1
Password: Pass1

Person 2

Ref No:
IndividualSerial2
Password: Pass2



Dyddiad cau'r arolwg yw **Dydd Mercher 5 Gorf ennaf 2023**.

Gallwch ddewis ad-dalu'ch taleb gan ystod o fanwerthwyr.

Mae'r arolwg yn cymryd tua 15 i 20 munud a gellir ei gwblhau ar liniadur, llechen neu f ôn clyfar. Rhag ofn na allwch gwblhau'r arolwg ar-lein, rydym wedi amgáu dau gopi papur o'r holiadur gydag amlen wedi'i thalu ymlaen llaw. Rydym hefyd wedi cynnwys copi papur o hysbysiad preifatrwydd yr arolwg. Os oes angen mwy o fanylion mewngofnodi neu holiaduron papur arnoch, defnyddiwch y manylion cyswllt yn y blwch.

Diolch i chi am gymryd yr amser i ddweud wrthym am eich barn a chyfrannu at astudiaeth swyddogol y llywodraeth.

Yn gywir,

Jane Chandler - Chief Statistician
Department for Energy Security and Net Zero
HM Government

Mae'r astudiaeth hon yn cael ei chynnal ar ran y Llywodraeth gan Kantar Public, sefydliad ymchwil cymdeithasol annibynnol. Os hof ech chi siarad â rhywun am yr astudiaeth neu os oes angen fersiwn bost o'r holiadur arnoch chi, cysylltwch â Kantar Public rhwng 9am-5pm o ddydd Llun i ddydd Gwener, drwy'r cyfeiriad e-bost neu'r llinell wybodaeth isod.

✉ patsurvey@kantar.com

📞 Information line: 0800 051 0887

Further information

Future updates to these statistics

Results from the Public Attitudes Tracker are published quarterly. Note that not all tracker questions are included in each wave.

Revisions policy

The [DESNZ 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:

[Public Attitudes to Science](#)

A collection of studies looking at the UK public's attitudes to science, scientists and science policy.

[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

[Public Attitudes to Trade Tracker](#)

The Department for Business and Trade runs a survey twice a year to collect data on public attitudes towards trade and government trade policy.

[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.

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

Uses of these statistics

These statistics are used by DESNZ to guide policy, by many academics in their related studies, by ministers and by the general public. Some examples on the uses of previous waves of the PAT include:

- Monitoring attitudes towards fracking by policy makers, the media and local groups to understand how this is changing over time and the reasons why people support or oppose it.
- 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.
- Understanding public acceptability of different renewable energy sources which contribute to the Government's aim to reduce the dependence on fossil fuels.

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.

The DESNZ 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 [DESNZ statement of compliance](#) with the Pre-Release Access to Official Statistics Order 2008.

Contact

- Responsible statistician: Olivia Christophersen
- Email: PAT@energysecurity.gov.uk
- Media enquiries: 020 7215 1000; newsdesk@energysecurity.gov.uk
- Public enquiries: 020 7215 5000



© Crown copyright 2023

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3 or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

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

If you need a version of this document in a more accessible format, please email PAT@energysecurity.gov.uk. Please tell us what format you need. It will help us if you say what assistive technology you use.