Dadansoddi ar gyfer Polisi

YMCHWIL GYMDEITHASOL Y LLYWODRAETH

GSR

GOVERNMENT SOCIAL RESEARCH

Analysis for Policy

Llywodraeth Cymru
Welsh Government

SOCIAL RESEARCH NUMBER:
12/2025
PUBLICATION DATE:
06/02/2025

Climate change perceptions and actions survey: wave 2 survey outputs

Mae'r ddogfen yma hefyd ar gael yn Gymraeg.

This document is also available in Welsh.

 Digital ISBN 978-1-83715-183-7

Climate change perceptions and actions survey: wave 2 survey outputs

Author: Colin Wright

Full Research Report: Wright, C (2025). Climate Change Perceptions and Actions Survey Wave 2 Survey Outputs. Cardiff: Welsh Government, GSR report number 12/2025.
Available at: https://www.gov.wales/climate-change-perceptions-and-actions-survey-wave-1-and-2

For further information please contact:
Name: Laura Entwistle
Division: Climate and Environment Research Team
Welsh Government
Cathays Park
Cardiff
CF10 3NQ
Email: ClimateAndEnvironmentResearch@gov.wales

Table of contents

List of tables

List of figures

Glossary

Green choices

Green choices are the choices we can make in our everyday lives to tackle climate change from our home energy, to transport, food and consumption behaviours.

Net Zero

Where the greenhouse gases taken from the atmosphere are in balance with the greenhouse gases emitted.

1. Introduction

1.1 This report details the outputs from the second of six waves of the Climate Change Perceptions and Actions quantitative survey of households in Wales. The survey was commissioned by the Welsh Government to understand attitudes and behaviours related to reducing carbon emissions. This research will contribute to the Welsh Government's approach to behavioural and societal change and will inform future policy development and decisions in relation to decarbonisation.

1.2 The aims of the research are to be met through primary research with members of the public in Wales over 6 biannual waves, with a target of 1,000 responses per wave.

1.3 The Wave 1 Survey Outputs Report provides more detail on the background to the survey.

Questionnaire design

1.4 The questionnaire was developed by WSP, Accent and the Welsh Government.

1.5 The questionnaire was designed to allow for tracking of attitudes and behaviours in future waves and was structured to cover the following six areas:

- About you and your household
- Your perceptions and attitudes
- About your home energy
- Food
- Daily life
- Travel.

1.6 The questionnaire was refined following both cognitive and pilot survey testing.

1.7 The final questionnaire used for Wave 2 is included in the Annex.

Fieldwork

1.8 The fieldwork for Wave 2 took place between Tuesday 6 February and Wednesday 17 March 2024.

1.9 943 surveys were completed, 764 online and 179 completed face-to-face on the doorstep. 18 surveys were completed in Welsh. The overall response rate was 6.0%.

Sample characteristics

1.10 Demographic characteristics of the sample were compared to national data sets for Wales, e.g. 2021 Census, to ensure the sample was representative of the wider population. Demographic questions covered age, gender, ethnicity, location, work status, occupation, household income, property type, and tenure.

1.11 Comparisons indicate that the sample is broadly representative of the population of Wales. The survey outputs are comparable to the outputs from national data sets for age, sex, ethnicity, work status, household income, and occupation. Small variations were observed between the survey data and national data sets for location, occupation, tenure, and property type.

Methodology report

1.12 The Wave 1 and 2 Methodology Report provides further detail on survey design, including comparison of the survey sample demographic characteristics against Census 2021 data and national data sets.

Report structure

1.13 This report presents the key outputs from the second of six planned survey waves. As such the outputs show the current position, with any notable differences in responses when disaggregating the sample noted. The report does not detail the responses to each and every question but presents a high-level summary of key outputs.

1.14 All outputs show non-weighted responses and therefore cannot be statistically taken to represent the population of Wales as a whole, but the respondents collectively are broadly representative of that population according to key demographic variables. The outputs are a result of bi-variate analysis undertaken on the survey responses.

1.15 The waves are scheduled to alternate fieldwork between summer and winter, to capture any potential seasonal differences in responses. The Wave 2 Comparison Report presents a high-level summary of key outputs from both Wave 1 and Wave 2, highlighting both similarity in responses and differences where they occur

1.16 The report is structured as follows.

- Section 2 – Sample Characteristics
- Section 3 - Perceptions and Attitudes

- Section 4 - About Your Home Energy
- Section 5 – Food
- Section 6 – Daily Life
- Section 7 – Travel
- Section 8 – Conclusion

2. Demographic patterns

2.1 The Wave 1 and 2 Methodology Report contains the demographic breakdown of the survey respondents and provides a comparison to national data sets for Wales for both Wave 1 and Wave 2 responses.

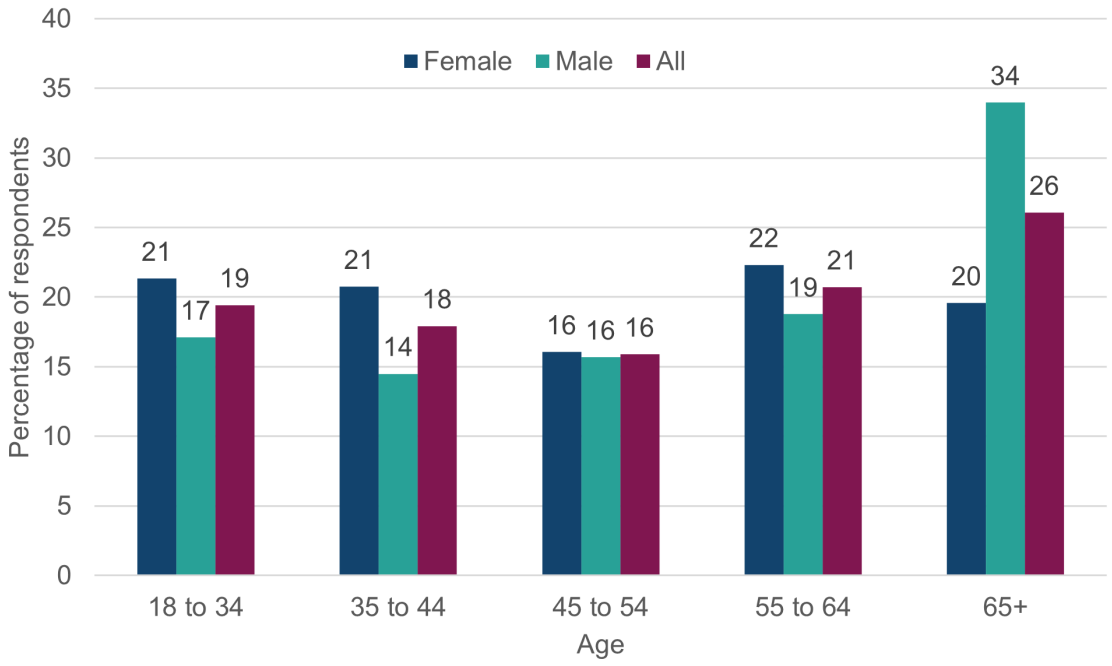
2.2 Comparisons indicate that the samples were broadly representative of the population of Wales in regard to age, gender, ethnicity, work status, and household income. Minor differences were observed for location, occupation, tenure, and property type.

2.3 This section breaks down the Wave 2 demographic data further identifying relationships between the different demographic characteristics.

Age and gender

2.4 The response to age and gender was broadly in line with 2021 census data for Wales. The combination of these categories shows that female respondents tended to be younger than male respondents (Figure 2.1). 42% of female respondents were aged 44 or under compared with 31% of male respondents.

Figure 2.1: Age and gender responses - 'What age group do you fall into?'

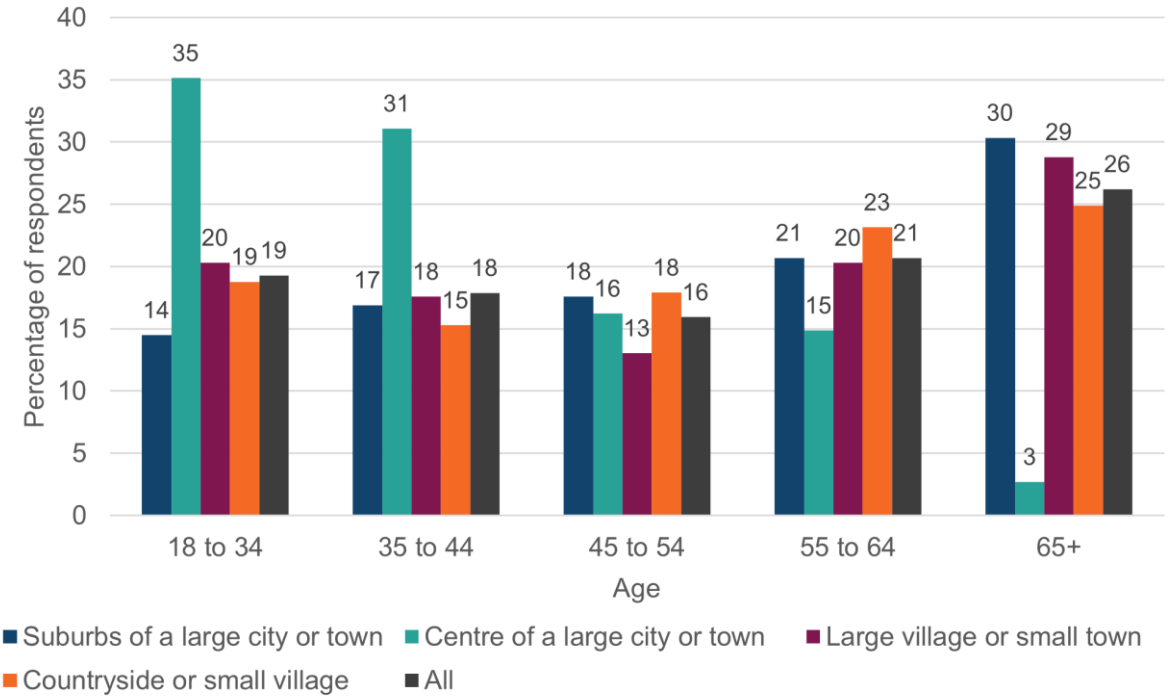


Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded. Base = 932 (Female = 511, Male = 421)

Age and area type

2.5 Respondents were asked to indicate the area type in which they lived. Respondents who lived in the centre of large towns or cities tend to be younger than those who lived in other areas. 66% of respondents who lived in the centre of a large city or town were aged between 18 and 44, compared with 34% of respondents aged 45 and over (Figure 2.2). Respondents who lived in the countryside or suburbs tended to be older.

Figure 2.2: Age and area type responses - 'What age group do you fall into?'

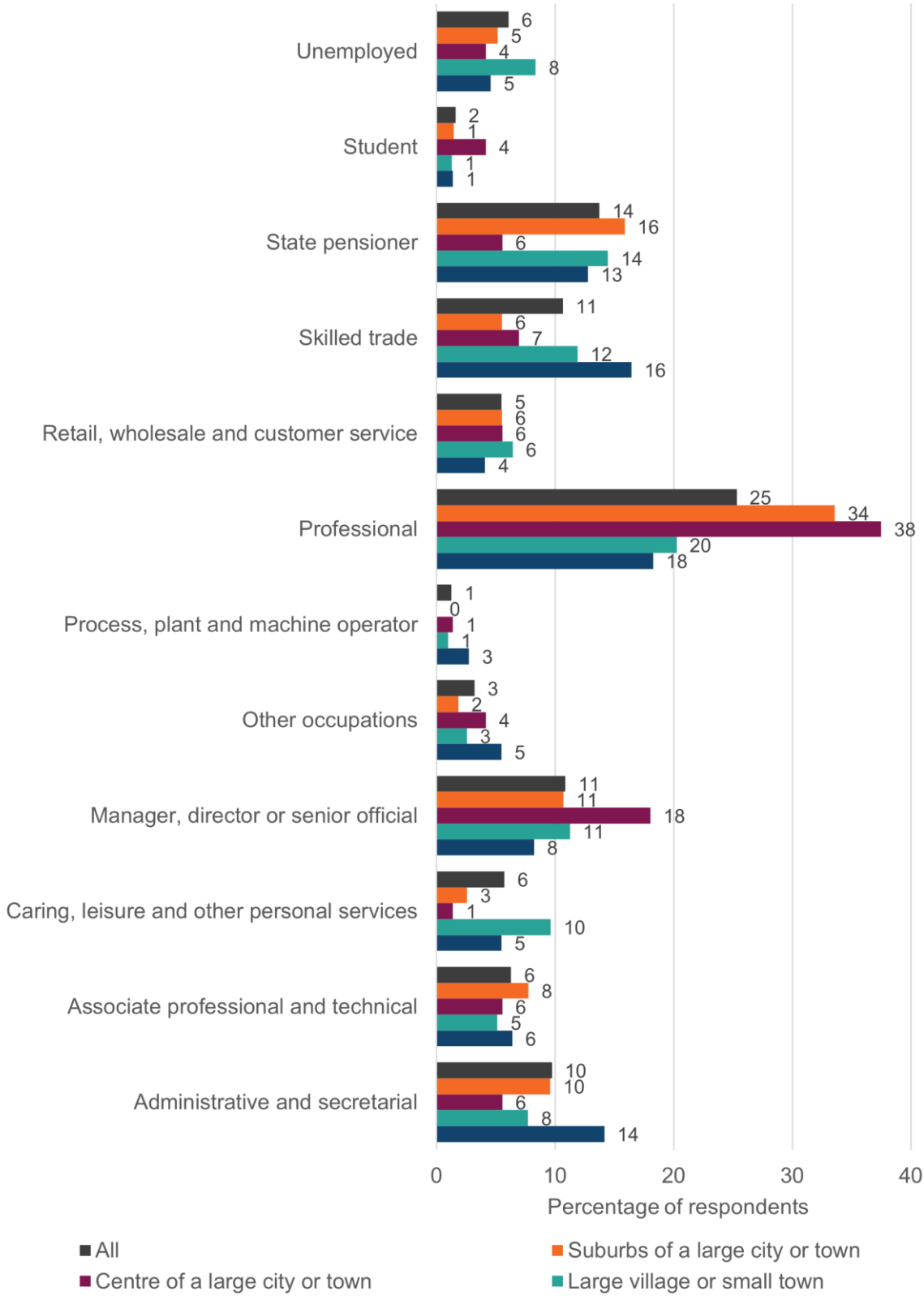


Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded. Base = 923 (Suburbs = 290, Centre = 74, Large Village = 330, Countryside = 229)

Occupation and area type

2.6 Respondents were asked what occupational group the main income earner in the household belonged to. A higher proportion of respondents who lived in the centre or suburbs of a large city or town had a professional occupation than those living in other area types, 38% and 34% respectively (Figure 2.3). The countryside was the area type with the highest proportion of respondents with a skilled trade occupation (16%). There was a lower proportion of state pensioners living in the centre of large city or town (6%) compared to all other area types.

Figure 2.3: Occupation and area type responses – 'Please indicate which occupational group the chief income earner (the person with the largest income) in your household belongs to'



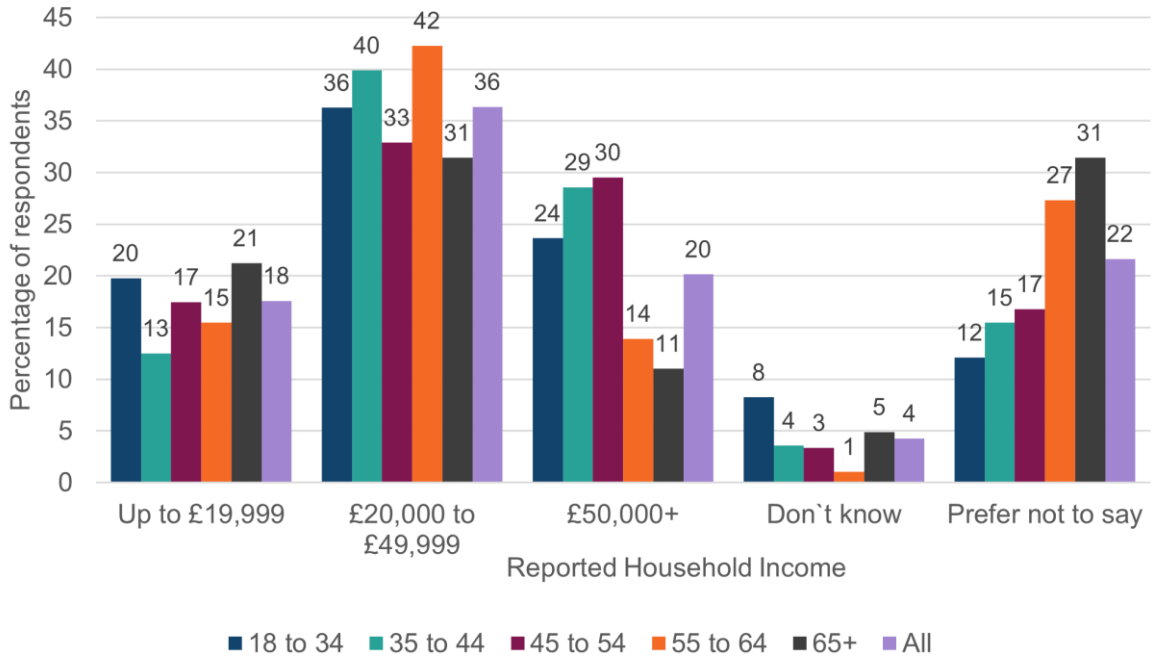
Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' 'Other / not applicable' and 'Prefer not to say' excluded. Base = 873 (Suburbs = 271, Centre = 72, Large Village = 311, Countryside = 219)

Income and age

2.7 Respondents were asked their annual household income per year before tax and any other deductions. Over a quarter of respondents did not give a range for their household income, 22% selected “Prefer not to say” and 4% selected “Don’t know”.

2.8 Older respondents were less likely to state their household income. 31% of respondents aged 65 and above preferred not to state their household income (Figure 2.4). Respondents aged between 18 and 34 were more likely to say they did not know the household income (8%) compared to respondents in other age groups.

Figure 2.4: Income and age responses – ‘Please indicate the approximate income of your household per year (before tax and any other deductions)?’

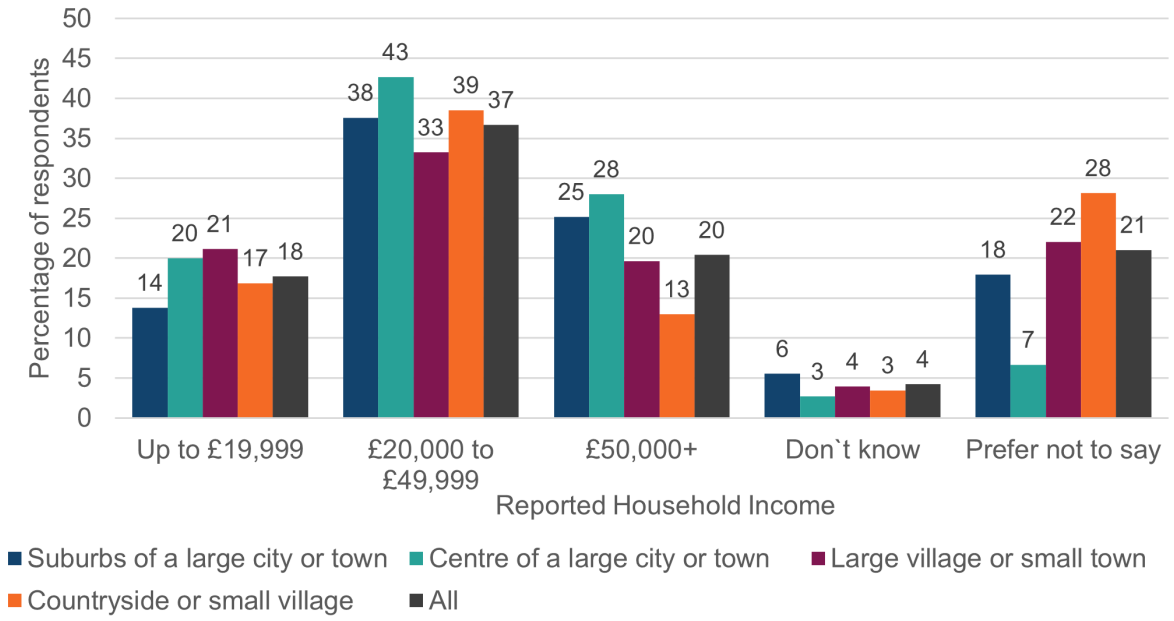


Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. ‘Prefer not to say’ excluded from age response. Base = 938 (18 to 34 = 182, 35 to 44 = 168, 45 to 54 = 149, 55 to 64 = 194, 65+ = 245)

Income and area type

2.9 Examining household income by area type (Figure 2.5) shows that respondents living in the countryside or a small village were more likely to not state their household income (28%) compared to respondents living in other area types. The suburbs of a large city or town (25%) and the centre of a large city or town (28%) were the area types with the highest proportion of respondents with household income of £50,000 and above.

Figure 2.5: Income and area type responses - 'Please indicate the approximate income of your household per year (before tax and any other deductions)?'



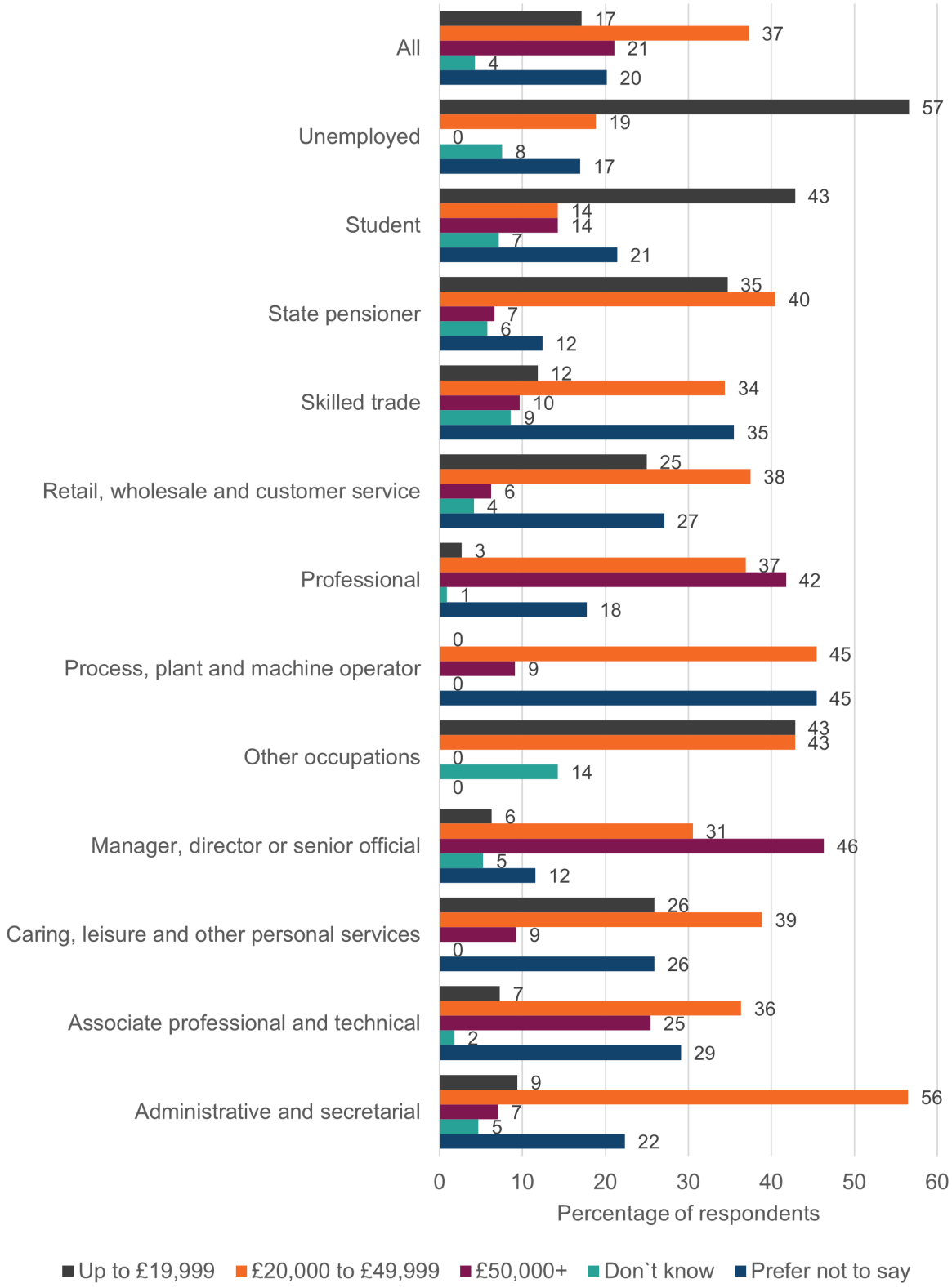
Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded from area type response. Base = 927 (Suburbs = 290, Centre = 75, Large Village = 331, Countryside = 231)

Occupation and income

2.10 Machine operators and skilled trade respondents were more likely not to state their household income (45% and 35% respectively) than respondents with any other occupation (Figure 2.6).

2.11 Other than unemployed and state pensioner respondents, 'caring, leisure, and other personal services' had the highest proportion of respondents with a household income up to £19,999 (26%). 'Manager, director, or senior official' had the highest proportion of respondents with a household income above £50,000 (46%).

Figure 2.6: Occupation and income responses - 'Please indicate the approximate income of your household per year (before tax and any other deductions)?'

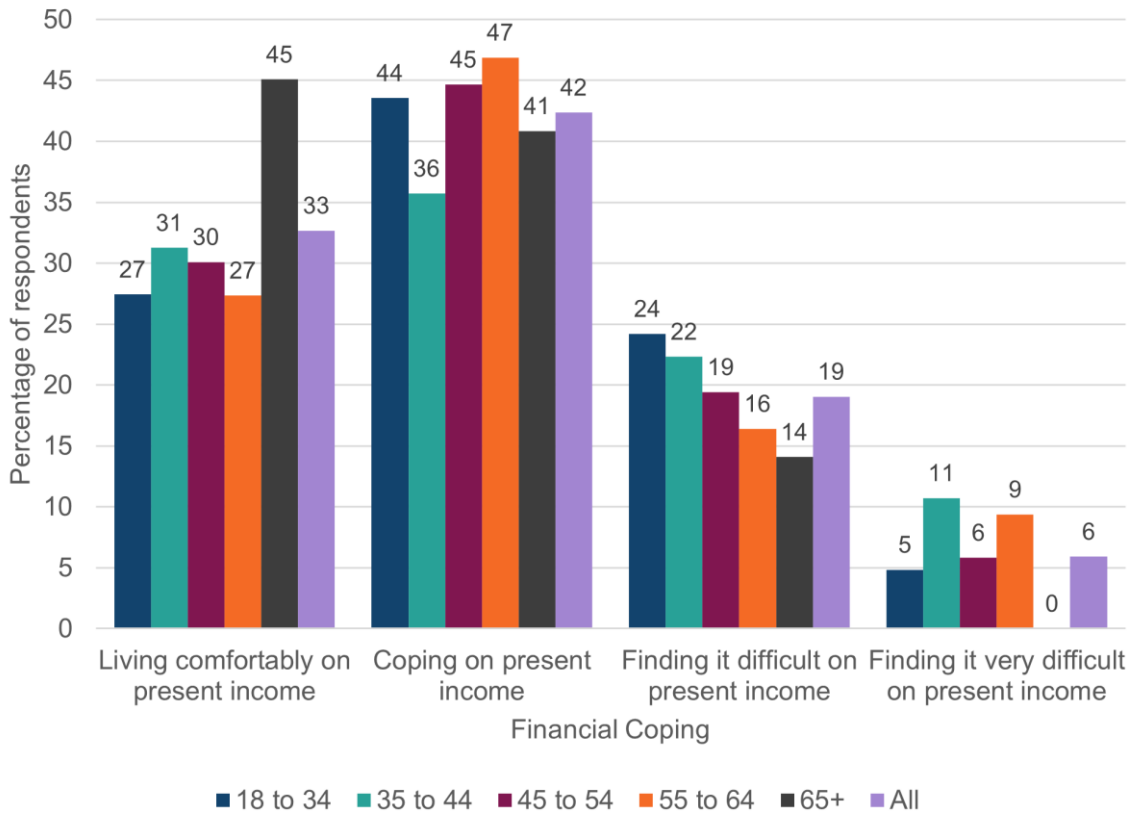


Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' 'Other / not applicable' and 'Prefer not to say' excluded from occupation response. Base = 868 (Admin = 85, Associate = 55, Caring = 54, Manager = 95, Other = 28, Process = 11, Professional = 225, Retail = 48, Skilled = 93, Pensioner = 121, Unemployed = 53)

Coping financially and age

2.12 Respondents were asked how they felt about their annual household income. Combining the responses with age group showed that 45% of respondents aged 65+ said they were living comfortably on their present income (Figure 2.7). This was 14 percentage points greater than the response from any other age category. The proportion of respondents who said they were finding it difficult on their current income decreased with increasing age category, 24% of 18-34 year olds said they were finding it difficult, compared to 14% of 65+ respondents.

Figure 2.7: Coping financially and age responses – 'Which of the following comes closest to how you feel about your household's income these days?'



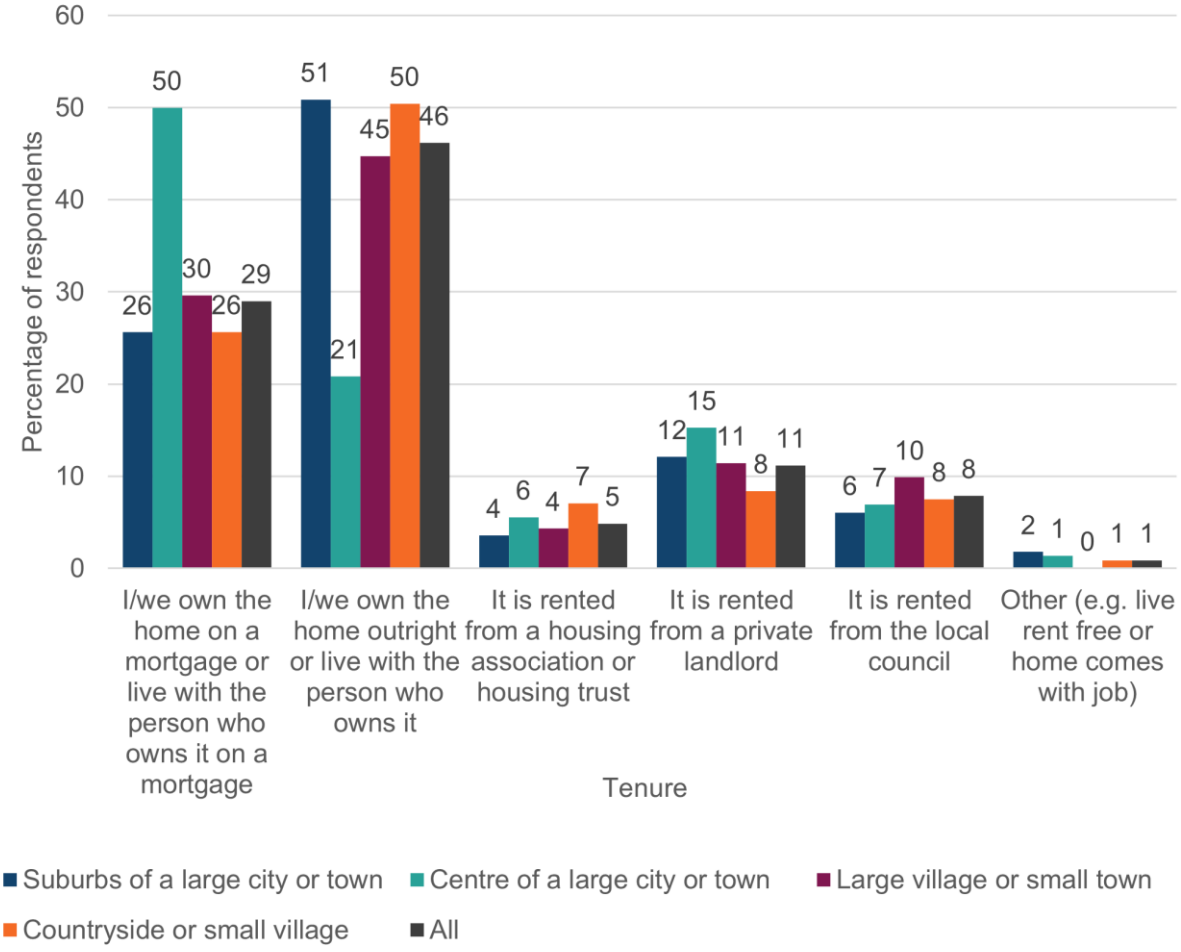
Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of households with 2 or more residents. 'Prefer not to say' excluded from Age response. Base = 609 (18 to 34 = 124, 35 to 44 = 112, 45 to 54 = 103, 55 to 64 = 128, 65+ = 142)

2.13 It should be noted that this question was only asked to households with 2 or more residents. In future waves this will be asked of all respondents.

Tenure and area type

2.14 Respondents were asked if the household owned or rented their accommodation. The combination of tenure and area type shows that around half of respondents in the countryside or a small village (50%) or suburbs of a large city or town (51%) owned their home outright or lived with the person who does (Figure 2.8).

Figure 2.8: Tenure and area type responses – 'Does your household own or rent your accommodation?'

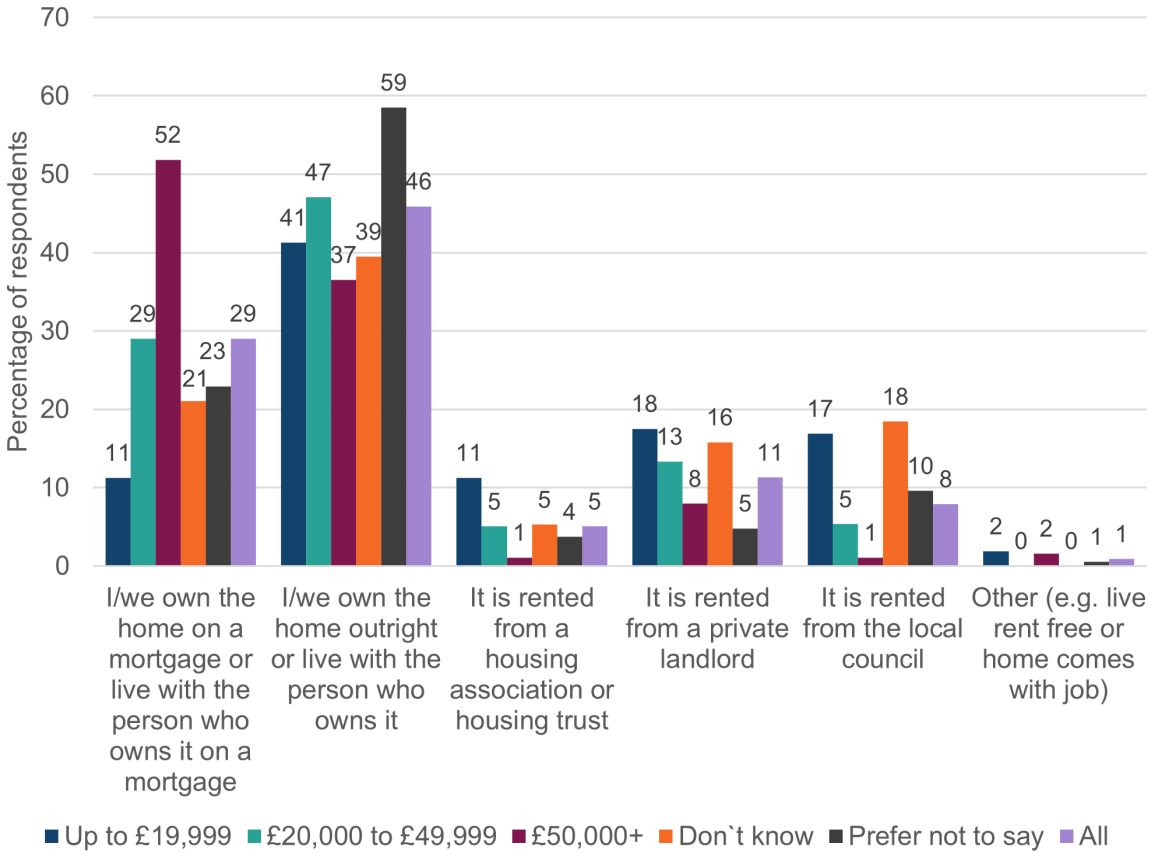


Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded. Base = 903 (Suburbs = 281, Centre = 72, Large Village = 324, Countryside = 226)

Tenure and income

2.15 The combination of tenure and household income shows that respondents who were renting were more likely to have a household income of up to £19,999, 46% (Figure 2.9) compared to the other income brackets. 91% of respondents with a household income of £50,000 and above owned the home outright or owned the home on a mortgage, 59% of respondents who did not state their household income owned the home outright or lived with the person who owned it.

Figure 2.9: Tenure and income responses – 'Does your household own or rent your accommodation?'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded from Tenure response. Base = 913 (Up to £19,999 = 160, £20,000 to £49,999 = 338, £50,000+ = 189, Don't know = 38, Prefer not to say = 188)

Demographic patterns: summary

To summarise the key findings on the characteristics of the survey respondents of Wave 2:

- Female survey respondents were younger than male survey respondents. Younger respondents tended to live in the centre of a large city or town, whilst older respondents tended to live in the suburbs of a large city or town, or the countryside or a small village.
- Respondents who had a skilled trade occupation were more likely to be living in the countryside or a small village.
- A large proportion of respondents did not state their household income. This group tended to be older, live in the countryside or a small village, often had a skilled trade, and tended to own their home outright.

3. Perceptions and attitudes

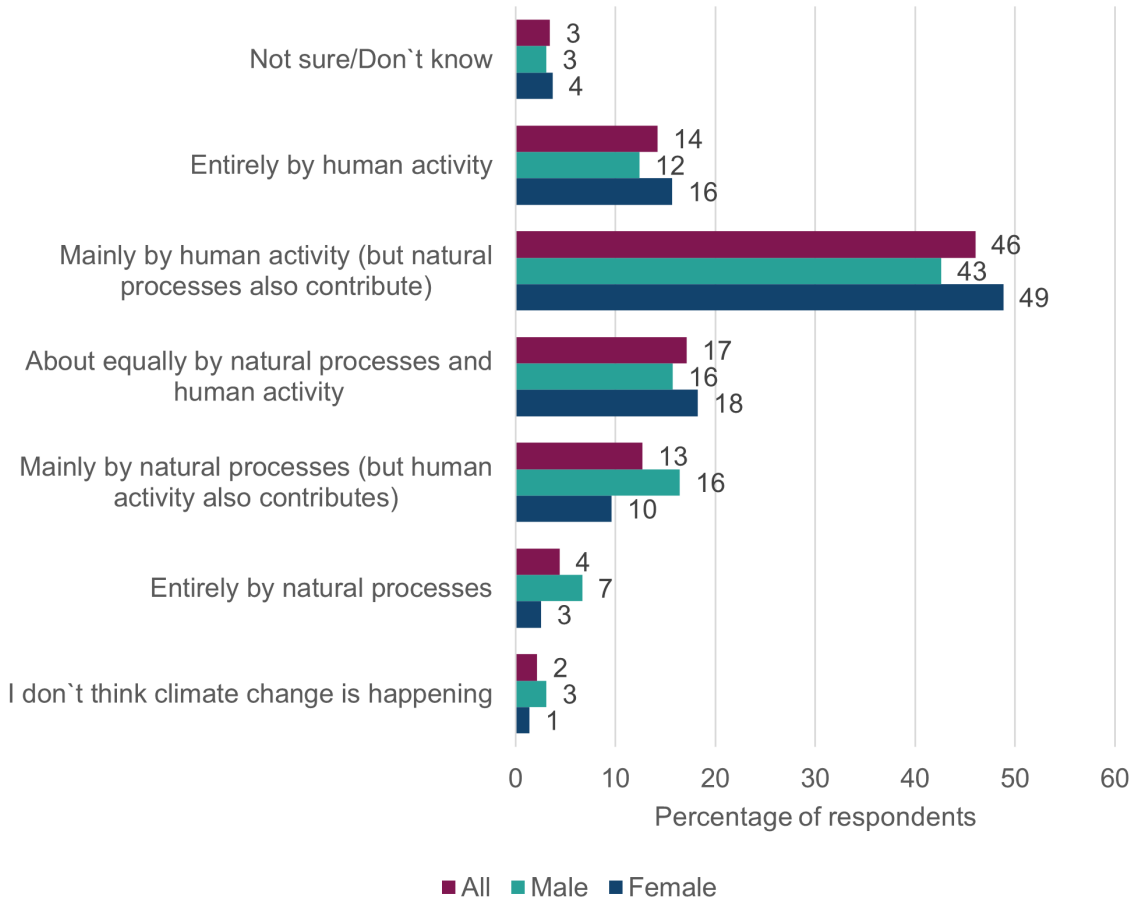
3.1 This section of the report will discuss respondents' views on climate change.

Causes of climate change

3.2 Respondents were asked about climate change. 46% of respondents said that they believed that climate change is caused mainly by human activity, with 14% saying that they believed that is caused entirely by human activity. However, 2% said they do not think climate change is happening, with 4% saying they believed it is caused entirely by natural processes.

3.3 A slightly higher proportion of male respondents than female respondents said that climate change is not happening (3% compared to 1%) or that natural processes are the primary cause (23% compared to 17%) (Figure 3.1).

Figure 3.1: Causes of climate change by gender – 'What do you think climate change is caused by?'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded from Gender response. Base = 930 (Female = 510, Male = 420)

Concern about climate change

3.4 Respondents were asked how worried they were personally about climate change. 26% of respondents said they were very worried about climate change, 38% said they were fairly worried, 22% said they were not very worried, and 11% said they were not at all worried.

3.5 Aggregating the response categories into very / fairly worried and not very / not at all worried provides a simplified output. Responses have then been disaggregated by gender, age, and income. A higher proportion of female respondents (74%) said they were very / fairly worried about change than male respondents (56%) (Table 3.1).

Table 3.1: Worry about climate change by gender – 'How worried are you personally about climate change?'

Concern	All	Female	Male
Not very / Not at all worried	34%	26%	44%
Very / Fairly worried	66%	74%	56%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded. Base = 899 (Female = 483, Male = 416)

3.6 Respondents aged 65 and over were the least worried about climate change (Table 3.2). 56% of respondents aged 65 and over said they were very / fairly worried about climate change, compared to 69 to 71% in other age categories.

Table 3.2: Worry about climate change by age – 'How worried are you personally about climate change?'

Concern	All	18 to 34	35 to 44	45 to 54	55 to 64	65+
Not very / Not at all worried	34%	31%	30%	30%	29%	44%
Very / Fairly worried	66%	69%	70%	70%	71%	56%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded. Base = 901 (18 to 34 = 175, 35 to 44 = 158, 45 to 54 = 145, 55 to 64 = 184, 65+ = 239)

3.7 Respondents who had a household income of £50,000 and above were the most concerned about climate change; 70% said they were very / fairly worried (Table 3.3). Respondents who preferred not to say their household income were less concerned about climate change; 57% said they were very / fairly worried.

Table 3.3: Worry about climate change by income - 'How worried are you personally about climate change?'

Concern	All	Up to £19,999	£20,000 to £49,999	£50,000+	Prefer not to say
Not very / Not at all worried	34%	36%	31%	30%	43%
Very / Fairly worried	66%	64%	69%	70%	57%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded from Worry response, 'Don't know' excluded from Income response. Base = 871 (Up to £19,999 = 162, £20,000 to £49,999 = 323, £50,000+ = 188, Prefer not to say = 198)

Responsibility for tackling climate change

3.8 Respondents were asked how responsible certain groups are for tackling climate change. The groups were the general public, local community, local council, businesses, the Welsh Government, the UK government and countries outside the UK.

3.9 Aggregating the response categories into highly / somewhat responsible and not very / not at all responsible provides a simplified output. The proportion of highly / somewhat responsible responses can then be compared between groups (Table 3.4). A lower proportion of respondents said that their local community (63%) and the general public (72%) were highly or somewhat responsible in comparison to businesses (87%), and both the Welsh (84%) and UK (87%) Governments. 91% of respondents said that countries outside the UK were highly or somewhat responsible for addressing climate change.

3.10 Female respondents indicated that all groups had a greater responsibility than male respondents, the greatest differences being in responsibility of the local community (20 percentage point difference), their local council (13 point difference) and the Welsh Government (14 point difference).

3.11 The proportion of respondents aged 55 to 64 and 65 and above who said the general public (68% for each age group) and local community (58% for 55 to 64, 54% for 65+) were highly / somewhat responsible for addressing climate change, was lower than that for all other age groups.

Table 3.4: Proportion of highly /somewhat responsible for addressing climate change: all respondents, gender and age – 'To what extent do you believe the following are responsible for tackling climate change?'

Group	All	Female	Male	18 to 34	35 to 44	45 to 54	55 to 64	65+
General public	72%	76%	67%	76%	76%	73%	68%	68%
Local community	63%	72%	52%	66%	68%	71%	58%	54%
Your council	78%	84%	71%	83%	83%	84%	73%	73%
Businesses	87%	91%	81%	89%	90%	88%	85%	83%
Welsh Government	84%	91%	77%	88%	89%	87%	82%	79%
UK government	87%	93%	81%	92%	90%	87%	86%	83%
Countries outside UK	91%	94%	89%	94%	93%	93%	89%	90%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded from all responses. Base = 888 - 911 (for all respondents, numbers vary due to exclusion of 'Don't Know' and 'Prefer not to say')

3.12 By area type, a lower proportion of respondents who lived in the countryside or a small village indicated that the general public (69%), their local community (60%) and their council (76%) were highly or somewhat responsible for addressing climate change, when compared to respondents who lived in other area types (Table 3.5).

Table 3.5: Proportion of highly /somewhat responsible for addressing climate change: all respondents by area type - 'To what extent do you believe the following are responsible for tackling climate change?'

Group	All	Suburbs of a large city or town	Centre of a large city or town	Large village or small town	Countryside or small village
General public	72%	74%	78%	70%	69%
Local community	63%	63%	72%	62%	60%
Your council	78%	79%	84%	78%	76%
Businesses	87%	86%	86%	87%	87%
Welsh Government	84%	86%	86%	84%	80%
UK government	87%	87%	89%	87%	86%
Countries outside UK	91%	90%	94%	92%	90%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded from all responses. Base = 881 - 897 (for all respondents, numbers vary due to exclusion of 'Don't Know' and 'Prefer not to say')

3.13 When the responses are broken down by household income, a lower proportion of respondents who preferred not to say their income indicated that the general public (53%), local community (47%) and their council (65%) were highly or somewhat responsible for addressing climate change, when compared to respondents from other household income groups (Table 3.6) . Across the other income bands, respondents expressed broadly similar views to each other.

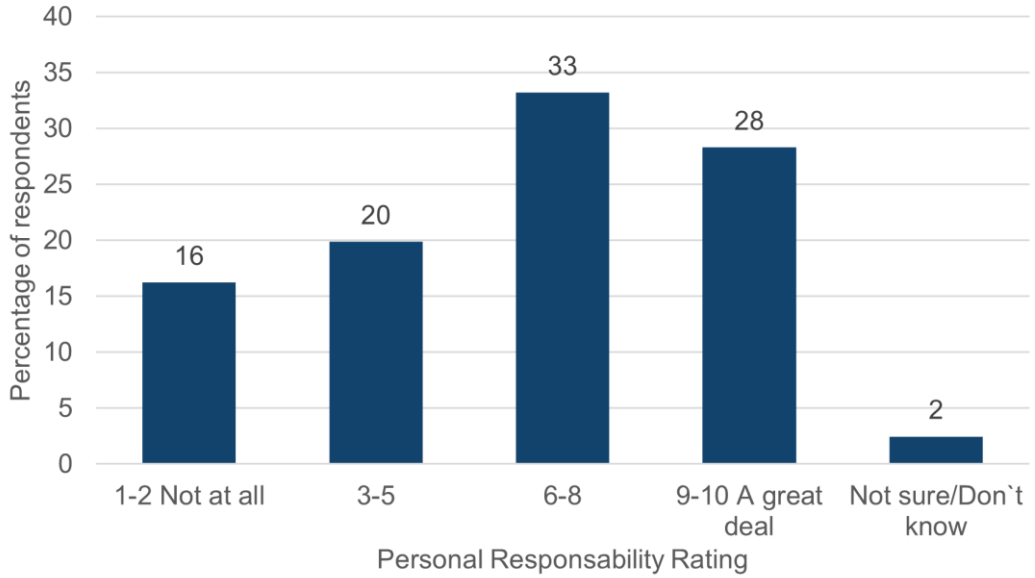
Table 3.6: Proportion of highly /somewhat responsible for addressing climate change: all respondents by income - 'To what extent do you believe the following are responsible for tackling climate change?'

Group	All	Up to £19,999	£20,000 to £49,999	£50,000+	Prefer not to say
General public	72%	81%	77%	75%	53%
Local community	63%	72%	65%	68%	47%
Your council	78%	85%	80%	83%	65%
Businesses	87%	87%	86%	86%	88%
Welsh Government	84%	86%	85%	89%	77%
UK government	87%	87%	85%	90%	87%
Countries outside UK	91%	89%	91%	95%	92%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded from all responses. Base = 852 - 875 (for all respondents, numbers vary due to exclusion of 'Don't Know' and 'Prefer not to say')

3.14 Respondents were asked to rank from 1 (not at all) to 10 (a great deal) if they felt a personal responsibility for preventing climate change. 28% said they felt a high responsibility (rank 9 and 10), whereas 16% said they felt a low responsibility (rank 1 and 2; Figure 3.2).

Figure 3.2: Personal responsibility for preventing climate change from worsening – 'To what extent do you feel a personal responsibility to try to prevent climate change from worsening?'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Prefer not to say' excluded from all responses. Base = 937

3.15 A higher proportion of male respondents said they felt little personal responsibility for preventing climate change from worsening than female respondents. 22% of male respondents said they felt a low responsibility (rank 1 and 2), compared to 11% of female respondents (Table 3.7).

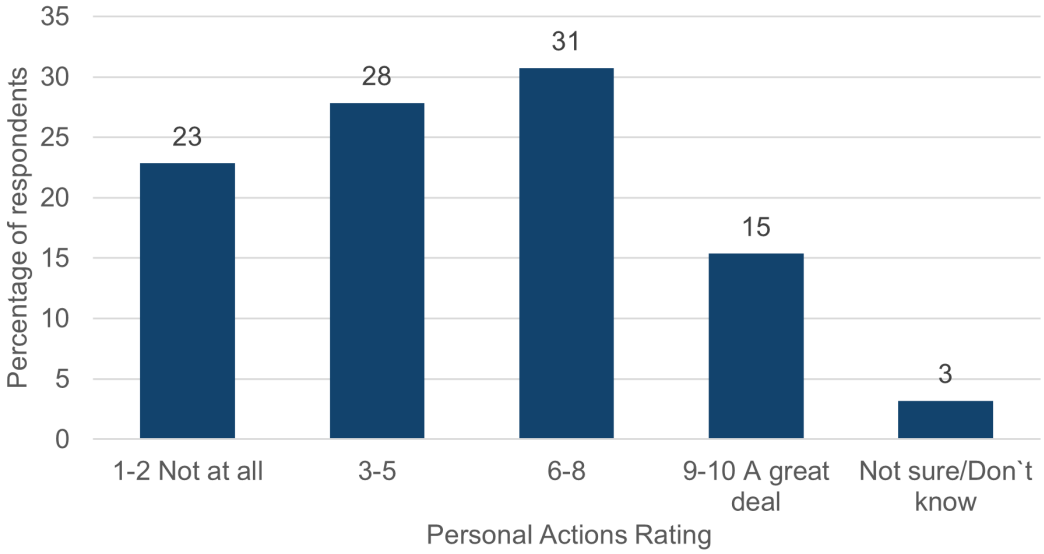
Table 3.7: Personal responsibility for preventing climate change from worsening by gender – 'To what extent do you feel a personal responsibility to try to prevent climate change from worsening?'

Group	All	Female	Male
1-2 Not at all	16%	11%	22%
3-5	20%	20%	20%
6-8	33%	33%	34%
9-10 A great deal	28%	34%	21%
Not sure/Don`t know	2%	3%	2%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded from Gender response. Base = 929 (Female = 509, Male = 420)

3.16 Respondents were asked to rank from 1 (not at all) to 10 (a great deal) if they felt their personal actions could prevent climate change. 15% said they felt strongly (rank 9 and 10) that their actions could prevent climate change, whereas 23% said they (rank 1 and 2) felt that their actions could not prevent climate change (Figure 3.3).

Figure 3.3: Belief that personal actions can help prevent climate change from worsening – 'To what extent do you feel that your own personal actions can help prevent climate change from worsening?'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Prefer not to say' excluded from all responses. Base = 937

3.17 A higher proportion of male respondents said they believed their personal actions would have little effect in preventing climate change from worsening than female respondents. 30% of male respondents said they felt their actions would have low effect (rank 1 and 2), compared to 16% of female respondents (Table 3.8).

Table 3.8: Belief that personal actions can help prevent climate change from worsening by gender – 'To what extent do you feel that your own personal actions can help prevent climate change from worsening?'

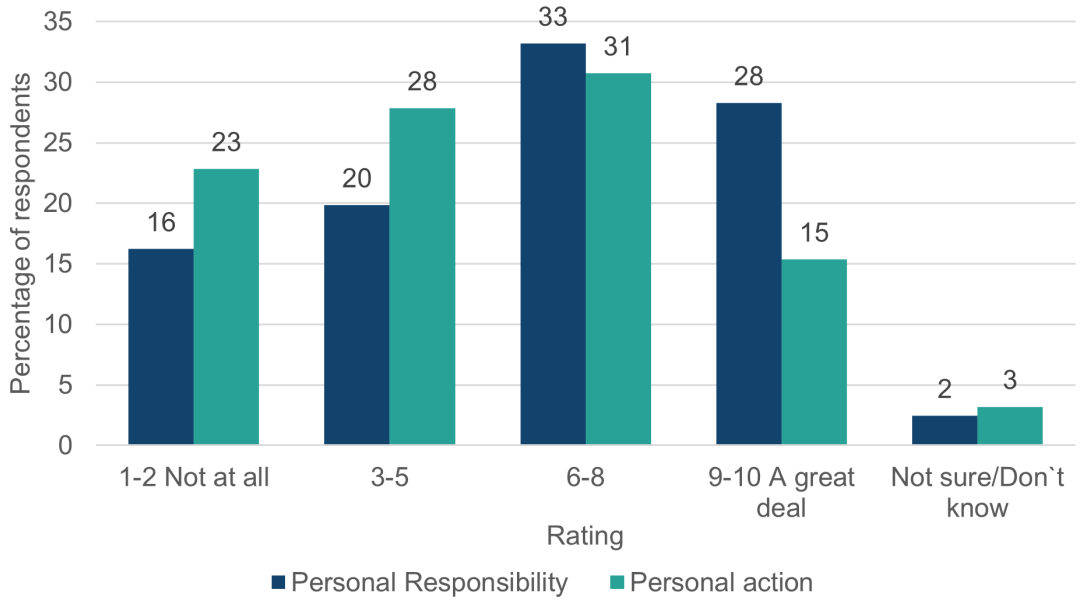
Group	All	Female	Male
1-2 Not at all	23%	16%	30%
3-5	28%	25%	31%
6-8	31%	36%	25%
9-10 A great deal	16%	19%	11%
Not sure/Don`t know	3%	4%	2%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded from Gender response. Base = 929 (Female = 509, Male = 420)

3.18 A comparison of the responses to the question on personal responsibility and belief on personal actions shows a discrepancy between the extent to which people felt a personal responsibility to try to prevent climate change from worsening, and the extent to which people felt their own personal actions could help prevent climate change from worsening. 28% said they felt a high responsibility (rank 9 and 10)

whereas only 15% said they felt strongly (rank 9 and 10) that their actions could prevent climate change (Figure 3.4).

Figure 3.4: Comparison – 'To what extent do you feel a personal responsibility to try to prevent climate change from worsening?' and 'To what extent do you feel that your own personal actions can help prevent climate change from worsening?'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Prefer not to say' excluded from all responses. Base = 937

Knowledge

3.19 Respondents were asked about their knowledge of Net Zero. 24% of respondents said they knew nothing and 38% of respondents said they knew a little about Net Zero (Table 3.9).

3.20 Respondents were asked about their knowledge of the Welsh Government's Net Zero targets. 36% said they knew nothing and 41% said they knew a little about Net Zero targets (Table 3.9).

3.21 Respondents were asked about their knowledge of the action the Welsh Government is taking to help people make green choices. 32% said they knew nothing and 44% said they knew a little about the green choices (Table 3.9).

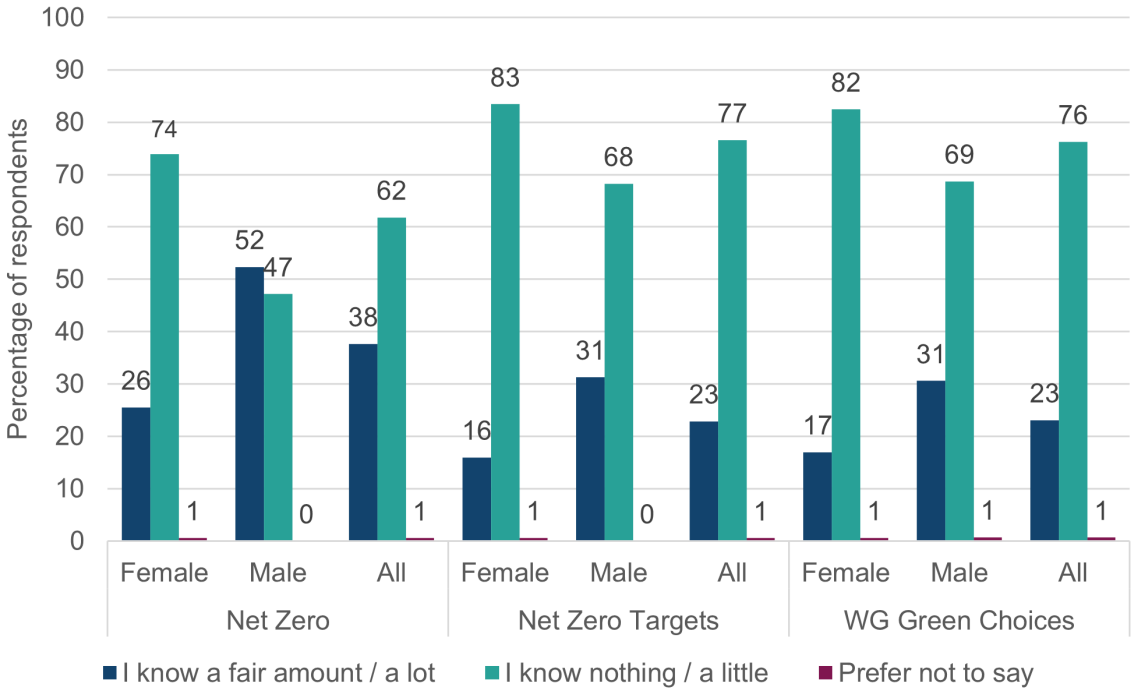
Table 3.9: Knowledge of Net Zero, Net Zero targets and the Welsh Government green choices – 'How much do you know about the following?'

Response	Net Zero	Net Zero Targets	WG Green Choices
I know nothing	24%	36%	32%
I know a little	38%	41%	44%
I know a fair amount	27%	17%	19%
I know a lot	10%	5%	5%
Prefer not to say	1%	1%	1%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all, no exclusions. Base = 943

3.22 Combining the responses 'know a fair amount' / 'a lot' and 'know nothing' / 'a little' shows that a higher proportion of male respondents said they knew more about all categories than female respondents. The difference is greatest for Net Zero knowledge where 52% of male respondents said they knew a fair amount / a lot compared to 26% of female respondents (Figure 3.5).

Figure 3.5: Knowledge of Net Zero, Net Zero targets and the Welsh Government Green Choices by gender – 'How much do you know about the following?'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded from Gender response. Base = 935 (Female = 500, Male = 435)

3.23 Unemployed respondents said they knew less about Net Zero than any other groups; 17% of unemployed respondents said they knew a fair amount / a lot about

Net Zero. Retirees were the respondents who said they knew most about Net Zero; 42% said they knew a fair amount / a lot (Figure 3.6), closely followed by Students (41%) and Employed (40%).

3.24 Respondents who were students, employed or retired said they knew less about Net Zero targets and WG Green Choices than they did about Net Zero. Unemployed respondents reported similar levels of knowledge on all three topics.

Figure 3.6: Knowledge of Net Zero, Net Zero targets and the Welsh Government green choices by employment status (respondents who answered "I know a fair amount / a lot") - 'How much do you know about the following?'

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Prefer not to say' excluded from Employment status response. Base = 930 (Employed = 506, Unemployed = 77, Retired = 267, Student = 39, Other = 41)

Perceptions and attitudes: summary

3.25 Respondents were asked about their views on climate change.

3.26 Across all respondents there was general agreement that climate change was happening and that the main cause was human activity.

3.27 Male respondents were more likely to believe that climate change is not happening or that it is caused by natural processes than female respondents. Male respondents were also less worried about the effects of climate change than female respondents.

3.28 A higher proportion of male respondents also said they had a high level of knowledge of Net Zero, Net Zero targets, and the Welsh Government's Green Choices than female respondents.

3.29 By area type, those in more rural area types said that the general public and local groups had less responsibility for tackling climate change than respondents living in other area types.

3.30 Younger respondents were more worried about climate change than respondents from other age groups. They also assigned higher levels of responsibility across different societal groups than other age groups, suggesting a view that there should be more collective responsibility for tackling climate change.

3.31 Respondents who were unemployed said they knew the least about Net Zero, Net Zero targets and the Welsh Government's Green Choices compared to other employment types.

4. About your home energy

4.1 Respondents were asked about energy use within their home and energy saving actions being employed.

Energy use

4.2 Energy bills were paid by direct debit in 76% of households, with pre-payment meters used in 12% of households. Pre-payment meters were used by 35% of unemployed respondents compared to 11% of employed respondents (Table 4.1).

Table 4.1: Payment method of energy bill by employment – 'How does your household currently pay the energy bill?'

Payment Method	All	Employed	Unemployed	Retired	Student	Other
Direct Debit	76%	80%	48%	87%	54%	59%
Prepayment meter/pay as you go	12%	11%	35%	3%	8%	24%
On receipt of bill	8%	7%	5%	7%	15%	15%
Other (e.g., landlord pays the bill)	1%	1%	3%	0%	2%	0%
Don`t know	1%	0%	5%	0%	18%	0%
Prefer not to say	2%	1%	4%	3%	3%	2%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Prefer not to say' included in 'All' responses. Base = 943 (Employed = 506, Unemployed = 77, Retired = 267, Student = 39, Other = 41, Prefer not to say = 13)

4.3 The tenure of the household was also associated with different use of pre-payment meters. Grouping the home ownership and renting categories shows that 87% of respondents who owned their own home paid by direct debit compared to 49% of respondents who rented (Table 4.2). Only 4% of respondents who owned their own home outright or on a mortgage paid by pre-payment meter compared to 35% of respondents who rented.

Table 4.2: Payment method of energy bill by tenure – 'How does your household currently pay the energy bill?'

Payment Method	All	I/we own the home*	It is rented
Direct Debit	76%	87%	49%
Prepayment meter/pay as you go	12%	4%	35%
On receipt of bill	8%	6%	13%
Other (e.g., landlord pays the bill)	1%	0%	1%
Don`t know	1%	1%	1%
Prefer not to say	2%	1%	0%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know', 'Prefer not to say' and 'Other' excluded from Tenure response. Base = 905 (I/we own the home = 684, It is rented = 221)

*'I/we own the home' includes outright and mortgaged ownership

4.4 62% of respondents indicated they had a smart meter in their household. However, only 42% of respondents indicated they regularly use their smart meter (Table 4.3). Grouping the home ownership and renting categories shows that 64% of respondents who owned their own home had a smart meter compared to 57% of respondents who rented.

Table 4.3: Use of smart meter by tenure

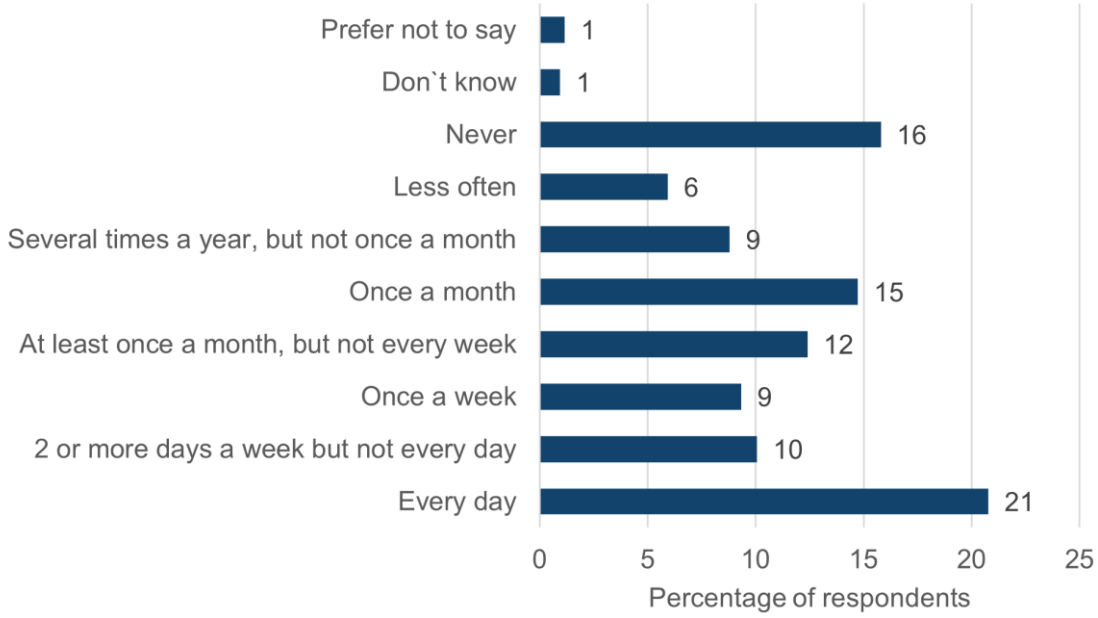
Payment Method	All	I/we own the home*	It is rented
I have a smart meter and I use the in-home display	42%	43%	39%
I have a smart meter but I don`t use the in-home display	13%	15%	11%
I have a smart meter but the in-home display isn't working	6%	6%	7%
I don`t have a smart meter	35%	33%	40%
Don`t know	2%	1%	2%
Prefer not to say	2%	1%	1%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know', 'Prefer not to say' and 'Other' included in 'All' response. Base = 943 (I/we own the home = 684, It is rented = 221)

*'I/we own the home' includes outright and mortgaged ownership

4.5 40% of respondents said they checked their energy use at least once per week, with 21% saying they checked their energy use every day (Figure 4.1).

Figure 4.1: Frequency of checking energy use - At the moment, how often do you check how much energy you are using?



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all, no exclusions. Base = 943

Energy saving actions

4.6 Respondents were asked to indicate whether they had taken any of the listed steps to save energy use (Figure 4.2).

4.7 The majority of respondents (94%) said they have taken at least one step to save energy, regardless of the reason for doing so. 4% said they were taking none of the listed steps, 2% said they didn't know or would prefer not to say.

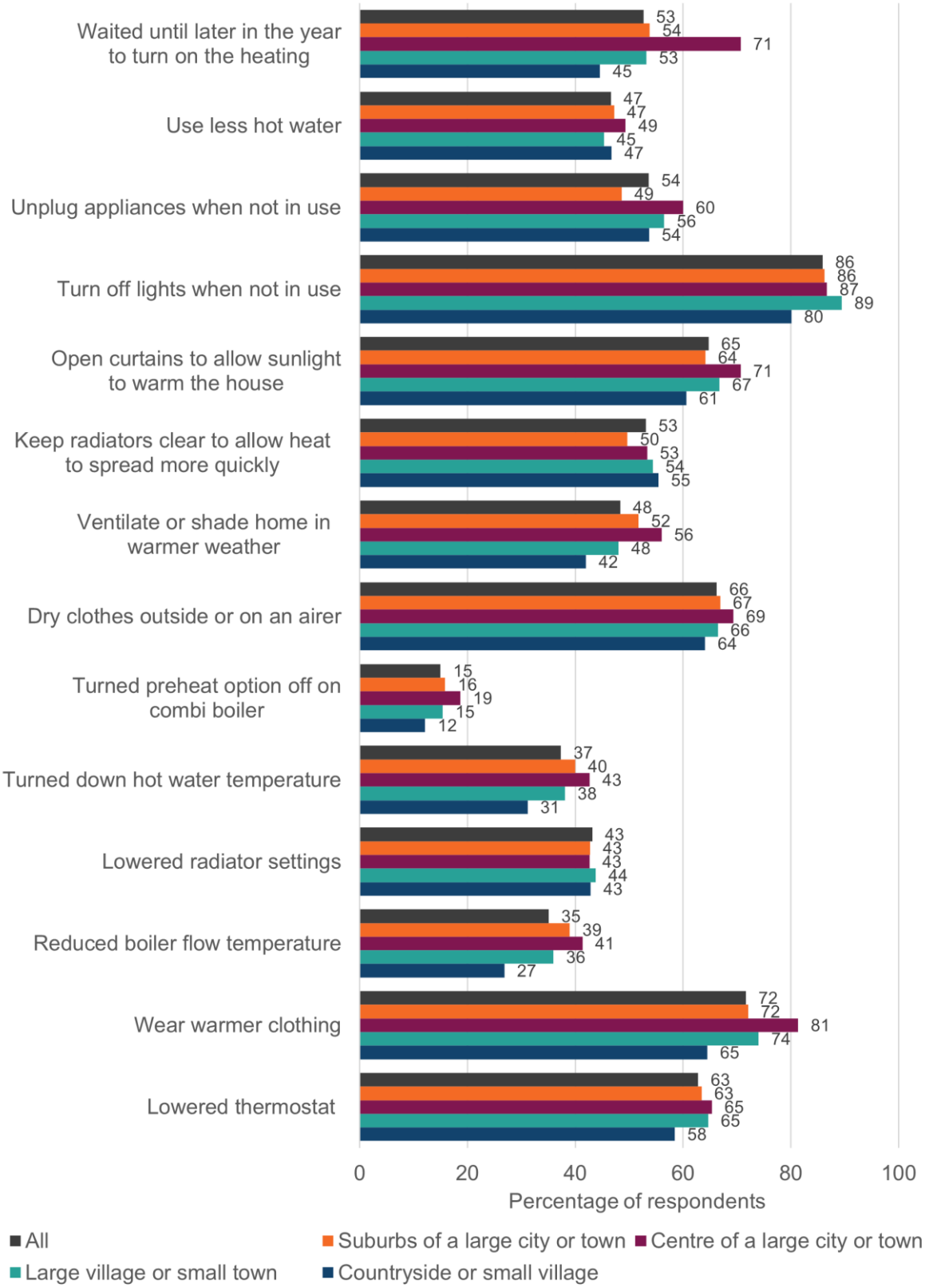
4.8 The most common step taken to reduce energy use was turning off the lights (86%), followed by wearing warmer clothing (72%) and drying clothes on an airer or outside (66%).

4.9 The least common steps were turning down the hot water temperature (37%), reducing boiler flow temperature (35%) and turning off the preheat option on a combi boiler (15%).

4.10 Aside from 4 of the fourteen energy saving actions included in the survey (using less hot water, unplugging appliances when not in use, keeping radiators clear and lowering radiator settings), respondents living in the countryside or a small village tended to employ fewer energy saving actions than those living elsewhere (Figure 4.2). For example, for the energy saving action of waiting until later in the year to

turn on the heating, 45% of respondents in the countryside or small village said they did this compared to 53-71% in the other area types, and for reducing boiler temperature, 27% of respondents in the countryside or small village said they did this compared to 36-41% in the other area types.

Figure 4.2: Reducing energy use by area type - Have you taken any of the following steps to reduce your energy use?

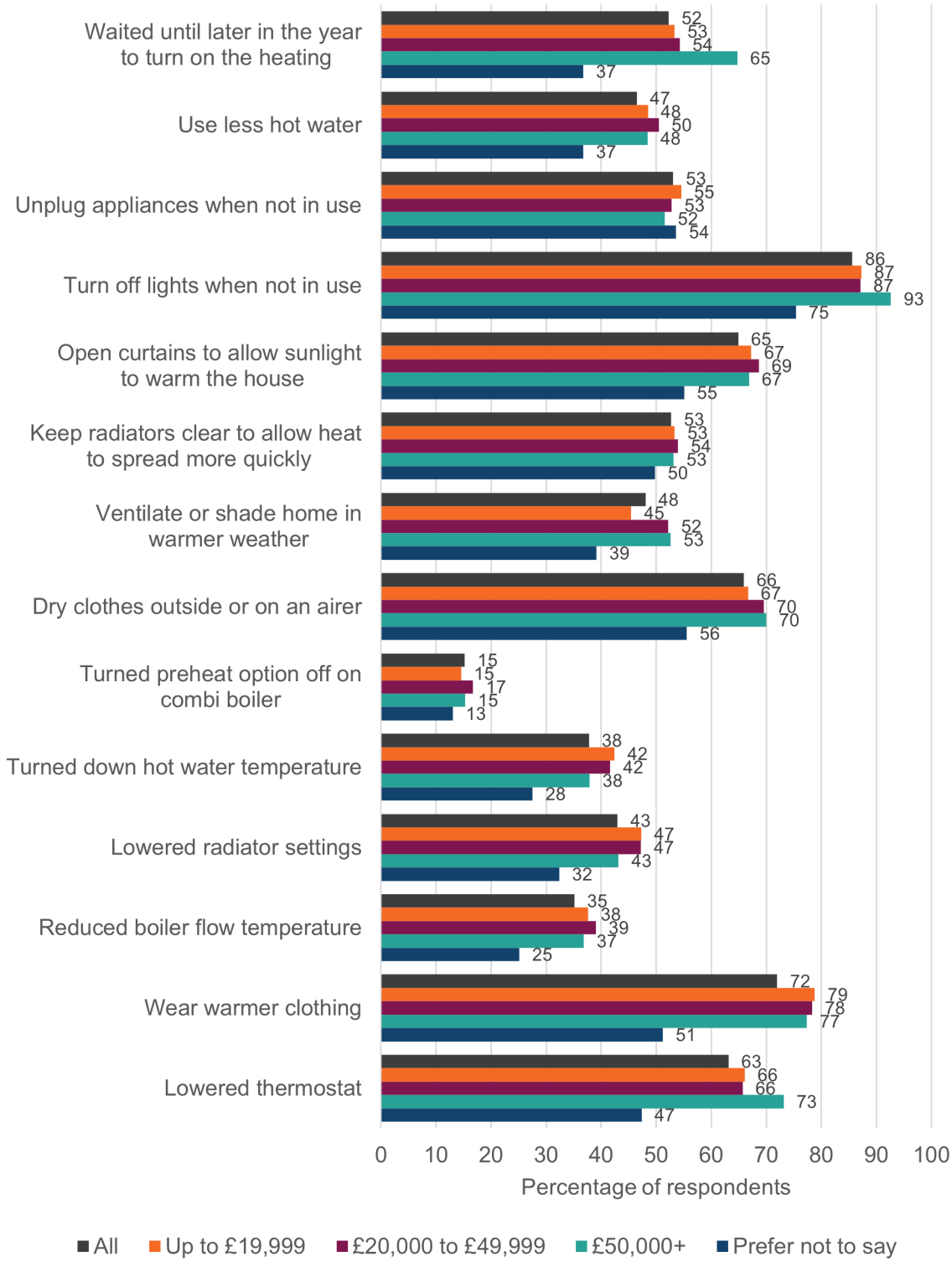


Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Other', None of the above', Don't know' and 'Prefer not to say' excluded from Energy step response. Base = 927 (Suburbs = 290, Centre = 75, Large Village = 331, Countryside = 231)

4.11 Among those who preferred not to give their household income, a lower proportion were employing energy saving actions compared to those who stated their household income (Figure 4.3). This comparison shows similar patterns when the data is broken down by area type (Figure 4.2) as a higher proportion of respondents who did not give their income lived in the countryside or a small village.

4.12 Of the respondents who did give their household income, a greater proportion of those with higher incomes were employing more energy saving actions than those with lower incomes.

Figure 4.3: Reducing energy use by household income - Have you taken any of the following steps to reduce your energy use?



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Other', None of the above', Don't know' and 'Prefer not to say' excluded from Energy step response, 'Don't know' excluded from Household income response. Base = 903 (Up to £19,999 = 165, £20,000 to £49,999 = 341, £50,000+ = 180, Prefer not to say = 207)

Energy efficiency

4.13 Respondents were asked what energy efficient measures they had in their home. The majority of respondents (73%) said they had at least one of the energy efficient measures in their home, but 23% said they didn't have any of the measures.

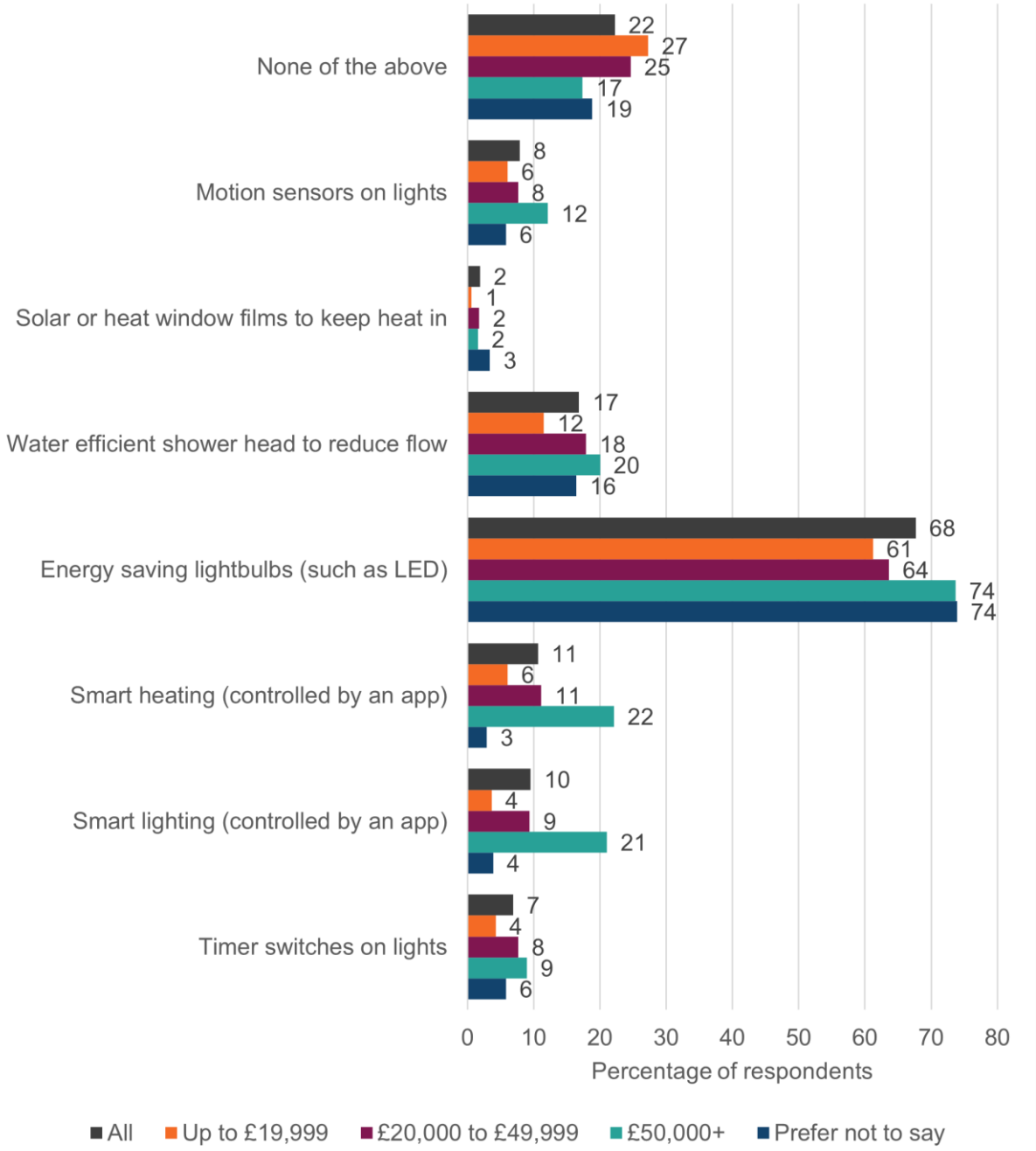
4.14 The most common energy efficient measures were energy saving light bulbs (67%) and water efficient shower head (17%).

4.15 The least common energy efficient measures were timer switches on lights (7%) and solar or heat window films (2%).

4.16 A greater proportion of respondents with higher household incomes had energy efficient measures in their home than those with lower household incomes. 22% of respondents whose household income was £50,000 or above had smart heating, compared to 6% of respondents whose household income was up to £19,999 (Figure 4.4). Similarly, 21% of respondents whose household income was £50,000 or above had smart lighting, compared to 4% of respondents whose household income was up to £19,999.

4.17 Respondents with lower household incomes were more likely to say they had none of the energy saving measures, 27 percent of respondents whose household income was up to £19,999 said they had none of the measures compared to 17% of respondents whose household income was £50,000 or above.

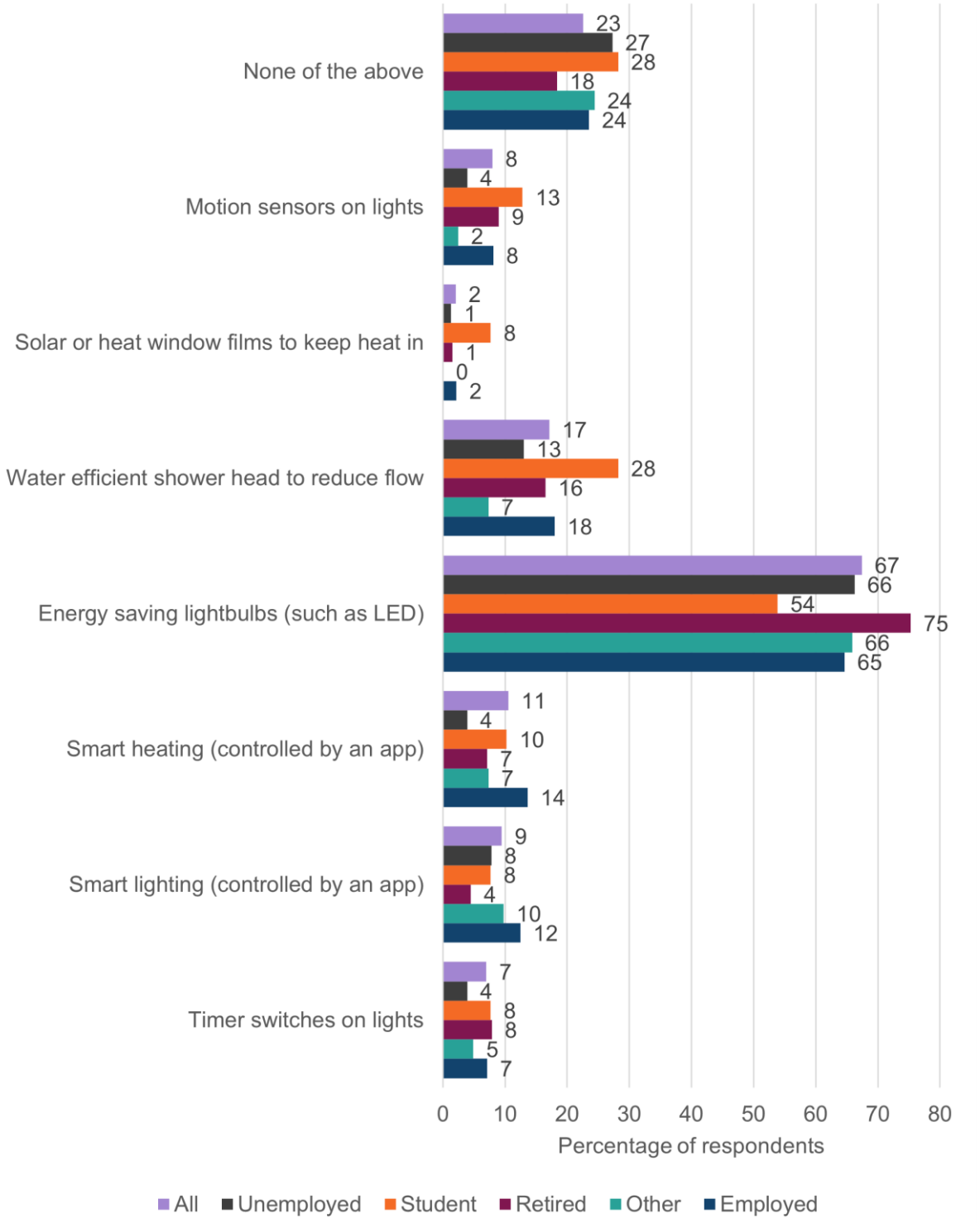
Figure 4.4: Energy efficient measures by household income – Below is a list of other energy efficiency measures. Which, if any, do you have in your home?'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. Don't know' and 'Prefer not to say' excluded from Energy step response, 'Don't know' excluded from Household income response. Base = 903 (Up to £19,999 = 165, £20,000 to £49,999 = 341, £50,000+ = 190, Prefer not to say = 207)

4.18 Examining the responses by employment status showed similar proportions of respondents in each group having energy efficient measures. However, the proportion of retirees with smart lighting (4%) or smart heating (7%) was lower than for employed respondents, 12% and 14% respectively (Figure 4.5).

Figure 4.5: Energy efficient measures by employment status– Below is a list of other energy efficiency measures. Which, if any, do you have in your home?'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Prefer not to say' excluded from Employment status response. Base = 930 (Employed = 506, Unemployed = 77, Retired = 267, Student = 39, Other = 41)

About your home energy: summary

4.19 Respondents were asked about energy use within the home and energy saving measures being employed.

4.20 Over three quarters of all respondents paid their energy bill by direct debit. These respondents tended to be employed and owned their own home. Unemployed respondents and those renting their accommodation were more likely to use a pre-payment meter.

4.21 Nearly all of respondents said they have taken at least one step to save energy, regardless of the reason for doing so. Respondents living in the countryside or a small village tended to employ fewer energy saving actions than those living elsewhere. This was also the case for respondents who preferred not to say their household income.

4.22 A greater proportion of respondents with higher household incomes had energy efficient measures in their home than those with lower household incomes, especially smart lighting and heating measures.

5. Food

5.1 Respondents were asked about their personal and household food consumption.

Diet

5.2 Respondents consumed dairy products more frequently than any other food type, 66% of respondents said they ate dairy products every day (Table 5.1). 56% of respondents ate fruit and vegetables every day. 83% of respondents said they ate white meat at least once per week, compared to 62% for fish or seafood, and 64% for red meat. 11% of respondents said they never eat red meat, and 12% of respondents said they never eat fish or seafood.

Table 5.1: Frequency of food type consumption – 'How many days a week do your usually eat each of the following things?'

Frequency	Dairy	Red Meat	White Meat	Fish / Seafood	Fruit / Vegetables
Every day	66%	2%	4%	1%	56%
5 to 6 days per week	12%	6%	10%	3%	18%
3 to 4 days per week	10%	19%	35%	12%	13%
1 to 2 days per week	5%	37%	34%	46%	7%
Less than once a week	3%	22%	7%	23%	3%
Never	3%	11%	8%	12%	1%
Don`t know	0%	1%	0%	1%	1%
Prefer not to say	1%	1%	1%	1%	1%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all, no exclusions. Base = 943

5.3 Respondents with lower household income said they consumed fruit and vegetables less frequently than those with higher household incomes. 64% of households with income up to £19,999 consumed fruit and vegetables at least 5 days a week, compared to 86% of households with a household income greater than £50,000 (Table 5.2).

Table 5.2: Food type consumption by income – every day and 5 to 6 days – 'How many days a week do you usually eat each of the following things?'

Food Type	All	Up to £19,999	£20,000 to £49,999	£50,000+	Prefer not to say
Dairy	78%	77%	74%	81%	82%
Red Meat	8%	6%	6%	7%	15%
White Meat	14%	10%	15%	15%	13%
Fish / Seafood	4%	4%	4%	1%	6%
Fruit and Vegetables	74%	64%	73%	86%	74%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' excluded from Household income response. Base = 903 (Up to £19,999 = 165, £20,000 to £49,999 = 341, £50,000+ = 190, Prefer not to say = 207)

5.4 Respondents aged between 18 and 34 said they consumed dairy products less frequently than older age groups. 71% of respondents aged 18 to 34 consumed dairy at least 5 days a week, compared to 81% of respondents aged 65 and above (Table 5.3). Younger respondents said they consumed white meat more frequently, and dairy and fruit and vegetables less frequently than older respondents.

Table 5.3: Food type consumption by age – every day and 5 to 6 days – 'How many days a week do you usually eat each of the following things?'

Food Type	All	18 to 34	35 to 44	45 to 54	55 to 64	65+
Dairy	78%	71%	74%	79%	81%	81%
Red Meat	8%	8%	10%	6%	8%	9%
White Meat	13%	20%	19%	11%	7%	10%
Fish / Seafood	4%	3%	4%	4%	3%	7%
Fruit and Vegetables	74%	65%	72%	73%	77%	80%

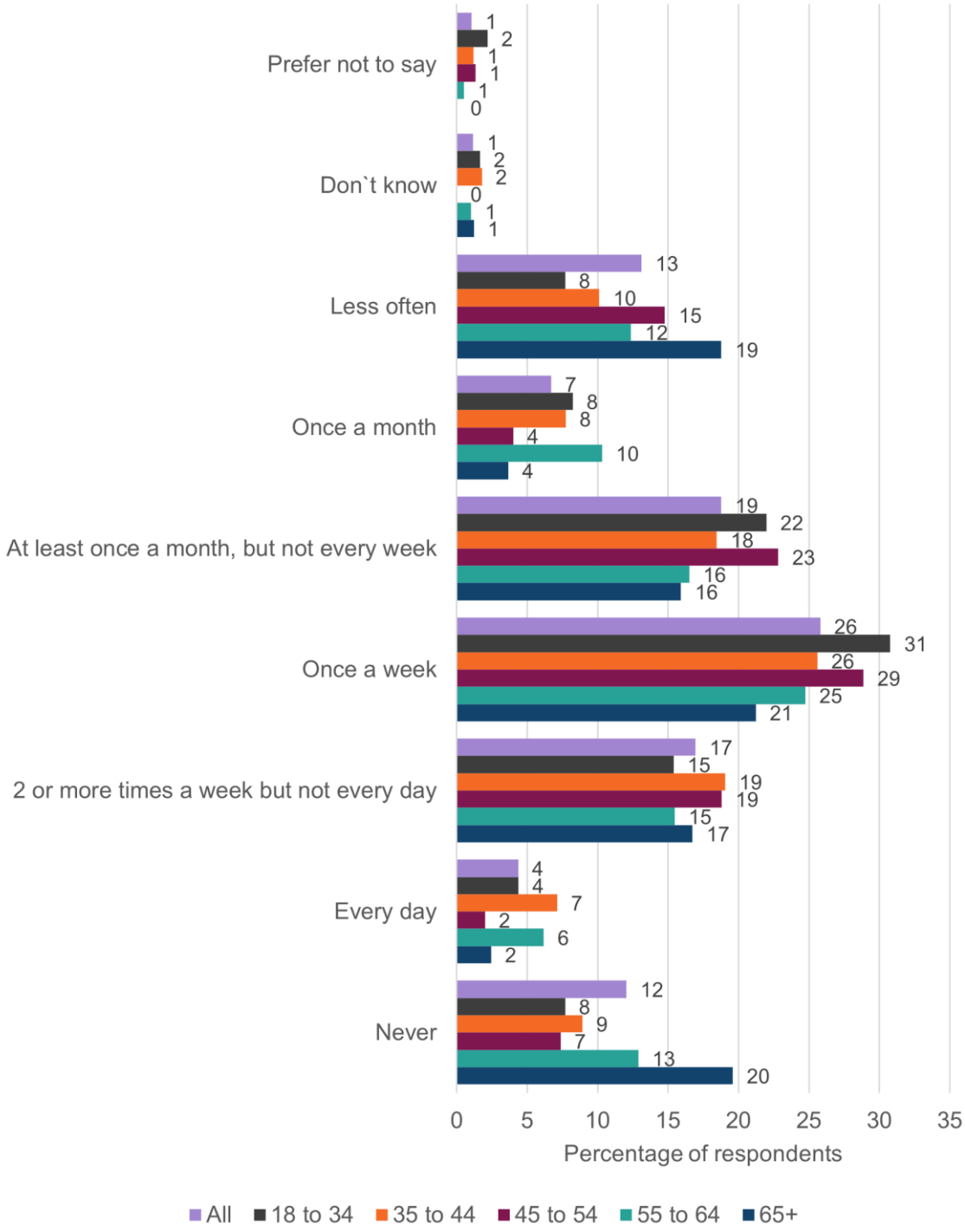
Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Prefer not to say' excluded from Age response. Base = 938 (18 to 34 = 182, 35 to 44 = 168, 45 to 54 = 149, 55 to 64 = 194, 65+ = 245)

Food waste

5.5 When asked how often they threw away food that had gone "off" or had exceeded its expiry date, 47% of respondents said they did this at least once a week, and 12% said they never do this.

5.6 20% of respondents aged 65 and above said they never throw away food, compared to 7-13% of respondents from other age categories (Figure 5.1).

Figure 5.1: Throwing away food by age – 'How often in a typical week does your household need to throw away food that went off or went past its use by date?'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Prefer not to say' excluded from Age response. Base = 938 (18 to 34 = 182, 35 to 44 = 168, 45 to 54 = 149, 55 to 64 = 194, 65+ = 245)

5.7 13% of respondents whose household income was £19,999 or less said they never threw away food, compared to 11% from respondents with household income of between £20,000 and £50,000, and 13% from respondents with household income greater than £50,000. 16% of respondents who preferred not to state their household income said they never threw away food.

5.8 72% of respondents said they always recycled food waste as opposed to putting it in the general rubbish, and 9% of respondents said they never recycled food waste.

5.9 Respondents aged 65 and above tended to recycle food waste more regularly (80% said they always recycled food waste) compared to respondents from other age groups (62% of respondents aged 18 to 34).

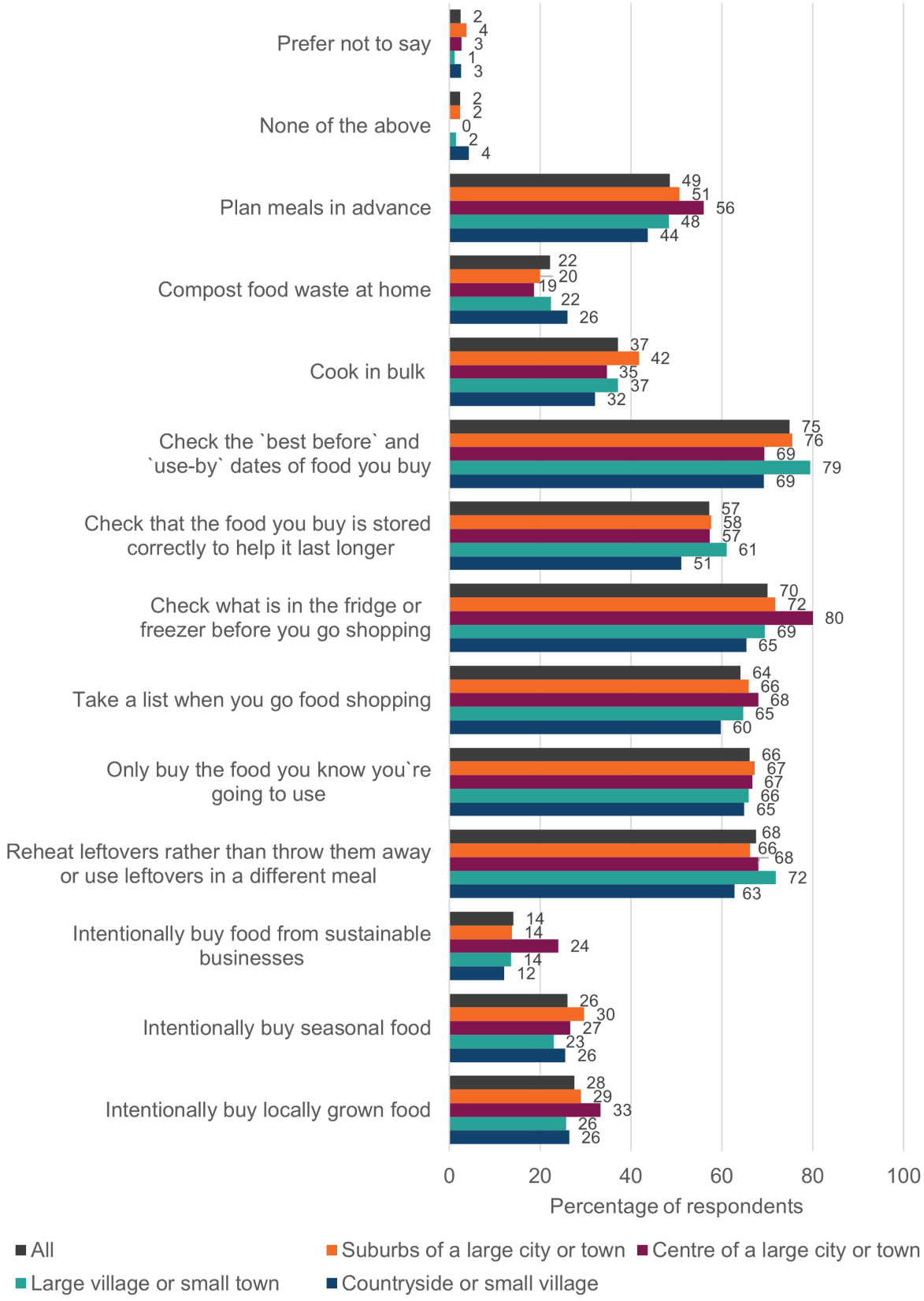
Sustainable practices

5.10 Respondents were asked what sustainable practices they undertook when food shopping or cooking meals. The three most common practices were checking use by and best before dates (75%), checking contents of fridge or freezer before going shopping (70%), and reheating or reusing leftovers (67%).

5.11 The three least common practices were buying food from sustainable businesses (14%), composting food waste at home (22%) and buying seasonal food (26%).

5.12 A smaller proportion of respondents who lived in the countryside or a small village undertook many of the sustainable practices in comparison to those living in other area types. The exception to this was composting food waste, (26% of those in the countryside or small village were doing this compared to 19-22% in other area types), checking the ‘use by’ or ‘best before’ dates of foods bought (69% compared to 69-79% respectively), intentionally buying seasonal food (26% compared to 23-30% respectively), and intentionally buying locally grown food (26% compared to 26-33% respectively) (Figure 5.2).

Figure 5.2: Food shopping or cooking meals practices by area type – 'Do you do any of the following when food shopping or cooking meals?'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Other' and Don't know' excluded from Sustainable practice response. Base = 927 (Suburbs = 290, Centre = 75, Large Village = 331, Countryside = 231)

Food: summary

5.13 Respondents were asked about their food consumption.

5.14 Dairy products were the most frequently consumed food type by all respondents with fish and red meat the least frequently consumed. Respondents with higher household incomes consumed fruit and vegetables more frequently than respondents from other household income groups. Respondents aged between 18 and 34 consumed white meat more frequently and dairy and fruit and vegetables less frequently than older respondents.

5.15 Respondents aged 65 and over said they threw away less food and recycled food waste more regularly than respondents from other age groups.

5.16 Respondents who lived in the countryside or small village undertook fewer sustainable food practices than those living in other area types. The main exception to this was composting food waste, where respondents in the countryside or small village had a higher proportion of respondents doing this.

6. Daily life

6.1 Respondents were asked about sustainable practices they might do in their daily life.

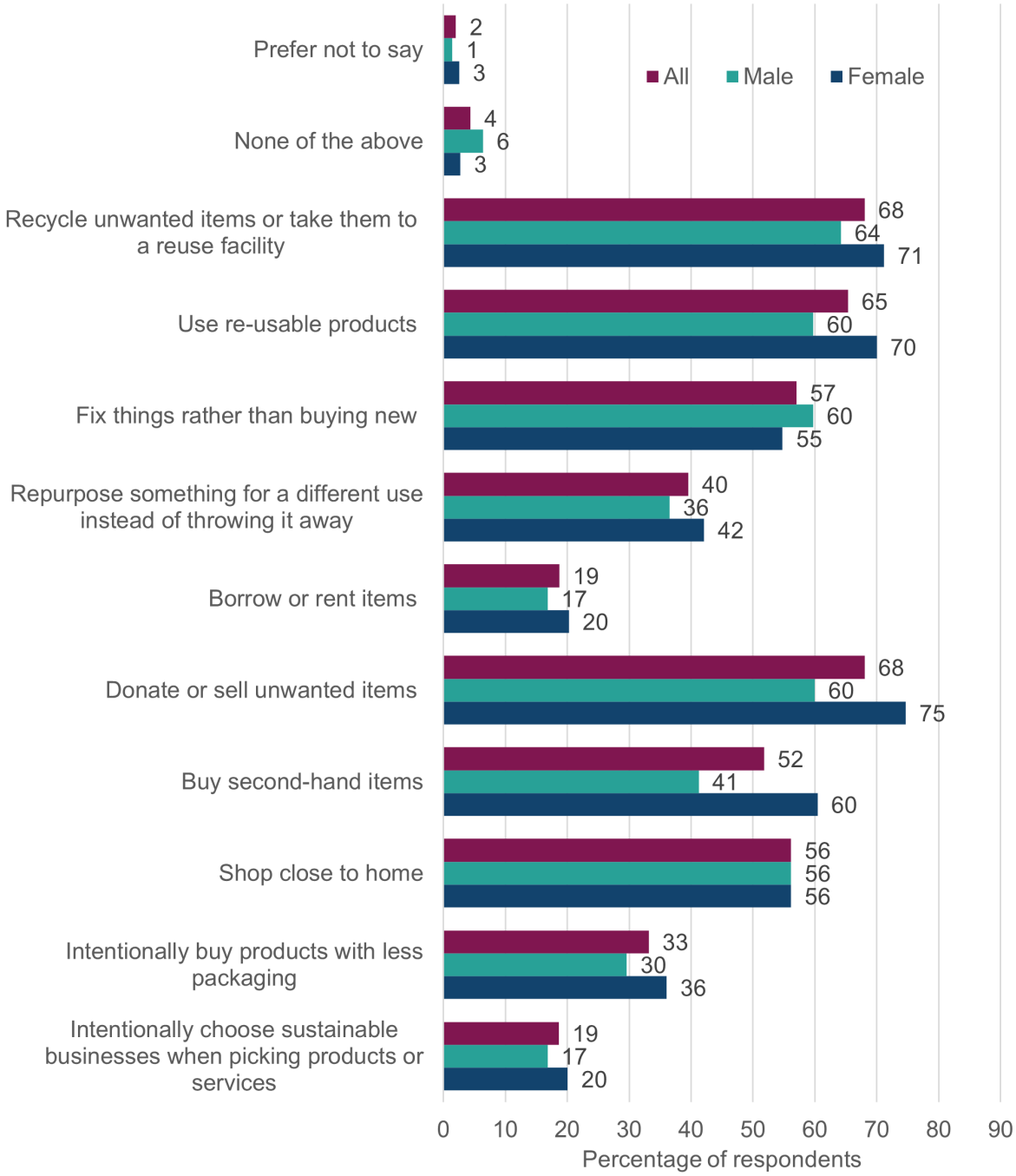
Daily life practices

6.2 Respondents were asked what sustainable practices they undertook in daily life. The three most common practices were donating or selling unwanted items (68%), recycling unwanted items (68%), and using reusable products (65%).

6.3 The three least common practices were choosing sustainable businesses (19%), borrowing or renting items (19%), and buying products with less packaging (33%).

6.4 A higher proportion of female respondents said they were undertaking many of the sustainable daily practices in comparison to male respondents. The largest differences were buying second hand (60% to 41%), donating or selling unwanted items (75% to 60%), and using reusable products (70% to 60%, Figure 6.1).

Figure 6.1: Sustainable practices by gender – 'Now we'd like to ask you about things you might do in your daily life. Please answer for yourself, not your household. Do you do any of the following?'

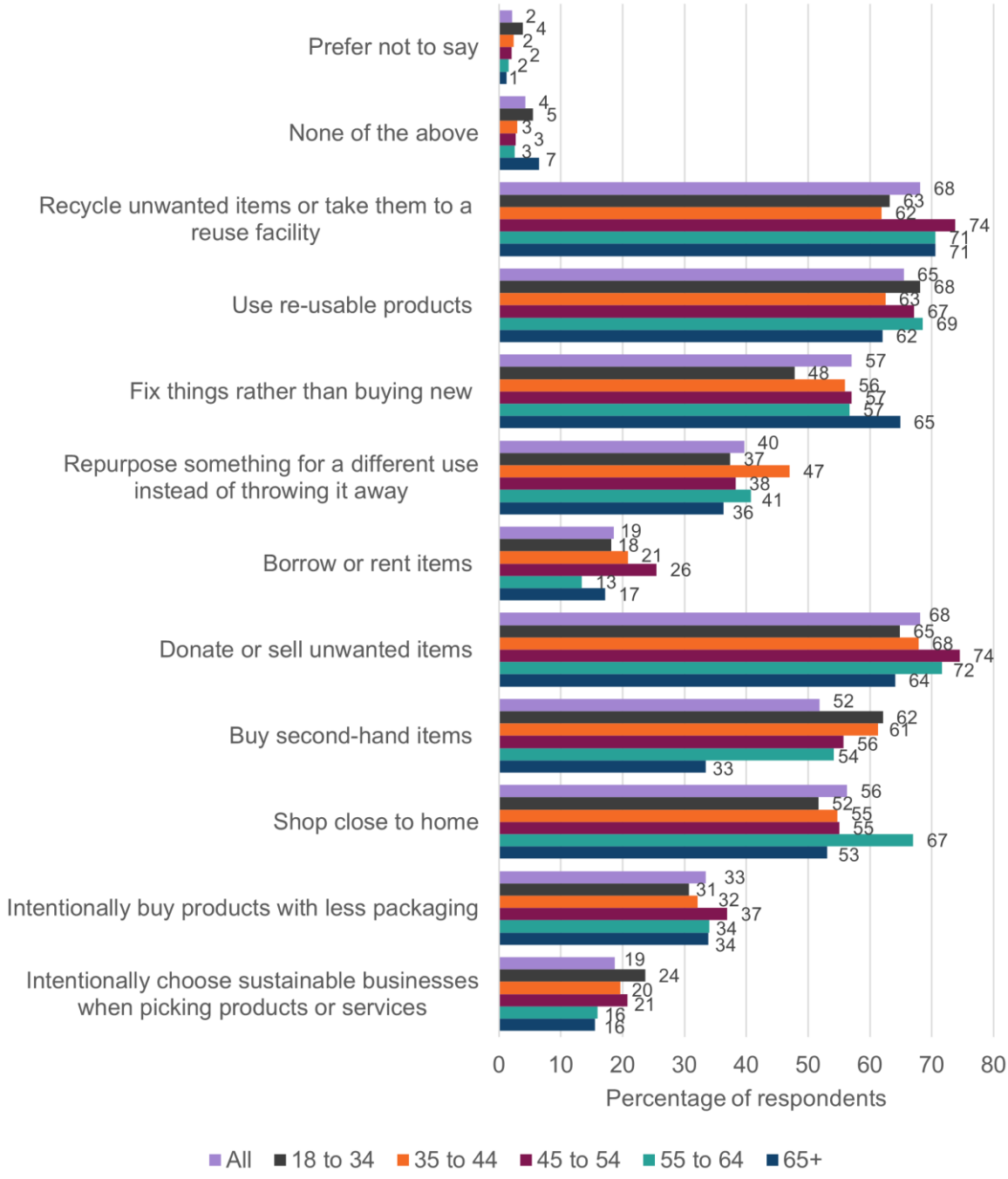


Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded from Gender response. Base = 935 (Female = 513, Male = 422)

6.5 The response by age is shown in Figure 6.2. Some practices were undertaken by a greater proportion of older respondents, e.g. fix things yourself (65% of respondents aged 65 and above) and shop close to home (67% of respondents aged 55 to 64 years). Other practices were undertaken by a greater proportion of younger

respondents, e.g. buying second hand (62% of respondents aged 18 to 34 years) and choosing sustainable businesses (24% of respondents aged 18 to 34 years).

Figure 6.2: Sustainable practices by age - 'Now we'd like to ask you about things you might do in your daily life. Please answer for yourself, not your household. Do you do any of the following?'

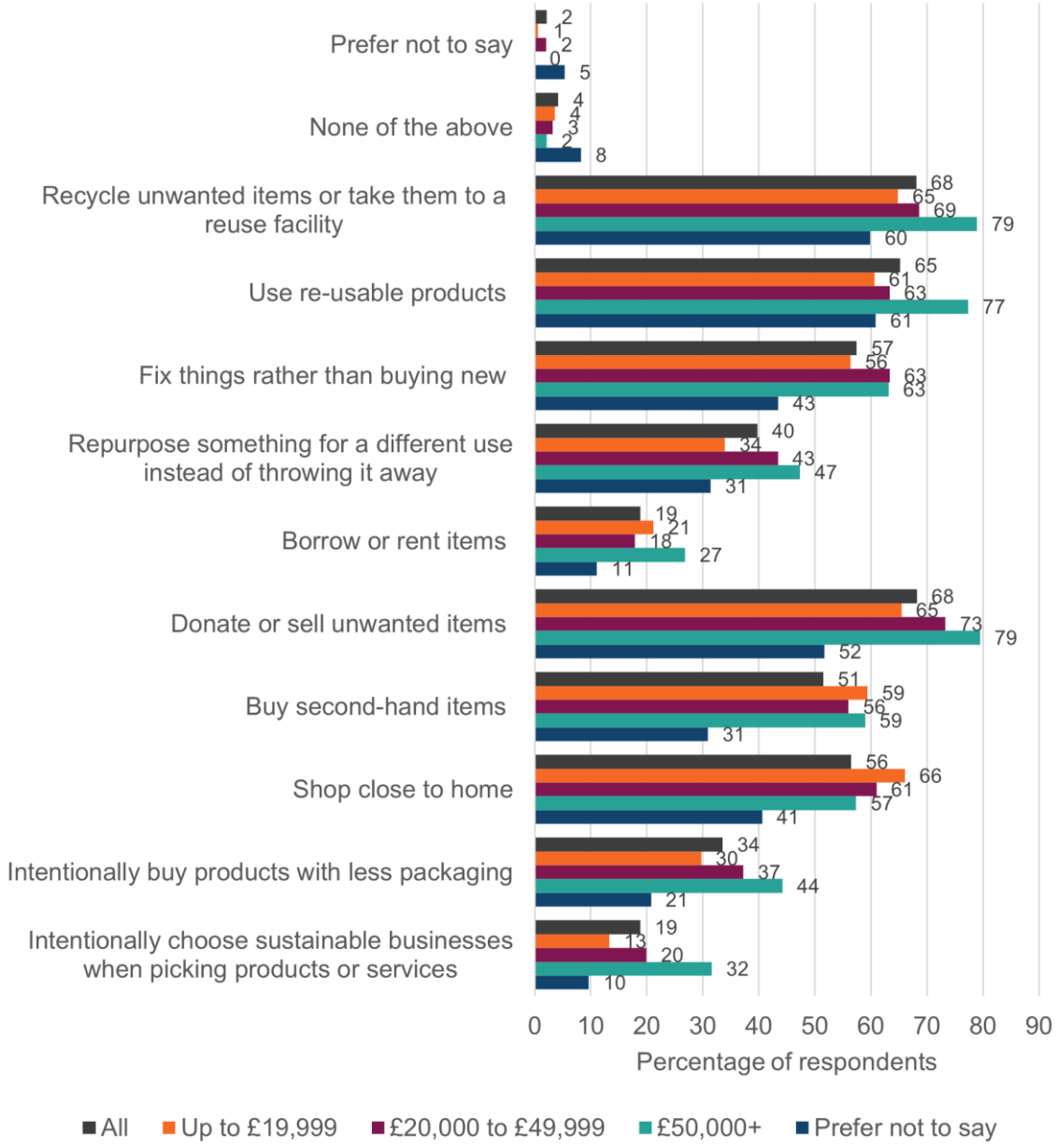


Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Prefer not to say' excluded from Age response. Base = 938 (18 to 34 = 182, 35 to 44 = 168, 45 to 54 = 149, 55 to 64 = 194, 65+ = 245)

6.6 The response by income is shown in Figure 6.3. Respondents who preferred not to state their household income had the lowest response proportions for all categories.

A greater proportion of respondents with higher household income were undertaking sustainable practices than those with the lowest household income. The exception to this was shopping close to home (66% of respondents with a household income up to £19,999 did this, compared to 57% with a household income greater than £50,000), buying second hand items (59% of those with a household income up to £19,000, compared to 59% of those with an income greater than £50,000).

Figure 6.3: Sustainable practices by household income -'Now we'd like to ask you about things you might do in your daily life. Please answer for yourself, not your household. Do you do any of the following?'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' excluded from Household income response. Base = 903 (Up to £19,999 = 165, £20,000 to £49,999 = 341, £50,000+ = 190, Prefer not to say = 207)

Daily life: summary

6.7 Respondents were asked what sustainable practices they undertook in daily life.

6.8 The three most common practices for all respondents were donating or selling unwanted items, recycling unwanted items, and using reusable products. Female respondents undertook more sustainable practices than male respondents.

6.9 For almost all of the sustainable practices, a greater proportion of respondents with higher household income were undertaking them in comparison to those with lower household income. Respondents who preferred not to state their household income had the lowest response proportions for all sustainable practices. This group of respondents were typically older and owned their own accommodation.

7. Travel

7.1 Respondents were asked about travel behaviour.

Vehicle availability

7.2 Respondents were asked how many vehicles their household regularly had access to. 51% of households had access to one car, 28% of households had access to two cars, and 16% of households did not have access to a car.

7.3 34% of respondents with a household income of up to £19,999 did not have access to a car, compared to 3% of respondents whose household income was £50,000 or above (Table 7.1).

Table 7.1: Household access to car by household income – 'How many vehicles does your household have regular access to? Car'

No. of cars	All	Up to £19,999	£20,000 to £49,999	£50,000+	Prefer not to say
0	16%	34%	11%	3%	19%
1	51%	48%	54%	41%	57%
2	28%	15%	29%	48%	19%
3+	4%	1%	5%	8%	3%
Don`t know	0%	1%	1%	0%	0%
Prefer not to say	1%	1%	1%	1%	2%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all, 'Don't know' excluded from Household income response. Base = 903 (Up to £19,999 = 165, £20,000 to £49,999 = 341, £50,000+ = 190, Prefer not to say = 207)

7.4 45% of respondents who were unemployed did not have access to a car, compared to 10% of respondents who were employed.

7.5 Hybrid vehicles were available to 12% of all households, and electric vehicles available to 5%. 66% of respondents with access to electric cars were able to charge them at home.

7.6 Of households with access to at least one car /van, the availability of hybrid and electric vehicles increased with increasing household income (Table 7.2).

Table 7.2: Access to hybrid and electric vehicles by income for households with access to at least one car / van – 'Of the vehicles your household has access to, how many are electric and/or hybrid?'

Vehicle Type	All	Up to £19,999	£20,000 to £49,999	£50,000+	Prefer not to say
Hybrid	13%	10%	9%	20%	13%
Electric	4%	4%	4%	9%	1%

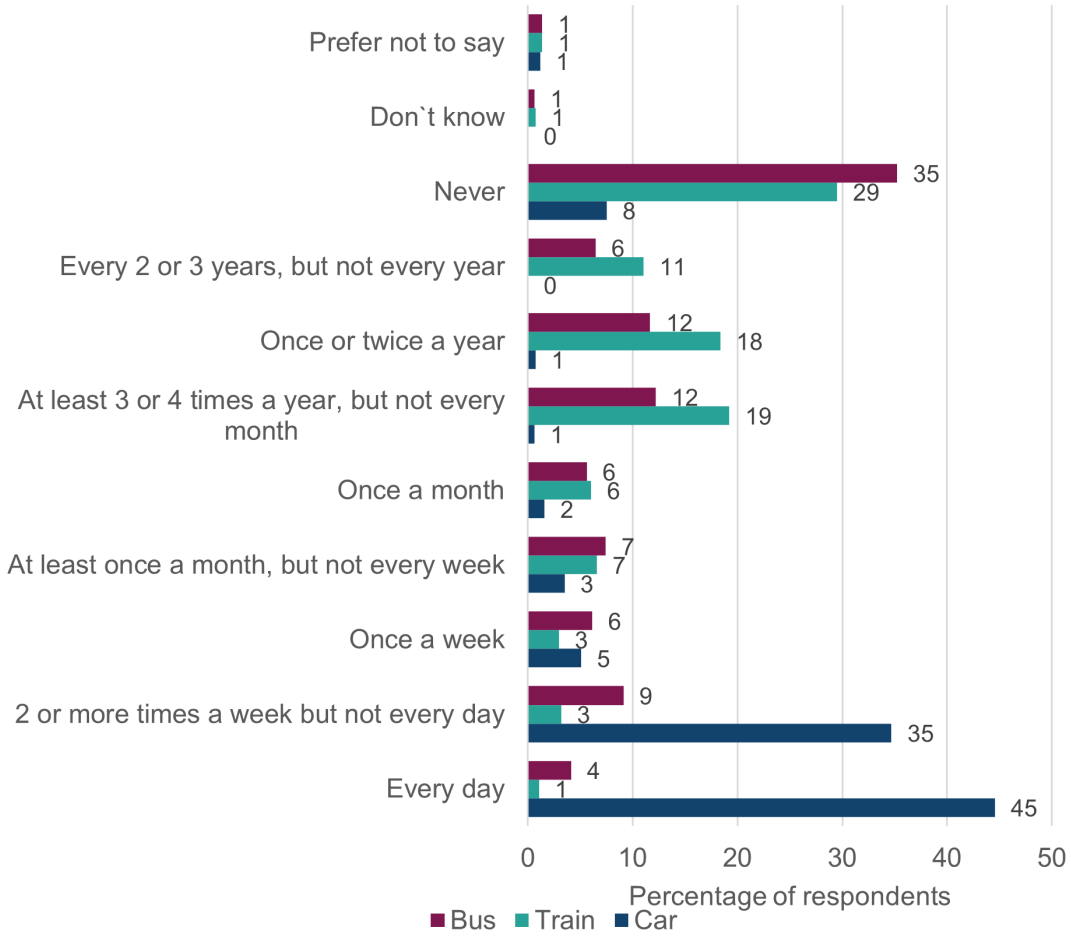
Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked to households with access to at least one car / van. 'Don't know' excluded from Household income response. Base = 763 (Up to £19,999 = 110, £20,000 to £49,999 = 303, £50,000+ = 184, Prefer not to say = 166)

Travel by mode

Car, train and bus

7.7 The frequency of travel by car, train and bus is given in Figure 7.1.

Figure 7.1: Frequency of travel by car, train and bus – 'How often do you use each of the following to travel from place to place?'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all, no exclusions. Base = 943

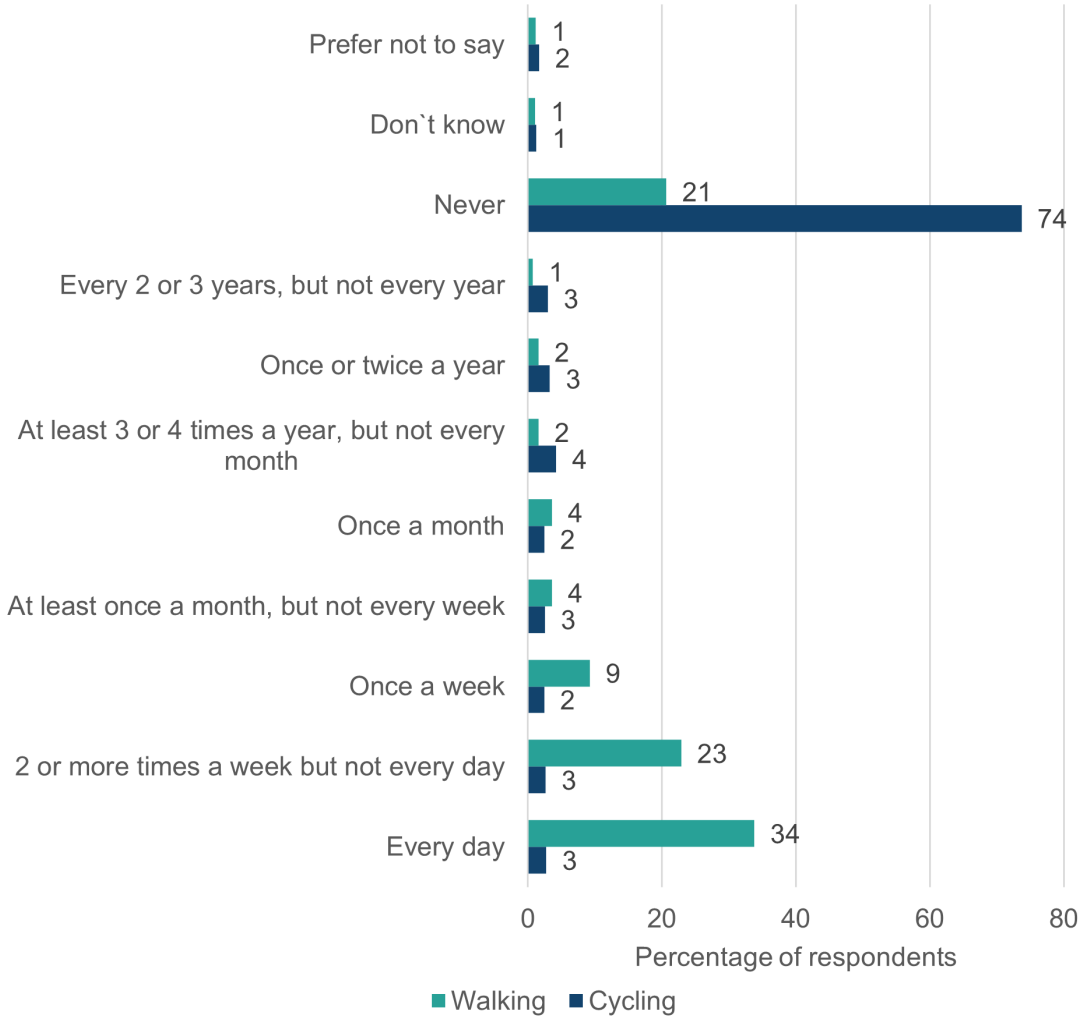
7.8 45% of respondents said the used a car every day, with 35% using a car two or more times per week but not every day.

7.9 1% of respondents said they used the train every day, and 3% used the train 2 or more times per week but not every day. For buses, 4% of respondents used them every day, and 9% used them 2 or more times per week but not every day. 29% of respondents said they never used trains, and 35% of respondents said they never used buses.

Cycling and walking / using wheelchair

7.10 The frequency of travel by cycling (standard bicycle) and walking / using wheelchair is given in Figure 7.2.

Figure 7.2: Frequency of travel by bicycle (standard) and walking / using wheelchair – 'How often do you use each of the following to travel from place to place?'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all, no exclusions. Base = 943

7.11 For cycling (on a standard bicycle), 3% of respondents cycled every day, with 3% cycling 2 or more times per week but not every day, and 2% cycling once per week. 13% of male respondents said they cycled at least once a week, compared to 4% of female respondents.

7.12 34% of respondents said they walked every day to travel from place to place (excluding leisure walks such as walking the dog), and 23% walked 2 or more times per week but not every day. 21% of respondents said they never walked from place to place.

7.13 10% of respondents whose household income was £50,000 or above cycled at least once a week, compared to 8% of respondents whose household income was up to £19,999 or between £20,00 and £50,000, and 5% of respondents who preferred not to state their household income (Table 7.3).

Table 7.3: Frequency of cycling (standard bicycle) at least once a week by income - How often do you use each of the following to travel from place to place? Bicycle (standard)

Frequency	All	Up to £19,999	£20,000 to £49,999	£50,000+	Prefer not to say
At least once a week	8%	8%	8%	10%	5%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' excluded from Household income response. Base = 903 (Up to £19,999 = 165, £20,000 to £49,999 = 341, £50,000+ = 190, Prefer not to say = 207)

7.14 Respondents aged 65 and above said they cycled the least of all age groups, with 84% saying they never cycled (Table 7.4).

Table 7.4: Frequency of never cycling (standard bicycle) by age - How often do you use each of the following to travel from place to place? Bicycle (standard)

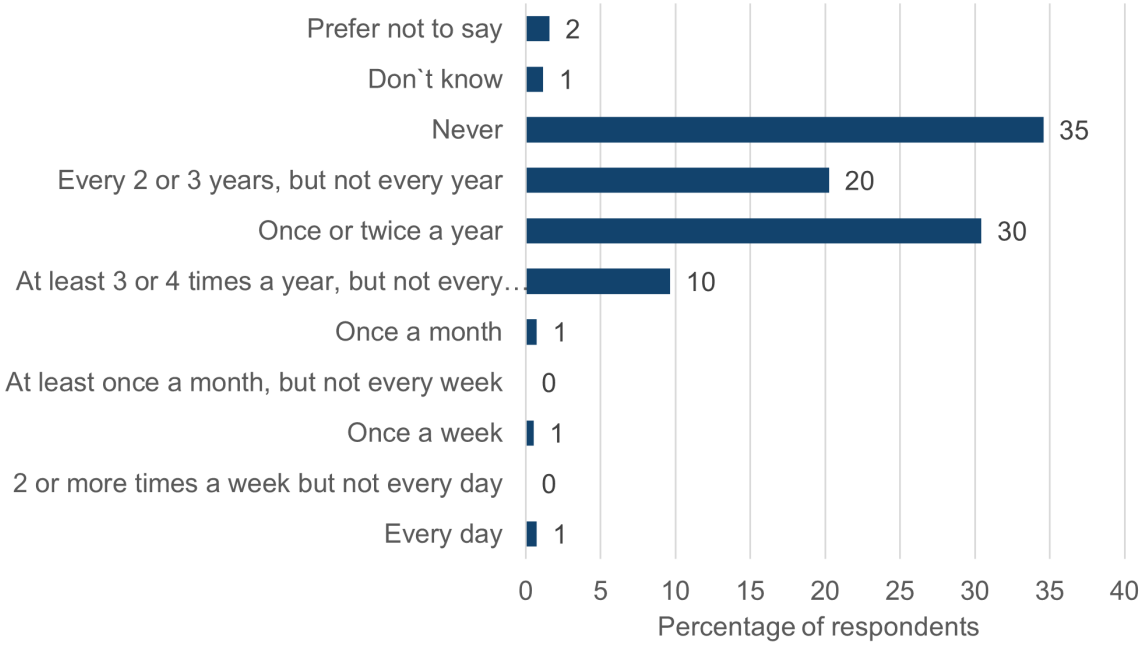
Frequency	All	18 to 34	35 to 44	45 to 54	55 to 64	65+
Never	74%	66%	67%	68%	78%	84%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Prefer not to say' excluded from Age response. Base = 938 (18 to 34 = 182, 35 to 44 = 168, 45 to 54 = 149, 55 to 64 = 194, 65+ = 245)

Plane

7.15 Respondents were asked how often they travelled by plane. 35% of respondents said they never use a plane to travel, with 20% using a plane every 2 or 3 years, and 30% using a plane once or twice a year (Figure 7.3).

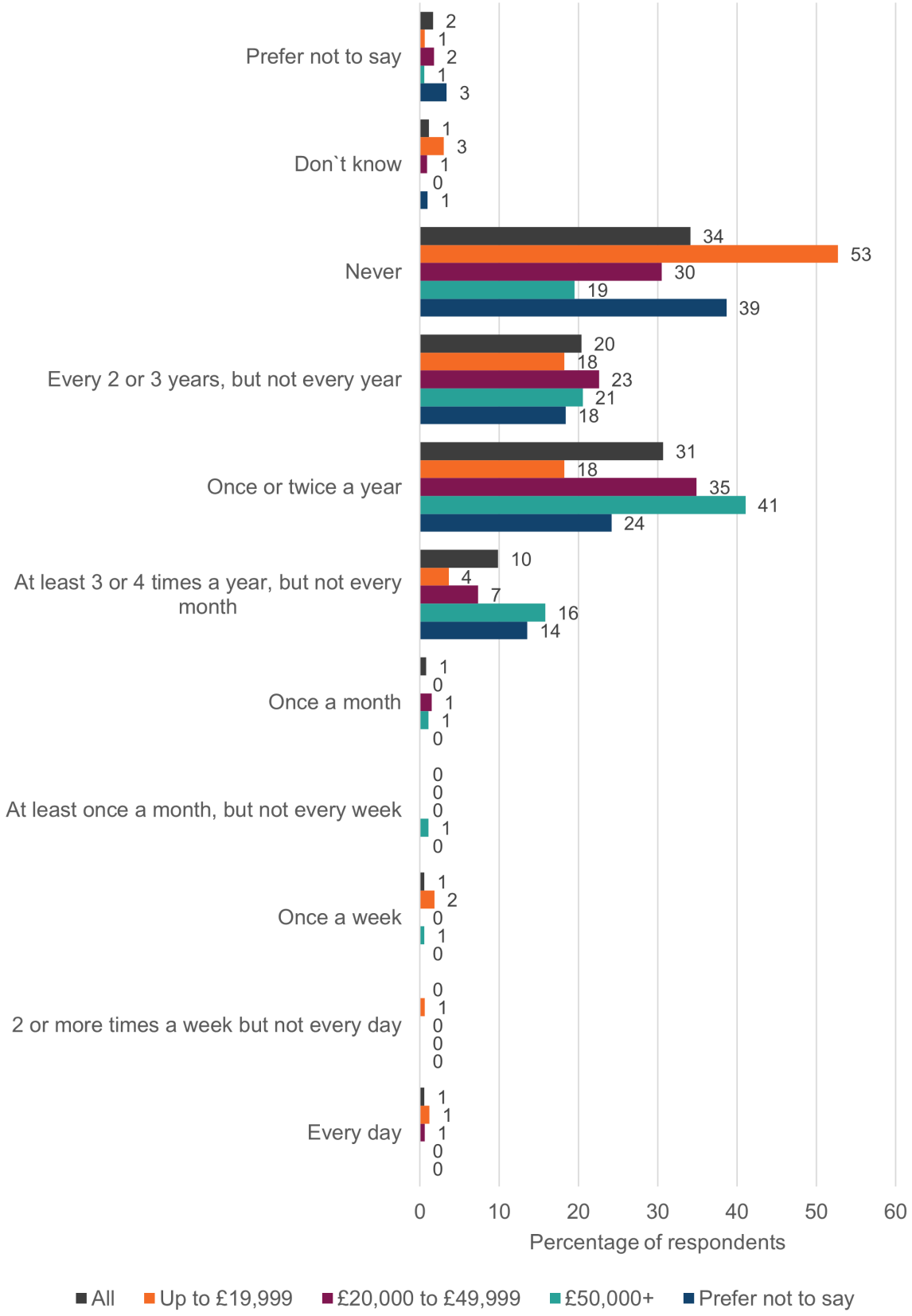
Figure 7.3: Frequency of travel by plane – 'How often do you use each of the following to travel from place to place? (Plane)'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all, no exclusions. Base = 943

7.16 53% of respondents whose household income was up to £19,999 said they never travelled by plane compared to 19% of respondents whose household income was £50,000 and above (Figure 7.4). 41% of respondents whose household income was £50,000 and above travelled by plane once or twice a year compared to 18% of respondents whose household income was up to £19,999. For travelling by plane 3 or 4 times per year the same household income group comparison was 16% to 4%.

Figure 7.4: Frequency of travel by plane by income – 'How often do you use each of the following to travel from place to place? (Plane)'

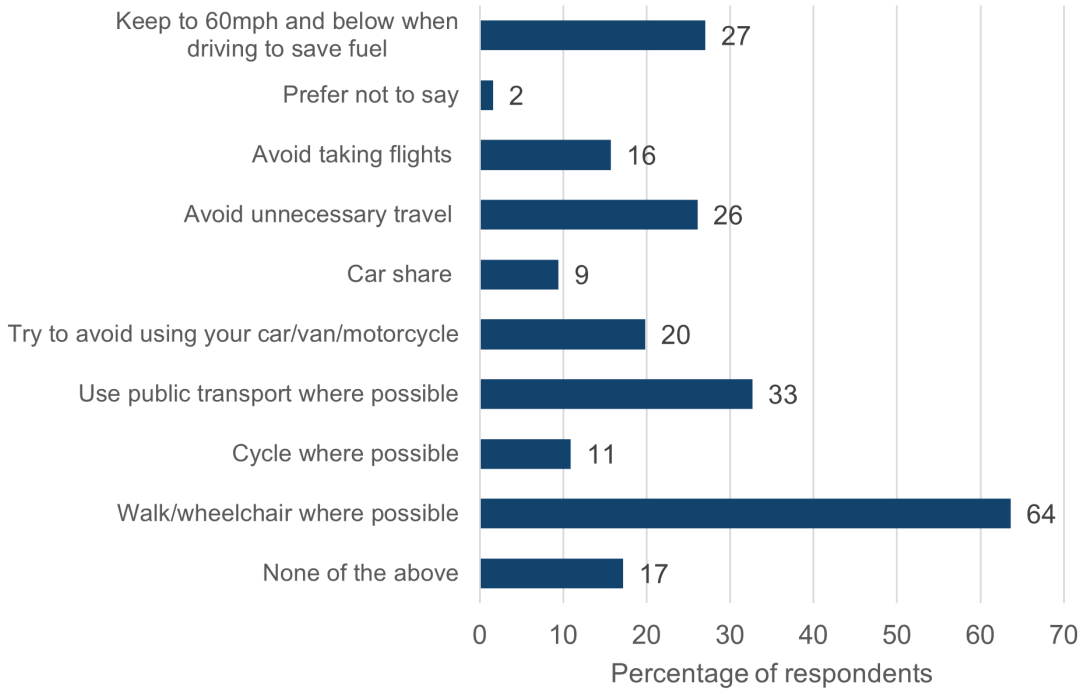


Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' excluded from Household income response. Base = 903 (Up to £19,999 = 165, £20,000 to £49,999 = 341, £50,000+ = 190, Prefer not to say = 207)

Sustainable travel behaviour

7.17 Respondents were asked about their travel behaviour. The most common travel practice was walking or using a wheelchair where possible (64%). The least common practices were car sharing (9%) and cycling where possible (11%). 17% of respondents did not undertake any of the sustainable travel practices indicated in the survey (Figure 7.5).

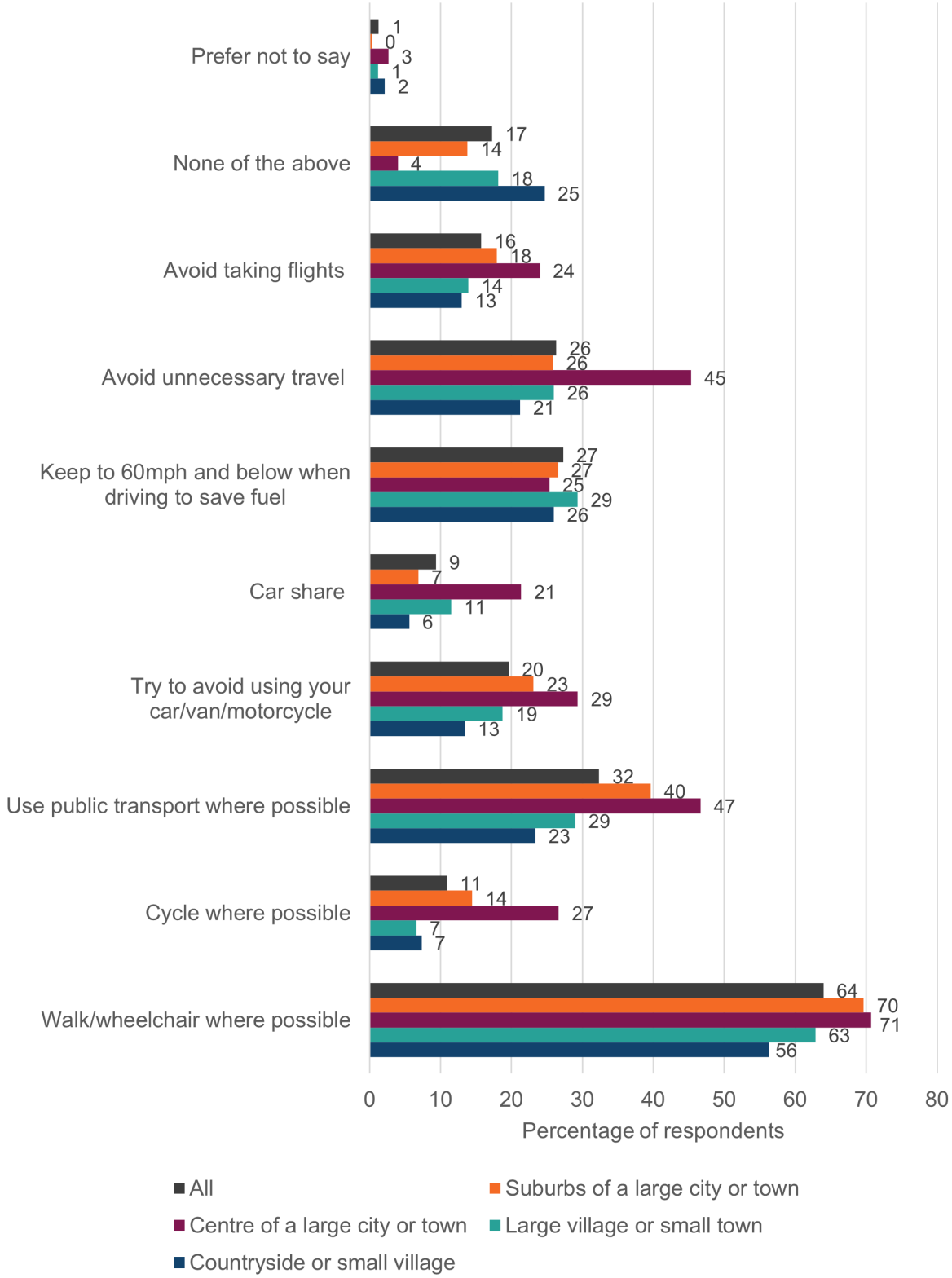
Figure 7.5: Sustainable travel practices – 'Do you do any of the following when travelling from place to place?'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all, no exclusions. Base = 943

7.18 A lower proportion of respondents who lived in the countryside or a small village were undertaking sustainable travel practices than those living in other area types. The exception to this was cycling where possible and keeping to 60mph and below when driving to save fuel, where those in the countryside or small village were similar to those in other area types (Figure 7.6).

Figure 7.6: Sustainable travel practices by area type – 'Do you do any of the following when travelling from place to place?'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded from area type response. Base = 927 (Suburbs = 290, Centre = 75, Large Village = 331, Countryside = 231)

Holiday travel

7.19 Respondents were asked how many holidays they had been on in the last 12 months. 60% of respondents had at least one domestic holiday (Wales or rest of UK), 44% of respondents had at least one short distance holiday (Europe), and 15% of respondents had at least one long distance holiday (Table 7.5).

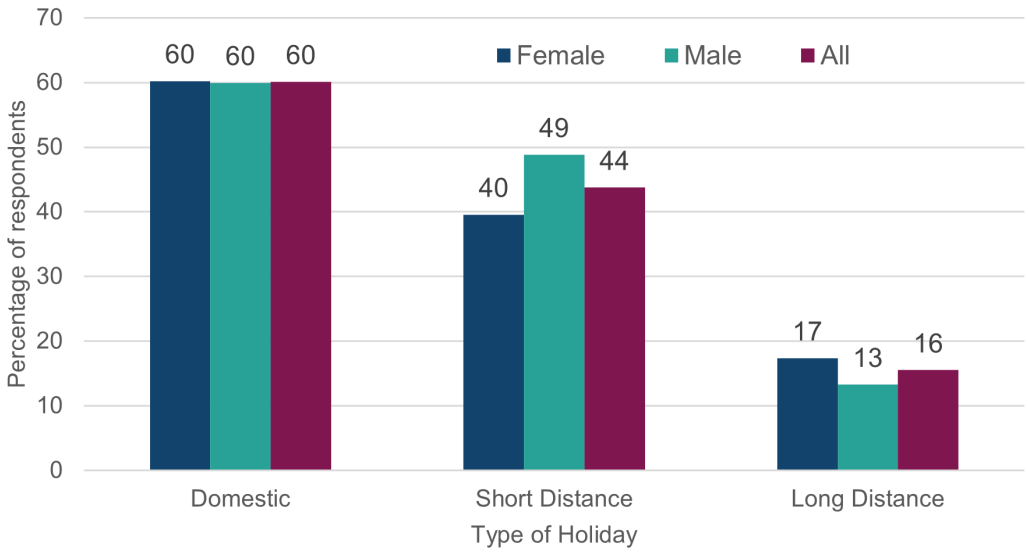
Table 7.5: Proportion of respondents taking holidays - In the past 12 months, how many of the following types of holidays, if any, have you taken?

Holiday Type	Three or more	Two	One	None	Don`t know	Prefer not to say
Domestic	18%	17%	25%	38%	1%	1%
Short Distance (e.g. Europe)	7%	13%	24%	55%	0%	1%
Long Distance	1%	4%	10%	83%	1%	1%

Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all, no exclusions. Base = 943

7.20 60% of both female and male respondents said they had taken at least one domestic holiday in the last 12 months (Figure 7.7). However male respondents said they took more short distance holidays compared to female respondents (40% to 49% respectively) and female respondents took more long distance holidays than male respondents (17% to 13% respectively).

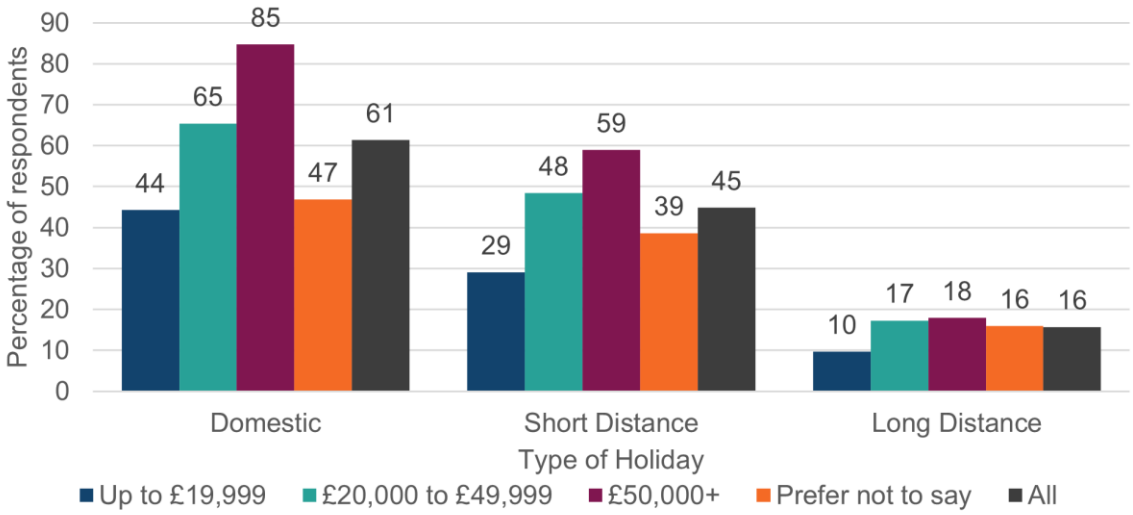
Figure 7.7: Proportion of respondents talking at least one holiday in the last 12 months by gender – 'In the past 12 months, how many of the following types of holidays, if any, have you taken?'



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' and 'Prefer not to say' excluded from Gender response. Base = 935 (Female = 513, Male = 422)

7.21 Respondents whose household income was £50,000 and above had taken more holidays in the last 12 months than respondents from other household income groups. 85% of respondents whose household income was £50,000 and above had taken at least one domestic holiday and 18% at least one long distance holiday (Figure 7.8). This compares to 44% and 10% respectively of respondents whose household income was up to £19,999.

Figure 7.8: Proportion of respondents talking at least one holiday in the last 12 months by income - In the past 12 months, how many of the following types of holidays, if any, have you taken?



Source: Climate Change Perceptions and Actions Survey, Wave 2 2024. Multiple choice. Questions asked of all. 'Don't know' excluded from Household income response. Base = 903 (Up to £19,999 = 165, £20,000 to £49,999 = 341, £50,000+ = 190, Prefer not to say = 207)

7.22 For domestic holidays, 87% of respondents did not travel by plane to reach their holiday destination. For short distance holidays,11% of respondents did not travel by plane.

Travel: summary

7.23 Respondents were asked about travel behaviour.

7.24 The majority of all respondents lived in a household with access to at least one vehicle. A lower proportion of respondents who had a household income of up to £19,999 or were unemployed had access to a vehicle in comparison to other groups. Respondents with higher household incomes had access to more vehicles, more hybrid and electric vehicles, cycled more frequently, travelled by plane more often and took more holidays than other respondents.

7.25 Respondents who lived in the countryside or a small village were less likely to have adopted many of the sustainable travel practices in comparison to than those living in other area types.

8. Conclusion

8.1 The second quantitative survey of six waves was undertaken in February and March 2024. A dataset was collected that was broadly representative of the population of Wales.

8.2 Survey outputs have been detailed within this report, highlighting any sub-groups of the population with differing attitudes or behaviours to certain questions. The outputs will be compared to previous and subsequent waves to identify any changes in attitudes or behaviours.

Reflections and considerations for interpretation of the outputs

8.3 Several methodological and analytical considerations may impact the interpretation of the findings.

8.4 Firstly, the survey's analysis was exclusively bivariate, meaning it only considered the relationship between two variables at a time. This approach does not capture how multiple factors may interact to influence individuals' attitudes and behaviours around climate change. It is possible that observed associations between demographic variables and climate change attitudes or behaviours could be explained by confounding variables. Multivariate analysis would provide a more nuanced understanding of the determinants of climate change perceptions and actions, and would allow controlling for confounding relationships.

8.5 Furthermore, the survey results were not weighted to reflect the broader population. This means the findings may not be representative of the general public's attitudes and behaviours.

8.6 Another consideration is the reliance on the early survey waves for drawing conclusions. The absence of further waves increases the risk that any observed relationships could be due to chance, and limits the ability to track changes over time or to affirm the stability of the observed attitudes and behaviours. Repeated measurements, as will be provided from future survey waves, are required to determine whether the identified relationships are stable or subject to fluctuation over time.

8.7 Whilst the sample was broadly representative of the public in Wales based on key sample demographics, the survey exhibited minor differences with census data for location, occupation, tenure, and property type. This may have stemmed, in part,

from self-selection bias. This imbalance in the sample composition could lead to biased findings, as the views and behaviours of overrepresented groups may disproportionately influence the results, thus not accurately reflecting the diversity of the population.

8.8 Conversely, the sample size of some marginalised groups, such as certain ethnic minorities, was too low in this survey to provide generalisable insights. Other complementary methods may be required in the future to further understanding around those most likely to be impacted by climate change and climate policies.

8.9 Additionally, there is a potential for bias in the respondents' answers. Participants may, consciously or unconsciously, alter their responses due to ingrained biases or preconceptions. This could obscure the true nature of public attitudes and behaviours toward climate change.

8.10 Lastly, the survey's findings may have been influenced by the media environment. Items that were topical in the media at the time of the survey could have affected the strength of feeling expressed by respondents, potentially exaggerating certain attitudes or concerns in ways that do not accurately represent long-term views. As highlighted above, future waves will help identify whether this was the case.