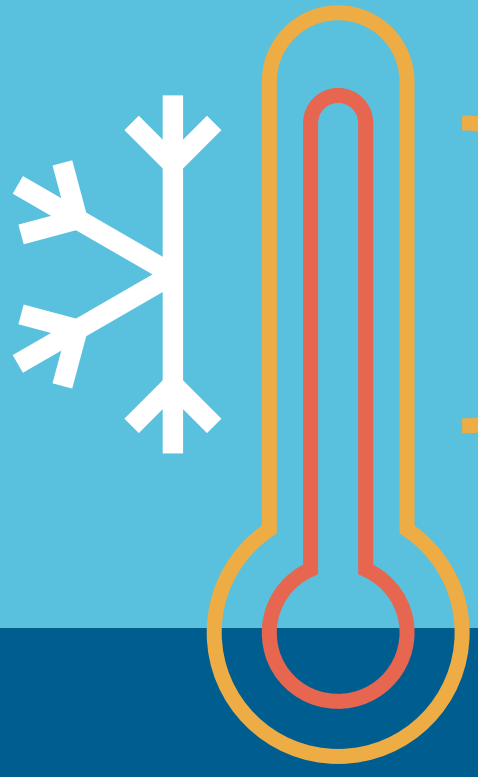




Climate Change's Four Irelands: An Audience Segmentation Analysis

Climate Change in the Irish Mind: Wave 2, Report 2



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1. Executive Summary:

Climate Change's Four Irelands

In 2021, the Irish Environmental Protection Agency (EPA) began a research program called Climate Change in the Irish Mind (CCIM). The EPA, in partnership with the Yale Program on Climate Change Communication (YPCCC) and the survey firm IPSOS B&A, carried out a nationally representative of climate change knowledge, attitudes, policy support, and behaviour among the Irish public.

This study led to two main publications: A main report called Climate Change in the Irish Mind: Wave 1, Report 1¹, and a segmentation report called Climate Change's Four Irelands: An Audience Segmentation Analysis, Wave 1, Report 2².

This publication: Climate Change's Four Irelands: An Audience Segmentation Analysis: Wave 2, Report 2 is an update of the initial segmentation report using data from the second wave of CCIM, which was carried out in 2023.

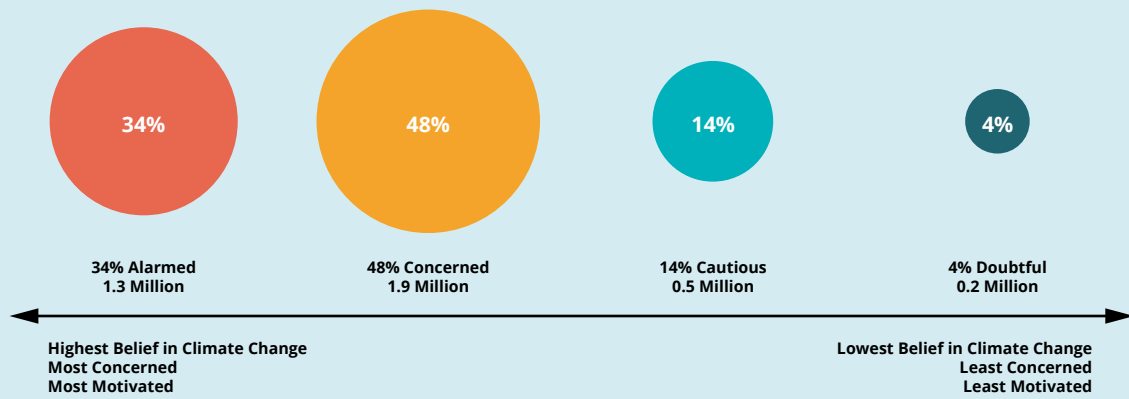
The structure of the Wave 2 segmentation report remains similar to the Wave 1 report, as a set of core questions were retained to maintain consistency between study waves. The audience segments described in the Wave 1 segmentation report were reproduced and the proportions of these audiences were found not to differ statistically from Wave 1. Updated descriptions of these audiences are provided below.

The Climate Change in the Irish Mind Wave 1 main report examined the responses of the Irish public as a whole. The Wave 1 segmentation report extended this analysis by identifying four distinct audiences based on views about climate change among the Irish public and examining the differences and similarities among them. The four climate audiences, which were found in similar proportions across both urban and rural settings, strongly differed on their knowledge, levels of worry, and willingness to take personal action on climate change. These audiences reflect a spectrum of views about climate change and are labelled as: The Alarmed, Concerned, Cautious and Doubtful.

1 Leiserowitz, A., Carman, J., Rosenthal, S., Neyens, L., Marlon, J., Desmond, M., Smith, S., Rochford, M. F., O'Mahony, J., and Reaper, L. (2021). Climate Change in the Irish Mind. New Haven, CT: Yale Program on Climate Change Communication.

2 Leiserowitz, A., Goldberg, M., Carman, J., Rosenthal, S., Neyens, L., Marlon, J., Finegan, S., Cotter, E., Desmond, M., Smith, S., Rochford, M. F., Quinlan, C., O'Mahony, D., O'Mahony, J., and Reaper, L. (2022). Climate Change's Four Irelands: An Audience Segmentation Analysis. New Haven, CT: Yale Program on Climate Change Communication.

The Wave 2 segmentation report confirms that the climate change audiences represent stable categories that persist in similar proportions of the population over time. These audiences maintained consistent outlooks between Waves 1 and 2. A new finding in this report highlights that large minorities across all audiences do not understand the human-caused nature of climate change. Additionally, a new climate literacy topic reveals systematic biases in how all audiences understand the contributions of different behaviours to an individual's carbon footprint. Specifically, all audiences underestimated the carbon footprint impact of their dietary choices and overestimated the impact of behaviours such as reusing shopping bags and recycling.



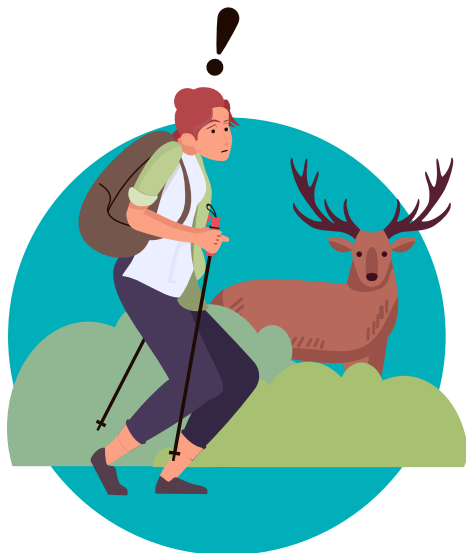
Climate Change's Four Irelands: An Audience Segmentation Analysis



The **Alarmed** (34% of the Irish population) strongly think that climate change due to human activity is a real and immediate threat. They strongly support climate mitigation and adaptation policies and are the most knowledgeable audience about factual climate change information. The Alarmed are most likely to be highly educated, urban, female, and employed.



The **Concerned** (48% of the Irish population) are the largest audience. They are convinced that climate change is a serious issue, but when compared to the Alarmed are less worried about it and view it as a less immediate threat. They support policies addressing climate change and adaptation and have a moderate command of factual information about climate change. The Concerned are evenly split on gender and are most likely to be urban, highly educated, and employed.



The **Cautious** (14% of the Irish population) think climate change is happening but are less sure of the causes and are less likely to think it will affect them personally. They support climate-related policies and have the weakest understanding of factual information on climate change. The Cautious are most likely to have moderate levels of education, be male, older, and retired.



About half of the **Doubtful** (4% of the Irish population) think climate change is happening, but with less certainty than other audiences, while smaller proportions say climate change is not happening or say that they don't know. The Doubtful are overwhelmingly not worried about climate change, and do not perceive it as a threat. They partially support climate-related policies but strongly oppose bans or increased taxation on home or transport fuels. They have a moderate grasp on factual information about climate change. They are most likely to have moderate levels of education, be male, over 45 years of age and employed.

2. Key Findings

2.1 Climate change awareness and beliefs

A majority within each climate change audience agrees that climate change is happening. While awareness of climate change is very high, there are strong differences in what the audiences think is causing it.

Three quarters of the Alarmed and about half of the Concerned correctly understand that climate change is “mostly caused by human activities.” However about one in five of the Alarmed, and about two in five of the Concerned incorrectly say that climate change is “caused about equally by human activities and natural changes.” A significant proportion of the audiences most engaged with climate change do not understand that human behaviour is the main cause.

The Cautious and Doubtful are more likely to misunderstand the causal role human activities play in climate change. They are more likely to think that climate change is “caused about equally by human activities and natural changes,” or that is “caused mostly by natural changed in the environment.”

2.2 Worry about harms of climate change

Worry about climate change was a factor used to classify the audiences. The Alarmed and Concerned audiences have the highest levels of worry about climate, with lower levels among the Cautious and Doubtful.

About seven in ten of the Alarmed and about half of the Concerned perceive climate change as causing harm right now to their communities or themselves, with a majority perceiving at least moderate harm. The other audiences are less worried and perceive little to no climate change risks to their communities or themselves.

2.3 Worry about impacts of climate change

The Alarmed and Concerned overwhelmingly think climate change is affecting weather in Ireland, while fewer of the Cautious and Doubtful think so.

Water pollution, severe storms and air pollution are the top local environmental concerns across all audiences. The Alarmed express the highest level of worry about environmental hazards, while worry steadily declines across other groups.



2.4 Climate change scepticism

Climate change scepticism remains very rare in Ireland. Only a small fraction of the Cautious (8%), and a minority of the Doubtful (40%) think climate change is not happening.

Despite overall agreement that climate change is happening, as noted above, distinct differences in opinion remain between audiences on the causes of climate change and its potential impacts.

2.5 Engagement with climate change

Personal importance of climate change was one of the factors used to classify the audiences. Accordingly, almost all of the Alarmed say that climate change is either “extremely” or “very” personally important, compared to just over half of the Concerned. The Cautious and Doubtful place much less importance on climate change.

While a majority of all audiences hear about climate change in the media at least weekly, the Alarmed are the most likely to “often” discuss climate change with family and friends.

2.6 Outlook on climate change policy

Majorities of the Alarmed, Concerned and Cautious think that: “We have a responsibility to act on climate change and Ireland should do what it can to reduce its own greenhouse gas emissions.” However, a majority of the Doubtful think “Ireland is too small to make a difference in climate change.”

The audiences also have different outlooks on the economic and social consequences of taking climate action. A majority of the Alarmed and Concerned think taking action to reduce climate change will “improve economic growth and create jobs” and will “improve Ireland’s quality of life.” The Cautious and Doubtful envision less optimistic economic and social outcomes from climate action.

2.7 Support for climate policy

Majorities of the Alarmed and Concerned audiences think climate change should be a “very high” or “high” priority for the Government of Ireland, with a much lower priority given to climate change by the Cautious and Doubtful.

Many climate action policies aimed at helping Ireland achieve greenhouse gas reduction targets have extremely high support across all audiences, with particularly high support for grants to install cleaner and more efficient heating systems, investment in public transport infrastructure, and increased investment in forestry to offset greenhouse gas emissions from agriculture.

2.8 Framing of climate policy

Policies that are framed as redistributive and protective of those in lower socioeconomic groups (e.g., using carbon tax revenue for energy efficiency grants to low-income households) receive the highest levels of support across all audience segments, even among the Cautious and Doubtful audiences.

All four segments are less likely to support policies that are framed as restrictive bans or cuts (e.g., higher taxes on cars that use petrol and diesel, reducing the size of the national cattle herd, or banning peat, coal, and oil for home heating purposes), and majorities of the Cautious and Doubtful oppose those policies.

2.9 Consumer behaviour and climate change

Large proportions of the population report engaging in personal actions to benefit the environment in the last 12 months. For example, a majority of the Alarmed and about a third of the Concerned said that they had “occasionally” or “often” avoided eating red meat for environmental reasons. Very few of the Cautious or Doubtful took similar actions.

Majorities of the Alarmed and Concerned reported purchasing goods or services at least once in the last 12 months from companies that took steps to reduce climate change with small proportions of the Cautious and Doubtful doing so.

Additionally, a majority of the Alarmed and about four in ten of the Concerned reported punishing companies opposing climate change measures by *NOT* buying their products, with very small proportions of the Cautious or Doubtful doing so.

2.10 Climate change attitudes in urban and rural areas

There is no evidence for an urban/rural divide in climate change attitudes. The four climate change audiences are found in similar proportions across both urban and rural settings. People from cities, towns, villages, and rural areas hold diverse views on climate change, with the distribution of the climate change audiences similar among urban and rural residents.

2.11 Engaging the Cautious and Doubtful through trusted messengers

An overwhelming majority of the Alarmed and Concerned understand that most scientists agree that climate change is happening. There is much less certainty about the scientific consensus among the Cautious and Doubtful audiences.

There are opportunities to inform those who are uncertain about the scientific consensus on climate change using trusted messengers. Across all audiences, the most strongly trusted messengers on climate change are scientists, the Irish EPA, educators, family and friends and TV weather reporters.

2.12 Climate Literacy

The Alarmed are the audience that feel most knowledgeable about climate change, followed by the Doubtful. Actual performance differences between audiences on factual climate change questions were extremely small.

All audiences exhibited similar biases in estimating the contribution of behaviours to the carbon footprint of an average person. A majority of participants could identify large contributors such as avoiding flights of 6 hours or more or switching to energy from renewable sources. However, they typically underestimated contributions of dietary choices, and heavily overestimated small contributions from behaviours like re-using shopping bags.

Large minorities across all audiences, including the Alarmed and Concerned did not understand the large carbon footprint impact of avoiding flights or eating a plant-based diet, which demonstrates the necessity of public education on climate literacy.



3. Introduction

3.1 Climate Change in the Irish Mind

Engaging the public on the topic of climate change requires the messenger to recognise individual and group differences in beliefs and attitudes about the topic along with multiple psychological³, historical⁴, cultural⁵, and political influences⁶.

Large scale international surveys such as Eurobarometer, find that climate change ranks extremely highly among a long list of potential economic, political, and environmental concerns for Europeans. In 2021⁷, climate change was ranked as the issue of highest concern among 11 global issues such as “the spread of infectious disease,” and “armed conflict.” In August 2023⁸, following a period of severely increased energy costs and ongoing armed conflict in Ukraine, climate change’s ranking was still third out of 11 items.

Corresponding research from the Climate Change in the Irish Mind main reports at Wave 1 from 2021, and Wave 2 from 2023 confirmed that in Ireland, belief in the reality of climate change is extremely high. The latest Wave 2 report revealed that nearly all Irish people (95%) think climate change is happening and 92% believe it is caused, at least in part, by human activities. However, when broken down further, 53% correctly believe that climate change is caused mostly by human activities, while 39% erroneously believe that climate change is about equally caused by human activities and natural changes.

A large majority of the Irish public (80%) accept that most scientists think that climate change is happening. Irish people are also highly engaged on the topic of climate change, with 89% saying that climate change is important to them personally and a similar proportion (81%) are worried about climate change.

While the international data shows that the salience of climate change as a media topic has remained extremely high over the last three to four years, it is clear that public attitudes towards climate change and the urgency of climate action can be eclipsed by current events, with the potential for people to react to urgent current issues such as economic difficulties and ignore important long-term trends such as climate change.

Ongoing study is required to understand how the motivations of the Irish population change over time under the influence of economic and social factors, how these changes impact people’s engagement with the issue of climate change, and how beliefs, attitudes, and perceptions relate to the public’s willingness to support climate action policy, or to take action on climate change themselves.

Examples of these longer-term shifts in attitudes towards climate change were found in response to the experience of economic difficulties in the CCIM Wave 2 data. The support for two descriptions of climate action policies that proposed banning or taxing fossil fuels was weaker in 2023 compared to 2021. The overall proportion of the Irish public supporting “banning peat, coal, and oil for home heating” has decreased by nine percentage points to 59% since 2021, and overall support for “higher taxes on cars that use petrol or diesel” has decreased by 13 percentage points to 51%.

3 Kaiser, F. G., & Byrka, K. (2011). Environmentalism as a trait: Gauging people’s prosocial personality in terms of environmental engagement. *International Journal of Psychology*, 46(1), 71-79.

4 White Jr, L. (1967). The historical roots of our ecologic crisis. *Science*, 155(3767), 1203-1207.

5 Collado, S., Evans, G. W., & Sorrel, M. A. (2017). The role of parents and best friends in children’s pro-environmentalism: Differences according to age and gender. *Journal of Environmental Psychology*, 54, 27-37.

6 Czarnek, G., Kossowska, M., & Szwed, P. (2021). Right-wing ideology reduces the effects of education on climate change beliefs in more developed countries. *Nature Climate Change*, 11(1), 9-13.

7 Eurobarometer 513, July 2021: <https://europa.eu/eurobarometer/api/deliverable/download/file?deliverableId=75839>

8 Eurobarometer 538, August 2023: https://climate.ec.europa.eu/system/files/2023-07/ie_climate_2023_en.pdf



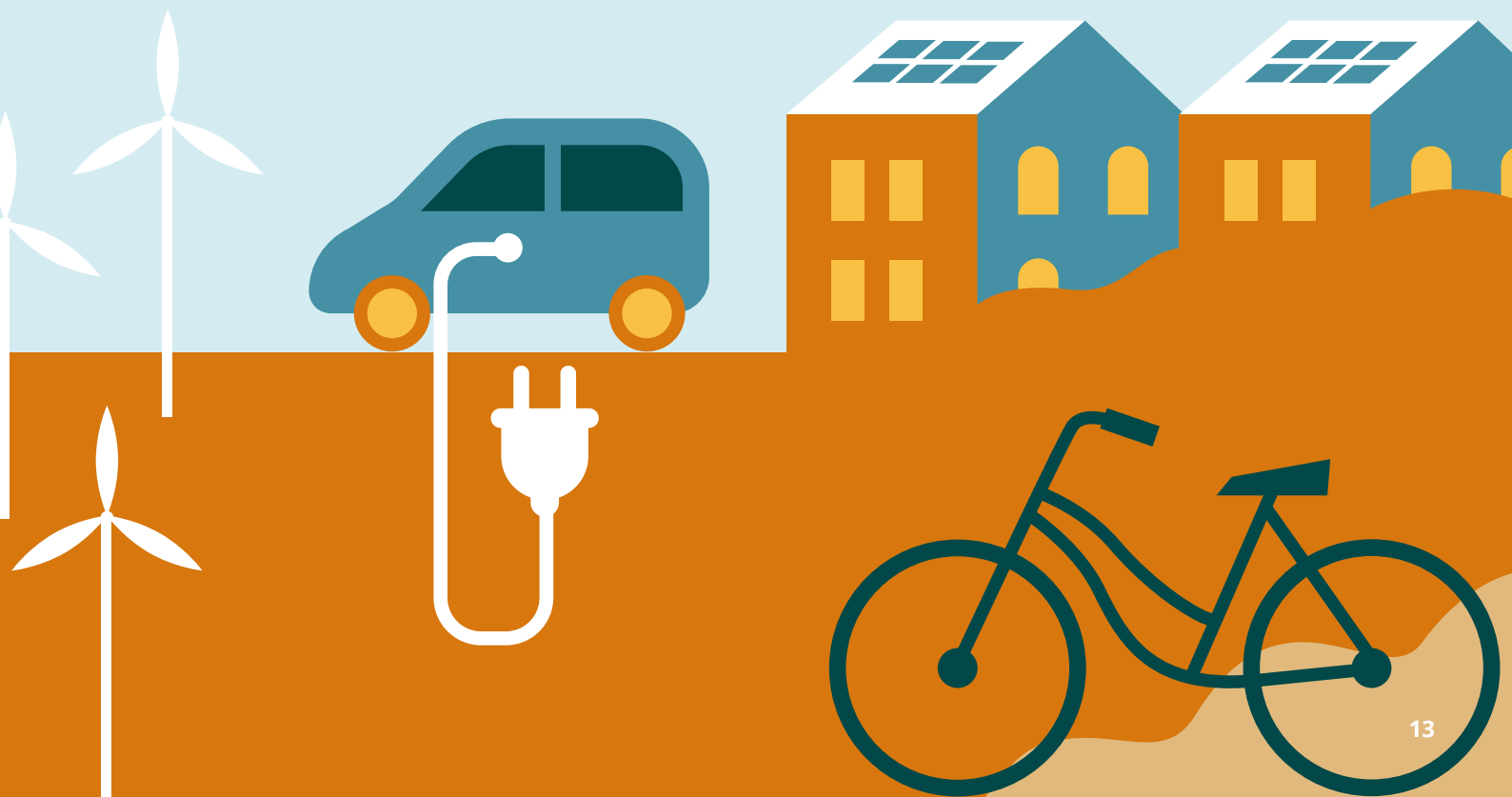
The Climate Change in the Irish Mind (CCIM) project aims to engage in this ongoing research in Ireland to track broad shifts in public attitudes about climate change and on climate action policy. The project was undertaken in 2021 by the Environmental Protection Agency (EPA) and the Yale Program on Climate Change Communication in support of the National Dialogue on Climate Action. The current segmentation report aims to explore some of the above issues across four climate change audiences in Ireland, each of which have their own distinct outlooks on the topic of climate change.

3.2 Study framework

The approach to this work is based on the established methodology of the “Global Warming’s Six Americas” project conducted by the Yale Program on Climate Change Communication and the George Mason University Center for Climate Change Communication⁹. The Global Warming’s Six Americas framework has been used by a variety of communicators, including scientists, educators, policymakers, government agencies, journalists, and advocates. Similar segmentation approaches have also been implemented in other countries, including Australia, India, Germany, Singapore, Indonesia, and now with two waves of the Climate Change in the Irish Mind Study in Ireland. The survey and reporting have been tailored to meet Ireland’s particular socio-economic context, adapting to Ireland’s ethnic and social make-up by using demographic measures that are compatible with standards set by the Central Statistics Office as appropriate.

A new set of questions have been added to Wave 2 in order to explore the topic of climate literacy in the Irish public, and a new demographic question explores “difficulty making ends meet in the last 12 months.” To keep the survey interview to a manageable length, a set of questions on climate change “media sources” and a set of questions on “political actions to limit climate change” which were asked in Wave 1 were not repeated in Wave 2. The topic-based blocks of questions are designed to be modular and may be re-inserted into the questionnaire at a future wave of CCIM. This allows a set of core questions to provide longitudinal consistency while modular questions allow exploration of topical climate change issues at each wave.

⁹ Leiserowitz, A., Roser-Renouf, C., Marlon, J., & Maibach, E. (2021). Global Warming’s Six Americas: A review and recommendations for climate change communication. *Current Opinion in Behavioral Sciences*, 42, 97-103. <https://doi.org/10.1016/j.cobeha.2021.04.007>



3.3 Audience segmentation

Audience segmentation is an approach that identifies different groups of people with shared characteristics for engagement and communication. A statistical technique called latent class analysis (LCA) is used to identify patterns in respondents' answers to climate change questions. These patterns identify groups of people who share a similar set of beliefs, attitudes, and behaviours. This can support prediction, explanation, and understanding of unique groups and can provide insight into how to craft more effective public communication strategies and activities¹⁰.

3.4 Project outputs

The outputs from the Climate Change in the Irish Mind research to date include:

CCIM Wave 1

- CCIM Wave 1, Report 1 "Climate Change in the Irish Mind" which provided topline survey results.
- CCIM Wave 1, Report 2 "Climate Change's Four Irelands" identified distinct audience segments within the Irish population and provided insights into how each segment responds to climate issues.
- An interactive mapping tool provided estimates of public climate change beliefs, attitudes, policy support and behaviour at the national, regional, and county levels.
- Four CCIM Insight reports expanded a selection of findings from Wave 1 in greater detail.

CCIM Wave 2

- CCIM Wave 2, Report 1 "Climate Change in the Irish Mind," which provided topline survey results, allowing an exploration of changing attitudes between 2021 and 2023.
- This report CCIM Wave 2, Report 2 Climate Change's Four Irelands.
- A forthcoming update to the mapping tool providing accurate estimates of public climate change beliefs, attitudes, policy support, and behaviour at the national, regional, and county levels.

3.5 This report

This segmentation report uses the data from the CCIM survey at Wave 2. The Wave 1 segmentation report previously identified four unique audiences within the Irish population that each respond to climate change in their own distinct way. The Wave 2 report confirms that these audiences represent stable categories that persist over time in the population and have remained consistent in their outlook. The audiences are discussed in detail in later sections, but are briefly identified as:

- The Alarmed
- The Concerned
- The Cautious
- The Doubtful

¹⁰ In the U.S. the analysis identified six unique "interpretive communities" who each respond to the issue of global warming in their own distinct ways; the "Six Americas," which represent a spectrum from those Alarmed about global warming to the Dismissive who do not think climate change is happening.

The report expands on the findings of the Wave 2 main report along eight key themes, with each theme broken down by audience segment. The eight themes are:

- Climate Change Beliefs
- Emotional Responses and Perceived Risks of Climate Change
- Personal and Social Engagement with Climate Change
- Impacts of Climate Change
- Climate Policies
- Climate-Related Behaviours
- Climate Literacy
- Demographics and Social Characteristics

Audience profiles are also presented in Appendix 3. The audience profiles present the same information as the main report text but arrange this information by audience instead of by topic and so aid the reader interested in a particular audience.

3.6 Uses of the project data and segmentation

The CCIM segmentation reports and associated audience profile information provides a useful framework and tool to help strategic communicators identify and understand their target audiences to engage the public more effectively in climate science and solutions.

Insights from the segmentation report support climate policy and decision makers, climate educators and communicators across Irish society, including government, agencies, local authorities, academic institutions, environmental organisations, businesses, scientists, and the media.

Successfully addressing the challenge of climate change requires a diversity of messages, messengers, and methods. Each must be tailored to meet the needs of different target audiences. The findings of the Climate Change in the Irish Mind project as a whole, and the Climate Change's Four Irelands segmentation reports are being used to inform and support national communications on climate change by providing public access to high-quality, timely and nationally representative information on public attitudes and behaviours about this topic.

The Climate Change in the Irish Mind segmentation reports and wider CCIM data are being used in:

- Formation of national climate change engagement strategies, targeting and communicating key messages.
- Development of policy briefs, opinion pieces and working papers on behaviours, actions, policy preferences towards climate change.
- Further data analysis through CCIM Insight reports which is revealing information on key sub-populations (e.g., vulnerable demographic groups, or those who might be most supportive of climate policies).
- Providing an approach that can be repeated on a frequent basis to track shifts in attitudes and behaviours in response to prevailing economic and social conditions.

4. Methodology

4.1 Survey fieldwork

The fieldwork was conducted between the 30th of August and the 6th of October 2023 by the survey company IPSOS B&A following recognised industry standards. The survey was conducted with a representative sample of the Irish population, aged 18 years and over. Survey respondents were recruited using a random digit dial sample of live Irish telephone numbers. A total of 22,862 numbers were contacted by telephone, about 80% of survey respondents were reached through mobile phone numbers and 20% through landline phone numbers. A total of 1,355 interviews were completed (including 25 pilot interviews to test survey wording and timing), for a response rate of 5.9%. All questionnaires were administered by call agents using computer-assisted telephone interviewing (CATI) software. The survey took, on average, 25 minutes to complete. Gender, age, work status and region quotas were used to ensure sample representativeness. Key demographic variables were also weighted, post survey, to match Central Statistics Office norms. For further information on the methodology, see Appendix 2.

4.2 Segmentation

The CCIM Wave 1 segmentation report described how latent class analysis (LCA) was conducted on a subset of Climate Change in the Irish Mind survey questions to identify distinct audiences in the population based on similar patterns of responses to questions about climate change. LCA works by analysing how different types of people can be clustered into smaller audiences or “classes” based on their pattern of responses. For this report, we apply the original segmentation model developed at Wave 1 of this survey¹¹ to the Wave 2 dataset. This technique has been carried out successfully in other large-scale surveys using similar methods¹². The proportions of participants classified into each audience at Wave 2 did not differ statistically from Wave 1.

It should be noted that audience descriptions are indicative of the typical make-up of the groups. Where an audience is described as “male” or “urban,” it means that there is a higher likelihood that the typical person from this segment is male or is likely to live in an urban setting. It does not indicate that there are no females or people from a rural setting in the audience. Further technical details of this analysis can be found in Appendix 2.

11 Leiserowitz, A., Goldberg, M., Carman, J., Rosenthal, S., Neyens, L., Marlon, J., Finegan, S., Cotter, E., Desmond, M., Smith, S., Rochford, M. F., Quinlan, C., O'Mahony, D., O'Mahony, J., and Reaper, L. (2022). Climate Change's Four Irelands: An Audience Segmentation Analysis. New Haven, CT: Yale Program on Climate Change Communication.

12 Leiserowitz, A., Roser-Renouf, C., Marlon, J., & Maibach, E. (2021). Global Warming's Six Americas: A review and recommendations for climate change communication. *Current Opinion in Behavioral Sciences*, 42, 97-103.

4.3 Rounding error and tabulation

For tabulation purposes, percentage points are rounded to the nearest whole number. As a result, percentages in a given chart may total slightly higher or lower than 100%. Summed response categories (e.g., “strongly support” + “somewhat support”) are rounded after sums are calculated. For example, in some cases, the sum of 25% + 25% might be reported as 51% (e.g., 25.3% + 25.3% = 50.6%, which, after rounding, is 51%).

4.4 Margin of error and reporting trends

The margin of error for the survey as a whole is +/-3 percentage points with 95% confidence in the CCIM Wave 2 survey¹³. The margin of error for the population segments are: Alarmed 5%; Concerned 4%; Cautious 7%, and Doubtful 13%.

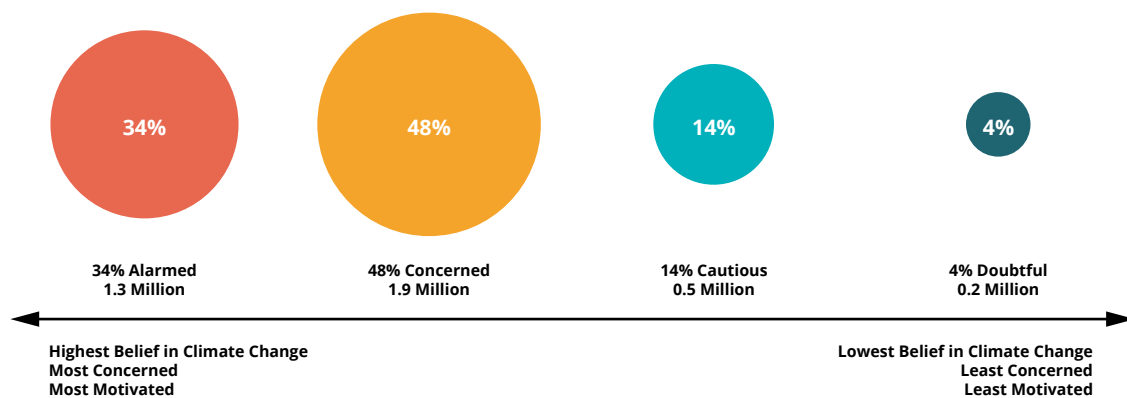
Caution should be exercised in interpreting small differences between groups, or between findings from CCIM Wave 1 and Wave 2.



13 A 95% confidence level of the Irish adult population, with a margin of error of +/- 3 percentage points, requires a sample size of 1,067. The Wave 2 sample included 1,330 interviews.

5. Four Segments of the Irish Population

Analysis of the Climate Change in the Irish Mind data in the Wave 1 segmentation report identified four unique audiences on the topic of climate change within the Irish population. As outlined previously, the proportions of the climate change audiences were found not to differ statistically from CCIM Wave 1. The Wave 2 report confirms that these audiences represent stable ways to categorise the Irish public in terms of climate change attitudes that persist over time in the population. These audiences are represented graphically below along with an estimate of the sizes of each audience based on information from census 2022¹⁴. A detailed description of each audience is provided highlighting some important features of each.



5.1 The Alarmed

5.1.1 Who are the Alarmed?

The Alarmed comprise 34% of the population of Irish adults. They overwhelmingly believe that climate change is happening and are the audience that are the most worried about climate change, viewing it as personally threatening in the here and now.

They are the audience most likely to understand that human activities are the cause of climate change and that scientists agree that it is happening (i.e., that there is a scientific consensus).

The Alarmed think the impacts of climate change are already happening right now. They are the most likely to say that climate change is affecting the weather and poses a great risk to people and places in Ireland.

The Alarmed are the segment most likely to hear about climate change in the media at least weekly and to talk often to their friends or family about the issue.

The Alarmed are the most likely to feel they are knowledgeable about climate change issues like the "greenhouse effect," and they are also the most likely to correctly answer factual climate change related questions. However, when asked about applied climate change information, the Alarmed also tended to overestimate the impact of many behaviours when considering their contribution to carbon footprint.

14 <https://www.cso.ie/en/statistics/population/censusofpopulation2022/>

The Alarmed strongly support climate policies and want more action by everyone, from government to individuals. They are the most likely to have made personal behavioural changes such as eating less meat for environmental reasons or making purchasing decisions based on their opinion of the environmental actions of a company.

5.1.2 Demographics of the Alarmed

The Alarmed are more likely than other segments to be female (56%). The largest cohort of the Alarmed are in the 30-44 age group (32%). The Alarmed are the group most likely to have completed Further, or Higher Education (80%).

About two thirds of the Alarmed (64%) are in paid employment, and they are more likely to be Intermediate managerial or junior professionals (17%) or Supervisory, clerical, or administrative workers (47%) than other audiences.

5.2 The Concerned

5.2.1 Who are the Concerned?

The Concerned are Ireland's largest climate change audience, comprising 48% of the population of Irish adults. They are convinced that climate change is happening, although they are less certain than the Alarmed.

Most of the Concerned are "somewhat worried" about climate change. They are less likely than the Alarmed to view climate change as personally important or personally threatening. They are also less likely than the Alarmed to think that climate change is happening here and now, but still notably more likely to do so than members of the Cautious or Doubtful audiences.

While the great majority of the Concerned agree that there is a scientific consensus on climate change, they are almost evenly divided on the causes of climate change with 51% correctly saying that it is caused "mostly by human activities," and 45% incorrectly saying that it is "caused about equally by human activities and natural changes."

A majority of the Concerned know at least "a moderate amount" about climate issues like "the greenhouse effect" and a majority are also able to correctly answer factual questions on climate change. Considering applied climate knowledge, the Concerned were better at estimating the carbon footprint of transport behaviours than the Alarmed, but heavily underestimated the effects dietary changes would have on carbon footprint, while overestimating the contributions of consumption behaviours such as recycling or re-using shopping bags.

About three quarters hear about climate change in the media at least once a week, but only about a quarter will "often" talk to their friends or family about the issue. The Concerned strongly support climate policies and want more action by everyone, from government to individuals. They are the second most likely audience to have made personal behavioural changes such as eating less meat for environmental reasons or making purchasing decisions based on their opinion of the environmental actions of a company.

5.2.2 Demographics of the Concerned

The Concerned are the largest audience encompassing almost half of the adult population (48%). Therefore, they are equally likely to be male or female and due to the size of the group tend to follow national averages on age and urban residence.

The Concerned are more likely than the Cautious or Doubtful to hold a postgraduate degree (55%). About two thirds are in paid employment (64%) and they have the highest proportion of higher managerial and higher professional staff (6%) of all audiences.

5.3 The Cautious

5.3.1 Who are the Cautious?

The Cautious comprise 14% of the Irish adult population. A large majority (84%) think climate change is happening, but with less certainty than the Alarmed or Concerned. While over half (57%) say there is a scientific consensus on climate change, three in ten think that “there is a lot of disagreement among scientists” on the topic of climate change.

A major difference between the Cautious and the other groups is that a majority think climate change is caused “equally by human activities and natural changes” (59%), while only one in five of the Cautious understand that it is caused “mostly by human activities.”

Few of the Cautious say they feel well informed about the issue of climate change and they had the weakest overall performance on factual climate change questions. The Cautious exhibited a similar pattern to the Concerned of overestimating the carbon footprint contributions of behaviours like recycling, and strongly underestimating the contributions of diet.

The Cautious typically do not worry about climate change, as most feel climate change effects may not cause serious harm until far into the future. About three quarters of the Cautious hear about climate change in the media at least once a week, but they talk to their friends or family about the issue relatively infrequently.

The Cautious assign lower importance to climate change as a priority for government than the Alarmed or Concerned, but still provide majority support for most climate policies. However, a majority of the Cautious oppose banning peat, coal, and oil for home heating purposes, and higher taxes on cars that use petrol and diesel. The Cautious want more climate action from everyone, from government to individuals, but only a minority of the Cautious think they should be doing more personally.

5.3.2 Demographics of the Cautious

The majority of the Cautious are male (64%). They have a high proportion of older members, 32% are 60+.

A little over half of the Cautious are in paid employment (55%), and the Cautious have the highest proportion of unemployed (12%) and retired (28%) members.

The Cautious audience contains higher proportions of members with a primary school level education and lower proportions of post graduate qualified members compared to the Alarmed and Concerned.

5.4 The Doubtful

5.4.1 Who are the Doubtful?

The smallest of the four segments (4% of the Irish public), the Doubtful are split between those who think climate change is happening, those who don't, and those who say they don't know. Independent of their climate change beliefs, a unifying feature of the Doubtful is that they overwhelmingly say they are not at all worried about climate change and do not perceive it as a serious threat to themselves, Ireland, or people in general.

About two thirds hear about climate change in the media at least once a week, but most rarely or never talk to their friends or family about the issue. The Doubtful narrowly support most climate policies, but a majority oppose banning the use of peat, coal, and oil for home heating purposes, expanding renewable energy infrastructure, subsidising the purchase of electric vehicles, and raising taxes on cars that use petrol and diesel.

A majority of the Doubtful understood that the topic of the greenhouse effect was related to climate change, and just over half identified carbon dioxide as being "good at trapping heat from the Earth's surface."

The Doubtful were the only group to underestimate the carbon footprint contribution of long-distance flights but made similar judgements to the other audiences in overestimating the carbon footprint contribution of behaviours such as recycling, and greatly underestimating the carbon footprint contributions of diet.

5.4.2 Demographics of the Doubtful

The Doubtful are the audience most likely to be male (71%) and the majority are over 45 years of age (63%).

They have the largest proportion reporting primary schooling as their highest educational level (9%), but otherwise have a similar educational profile to the Cautious with about six in ten reporting the completion of further or higher education.

About two thirds of the Doubtful (67%) are also in paid employment. They have a similar pattern of employment to the Concerned where about two thirds are also employed.

6. Climate Change Beliefs

Respondents were asked a series of questions about their climate change beliefs, such as whether they think that climate change is happening, and their degree of certainty in that belief. The main points of difference between the four climate change audiences are in their degree of certainty that climate change is happening, their attribution for the causes of climate change, and how immediate and threatening they perceive climate change to be.

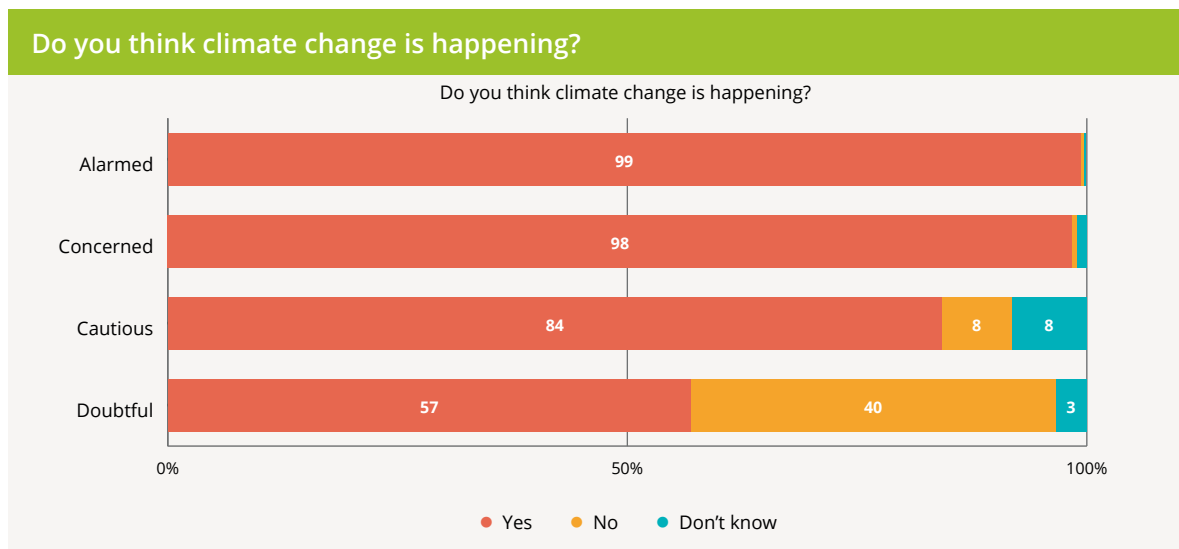
Majorities of all four audiences think climate change is happening. Both the Alarmed (99%) and Concerned (98%) are almost unanimous in this belief. A large majority of the Cautious (84%) and a smaller majority of the Doubtful (57%) think climate change is happening. However, the minorities of the Cautious (8%) and Doubtful (40%) who do not think climate change is happening are estimated to represent 2.8% of the adult Irish population.

When asked how much they know about climate change, the most common response, given by about half of the people from all audiences, was that they know “a moderate amount about it.” Both the Alarmed (37%) and Doubtful (36%) are the most confident that they know “a lot” about climate change. Only 15% of the Concerned and 19% of the Cautious report knowing “a lot” about climate change.

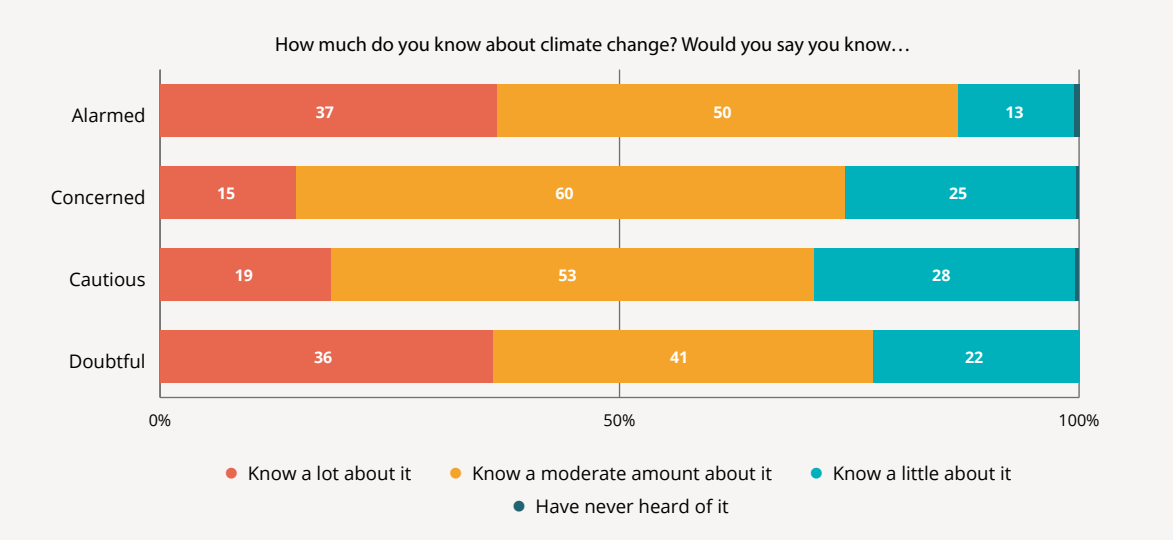
The audiences differ strongly on their attributions of the causes of climate change. Three in four of the Alarmed (75%), and about half of the Concerned (51%) say that climate change is “mostly caused by human activities.” About one in five of the Alarmed (22%) and over four in ten of the Concerned (45%) incorrectly think that climate change is “caused about equally by human activities and natural changes.”

The Cautious are more likely to say that climate change is “caused about equally by human activities and natural changes” (59%), while the most common response among the Doubtful (37%) is that climate change is “caused mostly by natural changes in the environment.”

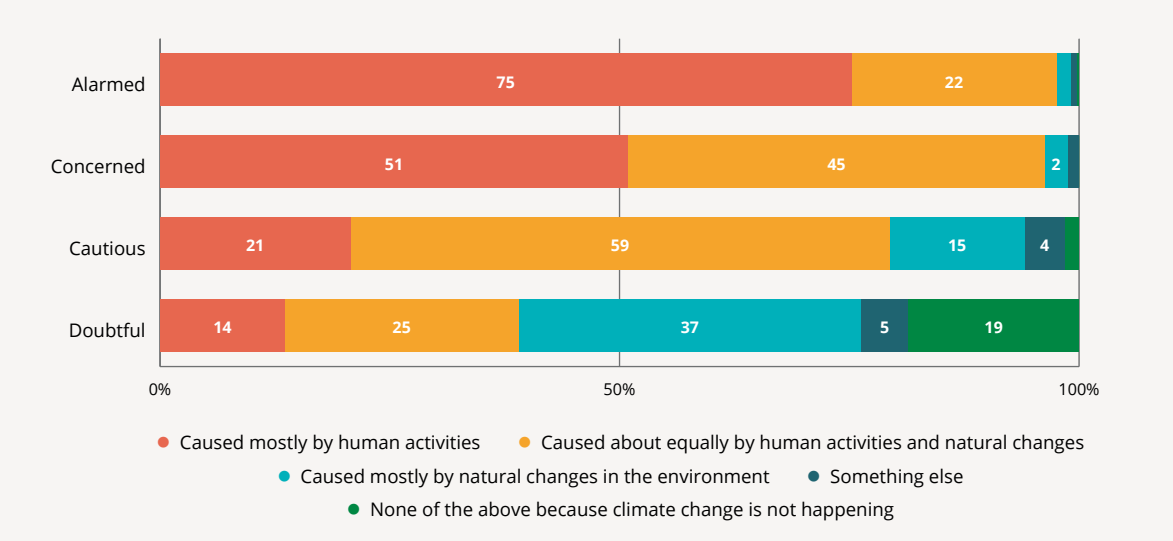
Graphs of each climate change audience’s responses to individual climate change belief questions are presented below. A detailed summary of the responses is provided for each audience following the graphs.



How much do you know about climate change? Would you say you know...

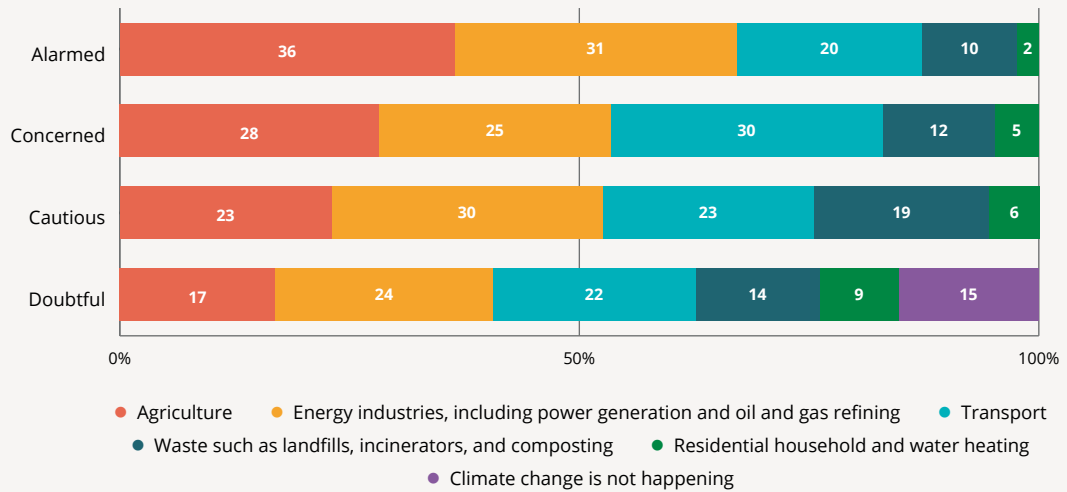


Assuming climate change is happening, do you think it is...

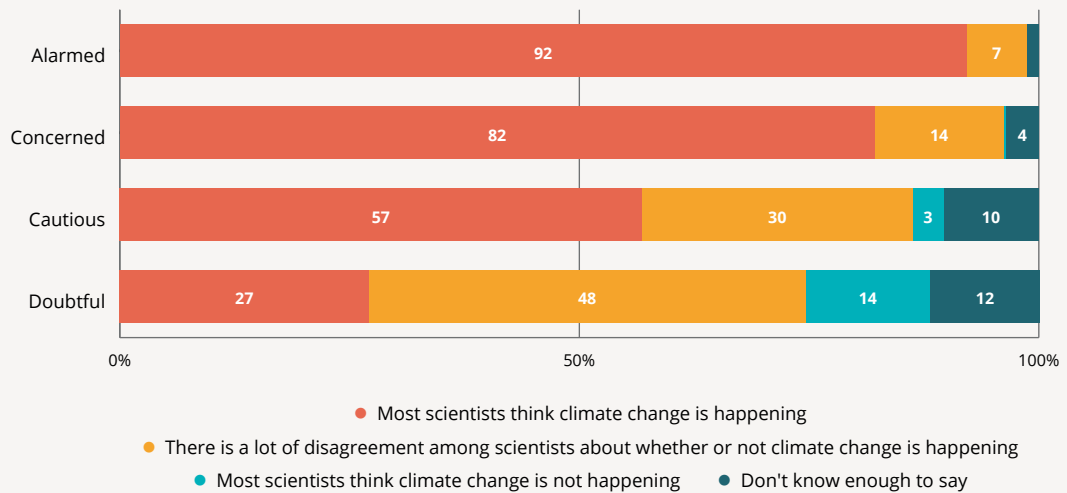


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For this next question, I'm going to read you a short list of possible answers and will ask you to pick one. To the best of your knowledge, which one of the following sectors is Ireland's largest source of the pollution that causes climate change? If you're not sure, please provide your best guess.



Which of the following statements comes closest to your own view?



6.1 The Alarmed

The Alarmed are the segment most likely to say they know “a lot” (37%) or “a moderate amount” (50%) about climate change. They overwhelmingly think climate change is happening (99%) and most are “extremely sure” that it is (63%).

About 9 in 10 (92%) say that “most scientists think climate change is happening.” Three-quarters (75%) think climate change is caused mostly by human activities, while 21% think it is caused equally by human activities and natural changes.

Only 36%, however, correctly identified agriculture as Ireland’s largest source of the pollution that causes climate change¹⁵, while 31% think energy industries are the largest emitter.

6.2 The Concerned

The Concerned are most likely to say they know “a moderate amount” (60%) or “a little” (25%) about climate change.

They overwhelmingly think climate change is happening (98%) and most are either “very” sure (46%) or “extremely” sure (33%) that it is.

About 8 in 10 (82%) say that “most scientists think climate change is happening.” About half understand that climate change is caused “mostly by human activities” (51%), while 45% think it is caused equally by human activities and natural changes.

However, only 28% understand that agriculture is Ireland’s largest source of the pollution that causes climate change, while 30% think it is transport and 25% think it is energy industries.

6.3 The Cautious

The Cautious are most likely to say they know “a moderate amount” (53%), or “a little” (28%) about climate change. A large majority (84%) think climate change is happening and most are either “somewhat” (33%) or “very” (32%) sure that it is.

A majority (57%) say that “most scientists think climate change is happening,” but three in ten (30%) think that “there is a lot of disagreement among scientists” on the topic of climate change.

A majority think climate change is caused “equally by human activities and natural changes” (59%), while only 21% understand that it is caused “mostly by human activities.” Only 23% understand that agriculture is Ireland’s largest source of the pollution that causes climate change, while 30% think it is energy industries and 23% think it is transport.

6.4 The Doubtful

The Doubtful are the second most likely segment to say that they know “a lot” about climate change (36%), while 41% say they know a “moderate amount,” and 22% say they know only “a little.”

A majority of the Doubtful (57%) think climate change is happening, with 16% saying they are “extremely sure” it is happening. However, 40% of the Doubtful say climate change is not happening, with 17% saying they are “extremely sure” that it is not.

15 <https://www.epa.ie/our-services/monitoring--assessment/climate-change/ghg/latest-emissions-data/>

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About a quarter of the Doubtful (27%) say that “most scientists think climate change is happening,” but 48% think that “there is a lot of disagreement among scientists,” contrasted with 14% saying “most scientists think climate change is not happening,” and 12% who “don't know enough to say.”

A little over a third think climate change is caused “mostly by natural changes in the environment” (37%), while 25% say that it is caused “about equally by human activities and natural changes.” Only 14% understand that it is caused “mostly by human activities.”

Only 17% understand that agriculture is Ireland's largest source of the pollution that causes climate change, while 24% think it is energy industries, 22% think it is transport.

7. Emotional Responses and Perceived Risks of Climate Change

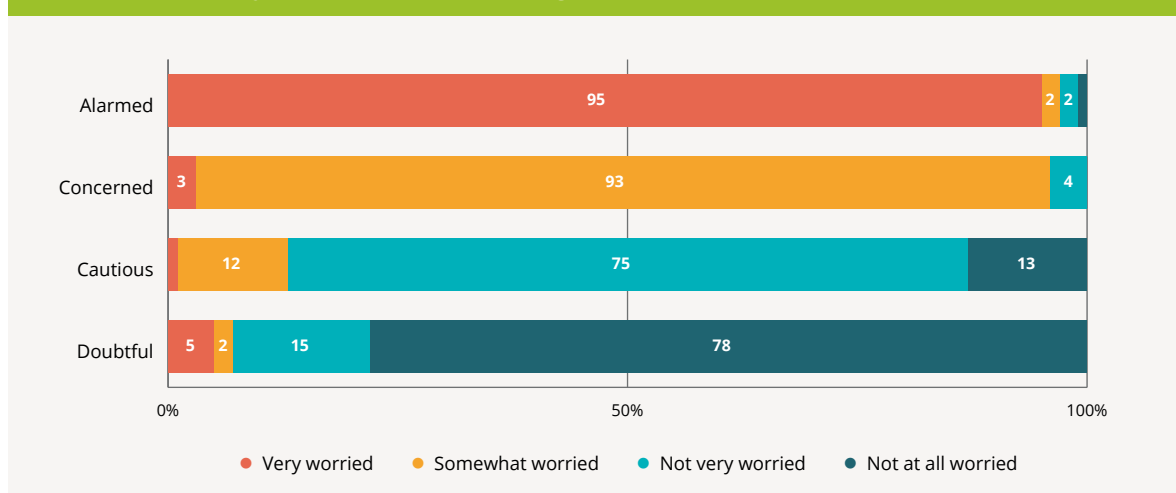
Respondents were asked about their overall level of worry about climate change and the potential for harm it presents to different groups currently, and in the future. These ranged from themselves and close family, to more distant groups such as people in Ireland, people in other countries and future generations.

The highest levels of worry about climate change harms are clustered in the Alarmed and Concerned audiences, with lower levels of concern among the Cautious and Doubtful.

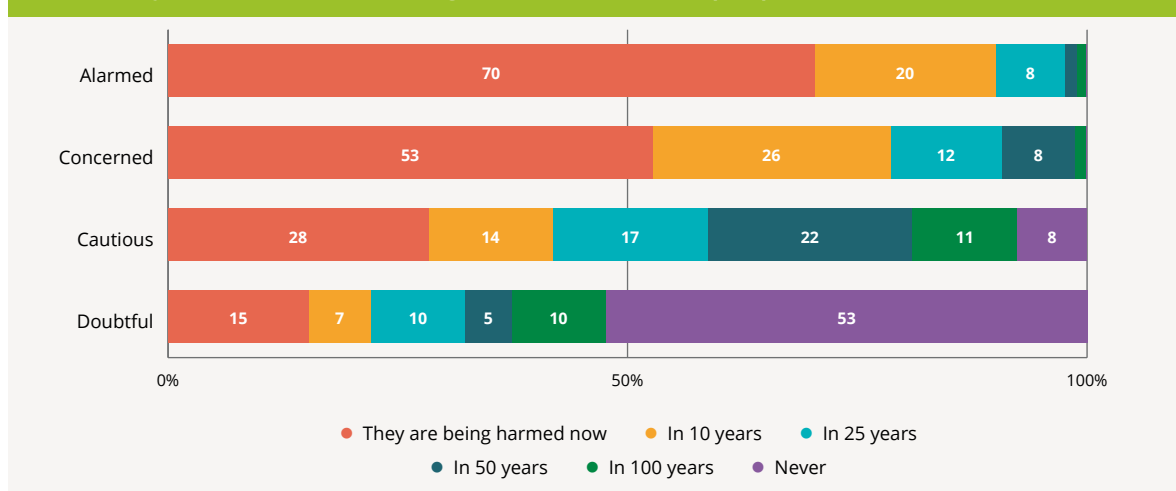
Majorities of the Alarmed (70%) and Concerned (53%) also think climate change is harming people in Ireland now, while much smaller proportions of the Cautious (28%) and Doubtful (15%) think so.

Graphs of each audience's responses to individual climate change worry and harm questions are presented below. A detailed summary of the responses is provided for each audience following the graphs.

How worried are you about climate change?

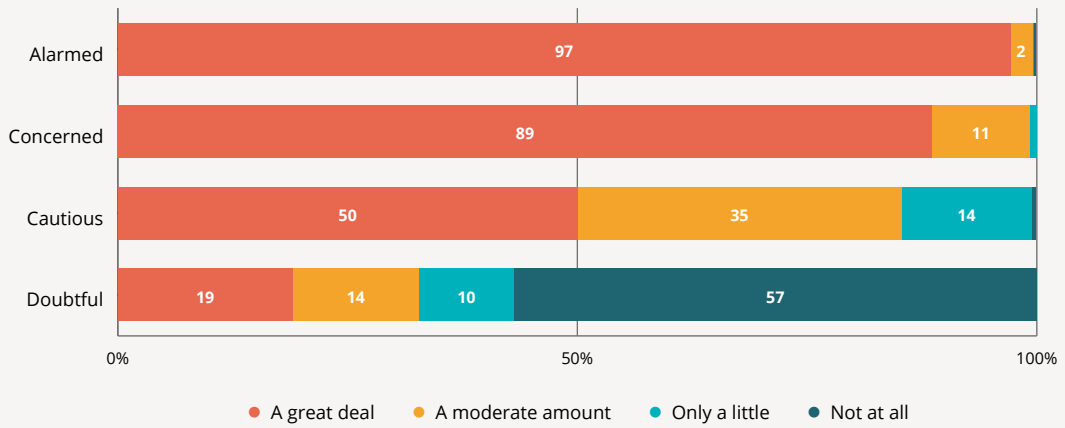


When do you think climate change will start to harm people in Ireland?

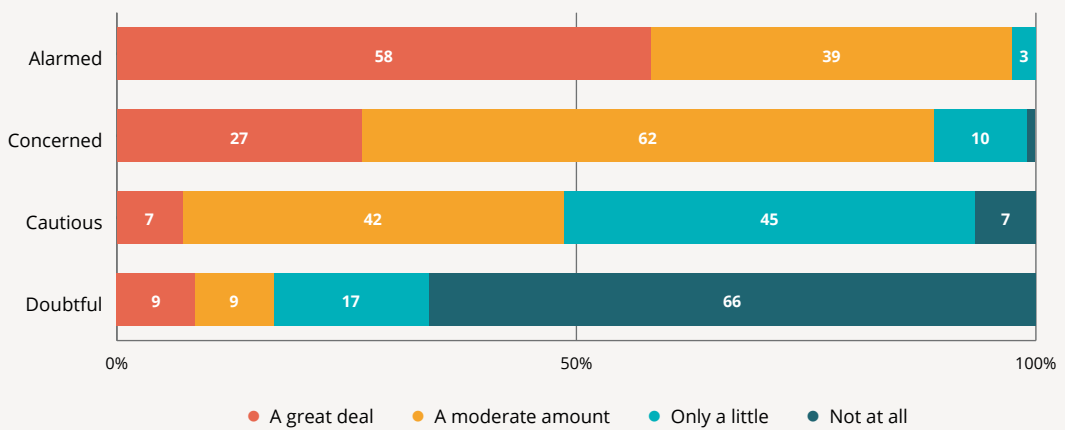


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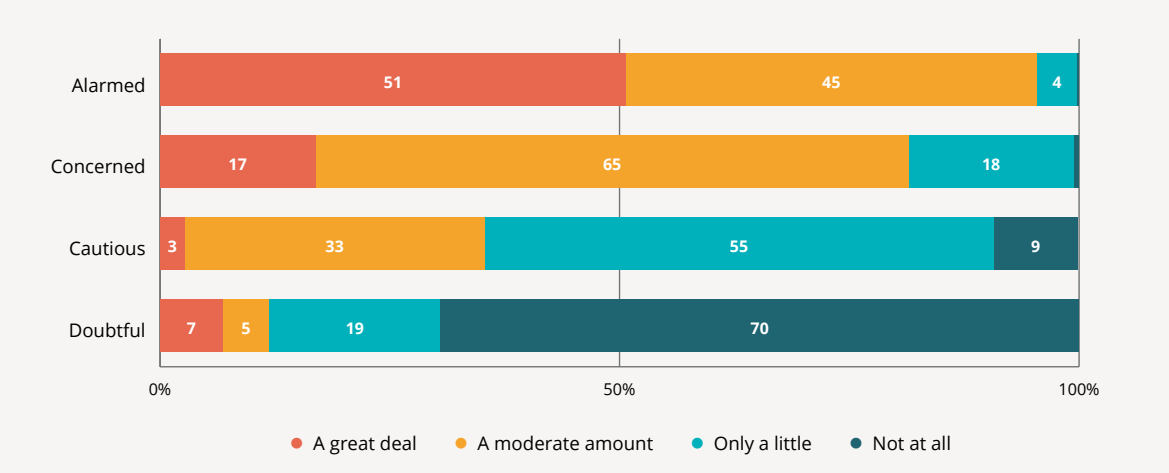
How much do you think climate change will harm ... [Future Generations]



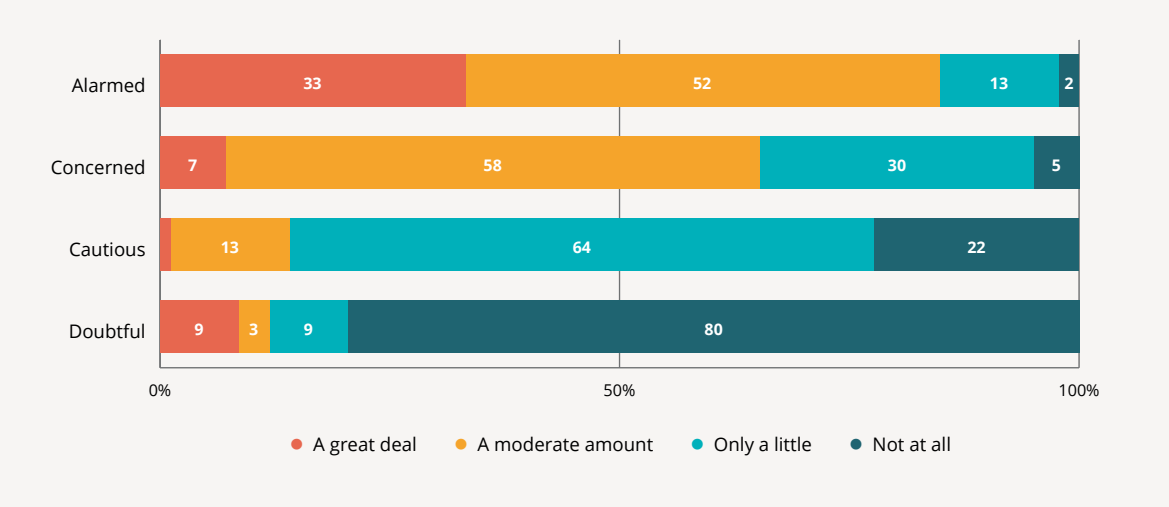
How much do you think climate change will harm ... [People in Ireland]



How much do you think climate change will harm ... [People in your community]



How much do you think climate change will harm ... [You personally]



7.1 The Alarmed

The Alarmed are overwhelmingly “very worried” about climate change (95%). A large majority (70%) think climate change is harming people in Ireland now, while 20% think it will start harming people in Ireland in the next 10 years. Nearly all of the Alarmed (97%) think climate change will harm future generations “a great deal.” A majority think climate change will harm people in Ireland (58%) or people in their community (51%) “a great deal,” while 33% think climate change will harm them personally “a great deal.”

7.2 The Concerned

The Concerned are mostly “somewhat worried” about climate change (93%), while only 3% are “very worried.” About half (53%) think climate change is harming people in Ireland now, while about a quarter (26%) think it will start harming people in Ireland in the next 10 years. Nearly nine in ten of the Concerned (89%) think climate change will harm future generations “a great deal.” However, the Concerned are much less likely to say that climate change will harm people in Ireland (27%), people in their community (17%), or themselves personally (7%) “a great deal.”

7.3 The Cautious

The majority of the Cautious are “not very worried” about climate change (75%), while 12% are “somewhat worried. Only about three in ten of the Cautious (28%) think climate change is harming people in Ireland now, with other opinions spread across longer timelines of 10 years (14%), 25 years (17%), and 50 years (22%). Half of the Cautious think climate change will harm future generations (50%) “a great deal,” but few think it will harm people in Ireland (7%), people in their community (3%), or themselves personally (1%) “a great deal.” Instead, the Cautious are more likely to think climate change will cause “only a little” harm to these groups.

7.4 The Doubtful

The majority of the Doubtful are “not at all worried” about climate change (78%). About half of the Doubtful (53%) think that climate change will “never” harm people in Ireland, while about a quarter (26%) think harm will occur on a longer timescale of 25-100 years, and about two in ten (22%) think harm due to climate change will occur in 10 years or less.

When considering the potential amount of harm, a majority of the Doubtful think that climate change will “not at all” harm people in Ireland (66%)¹⁶, future generations (57%), people in their community (70%), or themselves personally (80%).

16 The “Not at all” category expressed by the majority of the Doubtful was presented here as the small number of participants from this group meant that small percentages saying “A great deal” which are seemingly higher than those expressed by the Cautious were not statistically different from zero.

8. Personal and Social Engagement with Climate Change

Respondents were asked about their personal engagement with climate change. This was explored as how important climate change is to them personally, how much they discuss climate change with friends and family, and how frequently they hear about climate change content in the media. The respondents were also asked about their feelings of trust for a variety of people and organisations as sources of information about climate change.

There were large differences between audiences on the personal importance of climate change. All (100%) of the Alarmed reported that climate change was “very” or “extremely important” to them personally, compared to about half of the Concerned (54%).

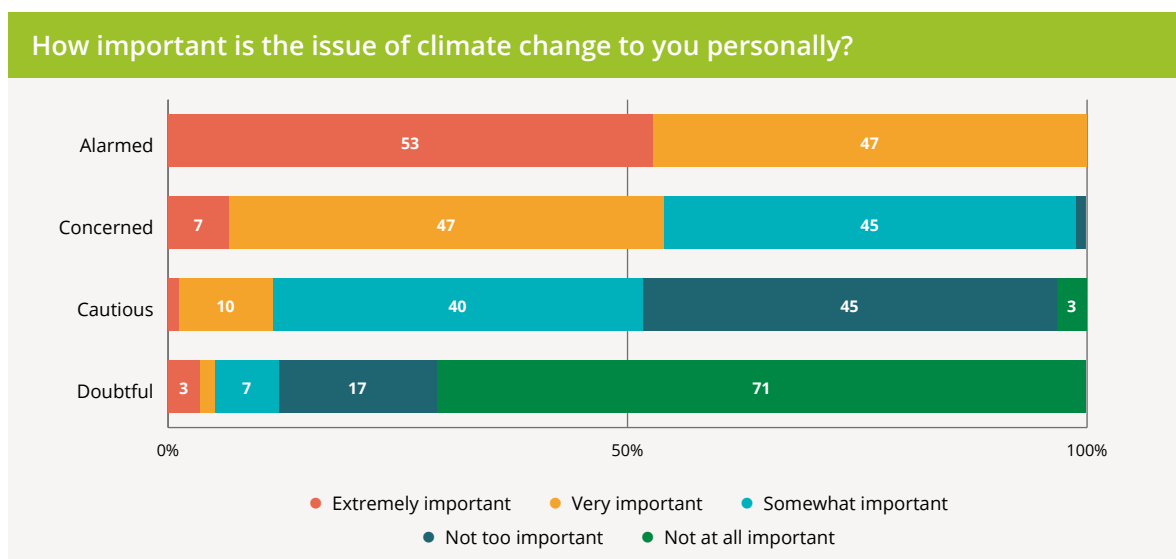
Much smaller proportions of the Cautious (11%) and Doubtful (5%) reported that climate change was “very” or “extremely” important to them personally.

About three quarters of the of the Alarmed (78%), Concerned (74%), and Doubtful (73%) audiences, and about two-thirds of the Cautious (65%), say they hear about climate change in the media at least once a week. The Alarmed (54%) are much more likely to “often” discuss climate change as an issue with family and friends compared to the Concerned (25%), Cautious (14%), or Doubtful (16%) audiences.

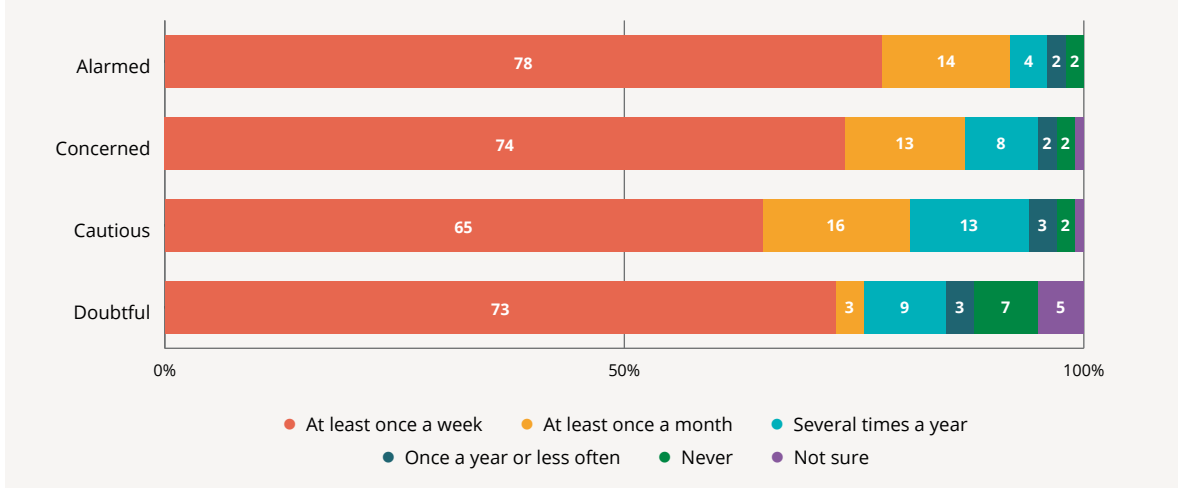
Overall, scientists are the most trusted source of information about climate change among the Irish people with overwhelming majorities of the Alarmed (96%), Concerned (95%), and Cautious (89%) audiences, and a majority of the Doubtful (61%) expressing trust in messaging from scientists, which is important given that 40% of the Doubtful do not think climate change is happening.

Graphs of each audience's responses to individual personal and social engagement questions are presented below. A detailed summary of the responses is provided for each audience following the graphs.

8.1 Engagement with climate change items

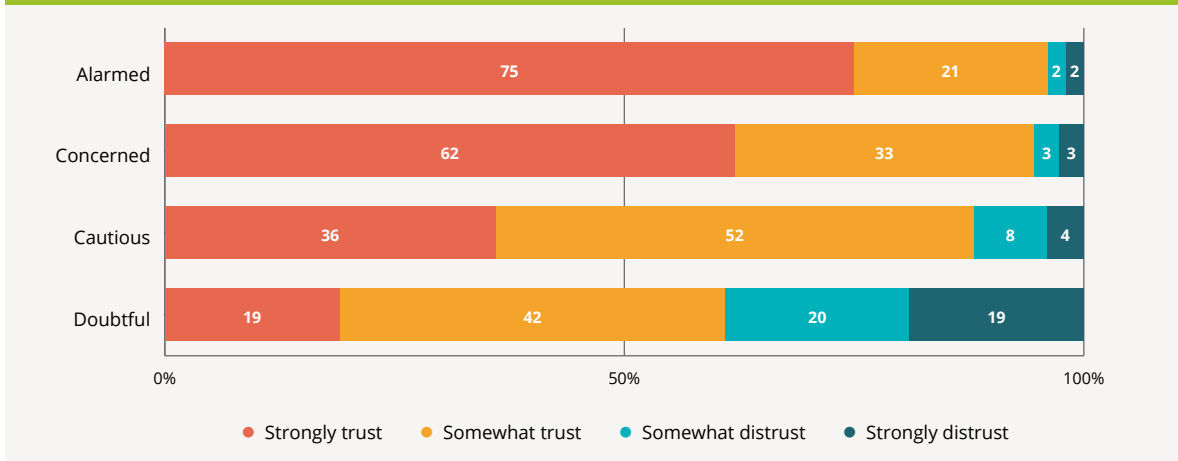


About how often do you hear about climate change in the media, such as TV, movies, radio, newspapers, magazines, online, etc.?

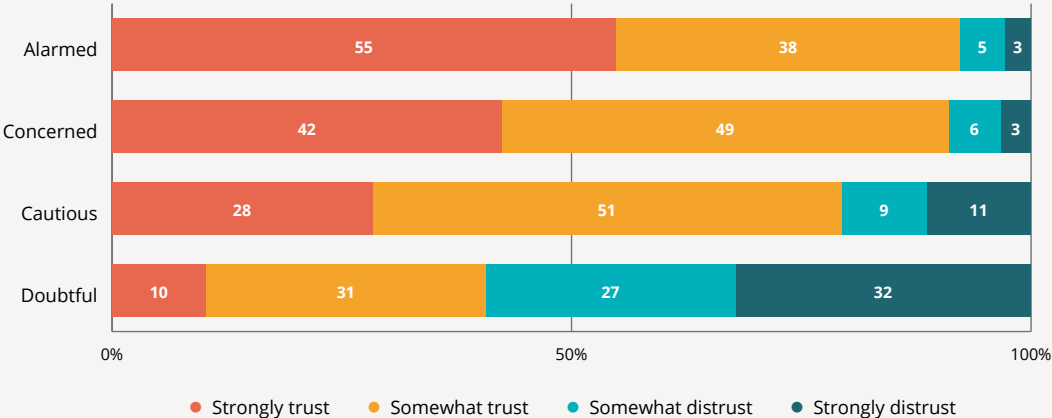


8.2 Trusted messenger items

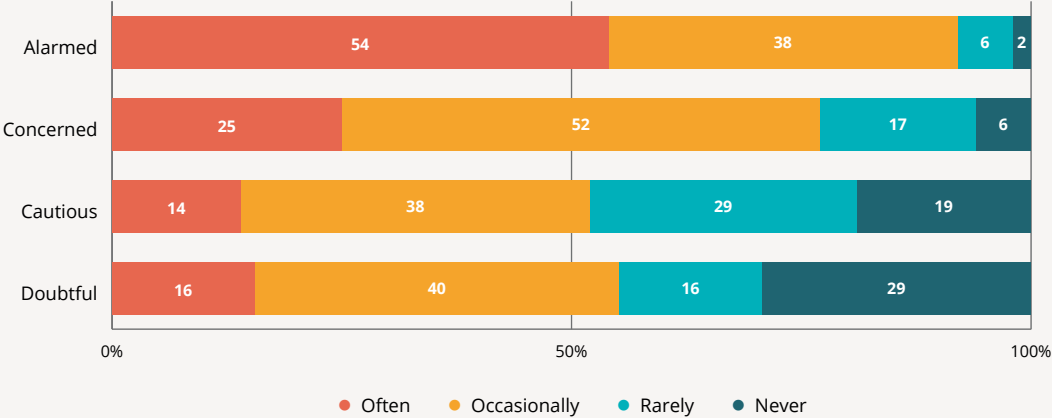
How much do you trust or distrust the following as a source of information about climate change? ... [Scientists]



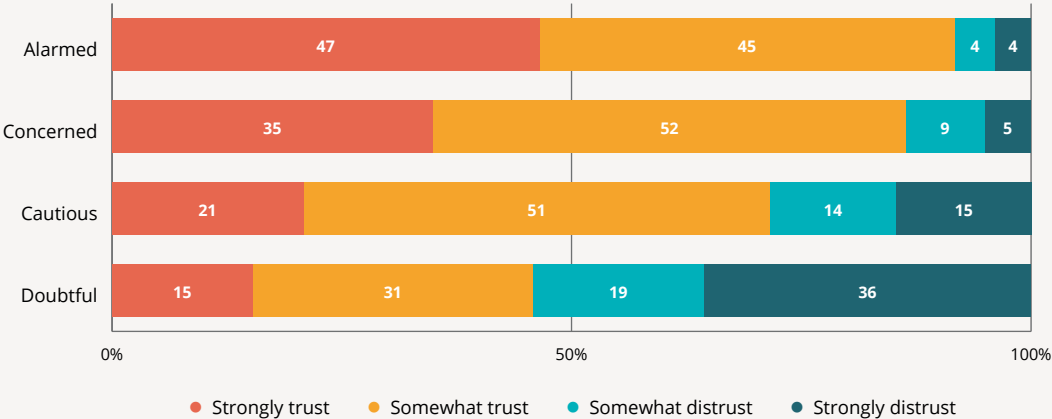
How much do you trust or distrust the following as a source of information about climate change? ... [The Irish EPA]



How often do you discuss climate change with your family and friends?

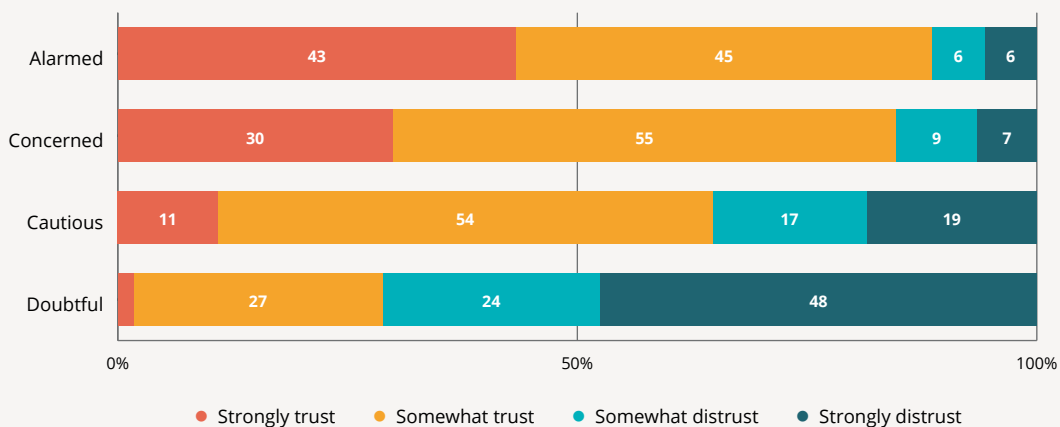


How much do you trust or distrust the following as a source of information about climate change? ... [TV Weather reporters]

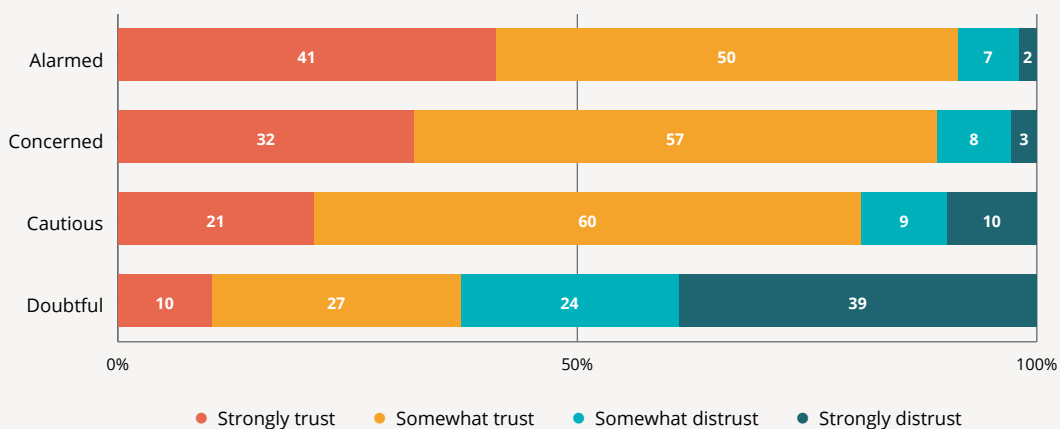


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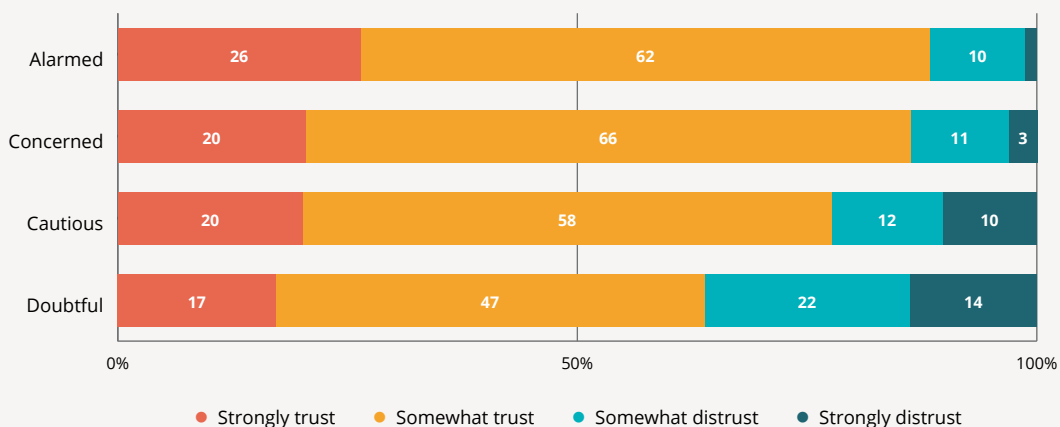
How much do you trust or distrust the following as a source of information about climate change? ... [Environmental NGOs]



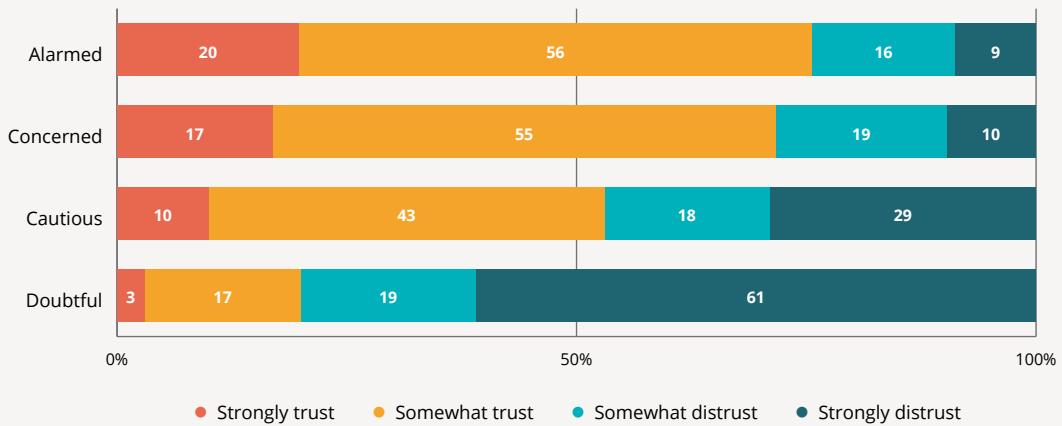
How much do you trust or distrust the following as a source of information about climate change? ... [Educators]



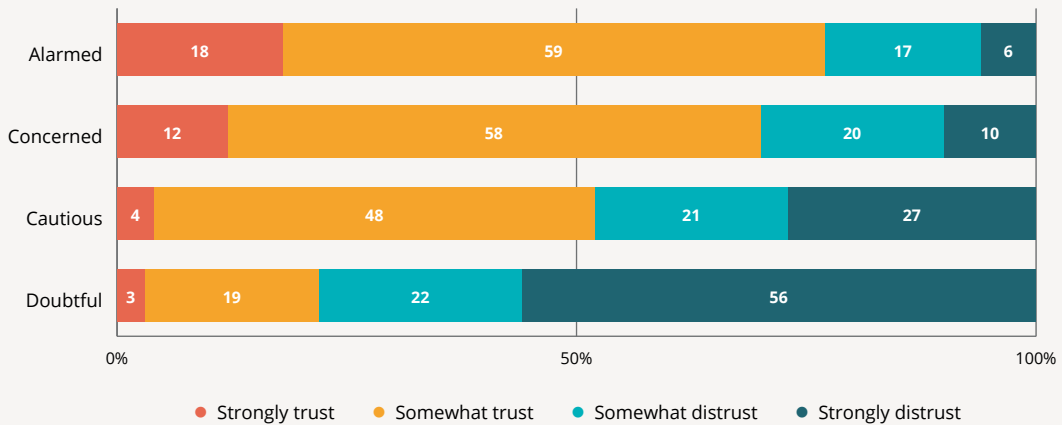
How much do you trust or distrust the following as a source of information about climate change? ... [Family and friends]



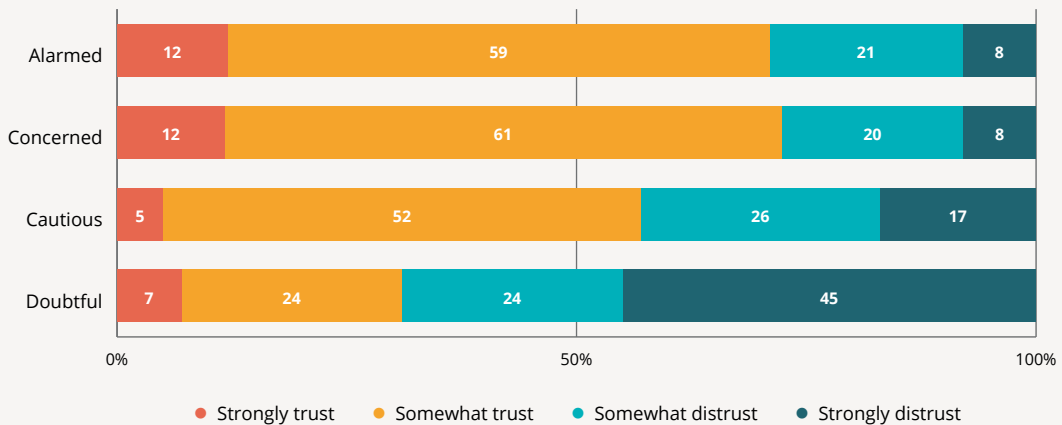
How much do you trust or distrust the following as a source of information about climate change? ... [The mainstream news media]



How much do you trust or distrust the following as a source of information about climate change? ... [Journalists]

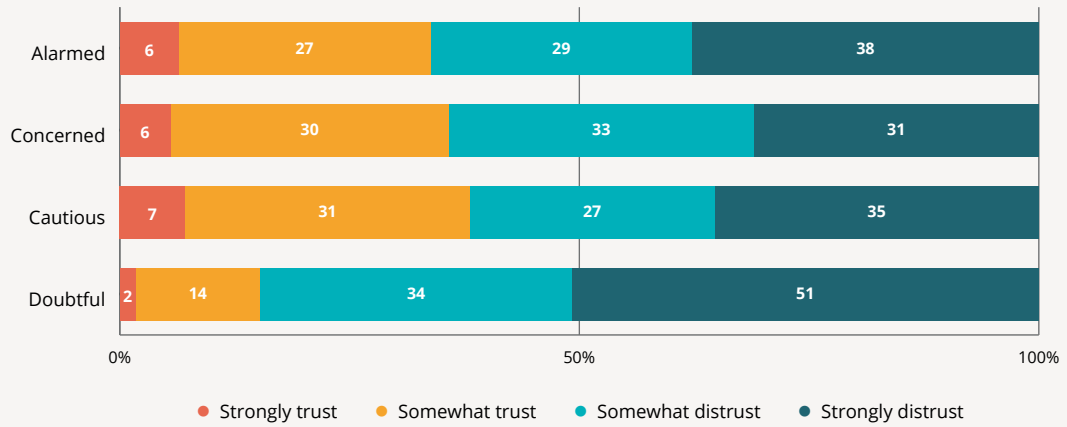


How much do you trust or distrust the following as a source of information about climate change? ... [Community leaders]

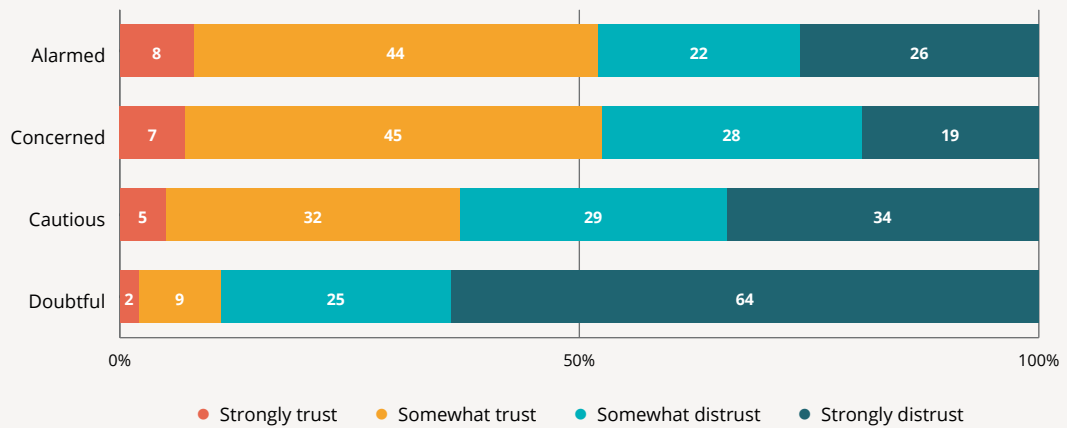


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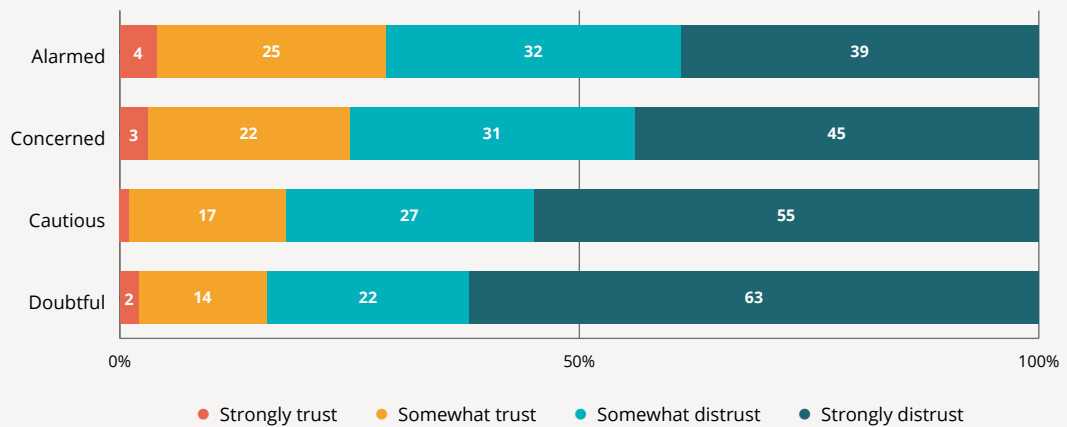
How much do you trust or distrust the following as a source of information about climate change? ... [Religious leaders]



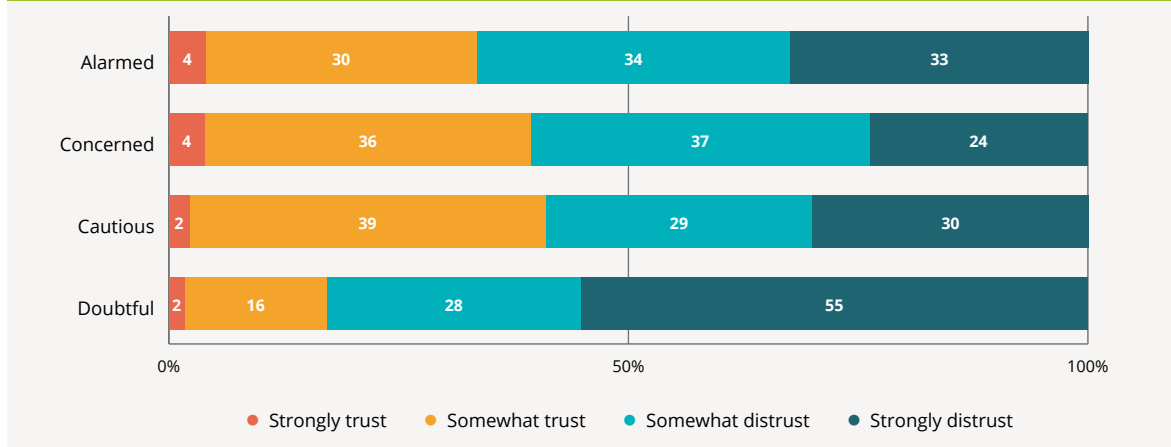
How much do you trust or distrust the following as a source of information about climate change? ... [Political leaders]



How much do you trust or distrust the following as a source of information about climate change? ... [Online influencers, celebrities, or media personalities]



How much do you trust or distrust the following as a source of information about climate change? ... [Corporations and businesses]



8.3 The Alarmed

The Alarmed overwhelmingly say that climate change is either “extremely” (53%) or “very important” (47%) to them personally.

A large majority say they hear about climate change in the media at least “once a week” (78%) or “once a month” (14%). Likewise, a majority say they discuss climate change with their family and friends “often” (54%) or “occasionally” (38%).

The Alarmed report that they “strongly trust” scientists (75%), the Irish EPA (55%), TV weather reporters (47%), environmental NGOs (43%), educators (41%), their own friends and family (26%), the mainstream news media (20%), journalists (18%), community leaders (12%), religious leaders (6%), political leaders (8%), online celebrities (4%), and corporations or businesses (4%) as sources of information about climate change.

8.4 The Concerned

The Concerned mostly say that climate change is either “very” (53%) or “somewhat important” (45%) to them personally, but few say it is “extremely important” (7%).

A large majority say they hear about climate change in the media at least “once a week” (74%) or “once a month” (13%). Likewise, a majority say they discuss climate change with their family and friends either “often” (25%) or “occasionally” (52%).

The Concerned say they “strongly trust” scientists (62%), the Irish EPA (42%), TV weather reporters (35%), educators (32%), environmental NGOs (30%), their own friends and family (20%), the mainstream news media (17%), community leaders (12%), journalists (12%), religious leaders (6%), political leaders (5%), corporations (4%), or online celebrities (3%) as sources of information about climate change.

8.5 The Cautious

The Cautious mostly say that climate change is either “somewhat” (40%) or “not too important” (45%) to them personally.

A large majority say they hear about climate change in the media at least “once a week” (65%) or “once a month” (16%). A majority of the Cautious also say they discuss climate change with their family and friends “occasionally” (38%), or “often” (14%).

Compared with the other audiences, fewer of the Cautious say they “strongly trust” scientists (36%), the Irish EPA (28%), educators (21%), TV weather reporters (21%), their own friends and family (20%), environmental NGOs (11%), the mainstream news media (10%), religious leaders (7%), political leaders (7%), community leaders (5%), journalists (4%), corporations (2%), or online celebrities (1%) as sources of information about climate change.

8.6 The Doubtful

The Doubtful mostly say that climate change is either “not too important” (17%) or “not at all important” (71%) to them personally.

A majority say they hear about climate change in the media at least “once a week” (73%). However, a majority also say they discuss climate change with their family and friends only “occasionally” (40%), “rarely” (16%), or “never” (29%).

Few of the Doubtful say they “strongly trust” scientists (19%), their own friends and family (17%), TV weather reporters, (15%), educators (10%), the Irish EPA (10%), community leaders (7%), religious leaders (2%), environmental NGOs (2%), the mainstream news media (3%), journalists (3%), corporations (2%), online celebrities (2%), or political leaders (2%) as sources of information about climate change. However, many of the Doubtful say they “somewhat trust” family and friends (47%), scientists (42%), the Irish EPA (31%) and weather forecasters (31%).

9. Impacts of Climate Change

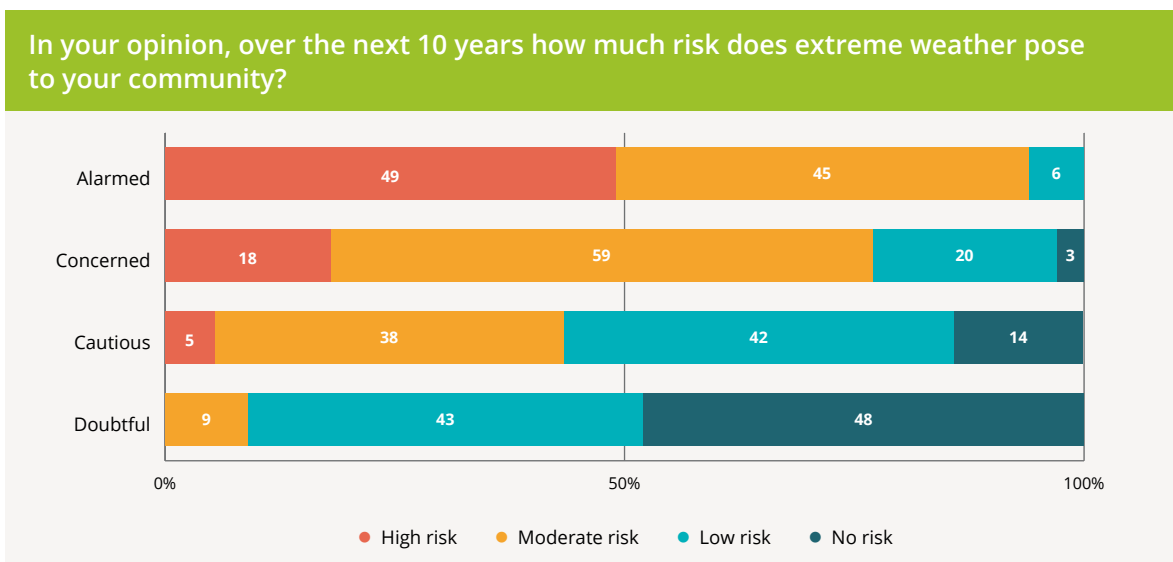
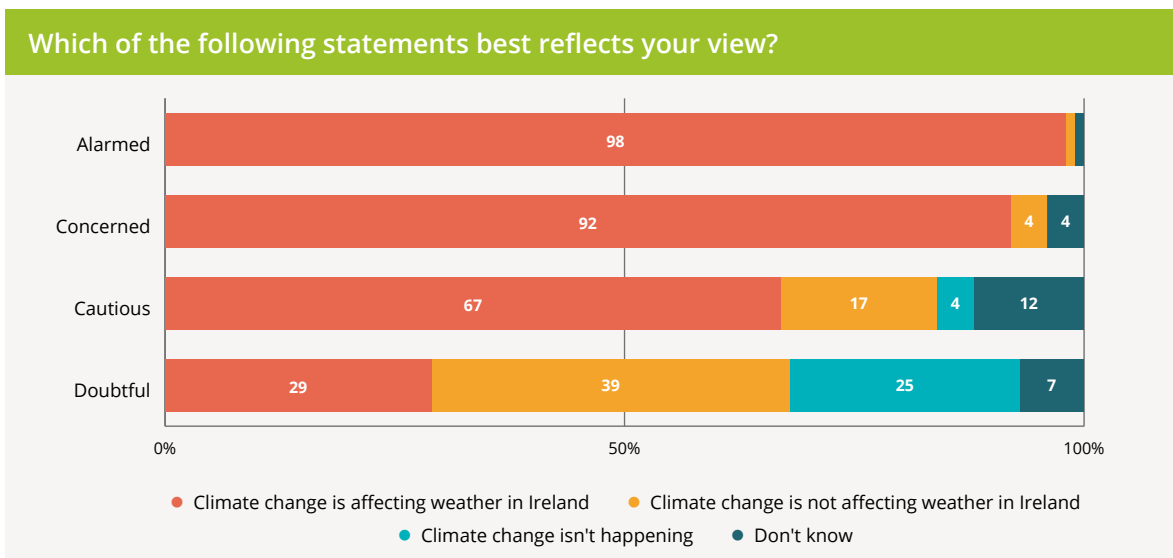
Respondents were asked whether they think climate change is currently affecting weather in Ireland and to indicate their level of worry about environmental hazards they thought might affect their local area.

Almost all of the Alarmed (98%) and Concerned (92%), and about two thirds of the Cautious (67%) think that climate change is affecting the weather in Ireland, with only about three in ten of the Doubtful (29%) thinking this.

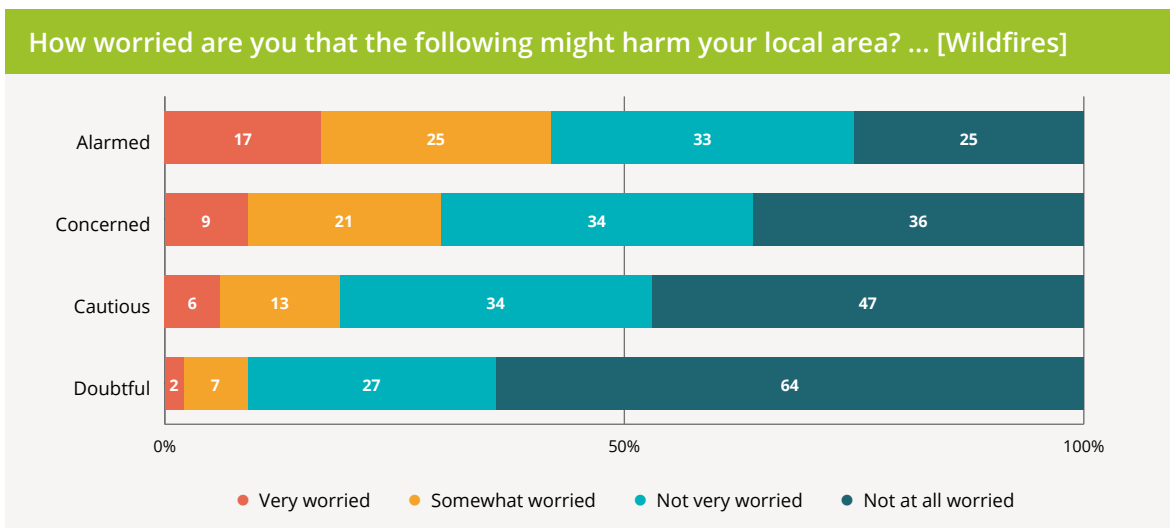
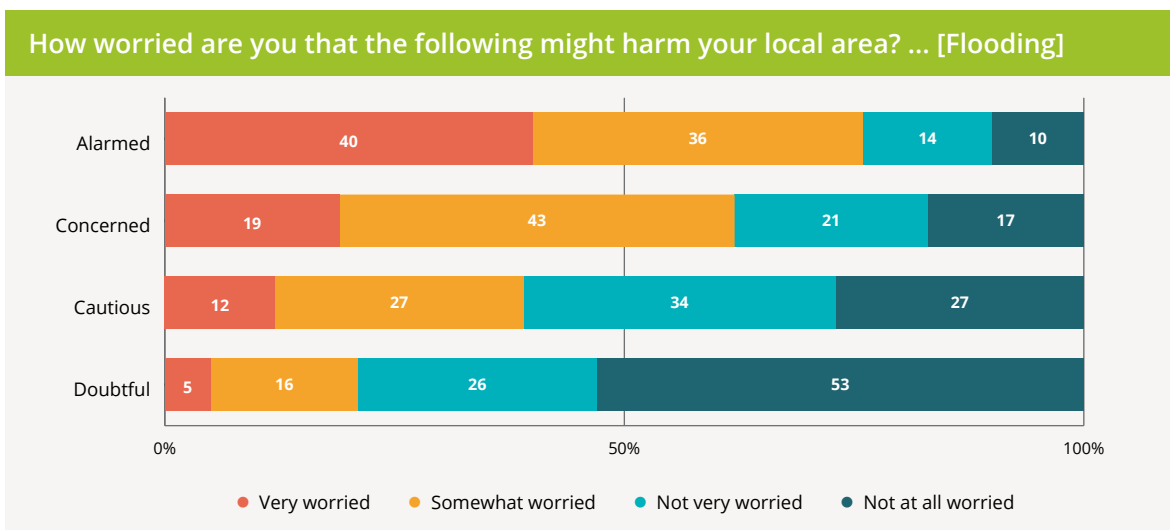
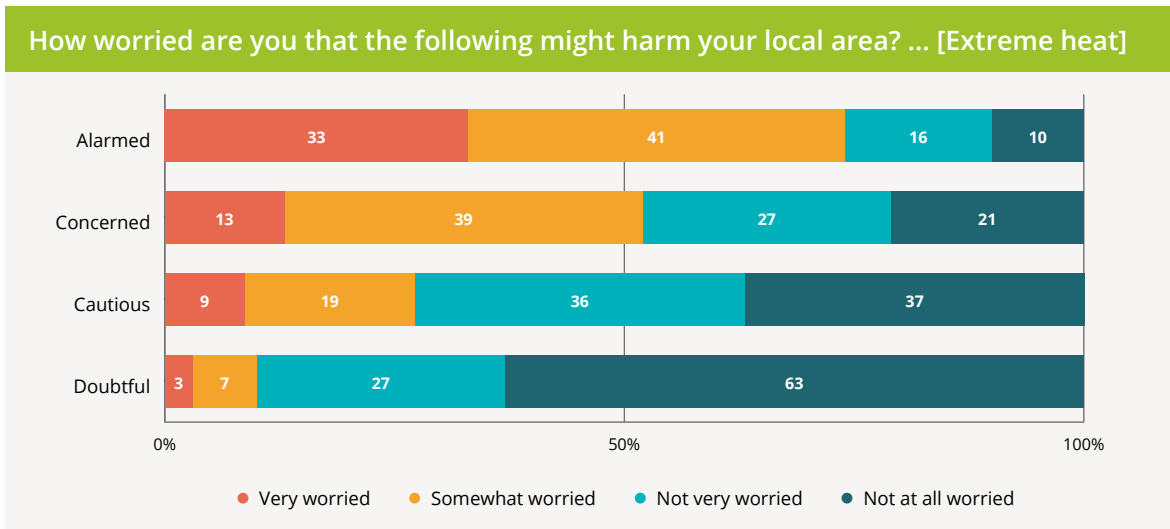
Large majorities of the Alarmed (93%) and Concerned (77%) perceive "high" or "moderate" risks from extreme weather to their local communities over the next 10 years, while majorities of the Cautious (57%) and Doubtful (91%) perceive "low" or "no" risk of extreme weather to their communities.

Graphs of each audience's responses to individual impacts of climate change questions are presented below. A detailed summary of the responses is provided for each audience following the graphs.

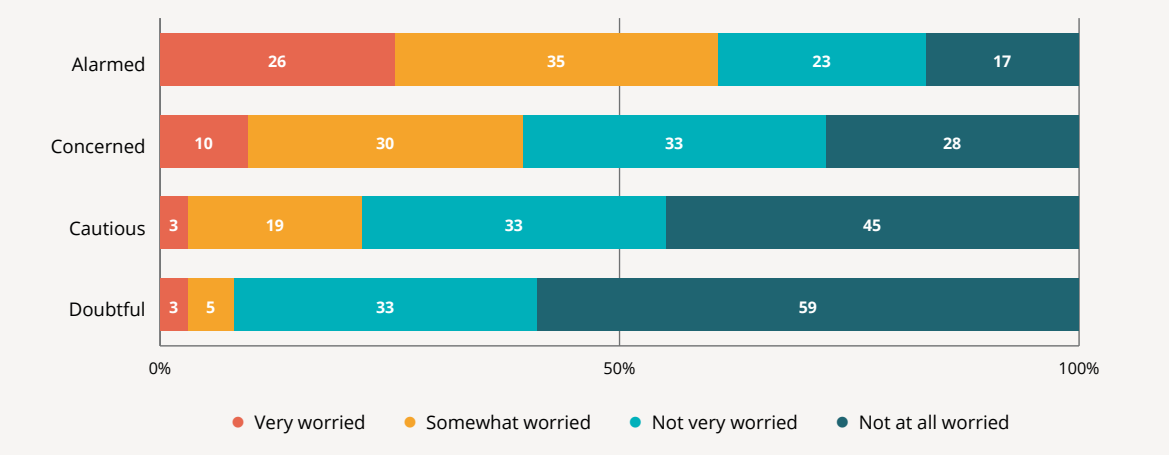
9.1 Climate change affecting weather and climate change risk items



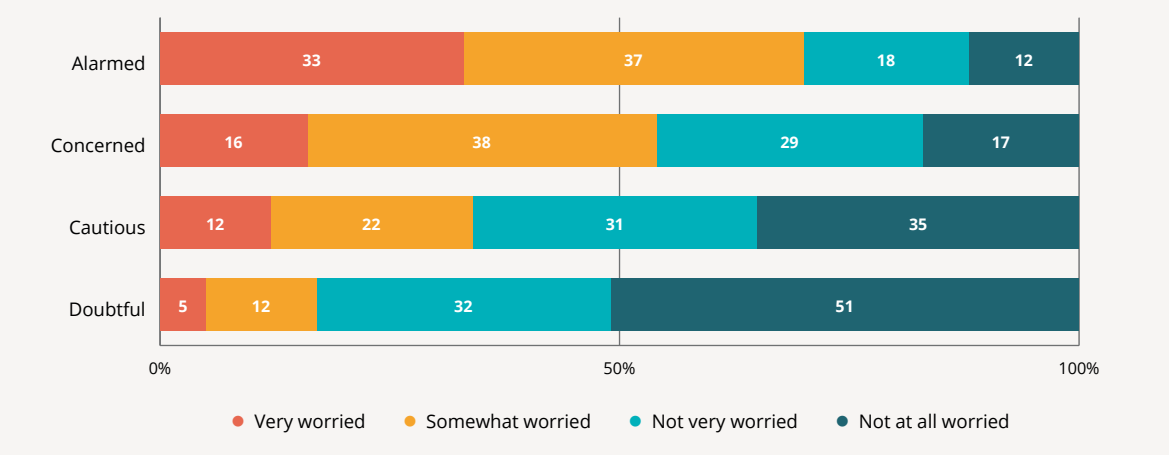
9.2 Local environmental hazards items



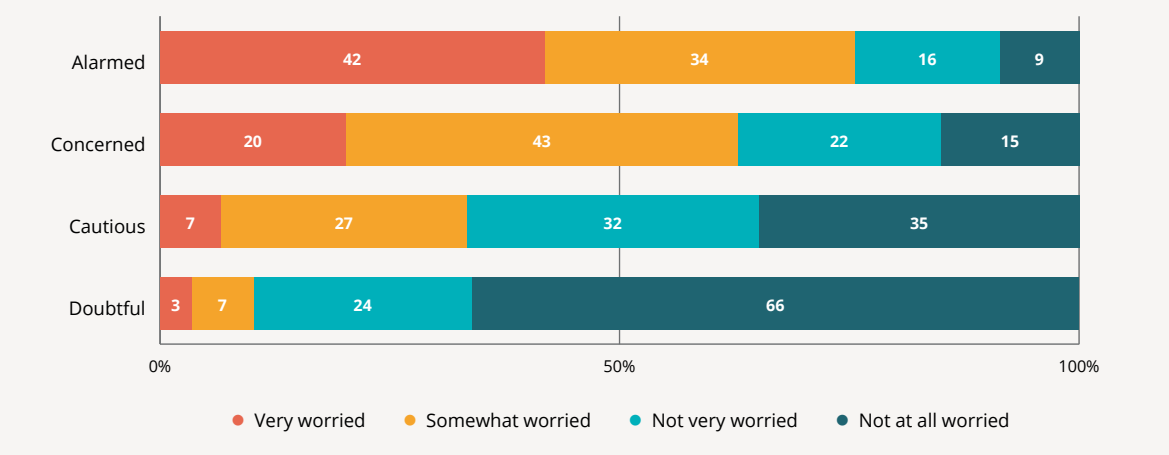
How worried are you that the following might harm your local area? ... [Droughts]



How worried are you that the following might harm your local area? ... [Water shortages]

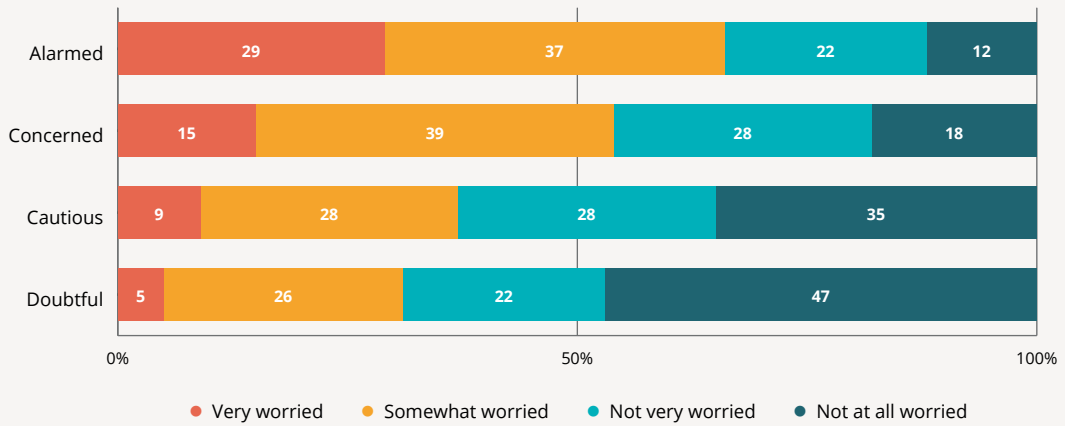


How worried are you that the following might harm your local area? ... [Rising sea levels]

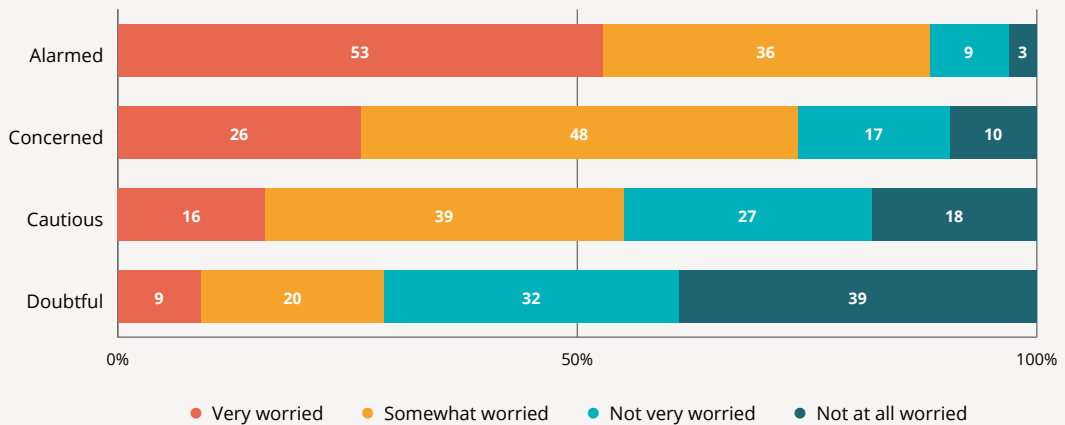


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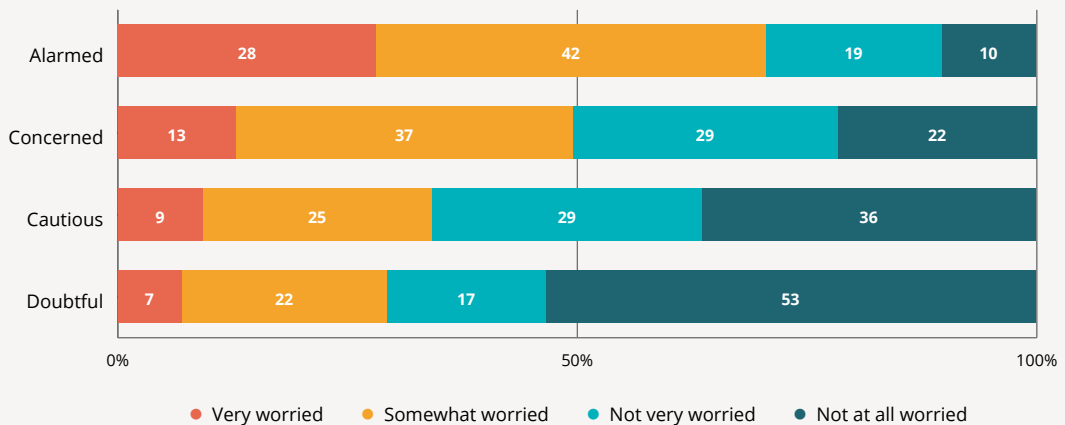
How worried are you that the following might harm your local area? ... [Agricultural pests and diseases]



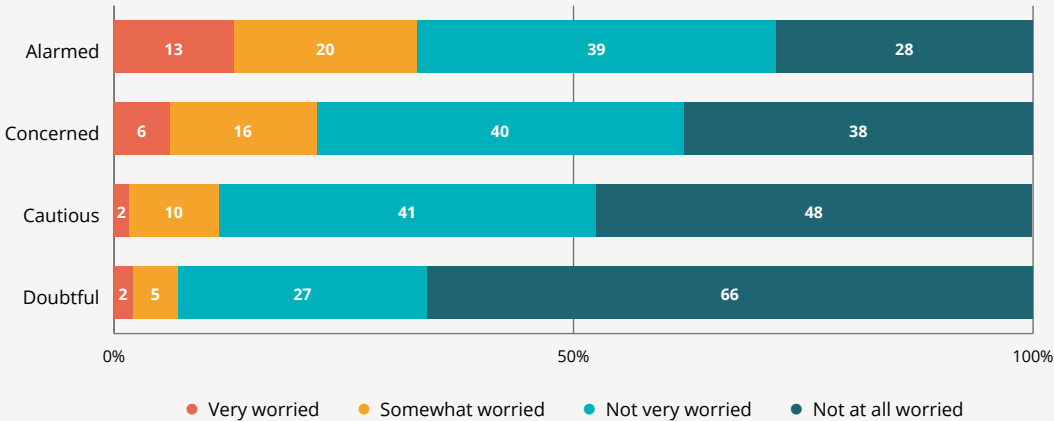
How worried are you that the following might harm your local area? ... [Severe storms]



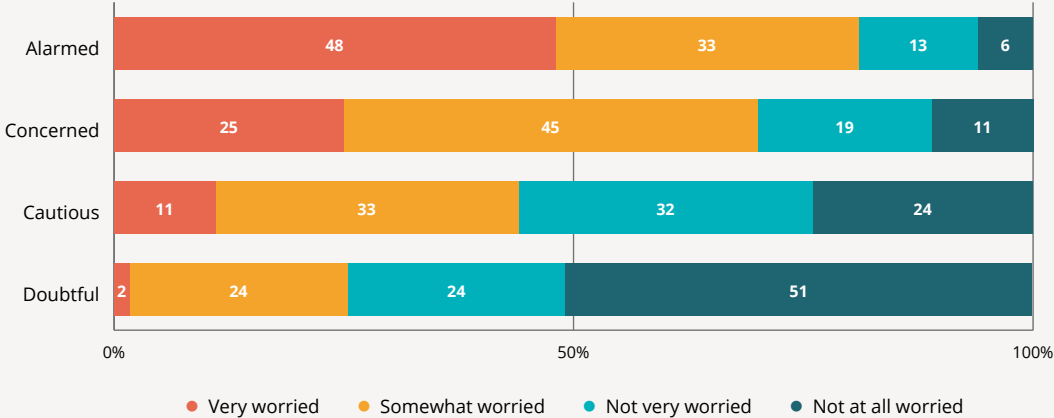
How worried are you that the following might harm your local area? ... [Invasive species]



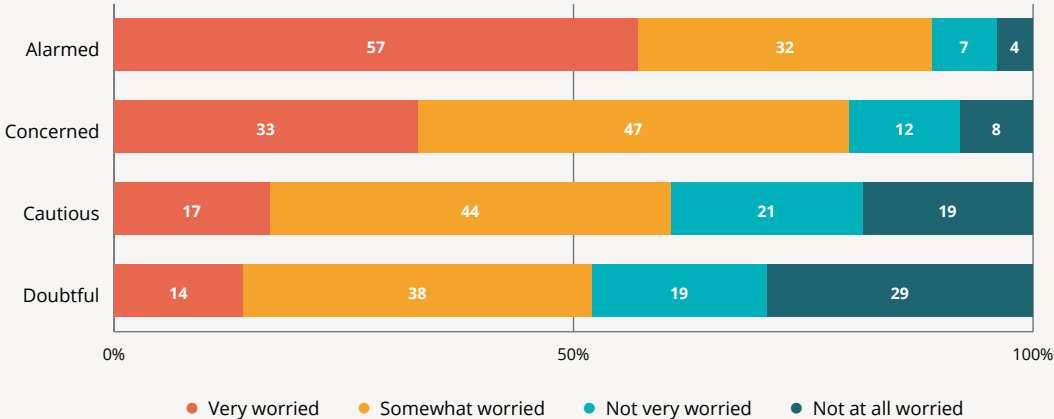
How worried are you that the following might harm your local area? ... [Bog bursts/landslides]



How worried are you that the following might harm your local area? ... [Air pollution]



How worried are you that the following might harm your local area? ... [Water pollution]



9.3 The Alarmed

The Alarmed overwhelmingly think that climate change is affecting the weather in Ireland (98%) and that over the next 10 years, extreme weather will pose either a “high risk” (49%) or “moderate risk” (45%) to their own communities.

A majority of the Alarmed are worried that water pollution (89%), severe storms (88%), air pollution (81%), and flooding (76%) might harm their local areas.

9.4 The Concerned

The Concerned overwhelmingly think that climate change is affecting the weather in Ireland (92%), but most say that over the next 10 years, extreme weather will pose only a “moderate risk” (59%) to their own communities.

A majority of the Concerned think that water pollution (80%), severe storms (74%), air pollution (69%), and flooding (62%) might harm their local areas.

9.5 The Cautious

Two-thirds of the Cautious think that climate change is affecting the weather in Ireland (67%), but most say that over the next 10 years, extreme weather will pose only a “moderate risk” (38%) or “low risk” (42%) to their own communities.

A majority of the Cautious think that water pollution (61%), and severe storms (55%) might harm their local areas. Fewer think air pollution (44%), or flooding (39%) pose local risks.

9.6 The Doubtful

Relatively few of the Doubtful think that climate change is affecting the weather in Ireland (29%), and most say that over the next 10 years, extreme weather will pose only a “low risk” (43%) or “no risk” (48%) to their own communities.

About half of the Doubtful (52%) are worried that water pollution might harm their local areas. Much smaller proportions worry about the risks posed by severe storms (29%), air pollution (25%), or flooding (21%).

10. Climate Policies

In line with their different beliefs about the seriousness of the threat posed by climate change, the four audiences express differing levels of support for proposed Government climate action policies.

In general, those who view climate change as the gravest and most immediate threat are the most supportive of a range of policies related to climate mitigation and adaptation.

Majorities of the Alarmed (96%), Concerned (91%) and Cautious (66%) think that "We have a responsibility to act on climate change and Ireland should do what it can to reduce its own greenhouse gas emissions." However, a majority of the Doubtful (60%) think "Ireland is too small to make a difference in climate change."

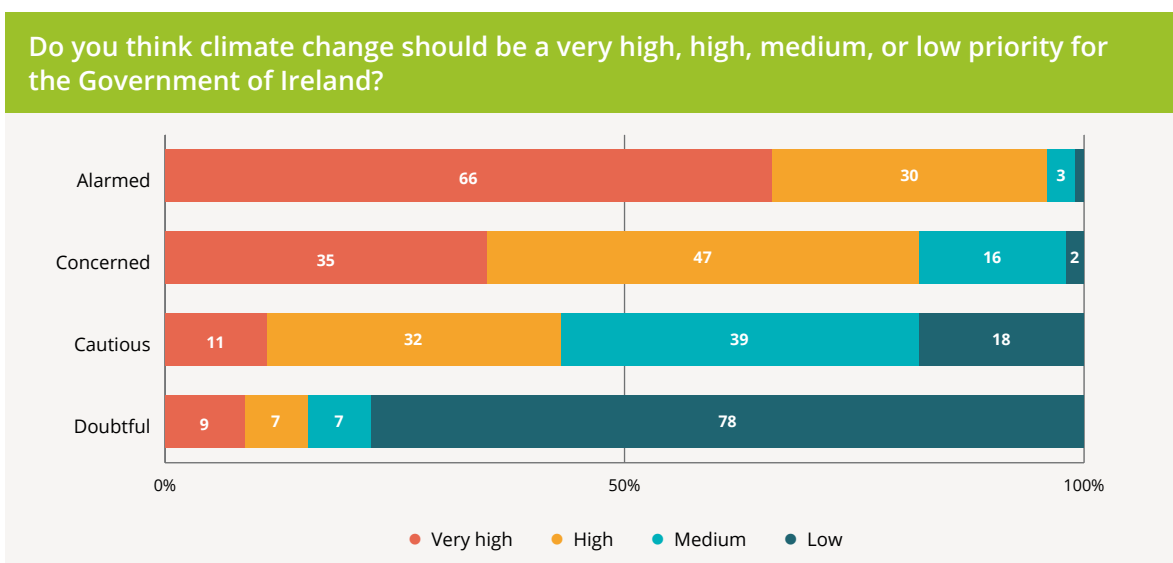
The four audiences also have different outlooks on the economic and social consequences of taking climate action. A majority of the Alarmed (69%) and Concerned (59%) think taking action to reduce climate change will "improve economic growth and create jobs." Strong majorities also think that taking climate action will "improve Ireland's quality of life" (Alarmed (86%), Concerned (79%).

The other two audiences are less optimistic in their economic and social outlooks. Only a third of the Cautious (33%) think climate action will "improve economic growth and create jobs," while most of the Doubtful think climate action will "reduce economic growth and cost jobs" (48%), or "have no effect on economic growth or jobs" (41%).

On quality of life, less than half of the Cautious (45%) think that climate action will "improve Ireland's quality of life," while most of the Doubtful again think climate action will "have no effect on Ireland's quality of life" (48%) or will "reduce Ireland's quality of life" (37%).

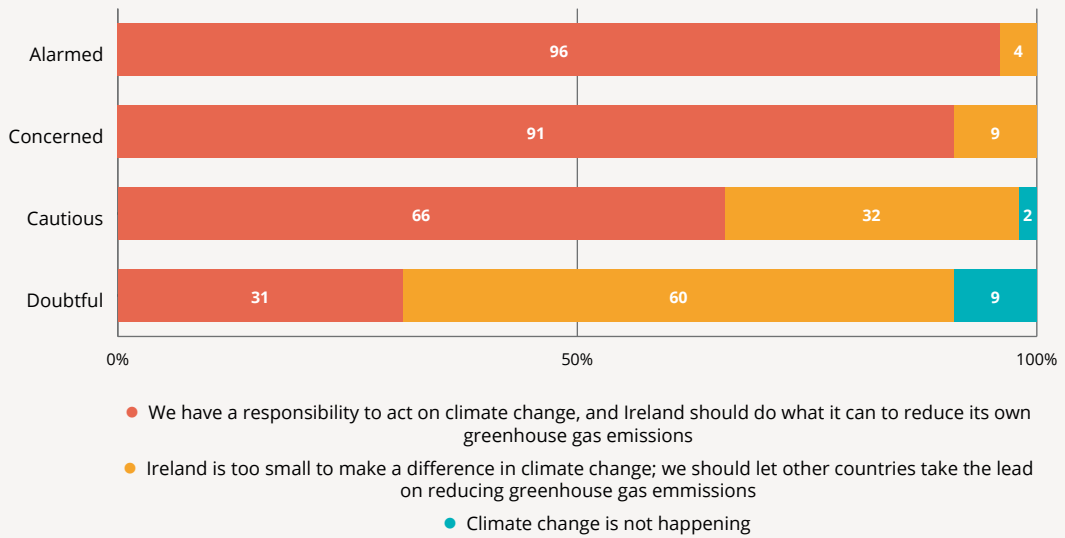
Graphs of each audience's responses to individual climate policy descriptions are presented below. A detailed summary of the responses is provided for each audience following the graphs.

10.1 Political and social outlook items

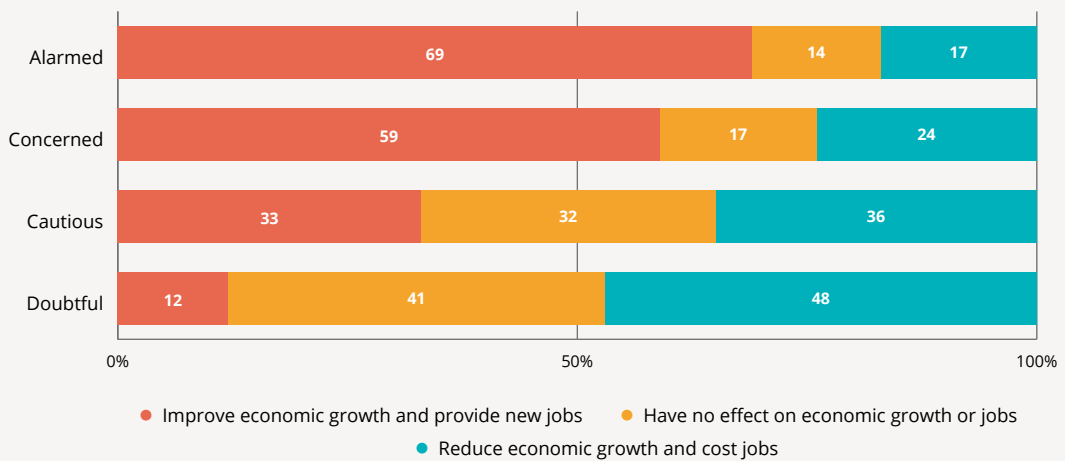


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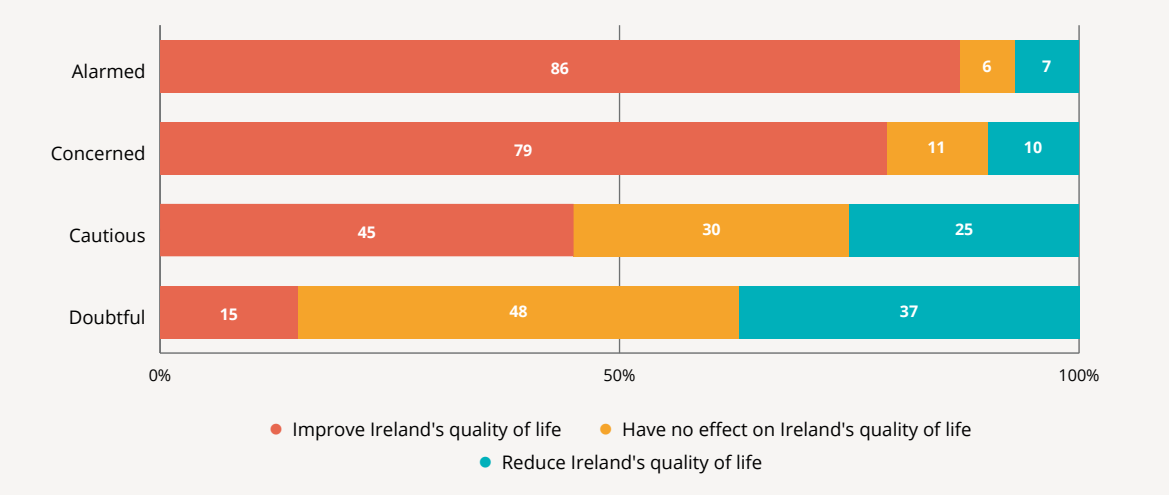
Now I will read you two statements. Neither may be perfect, but please let me know which comes closer to your point of view.



Overall, do you think that taking action to reduce climate change will ... [Economic]

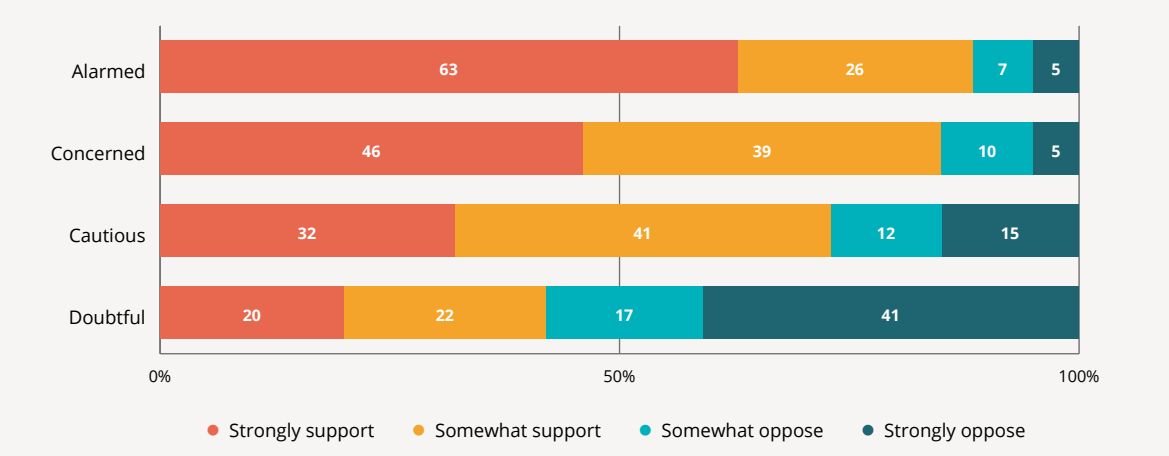


Overall, do you think that taking action to reduce climate change will ... [Quality of life]



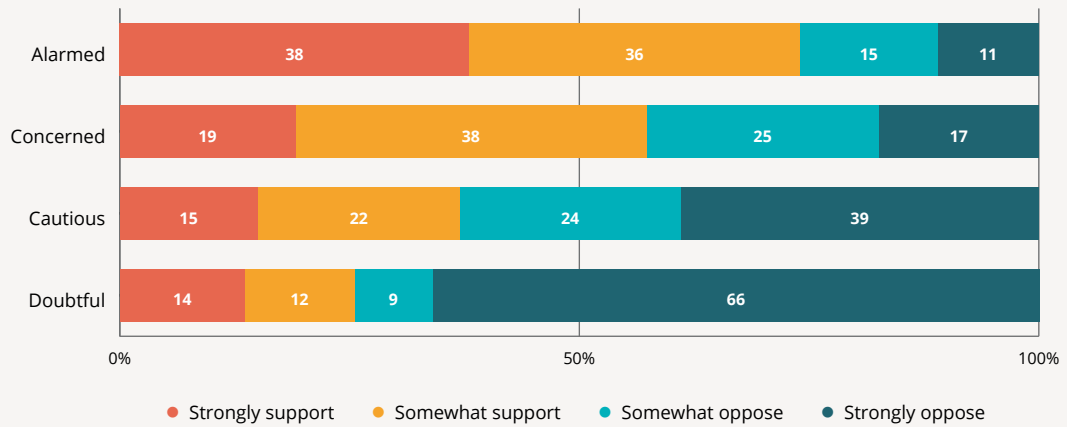
10.2 Support for climate change policy items

How much would you support or oppose the following policies to help Ireland achieve its greenhouse gas reduction targets? ...
[Building new infrastructure such as pylons or substations in your local area to support the increased use of renewable energy?]

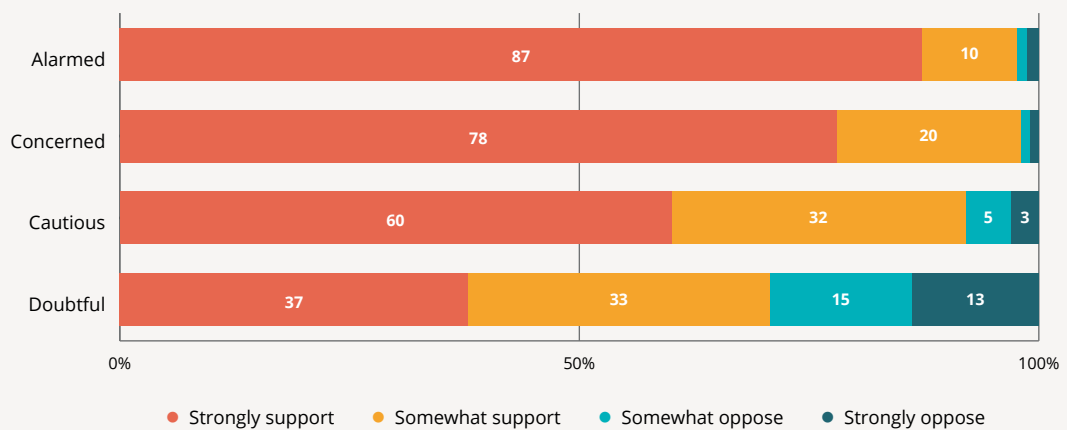


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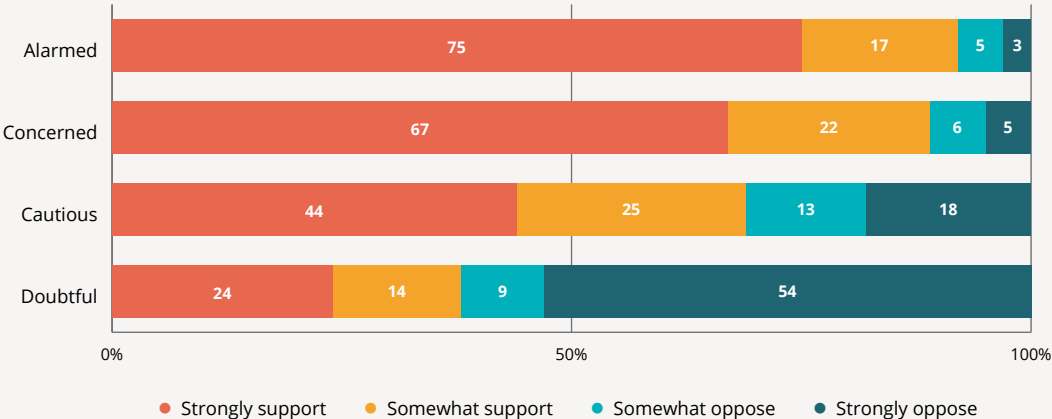
How much do you support or oppose the following policies to help Ireland achieve its greenhouse gas reduction targets? ...
[Banning peat, coal and oil for home heating purposes]



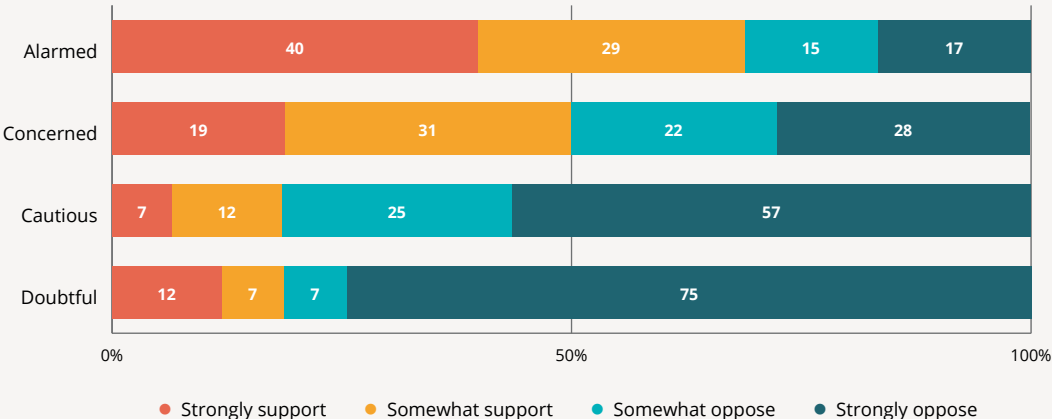
How much do you support or oppose the following policies to help Ireland achieve its greenhouse gas reduction targets? ...
[Government grants to encourage residential and commercial building owners to install cleaner and more efficient heating systems]



How much do you support or oppose the following policies to help Ireland achieve its greenhouse gas reduction targets? ...
[Government grants to make electric vehicles more affordable]

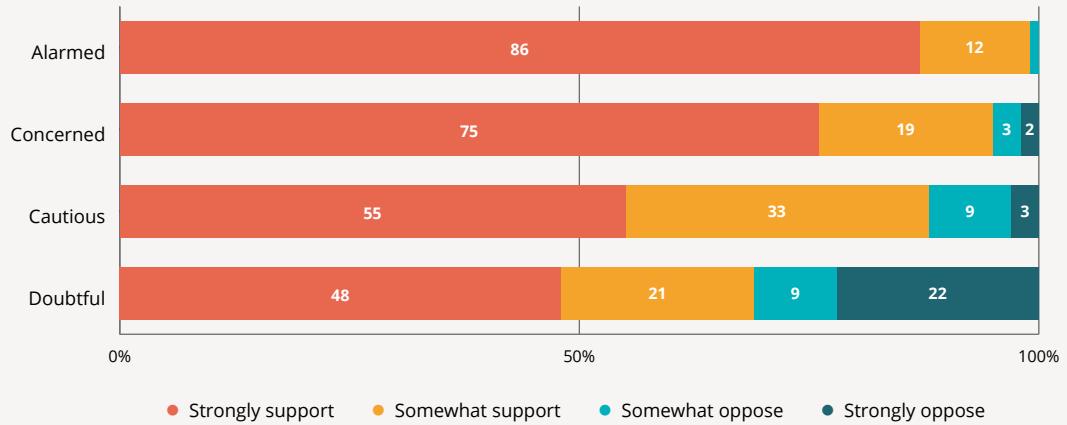


How much do you support or oppose the following policies to help Ireland achieve its greenhouse gas reduction targets? ...
[Higher taxes on cars that use petrol and diesel]

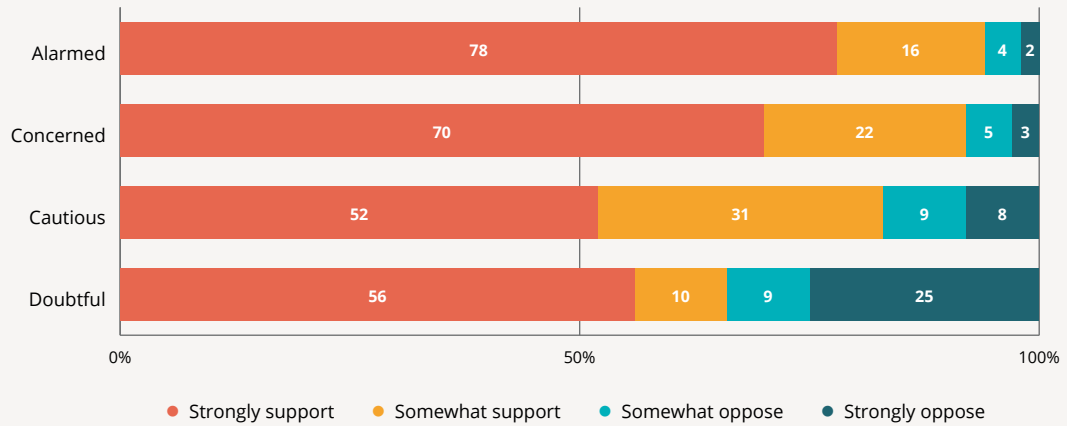


Climate Change's Four Irelands: An Audience Segmentation Analysis

How much do you support or oppose the following policies? ...
[Increased Government investment in public transport such as trains instead of motorways]

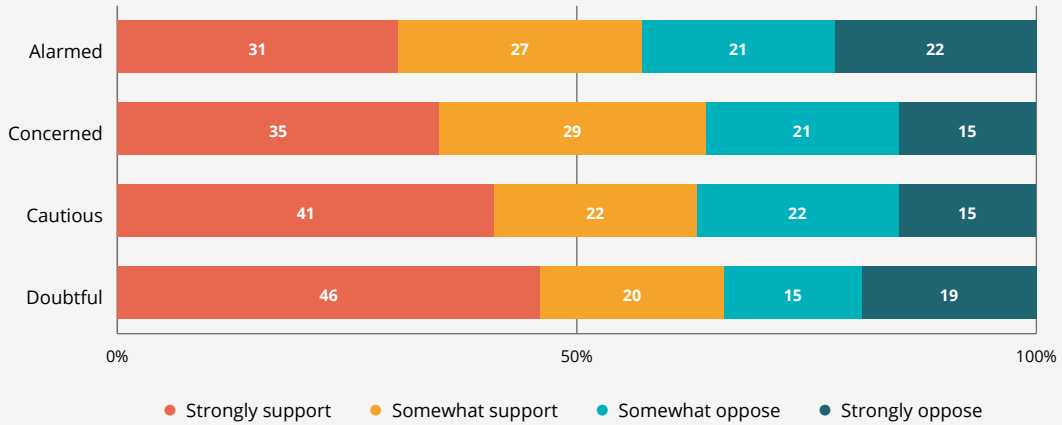


How much do you support or oppose the following policies? ...
[Increasing forest areas in your locality to offset greenhouse gas emissions from agriculture]

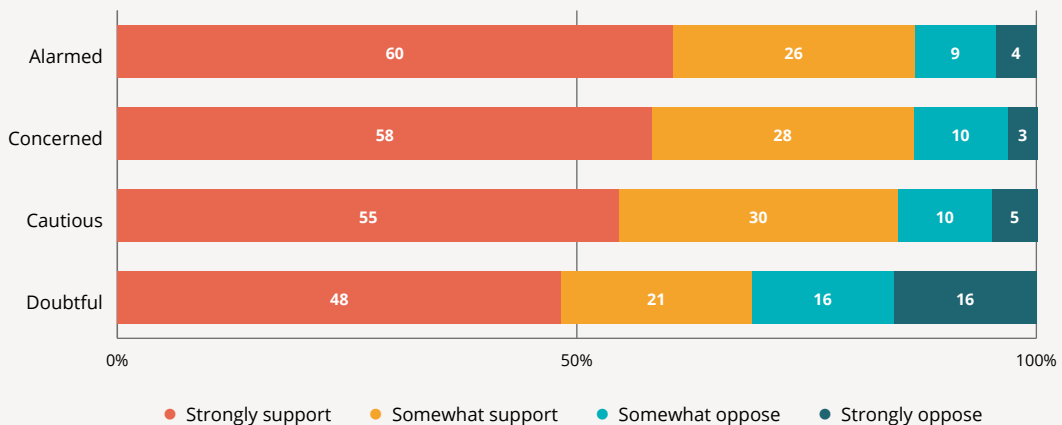


10.3 Carbon tax items

To help address climate change, taxes on fossil fuels will be rising in Ireland over the next 10 years. How much do you support or oppose using the revenues from these taxes for each of the following purposes? ...
[Returning the money to all Irish households in equal amounts]

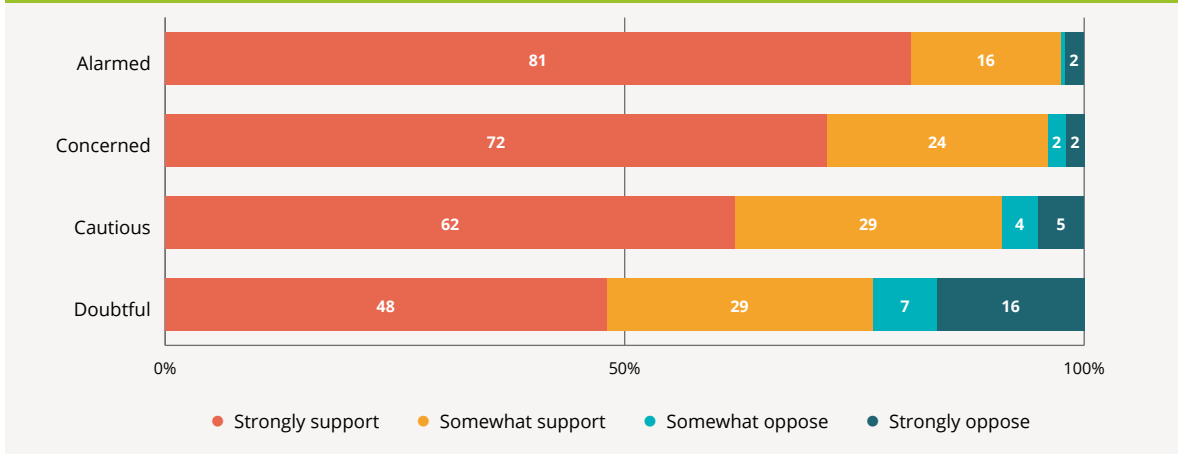


To help address climate change, taxes on fossil fuels will be rising in Ireland over the next 10 years. How much do you support or oppose using the revenues from these taxes for each of the following purposes? ...
[Assisting workers in the fossil fuel industry who may lose their jobs]

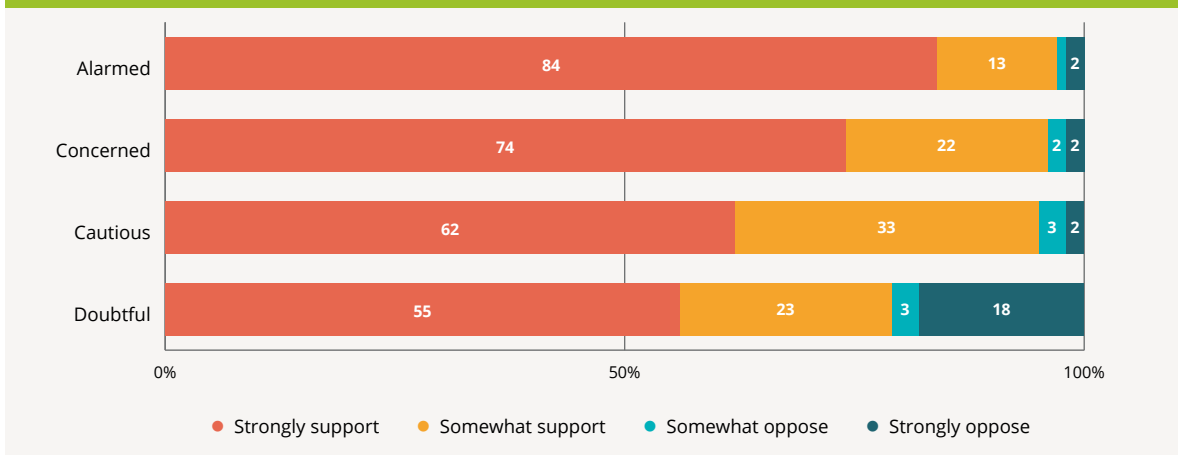


Climate Change's Four Irelands: An Audience Segmentation Analysis

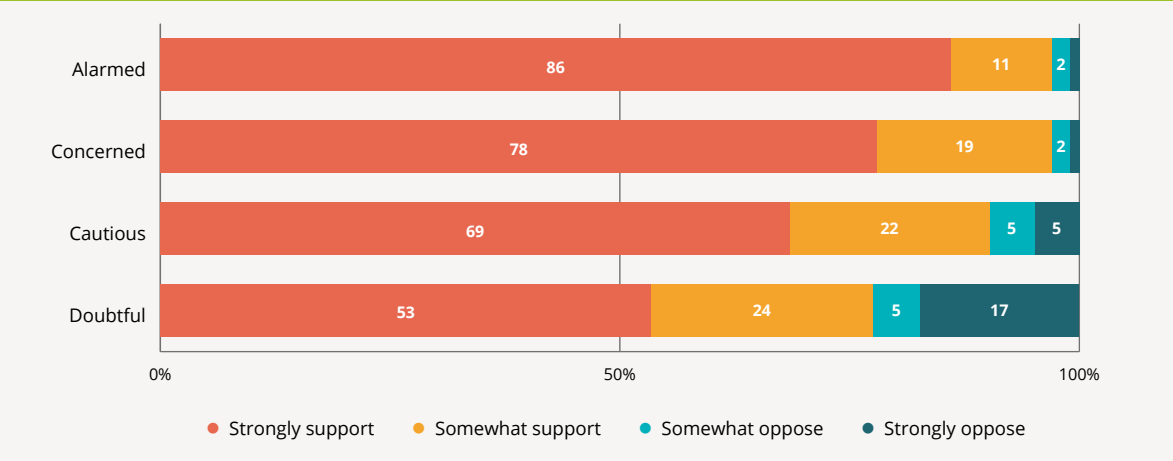
To help address climate change, taxes on fossil fuels will be rising in Ireland over the next 10 years. How much do you support or oppose using the revenues from these taxes for each of the following purposes? ...
[Helping pay for energy efficiency improvements in low-income households]



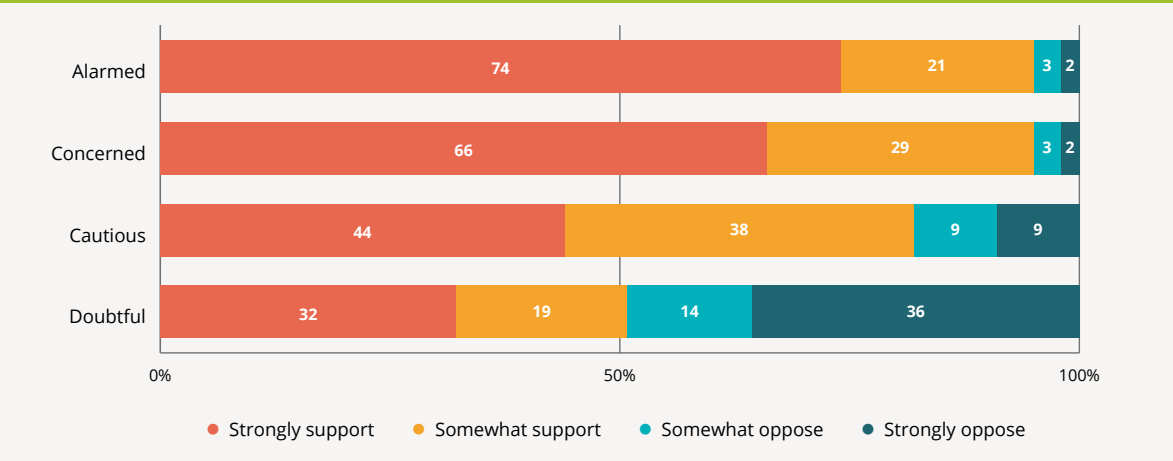
To help address climate change, taxes on fossil fuels will be rising in Ireland over the next 10 years. How much do you support or oppose using the revenues from these taxes for each of the following purposes? ...
[Supporting the further development of new clean energy sources such as marine and hydrogen power]



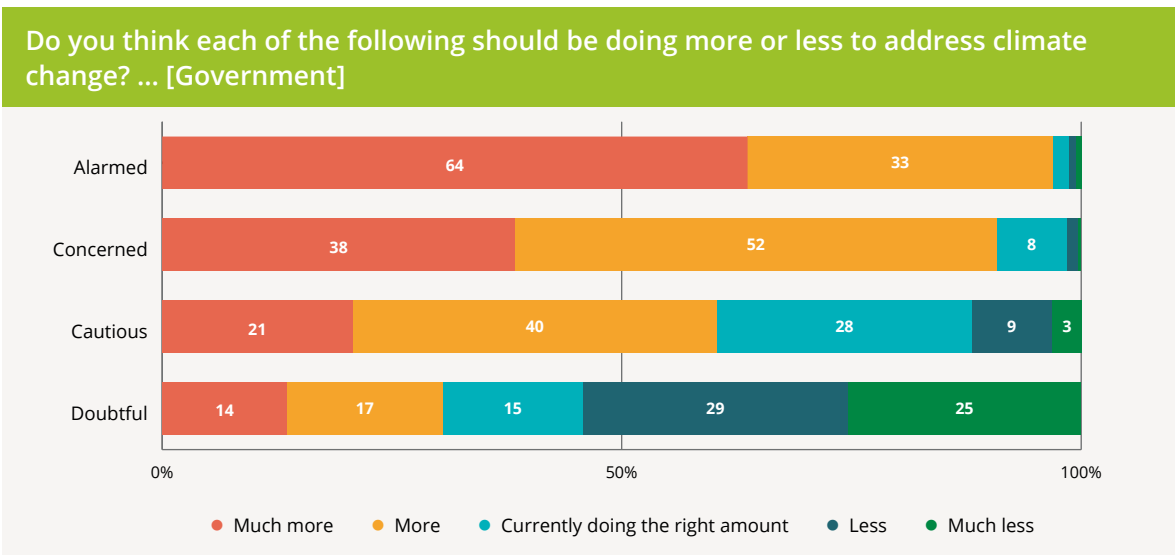
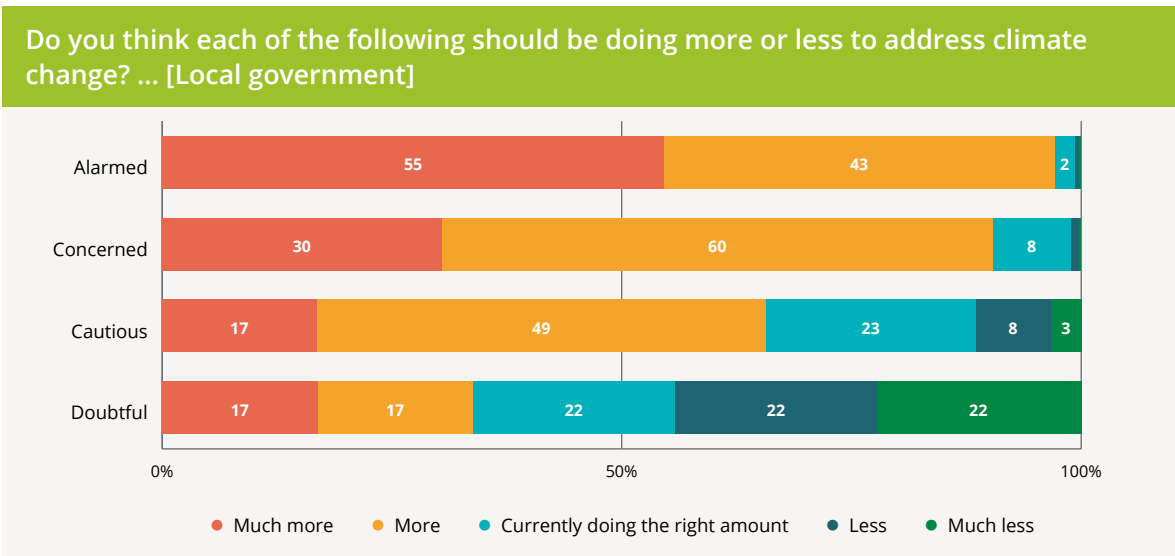
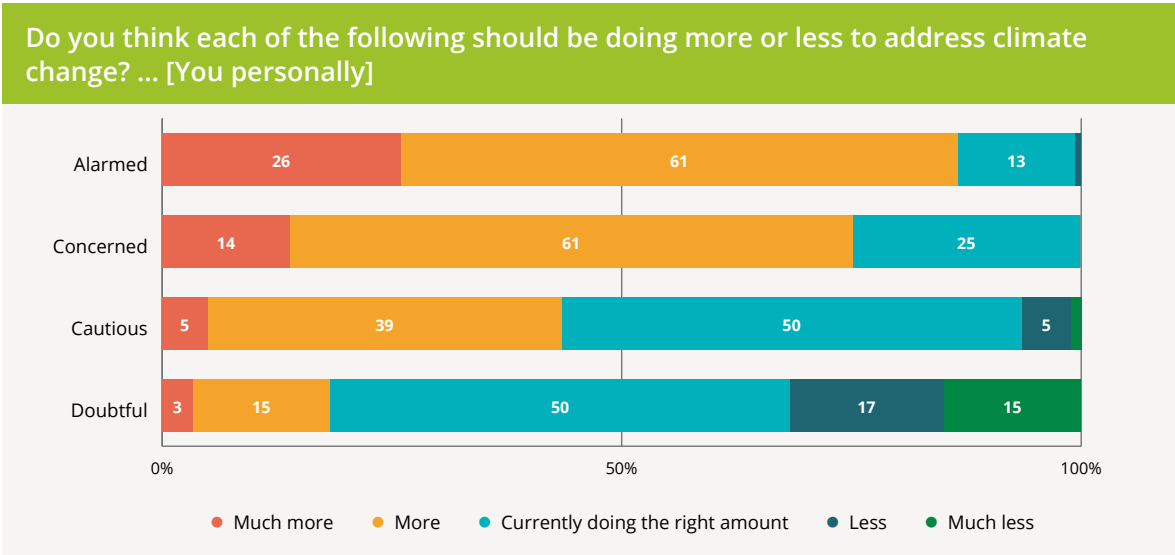
To help address climate change, taxes on fossil fuels will be rising in Ireland over the next 10 years. How much do you support or oppose using the revenues from these taxes for each of the following purposes? ...
[Funding improvements to Ireland's transport infrastructure such as rail, bus corridors, and cycling and walking paths]



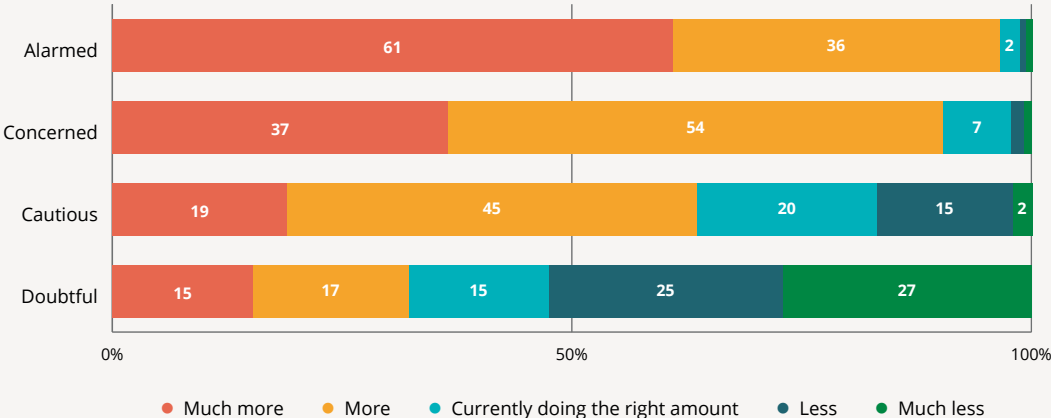
To help address climate change, taxes on fossil fuels will be rising in Ireland over the next 10 years. How much do you support or oppose using the revenues from these taxes for each of the following purposes? ...
[Funding programs to help Irish communities prepare for and adapt to the impacts of climate change]



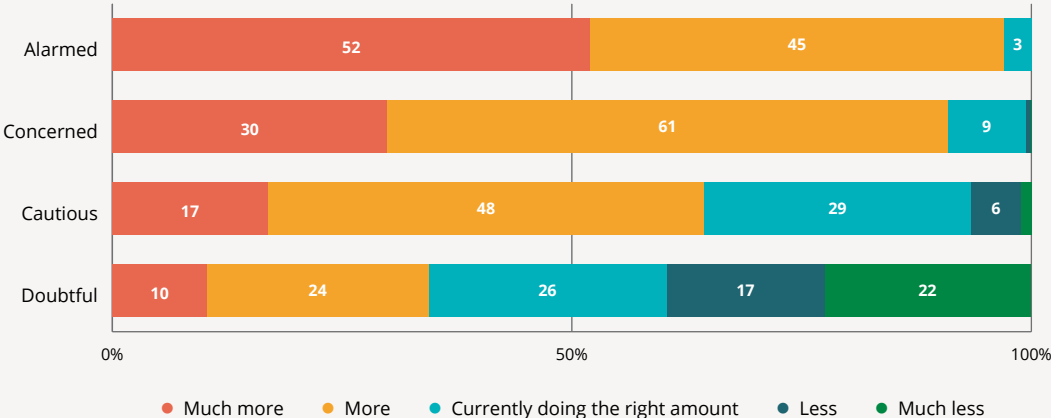
10.4 Who should do more to address climate change items



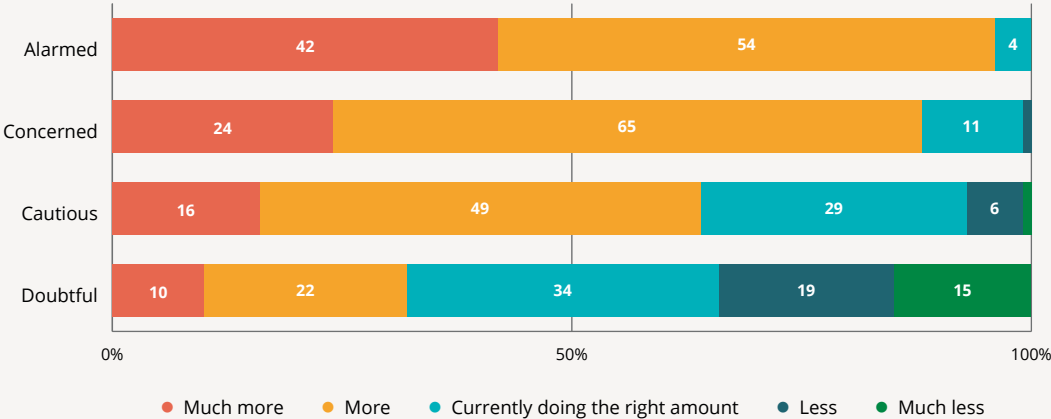
Do you think each of the following should be doing more or less to address climate change? ... [Politicians]



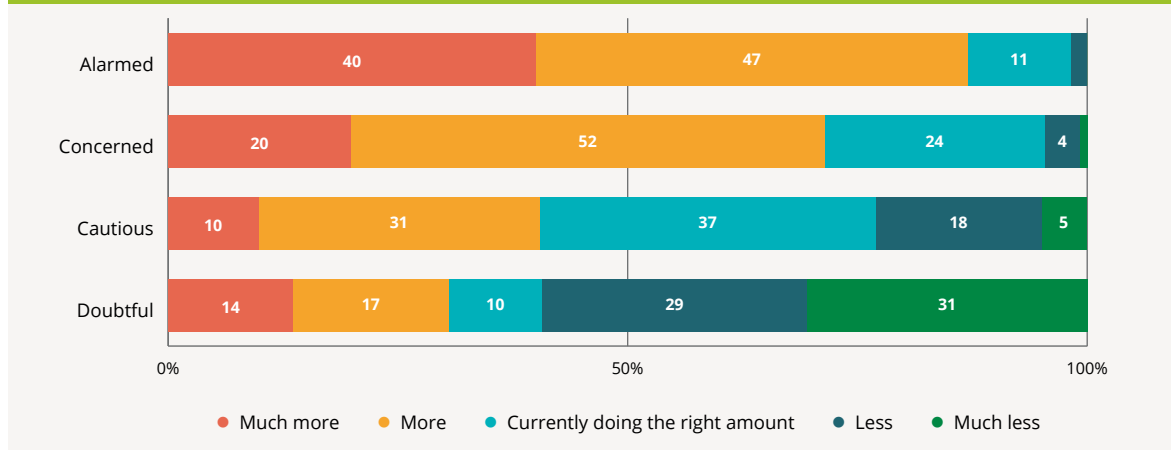
Do you think each of the following should be doing more or less to address climate change? ... [Businesses]



Do you think each of the following should be doing more or less to address climate change? ... [Citizens]



Do you think each of the following should be doing more or less to address climate change? ... [The media]



10.5 The Alarmed

10.5.1 Political and social outlook of the Alarmed

The Alarmed overwhelmingly think that climate change should be a “very high” (66%) or “high” (30%) priority for the Government of Ireland.

Most of the Alarmed think taking action to reduce climate change will “improve economic growth and provide new jobs” (69%). Likewise, a large majority think taking action to reduce climate change will “improve Ireland’s quality of life” (86%).

Almost all of the Alarmed think that “we have a responsibility to act on climate change, and Ireland should do what it can to reduce its own greenhouse gas emissions” (96%).

10.5.2 Support for climate action policies by the Alarmed

The Alarmed either “strongly” or “somewhat support” government grants to encourage residential and commercial building owners to install cleaner and more efficient heating systems (98%) and to make electric vehicles more affordable (92%).

They also support increasing forests in their own localities to offset greenhouse gas emissions from agriculture (94%), building new infrastructure such as pylons or substations in their local areas to support the increased use of renewable energy (88%), banning peat, coal, and oil for home heating purposes (74%), and higher taxes on cars that use petrol and diesel (69%). They also support the development of public transport infrastructure such as trains instead of motorway construction (95%).

10.5.3 Support for use of carbon tax revenues by the Alarmed

The Alarmed also “strongly” or “somewhat support” using the revenues from rising taxes on fossil fuels over the next 10 years for helping pay for energy efficiency improvements in low-income households (98%), supporting the further development of new clean energy sources such as marine and hydrogen power (97%), funding improvements to Ireland’s transport infrastructure such as rail, bus corridors, and cycling and walking paths (97%), funding programs to help Irish communities prepare for and adapt to the impacts of climate change (95%), assisting workers in the fossil fuel industry who may lose their jobs (87%), and returning the money to all Irish households in equal amounts (57%).

10.5.4 Alarmed: Who should do more to address climate change

Large majorities of the Alarmed think almost all actors should be doing “more” or “much more” to address climate change, especially local government (97%), businesses and corporations (96%), politicians (96%), themselves (87%), and the Irish EPA (81%).

10.6 The Concerned

10.6.1 Political and social outlook of the Concerned

The Concerned think climate change should be a “very high” (35%) or “high” (47%) priority for the Government of Ireland.

Most of the Concerned think taking action to reduce climate change will “improve economic growth and provide new jobs” (59%). Likewise, a large majority think that taking action to reduce climate change will “improve Ireland’s quality of life” (79%).

Nine in ten of the Concerned think that “we have a responsibility to act on climate change, and Ireland should do what it can to reduce its own greenhouse gas emissions” (91%).

10.6.2 Support for climate action policies by the Concerned

The Concerned either “strongly” or “somewhat support” government grants to encourage residential and commercial building owners to install cleaner and more efficient heating systems (98%) and to make electric vehicles more affordable (89%). They also support increasing forests in their own localities to offset greenhouse gas emissions from agriculture (92%), building new infrastructure such as pylons or substations in their local areas to support the increased use of renewable energy (85%), banning peat, coal, and oil for home heating purposes (57%), and higher taxes on cars that use petrol and diesel (50%). They also support the development of public transport infrastructure such as trains instead of motorway construction (95%).

10.6.3 Support for use of carbon tax revenues by the Concerned

The Concerned also “strongly” or “somewhat support” using the revenues from rising taxes on fossil fuels over the next 10 years for supporting the further development of new clean energy sources such as marine and hydrogen power (96%), helping pay for energy efficiency improvements in low-income households (96%), funding improvements to Ireland’s transport infrastructure such as rail, bus corridors, and cycling and walking paths (96%), funding programs to help Irish communities prepare for and adapt to the impacts of climate change (95%), assisting workers in the fossil fuel industry who may lose their jobs (87%), and returning the money to all Irish households in equal amounts (63%).

10.6.4 Concerned: Who should do more to address climate change

Large majorities of the Concerned think a number of actors should be doing more to address climate change, with the highest emphasis placed on local Government (90%), businesses and corporations (91%), politicians (90%). Smaller majorities think that they personally (70%) or the Irish EPA (70%) should do more.

10.7 The Cautious

10.7.1 Political and social outlook of the Cautious

Most of the Cautious think that climate change should be a “high” (32%), or “medium priority” (39%) for the Government of Ireland.

The Cautious are almost evenly split about the results of taking action to reduce climate change, with about a third thinking that climate action will “reduce economic growth and cost jobs” (36%), will “improve economic growth and provide new jobs” (33%), or will “have no effect on economic growth or jobs” (32%). Just under half think taking action to reduce climate change will “improve Ireland’s quality of life” (45%), while three in ten think it will “have no effect on Ireland’s quality of life” (30%).

A majority of the Concerned also say that “we have a responsibility to act on climate change, and Ireland should do what it can to reduce its own greenhouse gas emissions” (66%).

10.7.2 Support for climate action policies by the Cautious

The Cautious either “strongly” or “somewhat support” government grants to encourage residential and commercial building owners to install cleaner and more efficient heating systems (92%) and to make electric vehicles more affordable (69%). They also support increasing forests in their own localities to offset greenhouse gas emissions from agriculture (83%) and building new infrastructure such as pylons or substations in their local areas to support the increased use of renewable energy (73%). They also support the development of public transport infrastructure such as trains instead of motorway construction (88%).

In contrast, a majority of the Cautious either “strongly” or “somewhat oppose” the banning of peat, coal, and oil for home heating purposes (63%) and higher taxes on cars that use petrol and diesel (82%).

10.7.3 Support for use of carbon tax revenues by the Cautious

The Cautious also “strongly” or “somewhat support” using the revenues from rising taxes on fossil fuels over the next 10 years for supporting the further development of new clean energy sources such as marine and hydrogen power (95%), helping pay for energy efficiency improvements in low-income households (91%), funding improvements to Ireland’s transport infrastructure such as rail, bus corridors, and cycling and walking paths (90%), funding programs to help Irish communities prepare for and adapt to the impacts of climate change (81%), assisting workers in the fossil fuel industry who may lose their jobs (85%), and returning the money to all Irish households in equal amounts (63%).

10.7.4 Cautious: Who should do more to address climate change

Most of the Cautious think most sectors of society should be doing more to address climate change, including local Government (66%), businesses and corporations (64%), and politicians (64%). However, only a minority of the Cautious think that the Irish EPA (46%) or they personally (44%) should take more action regarding climate change.

10.8 The Doubtful

10.8.1 Political and social outlook of the Doubtful

A majority of the Doubtful think climate change should be a “low priority” (78%) for the Government of Ireland.

Almost half of the Doubtful think taking action to reduce climate change will “reduce economic growth and cost jobs” (48%), and another 41% think that it will “have no effect on economic growth or jobs.” Likewise, a majority think that taking action to reduce climate change will either “reduce Ireland’s quality of life” (37%) or “have no effect” (48%).

Only a minority of the Doubtful say that “we have a responsibility to act on climate change, and Ireland should do what it can to reduce its own greenhouse gas emissions” (31%), while most (60%) say “Ireland is too small to make a difference in climate change; we should let other countries take the lead on reducing greenhouse gas emissions.”

10.8.2 Support for climate action policies by the Doubtful

The Doubtful either “strongly” or “somewhat support” Government grants to encourage residential and commercial building owners to install cleaner and more efficient heating systems (71%). They also support increasing forests in their own localities to offset greenhouse gas emissions from agriculture (66%) and the development of public transport infrastructure such as trains instead of motorway construction (88%).

A majority either “strongly” or “somewhat oppose” the banning of peat, coal, and oil for home heating purposes (75%), and higher taxes on cars that use petrol and diesel (81%). They also oppose Government grants to make electric vehicles more affordable (63%) and oppose the local construction of renewable energy infrastructure (58%).

10.8.3 Support for use of carbon tax revenues by the Doubtful

The Doubtful also “strongly” or “somewhat support” using the revenues from rising taxes on fossil fuels over the next 10 years for supporting the further development of new clean energy sources such as marine and hydrogen power (78%), helping pay for energy efficiency improvements in low-income households (78%), funding improvements to Ireland’s transport infrastructure such as rail, bus corridors, and cycling and walking paths (78%), assisting workers in the fossil fuel industry who may lose their jobs (69%), returning the money to all Irish households in equal amounts (66%), and funding programs to help Irish communities prepare for and adapt to the impacts of climate change (51%).

10.8.4 Doubtful: Who should do more to address climate change

Only a minority of the Doubtful think various sectors of society should be doing “much more” or “more” to address climate change, including the Irish EPA (38%), local Government (34%), businesses and corporations (34%), or politicians (32%). Only about one in five (18%) think they personally should take more action regarding climate change.

11. Climate-Related Behaviours

There are many ways in which people can take action on climate change. Consumer activism, such as supporting the adoption of energy efficient products and technologies, as well as personal actions such as energy conservation can also contribute to large scale changes in climate-related behaviours. However, intention to engage in a behaviour does not always lead to actual behaviour. Accordingly, respondents were asked about their history over the past 12 months of engaging in a variety of consumer behaviours related to climate change and their intentions to engage in those behaviours over the next 12 months.

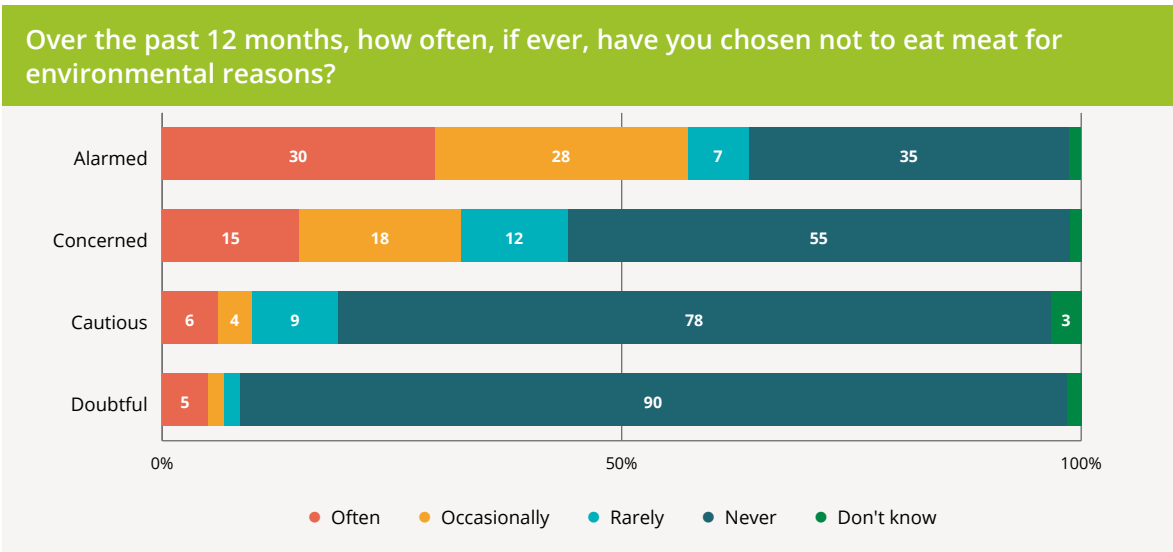
In terms of self-reported past consumer behaviour, a majority of the of the Alarmed (66%) said that, at least "once" in the past 12 months, they bought a good or service from a company because it has taken steps to reduce climate change. About three in ten (28%) said they had done so "several" or "many times." Much smaller proportions of the other audiences said they had taken this action.

Similarly, most of the Alarmed (58%) said that, at least "once" in the last 12 months, they had punished companies that are opposing steps to reduce climate change by *NOT* buying their products, with 20% saying they had done so "several" or "many times." Again, much smaller proportions of the other audiences said they had taken this action.

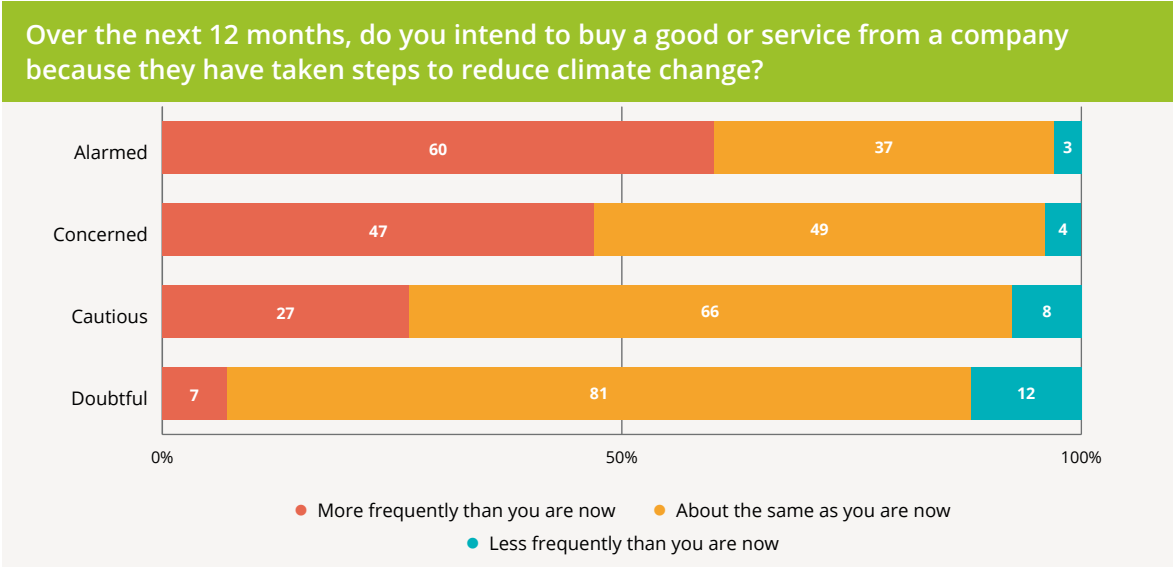
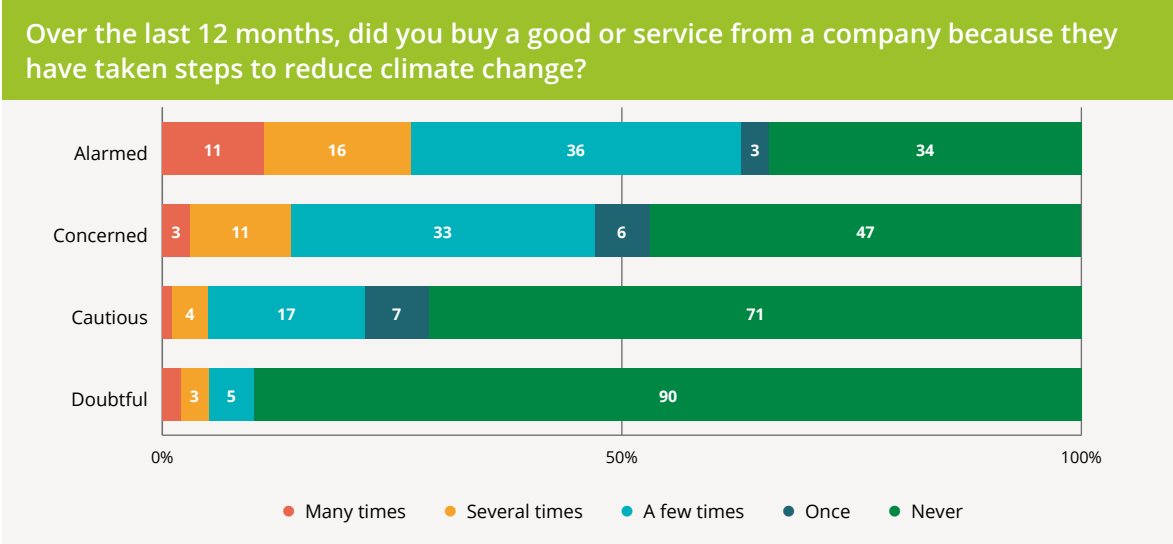
There are also large differences between the audiences in their intentions to change their consumer activities in the next year based on their perceptions of pro- or anti-climate actions of a company. About six in ten (60%) of the Alarmed intend to increase their frequency of punishing companies that are opposing steps to reduce climate change by not purchasing their products, compared with a little under half of the Concerned, and smaller minorities of the Cautious and Doubtful. Similarly, about six in ten of the Alarmed (60%) also plan to increase their frequency of rewarding companies that are taking steps to reduce climate change by purchasing their products or services. A little under half of the Concerned (47%), about a quarter of the Cautious (27%) and a small minority of the Doubtful (7%) also plan on rewarding companies in this way.

Graphs of each audience's responses to individual climate-related behaviour questions are presented below. A detailed summary of the responses is provided for each audience following the graphs.

11.1 Dietary choice item

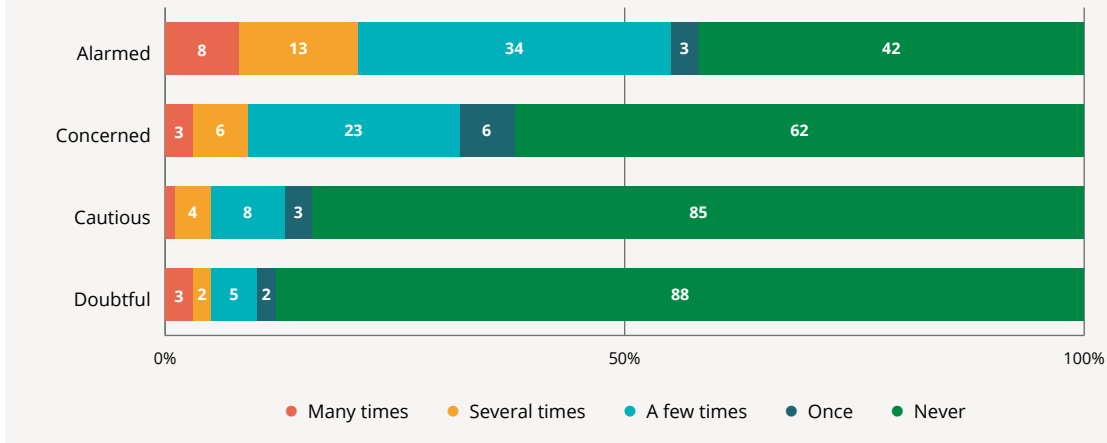


11.2 Economic behaviour items

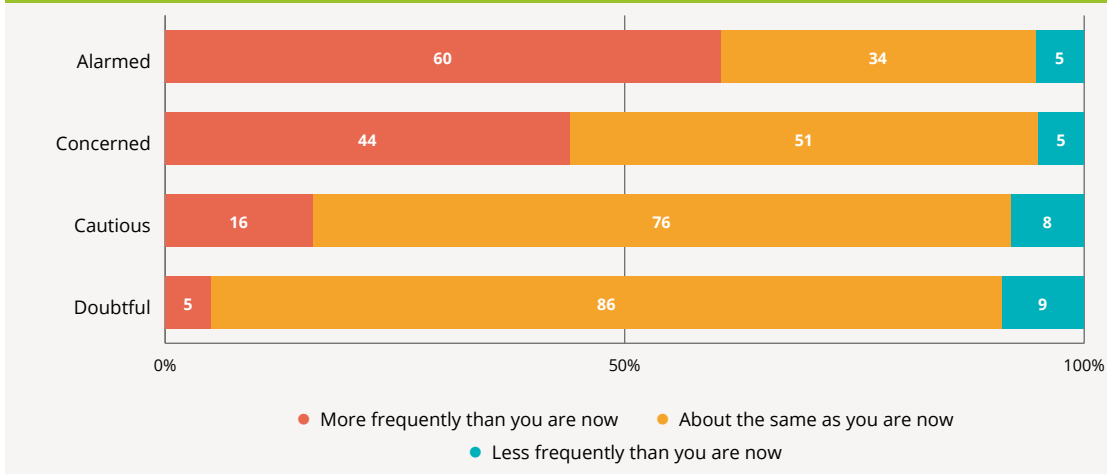


Climate Change's Four Irelands: An Audience Segmentation Analysis

Over the last 12 months, have you punished companies that are opposing steps to reduce climate change by NOT buying their products?



Over the next 12 months, do you intend to punish companies that are opposing steps to reduce climate change by NOT buying their products?



11.3 The Alarmed

Over the last 12 months, 66% of the Alarmed said that they had rewarded a company because they have taken action to reduce climate change. However, only 28% had done this “several” or “many times” in the last year. Similarly, 58% of the Alarmed said that they had punished companies that are opposing steps to reduce climate change by *NOT* buying their products at least once, with only 20% saying they had done this “several” or “many times” in the last year. A majority of the Alarmed (57%) also said that they had “occasionally” or “often” avoided eating red meat for environmental reasons.

However, over the next 12 months, six in ten of the Alarmed intend to increase their buying of goods or services from companies that have taken action to reduce climate change “more frequently than you are now” (60%), or to punish companies that are opposing steps to reduce climate change by *NOT* buying their products “more frequently than you are now” (60%).

11.4 The Concerned

Over the last 12 months, about half of the Concerned said that they had rewarded a company because they have taken action to reduce climate change, however only 14% had done this “several” or “many times.” Similarly, about four in ten of the Concerned (38%) said that they had punished companies that are opposing steps to reduce climate change by *NOT* buying their products at least once, with only 9% saying they had done this “several” or “many times.” A third of the Concerned (33%) also said that they had “occasionally” or “often” avoided eating red meat for environmental reasons.

However, over the next 12 months, nearly half of the Concerned intend to increase their buying of goods or services from companies that have taken action to reduce climate change “more frequently than you are now” (47%), or to punish companies that are opposing steps to reduce climate change by *NOT* buying their products “more frequently than you are now” (44%).

11.5 The Cautious

Over the last 12 months, about three in ten of the Cautious (29%) said that they had rewarded a company because they have taken action to reduce climate change. Only a very small percentage (5%) said they had done this “several” or “many times.” Similarly, only (15%) said that they had punished companies that are opposing steps to reduce climate change by *NOT* buying their products at least once, with only 4% saying they had done this “several” or “many times.” Accordingly, only one in ten of the Cautious (10%) also said that they had “occasionally” or “often” avoided eating red meat for environmental reasons.

Over the next 12 months, many of the Cautious intend to increase their buying of goods or services from companies that have taken action to reduce climate change “more frequently than you are now” (27%), or to punish companies that are opposing steps to reduce climate change by *NOT* buying their products “more frequently than you are now” (16%). Instead, the Cautious are much more likely to say that they intend to reward (66%) or punish companies with their purchases (76%) “about the same” as they are now.

11.6 The Doubtful

Over the last 12 months, only about one in ten (10%) of the Doubtful said that they had rewarded a company because they have taken action to reduce climate change. A very small percentage (5%) said that they had done this “several” or “many times.” Similarly, only about one in eight (12%) said that they had punished companies that are opposing steps to reduce climate change by *NOT* buying their products at least once, with only 5% saying they had done this “several” or “many times.” Accordingly, only a small fraction of the Doubtful (7%) also said that they had “occasionally” or “often” avoided eating red meat for environmental reasons, with the overwhelming majority (90%) saying they had never done this.

Over the next 12 months, very few of the Doubtful intend to increase their buying of goods or services from companies that have taken action to reduce climate change “more frequently than you are now” (7%), or to punish companies that are opposing steps to reduce climate change by *NOT* buying their products “more frequently than you are now” (5%).

Instead, the Doubtful are much more likely to say that they intend to keep to “about the same” habit of rewarding (81%) or punishing companies with their purchases (86%).

12. Climate Literacy

New questions to assess climate literacy were added to the Climate change in the Irish mind questionnaire for Wave 2.

Climate literacy refers to knowledge about climate change science and solutions. Public awareness of Government climate initiatives is also described in this section.

Factual knowledge is explored with a series of true or false questions about climate change derived from related research¹⁷. There were nine factual items in total. The overall average performance was 42% correct, with the Alarmed (47%), Concerned (40%), and Doubtful (46%) having similar levels of performance. The group with the weakest factual climate change knowledge was the Cautious (35%). Any difference between groups was small, on the order of a single question.

Applied knowledge is explored by presenting participants with a list of activities¹⁸, and asking whether each activity would make a Large (5% or more), Medium (between 1-5%), or Small (less than 1%) contribution to reducing the carbon footprint of an average person.¹⁹ These questions were asked in random order, but are presented as falling within four topics: Transport, home energy use, diet, and consumer behaviour.

Participants were also asked about their awareness of a large-scale Government program of engagement and consultation on climate change: "The National Dialogue on Climate Action"²⁰; and two climate action campaigns aimed at consumers: "Reduce Your Use"²¹; and "Stop Food Waste"²².

Graphs of each audience's responses to individual climate literacy questions are presented below. A detailed summary of the responses is provided for each audience following the graphs.

17 Leiserowitz, A., Nicholas, S., & Marlon, J. (2010). Americans' Knowledge of Climate Change. Yale Project on Climate Change Communication. <https://resources.environment.yale.edu/climate-communication-OFF/files/ClimateChangeKnowledge2010.pdf>

18 I will read out a series of actions that could benefit the environment by reducing an average person's carbon footprint. A carbon footprint is an estimate of the amount of greenhouse gases emitted from someone's actions and behaviours. For example, things like home energy use, diet, travel etc. We'd like to hear your best guess on which actions would have a large, medium, or small effect on reducing someone's carbon footprint over the last 12 months. (Order of items randomised)
A large effect is a reduction of 5% or more in someone's carbon footprint.
A medium effect is a reduction of between 1-5%
A small effect is a reduction of less than 1%

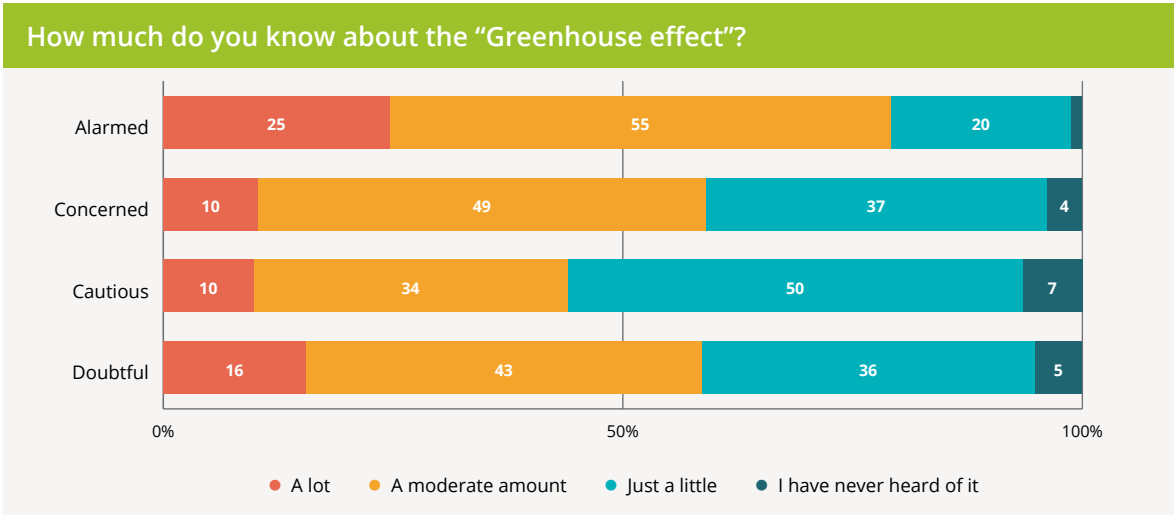
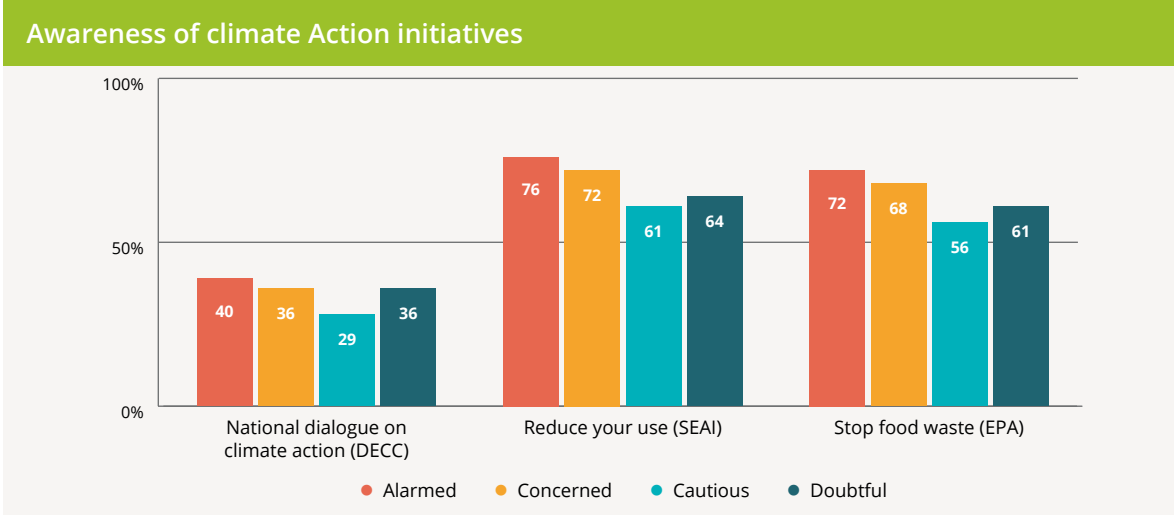
19 Relative contributions to a typical person's carbon footprint are derived from research by Wynnes et al. (2020), Anderson et al. (2021), and Timmons and Lunn, (2022). The telephone interview format of the Climate Change in the Irish Mind Study required the number and complexity of questions to be reduced from the original studies.
Wynnes, S., Zhao, J., & Donner, S. D. (2020). How well do people understand the climate impact of individual actions? *Climatic Change*, 162(3), 1521–1534. <https://doi.org/10.1007/s10584-020-02811-5>
Anderson, Y., Timmons, S., & Lunn, P. D. (2021). Youth knowledge and perceptions of climate mitigation. ESRI. <https://doi.org/10.26504/rs153>
Timmons, S., & Lunn, P. (2022). Public understanding of climate change and support for mitigation. ESRI. <https://doi.org/10.26504/rs135>

20 <https://www.gov.ie/en/publication/4bf2c-national-dialogue-on-climate-action-ndca/>

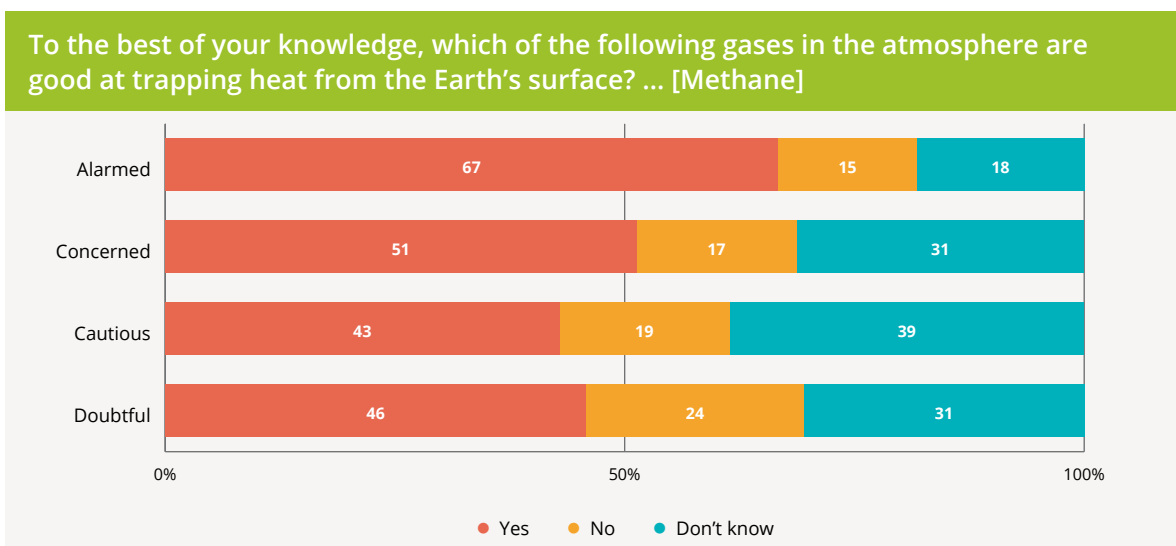
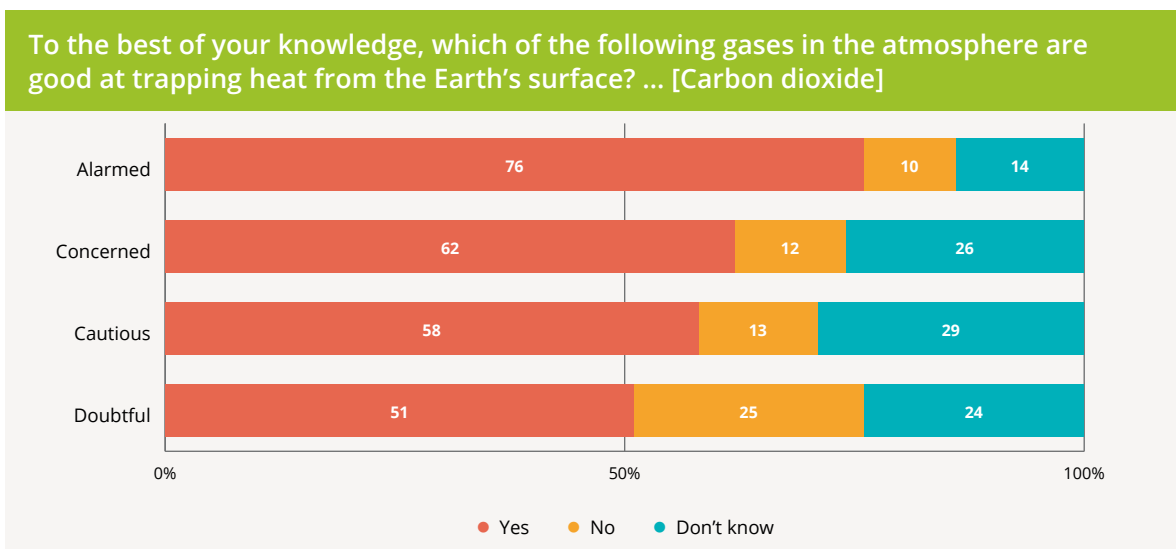
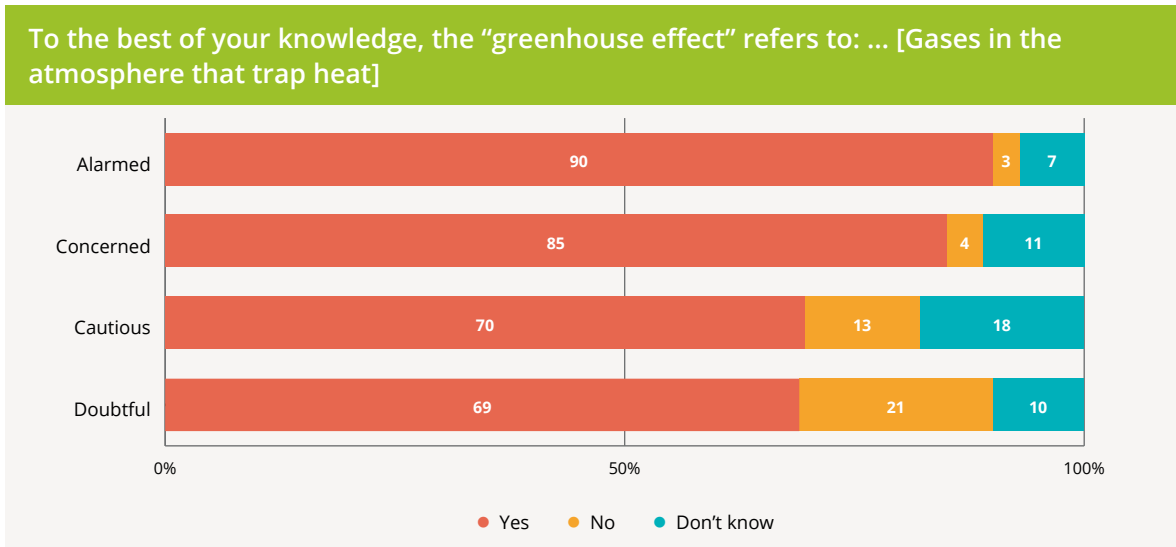
21 <https://www.seai.ie/reduceyouruse/>

22 <https://stopfoodwaste.ie/>

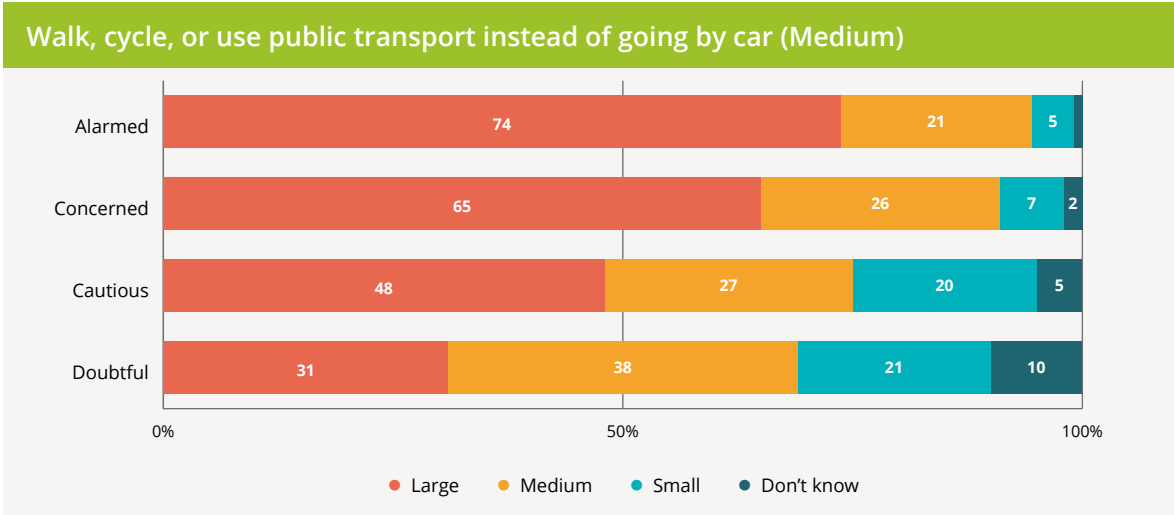
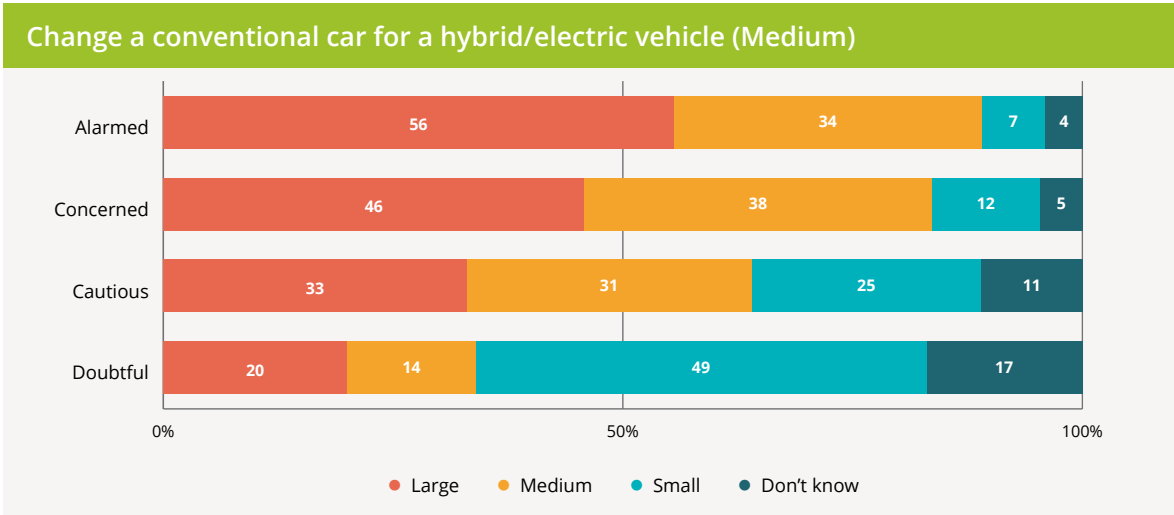
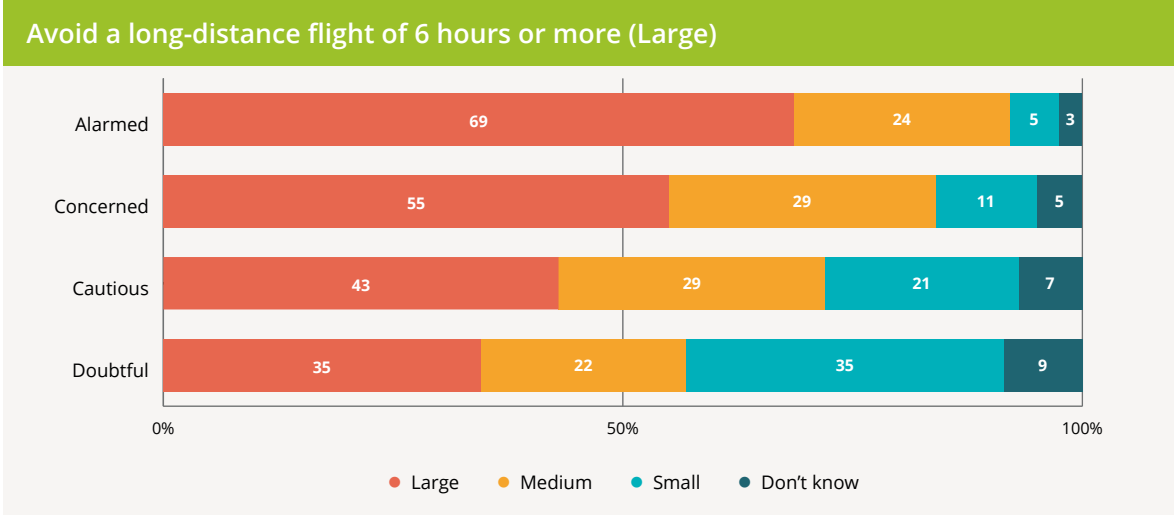
12.1 Awareness of initiatives and knowledgeability items



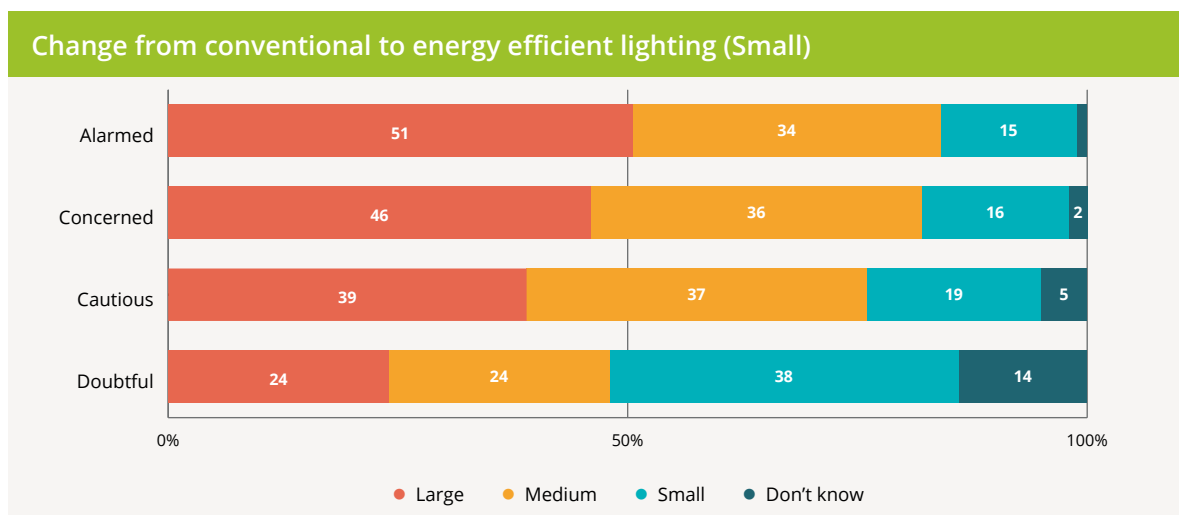
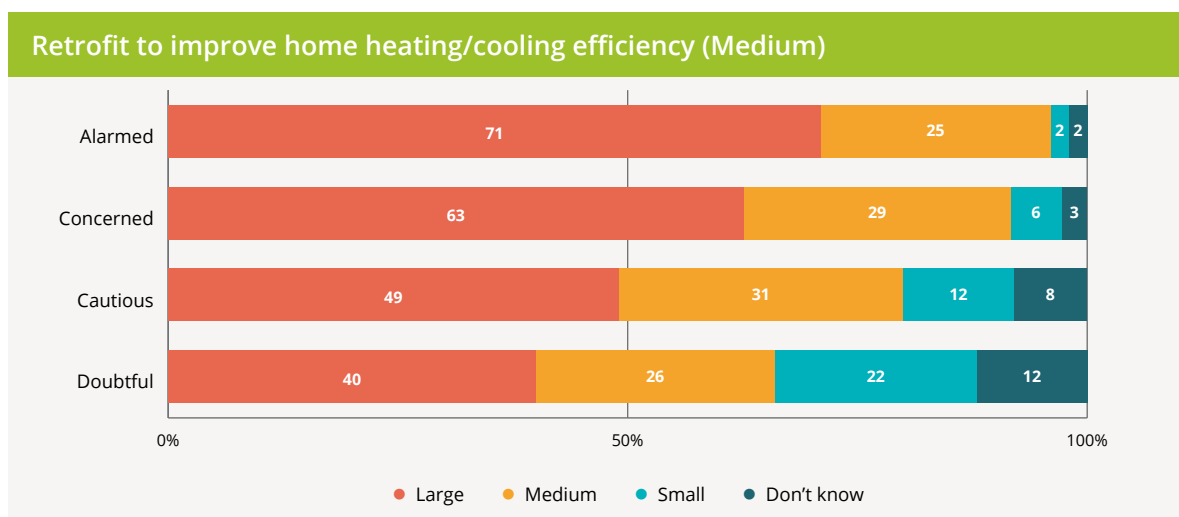
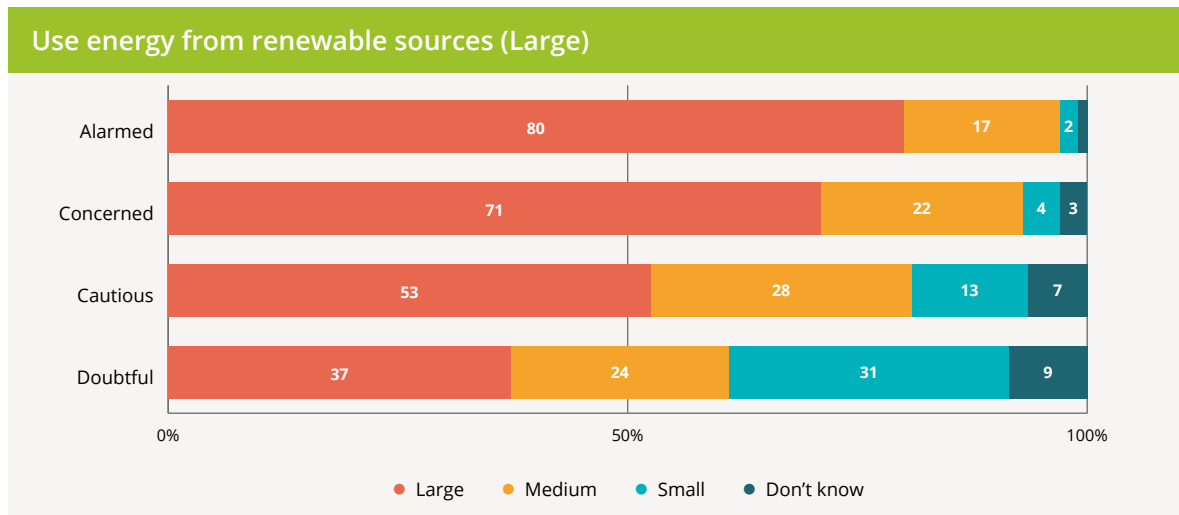
12.2 Factual climate change items



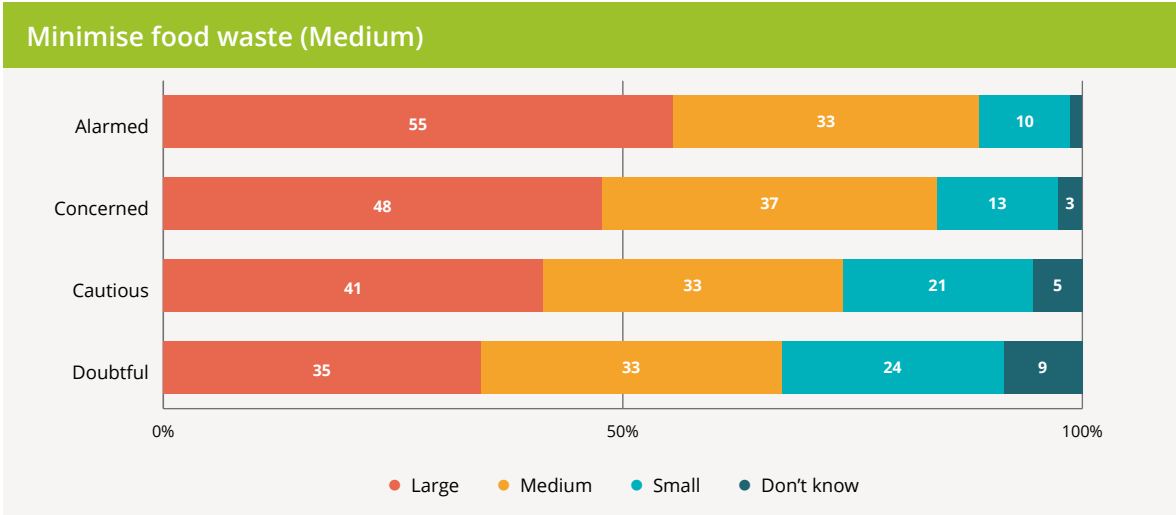
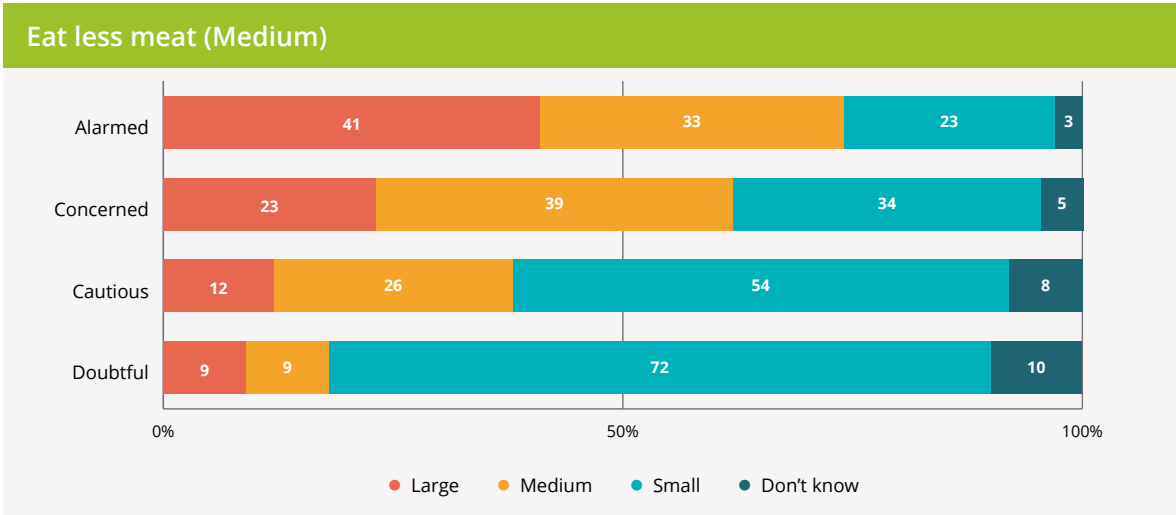
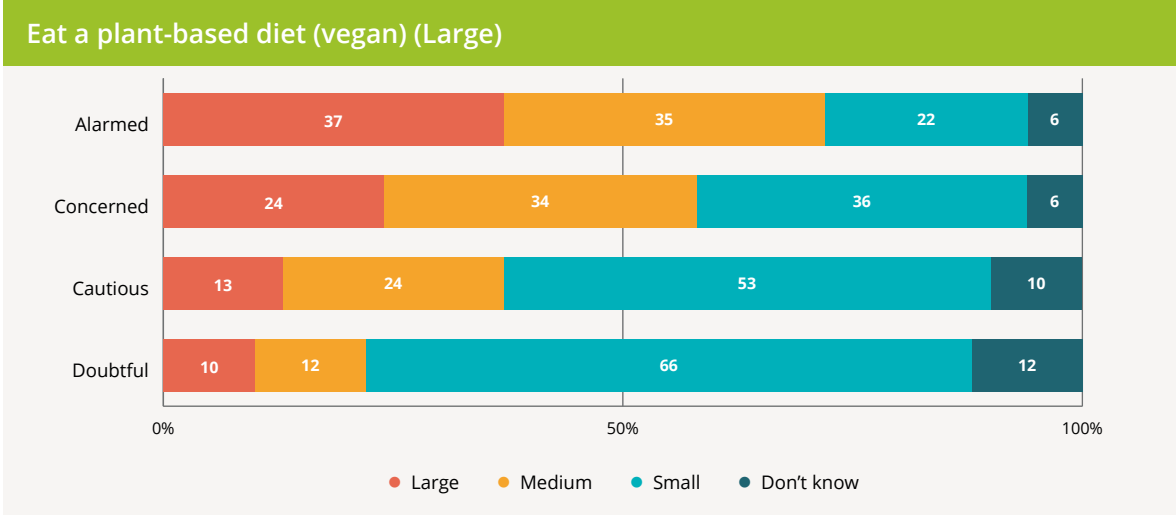
12.3 Carbon footprint – Transport items



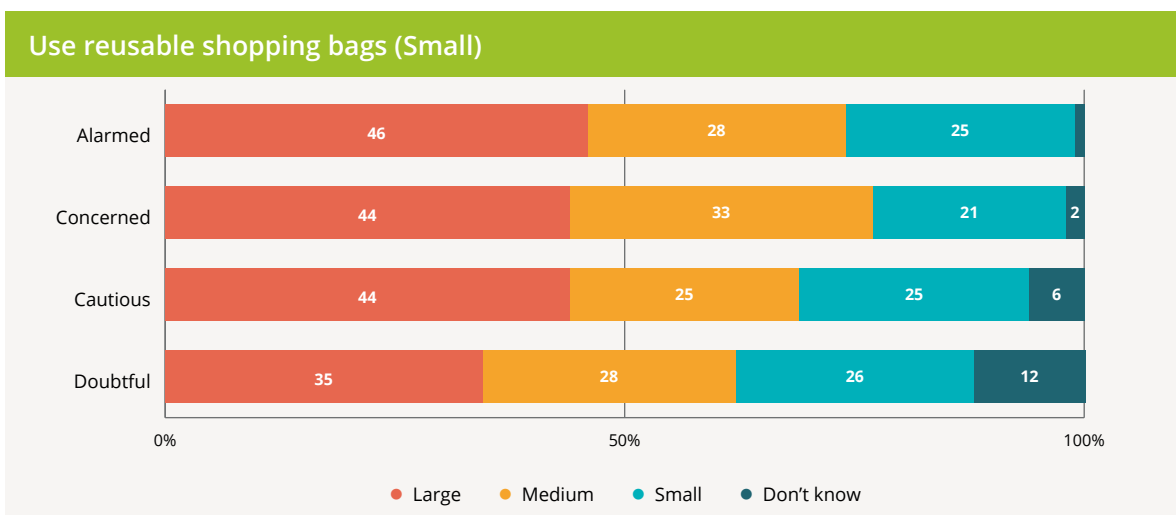
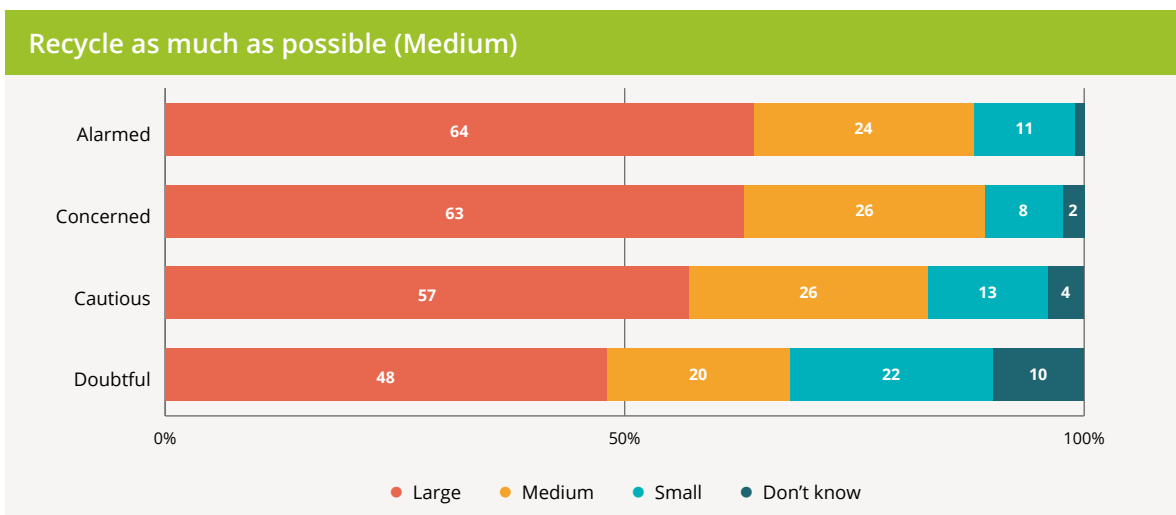
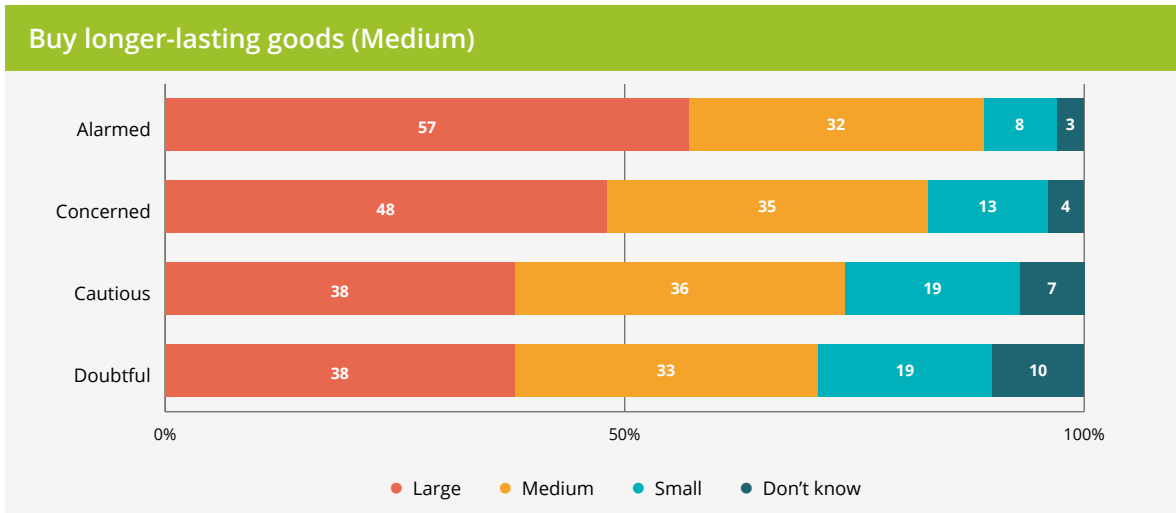
12.4 Carbon footprint – Home energy use items



12.5 Carbon footprint – Dietary items



12.6 Carbon footprint – Consumption items



12.7 The Alarmed

12.7.1 Self-reported knowledge and awareness

Almost eight in ten of the Alarmed (79%) say they know “a lot,” or “a moderate amount” about climate issues like the “greenhouse effect”. A strong majority also report awareness of the two national climate action campaigns: “Reduce Your Use” (76%); and “Stop Food Waste” (72%). Only about four in ten of the Alarmed (39%) said they were aware of “The National Dialogue on Climate Action.”

The overwhelming majority of the Alarmed (90%) knew that the “greenhouse effect” referred to “gases in the atmosphere that trap heat.” A majority also correctly identified carbon dioxide (76%) and Methane (67%) as being “good at trapping heat from the Earth’s surface.”

12.7.2 Transport

A majority of the Alarmed (69%) correctly identified that avoiding “a long-distance flight of 6 hours or more” would make a large reduction in the carbon footprint of an average person. However, majorities of the Alarmed also overestimated as large the medium-sized effects of deciding to “walk, cycle or use public transport instead of going by car” (74% of the Alarmed thought this would make a large reduction) and “switching from a conventional car to a hybrid/electric vehicle” (56%).

12.7.3 Home energy use

An overwhelming majority of the Alarmed correctly identified that switching to “energy from renewable sources” (80%) would make a large reduction in the carbon footprint of an average person. However, the Alarmed also tended to overestimate as large the medium effect of “retrofitting for home heating” (71%) and the small effect of “changing to energy efficient lighting” (51%).

12.7.4 Diet

The Alarmed were the group most likely to correctly identify that adopting a “plant-based diet” (37%) would make a large contribution to reducing the carbon footprint of an average person. However, a majority of the Alarmed (58%) also underestimated this effect as small or medium, so there was no clear consensus. The Alarmed were also more likely to overestimate as large (41%) the medium effect of eating less meat, which was only correctly identified by one third of the Alarmed (33%). A majority of the Alarmed (55%) overestimated as large the medium effect of “minimising food waste.”

12.7.5 Consumption

The Alarmed overestimated as large the medium-sized effects of “recycling as much as possible” (64%) and “purchasing longer lasting goods” (57%). They also heavily overestimated the small carbon footprint contribution of “reusable shopping bags” (28% medium, 46% large).

12.8 The Concerned

12.8.1 Self-reported knowledge and awareness

A majority of the Concerned (59%) say they know “a lot,” or “a moderate amount” about climate issues like the “greenhouse effect”. A majority also report awareness of the two national climate action campaigns: “Reduce Your Use” (72%); and “Stop Food Waste” (68%). Only a minority of the Concerned (36%) said they were aware of “The National Dialogue on Climate Action.”

A large majority of the Concerned (85%) knew that the “greenhouse effect” referred to “gases in the atmosphere that trap heat.” Half or more also correctly identified carbon dioxide (62%) and Methane (51%) as being “good at trapping heat from the Earth’s surface.”

12.8.2 Transport

A majority of the Concerned (55%) correctly identified that avoiding “a long-distance flight of 6 hours or more” would make a large reduction in the carbon footprint of an average person. However, many of the Concerned also overestimated as large the medium-sized effects of deciding to “walk, cycle or use public transport instead of going by car” (65%) and “switching from a conventional car to a hybrid/electric vehicle” (46%).

12.8.3 Home energy use

A majority of the Concerned correctly identified that switching to “energy from renewable sources” (71%) would make a large reduction in the carbon footprint of an average person. However, the Concerned also tended to overestimate as large the medium effect of “retrofitting for home heating” (63%) and the small effect of “changing to energy efficient lighting” (46%).

12.8.4 Diet

A majority of the Concerned (70%) underestimated the large effect that adopting a “plant-based diet” would have on reducing the carbon footprint of an average person. The Concerned were the most likely to correctly estimate the medium effect of “eating less meat” (39%), though a third of the Concerned (33%) underestimated this effect as small. The Concerned were also most likely to accurately estimate the medium effect of “minimising food waste” (37%) with almost half of the Concerned (48%) still overestimating the effect as large.

12.8.5 Consumption

Many of the Concerned overestimated as large the medium sized effects of “recycling as much as possible” (63%) and “purchasing longer lasting goods” (48%). They also heavily overestimated the small carbon footprint contribution of “reusable shopping bags” (33% medium, 44% large).

12.9 The Cautious

12.9.1 Self-reported knowledge and awareness

Less than half of the Cautious (44%) say they know “a lot,” or “a moderate amount” about climate issues like the “greenhouse effect”. Majorities reported awareness of the two national climate action campaigns: “Reduce Your Use” (61%); and “Stop Food Waste” (56%). Less than a third of the Cautious (28%) said they were aware of “The National Dialogue on Climate Action.”

A majority of the Cautious (70%) knew that the “greenhouse effect” referred to “gases in the atmosphere that trap heat.” About six in ten (58%) also correctly identified carbon dioxide as being “good at trapping heat from the Earth’s surface,” with a minority also correctly identifying Methane (43%) as doing so.

12.9.2 Transport

A majority of the Cautious (51%) underestimated the effect of avoiding “a long-distance flight of 6 hours or more” on the carbon footprint of an average person with about four in ten choosing the correct “large” option. Only a minority of the Cautious (33%) correctly identified the medium effect of “switching from a conventional car to a hybrid/electric vehicle.” The Cautious tended to overestimate the effect of deciding to “walk, cycle or use public transport instead of going by car” as large (48%) with only about a quarter correctly identifying that it had a medium effect.

12.9.3 Home energy use

A majority of the Cautious correctly identified switching to “energy from renewable sources” (53%) as making a large reduction in the carbon footprint of an average person. However, the Cautious also tended to overestimate as large the medium effect of “retrofitting for home heating” (49%) and the greatly overestimated the small effect of “changing to energy efficient lighting” with 37% overestimating the effect as medium, and 39% overestimating as large.

12.9.4 Diet

A majority of the Cautious greatly underestimated the large effect that adopting a “plant-based diet” would have on reducing the carbon footprint of an average person (53% small, 24% medium). Similarly, a majority of the Cautious underestimated the medium effect of “eating less meat” (54%). A third of the Cautious accurately estimated the medium effect of “minimising food waste” (33%) with about four in ten (41%) overestimating the effect as large.

12.9.5 Consumption

The Cautious were approximately equally likely to estimate the medium sized effect of “purchasing longer lasting goods” as medium (36%), or large (38%). A majority overestimated the contribution of “recycling as much as possible” (57%). A majority also overestimated the small carbon footprint contribution of “reusable shopping bags” (25% medium, 44% large).

12.10 The Doubtful

12.10.1 Self-reported knowledge and awareness

About six in ten of the Doubtful (59%) say they know “a lot,” or “a moderate amount” about climate issues like the “greenhouse effect”. Majorities reported awareness of the two national climate action campaigns: “Reduce Your Use” (64%); and “Stop Food Waste” (61%). Only a minority of the Doubtful (36%) said they were aware of “The National Dialogue on Climate Action.”

A majority of the Doubtful (69%) knew that the “greenhouse effect” referred to “gases in the atmosphere that trap heat.” About half also correctly identified carbon dioxide (51%) as being “good at trapping heat from the Earth’s surface,” with 46% also correctly identifying Methane as a greenhouse gas.

12.10.2 Transport

The Doubtful were the most likely to underestimate the effect of avoiding “a long-distance flight of 6 hours or more” on the carbon footprint of an average person with only about a third (35%) choosing the correct “large” option. About half of the Doubtful (49%) underestimated as small the medium effect of “switching from a conventional car to a hybrid/electric vehicle.” The Doubtful were the most likely to correctly estimate the effect of deciding to “walk, cycle or use public transport instead of going by car” as medium (38%).

12.10.3 Home energy use

A majority of the Doubtful (54%) underestimated the large carbon footprint contribution of switching to “energy from renewable sources.” Four in ten of the Doubtful overestimated as large the medium effect of “retrofitting for home heating” (40%). The Doubtful were the most likely (38%) to correctly estimate the small effect of “changing to energy efficient lighting,” with about half still overestimating the effect as either medium (24%), or large (24%).

12.10.4 Diet

A large majority of the Doubtful greatly underestimated the large effect that adopting a “plant-based diet” would have on reducing the carbon footprint of an average person (66% small, 12% medium). Similarly, a large majority of the Doubtful underestimated the medium effect of “eating less meat” (72%). About a third of the Doubtful accurately estimated the medium effect of “minimising food waste” (33%) with about another third (35%) overestimating the effect as large.

12.10.5 Consumption

The Doubtful were approximately equally likely to estimate the medium-sized effect of “purchasing longer lasting goods” as medium (33%), or large (38%). About half overestimated the contribution of “recycling as much as possible” (48%). A majority also overestimated the small carbon footprint contribution of “reusable shopping bags” (28% medium, 35% large).

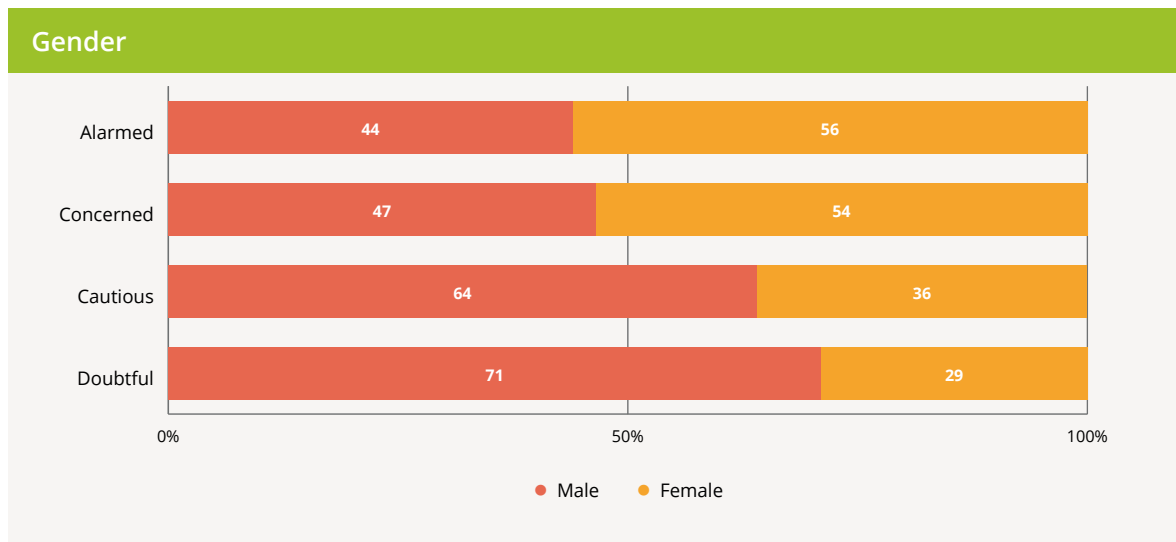
13. Demographics and Social Characteristics

A variety of socio-demographic questions on gender, employment category, and social class were answered by respondents. A number of these questions were used to ensure that the final sample was representative of the Irish population, based on information provided by the national census conducted by the Central Statistics Office.

Questions included a new variable, added at wave 2, which explores “difficulty making ends meet in the last 12 months.”²³

Graphs of each audience’s responses to individual demographic questions are presented below. A detailed summary of the responses is provided for each audience following the graphs.

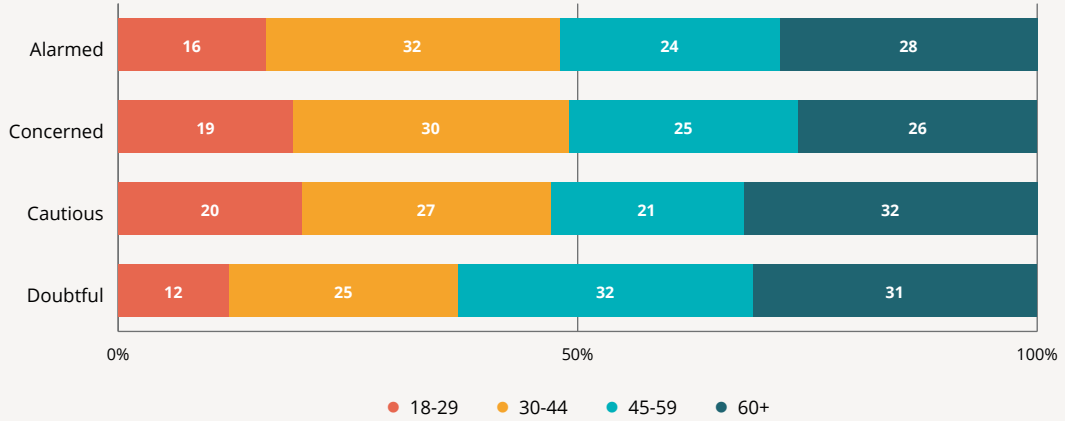
13.1 Demographic items



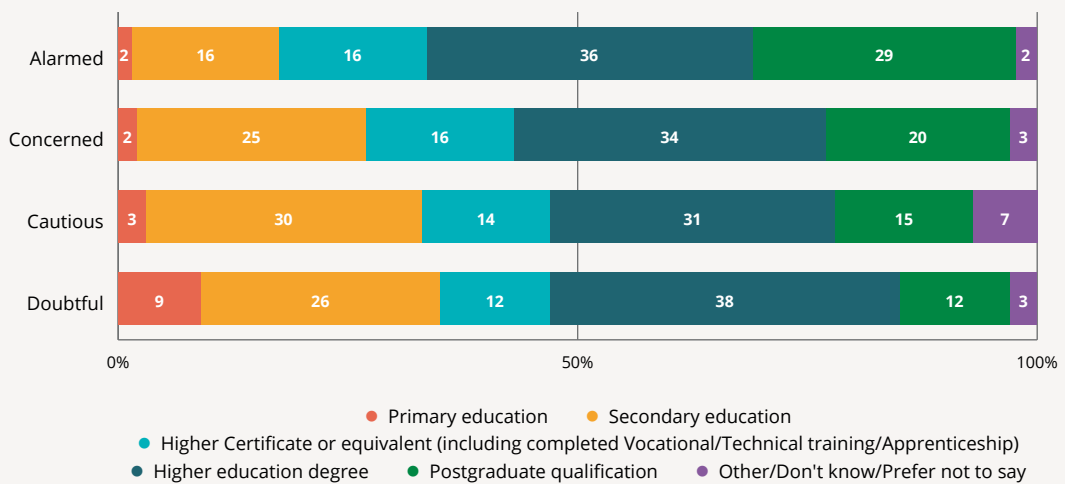
23 Residents were read the following text for this question: Concerning your household’s total monthly or weekly income over the last 12 months, with which degree of ease or difficulty is the household able to make ends meet? Answers ranged from “Very Easily” to “With great Difficulty.”
This question is derived from Question G8 in the Growing up in Ireland study, Cohort ‘98 Wave 4 Parent questionnaire:
https://www.growingup.gov.ie/pubs/Cohort-98-at-20Yrs_Parent-Main-Questionnaire-1.pdf

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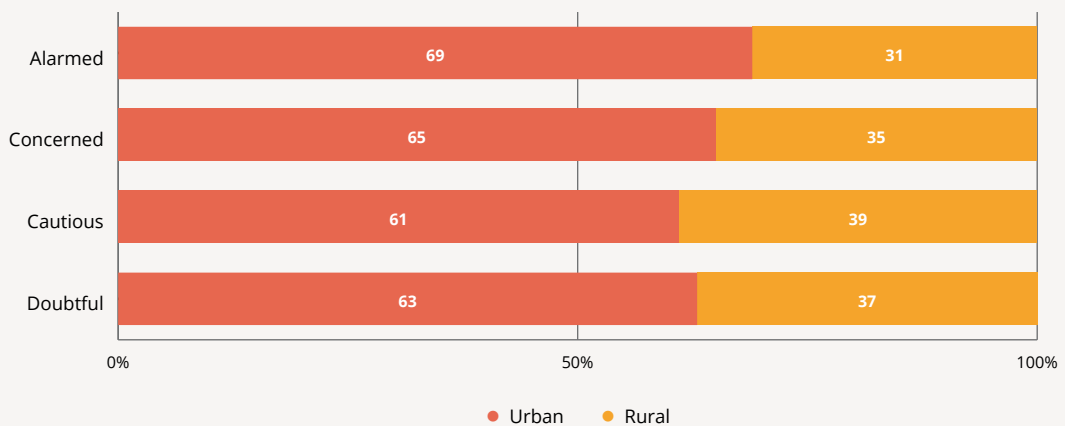
Age group



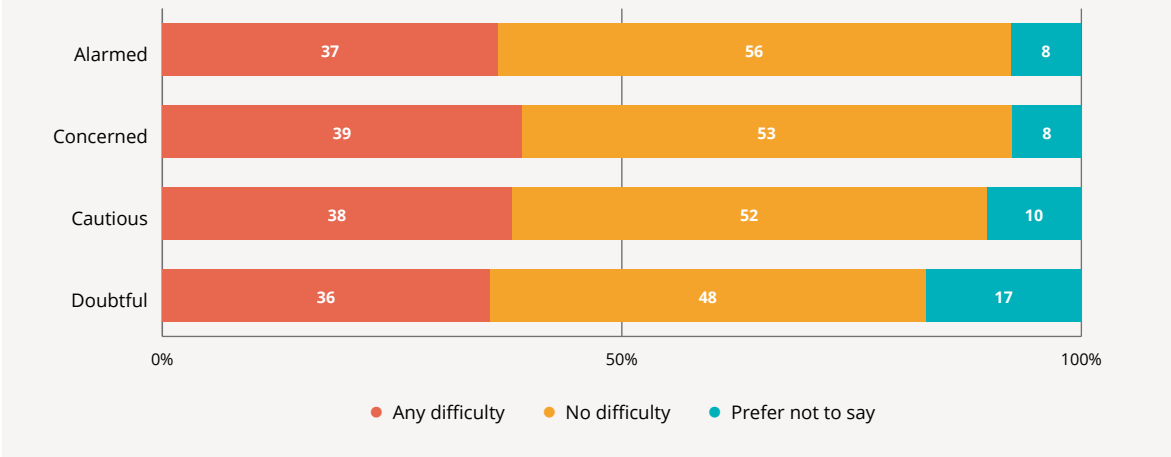
Education



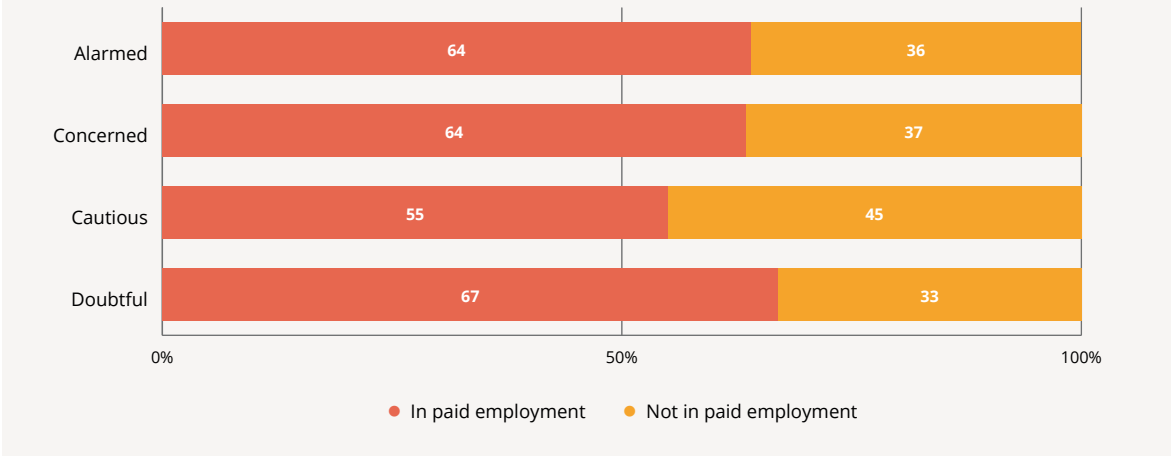
Urban/Rural



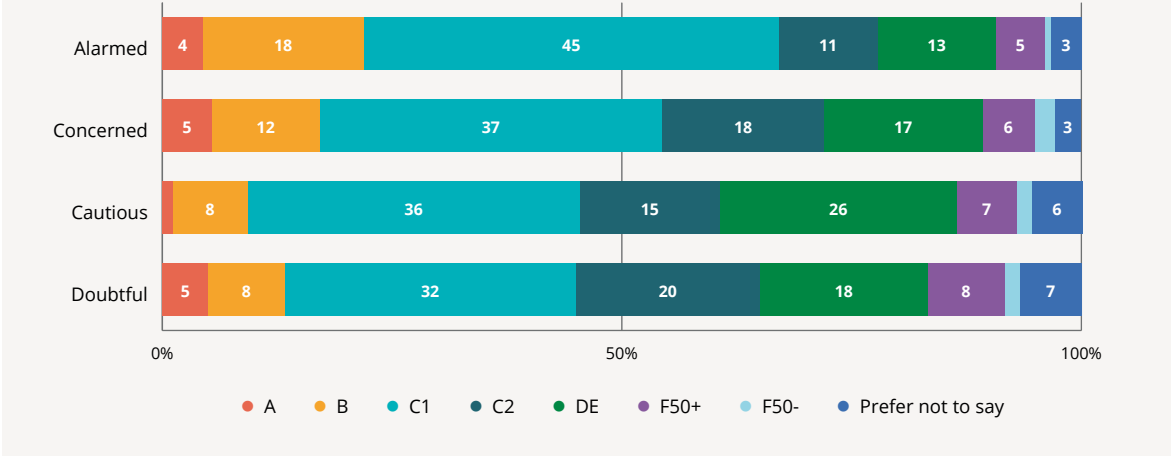
Any difficulty making ends meet in the last 12 months



Employment status



Social class



| Code | Label |
|------|---|
| A | Higher managerial/professional |
| B | Intermediate managerial/professional |
| C1 | Supervisory/clerical/administrative work |
| C2 | Skilled worker |
| D, E | Semi-unskilled worker/retired/carer/unemployed |
| F50+ | Farmer/agricultural worker on larger farm (over 50 acres) |
| F50- | Farmer/agricultural worker on smaller farm (under 50 acres) |

13.2 The Alarmed

The Alarmed are more likely than other segments to be female (56%). The largest proportion of the Alarmed are in the 30-44 age group (32%). The Alarmed are the group most likely to have completed Further, or Higher Education (80%). The Alarmed are somewhat more likely to live in cities than other audiences (28%), and this is reflected in the highest balance of urban dwellers²⁴ (69%) within this audience though there is no large urban-rural difference across audiences.

About two-thirds of the Alarmed (64%) are in paid employment, and they are more likely to be Intermediate managerial or junior professionals (17%) or Supervisory, clerical, or administrative workers (47%) than other audiences.

About four in ten of the Alarmed (37%) reported having at least some difficulties making ends meet in the last 12 months.

13.3 The Concerned

The Concerned are 47% male and 54% female. The Concerned are approximately equally split across all age groups with the largest proportion also in the 30-44-year age group (30%). About seven in ten of the Concerned (69%) have completed Further or Higher Education. About one in five (21%) of the Concerned live in cities and overall, 65% live in urban areas.

About two-thirds of the Concerned (64%) are in paid employment and have the highest proportion of Higher managerial and higher professional staff (6%) of all audiences. The Concerned have a higher proportion of Intermediate managerial, or junior professional staff (12%) than either the Cautious or the Doubtful, and large proportions are also Supervisory, clerical, or administrative workers (39%).

About four in ten of the Concerned (39%) reported having at least some difficulties making ends meet in the last 12 months.

²⁴ Respondents were asked if they lived in: A City; A large town (5000+ population); A small town (1,500 – 4,999 population); or A rural area. Respondents living in cities, large towns, and small towns were then classified as living in “urban” areas, all others were classed as living in “rural” areas.

13.4 The Cautious

The majority of the Cautious are male (64%). The largest proportion of the Cautious are 60+ years old (32%). About six in ten of the Cautious (60%) have completed Further or Higher Education. About one in five (20%) of the Cautious live in cities, with 61% living in urban areas.

A little over half of the Cautious are in paid employment (55%), and the Cautious have the highest proportion of unemployed (12%) and retired (28%) members. The largest proportion of the Cautious are employed in supervisory, clerical, or administrative roles (38%), but the Cautious are also more likely to do semi-skilled or unskilled work (27%) than other audiences.

About four in ten of the Cautious (38%) reported having at least some difficulties making ends meet in the last 12 months.

13.5 The Doubtful

A large majority of the Doubtful are male (71%). A majority of the Doubtful are over 45 years of age (63%). About six in ten of the Doubtful (62%) have completed Further or Higher Education, with about one in ten (9%) reporting primary schooling as their highest level of education. About one in seven (14%) of the Doubtful live in cities, with 63% overall living in urban areas.

About two-thirds of the Doubtful (67%) are in paid employment. They have a similar pattern of employment to the Concerned, with the largest proportion (34%) employed in supervisory, clerical, or administrative work, and other large groups spread between skilled (21%), and semi-skilled or unskilled work (20%).

About four in ten of the Doubtful (36%) reported having at least some difficulties making ends meet in the last 12 months. However almost one in five of the Doubtful (17%) did not answer this question.

14. Appendix 1: Climate Change in the Irish Mind Questionnaire Wave 2

Topic: Quota control

| Questions | Details | Response options |
|---|--|------------------|
| A. (INTERVIEWER DO NOT READ OUT: RECORD GENDER OF RESPONDENT) | (Male) (Female) | |
| B. Age | [NUMERIC OPEN END] | |
| C. Which of the following best describes your current status? | In Paid Employment Not in paid employment | |
| D. County of residence | [OPEN END] | |

Topic: Worry about climate change impacts/ex weather

| Questions | Details | Response options |
|---|--|---|
| 1. How worried are you that the following might harm your local area? | <p>Randomise</p> <ul style="list-style-type: none"> • Extreme heat • Flooding • Wildfires • Droughts • Water shortages • Rising sea levels • Agricultural pests and diseases • Severe storms • Invasive species • Bog bursts/landslides • Air pollution • Water pollution | <p>Response options for each:</p> <ul style="list-style-type: none"> • Very worried • Somewhat worried • Not very worried • Not at all worried |
| 2. In your opinion, over the next 10 years how much risk does extreme weather pose to your community? | <ul style="list-style-type: none"> • High risk • Moderate risk • Low risk • No risk | |

Topic: Beliefs

| Questions | Details | Response options |
|--|--|------------------|
| 3. How much do you know about climate change? Would you say you... | <ul style="list-style-type: none"> • Have never heard of it • Know a little about it • Know a moderate amount about it • Know a lot about it | |
| 4. Do you think climate change is happening? | <ul style="list-style-type: none"> • Yes [GO TO Q6] • No [GO TO Q7] • Don't know [GO TO Q5] • Yes, climate change is happening | |
| [ASK IF Q4 = "Don't know"] 5. Even if you don't know, what's your best guess about whether climate change is happening? | <ul style="list-style-type: none"> • No, climate change is not happening • Not sure at all | |
| [ASK IF Q4 = "Yes"] 6. How sure are you that climate change is happening? | <ul style="list-style-type: none"> • Somewhat sure • Very sure • Extremely sure • Not sure at all | |
| [ASK IF Q4 = "No"] 7. How sure are you that climate change is not happening? | <ul style="list-style-type: none"> • Somewhat sure • Very sure • Extremely sure • Caused mostly by human activities | |
| [ASK ALL] 8. Assuming climate change is happening, do you think it is... | <ul style="list-style-type: none"> • Caused mostly by natural changes in the environment • Caused about equally by human activities and natural changes • Something else • None of the above because climate change is not happening | |
| 9. Which of the following statements comes closest to your own view? | <ul style="list-style-type: none"> • Most scientists think climate change is happening • There is a lot of disagreement among scientists about whether or not climate change is happening • Most scientists think climate change is not happening • Don't know enough to say | |

Climate Change's Four Irelands: An Audience Segmentation Analysis

| Questions | Details | Response options |
|---|--|------------------|
| 10. For this next question, I'm going to read you a short list of possible answers and will ask you to pick one. To the best of your knowledge, which one of the following sectors is Ireland's largest source of the pollution that causes climate change? If you're not sure, please provide your best guess. | Randomise <ul style="list-style-type: none"> • Agriculture • Transport • Energy industries, including power generation and oil and gas refining • Residential household and water heating • Waste such as landfills, incinerators, and composting • (DO NOT READ) Climate change is not happening | |

Topic: Risk Perceptions

| Questions | Details | Response options |
|--|---|---|
| 11. How worried are you about climate change? | <ul style="list-style-type: none"> • Very worried • Somewhat worried • Not very worried • Not at all worried | |
| 12. How important is the issue of climate change to you personally? | <ul style="list-style-type: none"> • Extremely important • Very important • Somewhat important • Not too important • Not at all important | |
| 13. How much do you think climate change will harm...? | <ul style="list-style-type: none"> • You personally • Your family • People in your community • People in Ireland • People in developing countries • Future generations • Plant and animal species • The Irish way of life (IF NEEDED, READ: This may include Irish cultural traditions) • Irish historic sites | Response options for each: <ul style="list-style-type: none"> • A great deal • A moderate amount • Only a little • Not at all |
| 14. When do you think climate change will start to harm people in Ireland? | <ul style="list-style-type: none"> • They are being harmed now • In 10 years • In 25 years • In 50 years • In 100 years • Never | |

Topic: Policy Support

| Questions | Details | Response options |
|--|--|---|
| 15. Do you think climate change should be a very high, high, medium, or low priority for the Government of Ireland? | <ul style="list-style-type: none"> • Very high • High • Medium • Low | |
| 16. Overall, do you think that taking action to reduce climate change will... | <p>Rotate codes 1 & 2</p> <ul style="list-style-type: none"> • Improve economic growth and provide new jobs • Reduce economic growth and cost jobs • Have no effect on economic growth or jobs | |
| 17. Overall, do you think that taking action to reduce climate change will... | <p>Rotate codes 1 & 2</p> <ul style="list-style-type: none"> • Improve Ireland's quality of life • Reduce Ireland's quality of life • Have no effect on Ireland's quality of life? | |
| 18. I am going to read a list of people and organisations who could take action regarding climate change. Do you think each of the following should be doing more or less to address climate change? | <p>Randomise</p> <ul style="list-style-type: none"> • You personally • Local government • Government • Politicians • Businesses • Citizens • The media • The Irish Environmental Protection Agency (Irish EPA) | <p>Response options for each:</p> <ul style="list-style-type: none"> • Much more • More • Currently doing the right amount • Less • Much less |
| 19. Now I will read you two statements. Neither may be perfect, but please let me know which comes closer to your point of view. | <p>Rotate codes 1 & 2</p> <ul style="list-style-type: none"> • We have a responsibility to act on climate change, and Ireland should do what it can to reduce its own greenhouse gas emissions. • Ireland is too small to make a difference in climate change; we should let other countries take the lead on reducing greenhouse gas emissions. • (DO NOT READ) Climate change is not happening | |

Climate Change's Four Irelands: An Audience Segmentation Analysis

| Questions | Details | Response options |
|--|--|---|
| 20. The Irish Government has set a renewable electricity target of 70% by 2030. New infrastructure such as pylons and substations are needed to meet this target. How much would you support or oppose building new infrastructure such as pylons or substations in <i>your</i> local area to support the increased use of renewable energy? | <ul style="list-style-type: none"> • Strongly support • Somewhat support • Somewhat oppose • Strongly oppose | |
| 21. How much do you support or oppose the following policies to help Ireland achieve its greenhouse gas reduction targets? | <p>Randomise</p> <ul style="list-style-type: none"> • Banning peat, coal and oil for home heating purposes • Government grants to encourage residential and commercial building owners to install cleaner and more efficient heating systems • Government grants to make electric vehicles more affordable • Higher taxes on cars that use petrol and diesel • Increased Government investment in public transport such as trains instead of motorways | <p>Response options for each:</p> <ul style="list-style-type: none"> • Strongly support • Somewhat support • Somewhat oppose • Strongly oppose |
| 22. Agriculture is an important industry for Ireland and its rural economy. Agriculture is also a major source of greenhouse gas emissions, and now accounts for over one-third of Ireland's total emissions. With this in mind, how much do you support or oppose the following policies? | <p>Rotate</p> <ul style="list-style-type: none"> • Reducing the size of the national cattle herd to reduce greenhouse gas emissions • Increasing forest areas in your locality to offset greenhouse gas emissions from agriculture | <p>Response options for each:</p> <ul style="list-style-type: none"> • Strongly support • Somewhat support • Somewhat oppose • Strongly oppose |

| Questions | Details | Response options |
|--|--|---|
| <p>23. To help address climate change, taxes on fossil fuels will be rising in Ireland over the next 10 years. How much do you support or oppose using the revenues from these taxes for each of the following purposes?</p> | <p>Randomise</p> <ul style="list-style-type: none"> • Returning the money to all Irish households in equal amounts • Assisting workers in the fossil fuel industry who may lose their jobs • Helping pay for energy efficiency improvements in low-income households • Supporting the further development of new clean energy sources such as marine and hydrogen power • Funding improvements to Ireland's transport infrastructure such as rail, bus corridors, and cycling and walking paths • Funding programs to help Irish communities prepare for and adapt to the impacts of climate change | <p>Response options for each:</p> <ul style="list-style-type: none"> • Strongly support • Somewhat support • Somewhat oppose • Strongly oppose |

Topic: Behaviours (consumer and political)

| Questions | Details | Response options |
|--|--|------------------|
| 24. Over the past 12 months, how often, if ever, have you chosen not to eat meat for environmental reasons? | <ul style="list-style-type: none"> • Never • Rarely • Occasionally • Often • I don't ever eat meat (I'm vegetarian/vegan) • Don't know | |
| 25. Over the last 12 months, how many times, if ever, have you bought a good or service from a company because they have taken action to reduce climate change? | <ul style="list-style-type: none"> • Never • Once • A few times • Several times • Many times | |
| 26. Over the next 12 months, do you intend to buy a good or service from a company because they have taken steps to reduce climate change ... | <ul style="list-style-type: none"> • More frequently than you are now • Less frequently than you are now • About the same as you are now | |
| 27. Over the past 12 months, how many times, if ever, have you punished companies that are opposing steps to reduce climate change by NOT buying their products? | <ul style="list-style-type: none"> • Never • Once • A few times • Several times • Many times | |
| 28. Over the next 12 months, do you intend to punish companies that are opposing steps to reduce climate change by NOT buying their products ... | <ul style="list-style-type: none"> • More frequently than you are now • Less frequently than you are now • About the same as you are now | |

Topic: Norms

| Questions | Details | Response options |
|--|---|------------------|
| 31.How often do you discuss climate change with your family and friends? | <ul style="list-style-type: none"> • Never • Rarely • Occasionally • Often | |
| 32.About how often do you hear about climate change in the media, such as TV, movies, radio, newspapers, magazines, online, etc.? | <ul style="list-style-type: none"> • Never • Once a year or less often • Several times a year • At least once a month • At least once a week • Not sure | |
| 33. Have you heard of any of the following national climate action initiatives (Order of items randomised) <ul style="list-style-type: none"> • Climate Conversations 2023 • National Dialogue on Climate Action • EPA Annual Climate Conference, and Climate Lecture Series • "Reduce Your Use" campaign • "Stop Food Waste" campaign • National power dialogue • Wind Power for all counties strategy | <p>Answer options for each</p> <ul style="list-style-type: none"> • Yes • No | |

Topic: Personal Experience of Climate Change

| Questions | Details | Response options |
|---|--|------------------|
| 33.Which of the following statements best reflects your view? | <ul style="list-style-type: none"> • Climate change is affecting weather in Ireland • Climate change is not affecting weather in Ireland • Climate change isn't happening • Don't know | |

Topic: Media Sources

| Questions | Details | Response options |
|--|---|---|
| 35. How much do you trust or distrust the following as a source of information about climate change? | <p>Randomise</p> <ul style="list-style-type: none"> • Family and friends • Environmental non-governmental organisations (or NGOs) • Corporations/Businesses • Religious leaders • Scientists • The mainstream news media • Television weather reporters • Political leaders • Community leaders • Online influencers, celebrities, or media personalities • Educators • Journalists • The Irish Environmental Protection Agency (the EPA) | <p>Response options for each:</p> <ul style="list-style-type: none"> • Strongly distrust • Somewhat distrust • Somewhat trust • Strongly trust |

Topic: Climate literacy

Sub topic: Understanding the greenhouse effect

| Details | Answer options |
|---|---|
| <p>We would now like to ask you a few questions about your understanding of climate and related topics like climate change and the greenhouse effect.</p> <p>You don't have to think too long on any of the answers, don't worry about any mistakes. Your honest input is what matters most.</p> | |
| <p>36. How much do you know about the "greenhouse effect"?</p> | <ul style="list-style-type: none"> • A lot • A moderate amount • Just a little • I have never heard of it |
| <p>37. To the best of your knowledge, the "greenhouse effect" refers to: (order of items randomised)</p> <ul style="list-style-type: none"> • Gases in the atmosphere that trap heat • The Earth's protective ozone layer • Pollution that causes acid rain • How plants grow | <ul style="list-style-type: none"> • Yes • No • Don't know |
| <p>38. To the best of your knowledge, which of the following gases in the atmosphere are good at trapping heat from the Earth's surface? (order of items randomised)</p> <ul style="list-style-type: none"> • Carbon dioxide • Methane • Water vapor • Hydrogen • Oxygen | <ul style="list-style-type: none"> • Yes • No • Don't know |

Topic: Climate literacy

Sub topic: Understanding relative contribution of behaviours to greenhouse gas emissions

| Details | Response options |
|--|--|
| <p>“40. I will read out a series of actions that could benefit the environment by reducing an average person’s carbon footprint.</p> <p>A carbon footprint is an estimate of the amount of greenhouse gases emitted from someone’s actions and behaviours. For example, things like home energy use, diet, travel, etc.</p> <p>We’d like to hear your best guess on which actions would have a large, medium or small effect on reducing someone’s carbon footprint over the last 12 months.</p> <p>A large effect is a reduction of 5% or more in someone’s carbon footprint. A medium effect is a reduction of between 1-5%. A small effect is a reduction of less than 1%.</p> <p>(Item presentation randomised)”</p> <ul style="list-style-type: none"> • Avoid a long-distance flight of 6 hours+ • Change a conventional car for a hybrid/electric vehicle • Walk, cycle, or use public transport instead of going by car • Use energy from renewable sources • Retrofit to improve home heating/cooling efficiency • Change from conventional to energy efficient lighting • Eat a plant-based diet (vegan) • Eat less meat • Minimise food waste • Use reusable shopping bags • Recycle as much as possible • Buy longer-lasting goods | <p>For each item:</p> <ul style="list-style-type: none"> • Small • Medium • Large • Don’t know |

Topic: Demographics

| Details | Response options |
|---|--|
| I would like to ask you some questions for classification purposes. It will not be possible for the answers to be linked back to you in any way. If there are any questions you would rather not answer, please say "pass". | |
| C.1 Which phrase best describes the area where you live? | <ul style="list-style-type: none"> • A City • A large town (5000+ population) • A small town (1,500 – 4,999 population) • A rural area |
| C.2 What is the highest level of education which you have completed to date? (READ IF NEEDED: This can include full-time or part-time education or training.) | <ul style="list-style-type: none"> • Primary education • Secondary education • Higher certificate or equivalent (including completed vocational/ technical training/ apprenticeship) • Higher education degree • Postgraduate qualification • Other [OPEN END] • DK/NO ANSWER |
| C.5 What is your current working status? READ OUT | <ul style="list-style-type: none"> • Working - Full Time (30+ hours per week) • Working - Part Time (-29 hours per week) • Self-Employed • Unemployed • Home Duties/ Primary Carer • Retired • Student |
| Are you yourself the chief wage earner in your household or not? That is, the person who contributes most money to the household income? | <ul style="list-style-type: none"> • Yes • No |
| C.6 What is the occupation of the Chief Wage Earner? (If farmer, state acreage. If proprietor/manager/ supervisor, state number of employees. If unemployed for over a year or widow on State Pension, ask about Chief Wage Earner). | [OPEN END] |

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| Details | Response options |
|---|---|
| C.18 A household may have different sources of income and more than one household member may contribute to it. Concerning your household's total monthly or weekly income over the last 12 months, with which degree of ease or difficulty is the household able to make ends meet? | <ul style="list-style-type: none"> • With great difficulty • With difficulty • With some difficulty • Fairly easily • Easily • Very easily • Prefer not to say (Do Not Read Out) |
| C.8 What is your Marital Status, are you... | <ul style="list-style-type: none"> • Single • Married • Cohabiting • Widowed • Separated/Divorced • Civil Partnership |
| Do you have any dependent children living with you who are aged... | <ul style="list-style-type: none"> • 0-4 years • 5-12 years • 13-17 years |
| Do you have any dependent children living with you who are aged 18 years+? | <ul style="list-style-type: none"> • Yes • No |
| Are you an Irish citizen? | <ul style="list-style-type: none"> • Yes • No |

| Details | Response options |
|--|---|
| [ASK ALL] Intro TEXT The next two questions we will ask are in relation to, ethnicity and gender. It is asked solely in order to ensure we have spoken to a representative sample of the population. If there are any questions you would rather not answer, please say "pass" and we will move on to the next. | |
| What is your ethnic background? | <ul style="list-style-type: none">• White: Irish• White Irish: Irish traveller• White Irish: Any other white background• Black or black Irish: African• Black or black Irish: Any other Black background• Asian or Asian Irish: Chinese• Asian or Asian Irish: Any other Asian background• Other including mixed background• Other [OPEN END]• Prefer not to say |
| Do you describe yourself as a man, a woman, or in some other way? | <ul style="list-style-type: none">• Man• Woman• Some other way |

15. Appendix 2: Technical Summary of Survey Methodology

15.1 Statistical Procedures

The original segmentation analyses incorporated information from 4 variables (listed in the table below) and was conducted using the “poLCA” package in the R programming language. The package uses latent class analysis to identify clusters of respondents who are similar to one another on the measured variables. This method was chosen because it works with categorical data. The model aims to identify unobserved “latent classes” (i.e., segments) that help explain the relationships between the measured variables.

To accomplish this, the program uses the expectation-maximization (EM) and Newton-Raphson algorithms to maximize the log-likelihood function of belonging to each group. Thus, each observation (person) is assigned a probability of belonging to each potential cluster. The model begins with random values and proceeds iteratively, replacing old values with new values in each iteration until the maximum likelihood is reached. Put simply, respondents with similar responses on the observed variables will cluster into the same segments, with each response evaluated as to whether it causes a given respondent to have a lower or higher likelihood of being assigned to a given segment.

The segmentation analyses generated several potential solutions ranging from 3-segments to 10-segments. Model fit statistics (Akaike Information Criterion and Bayesian Information Criterion) were used to guide the assessment of each potential solution and evaluate the trade-off between parsimony (fewer segments) and the informational value of each additional segment.

Additionally, the interpretability of each solution was assessed by examining cross-tabulations of each segment with other variables in the dataset. The 4-segment solution was selected as the most interpretable and useful and is the solution we used in our original report. For this report, we apply the original segmentation model to our new dataset.

15.1.1 Questions used for latent class analysis

| Question Text | Response Levels |
|---|---|
| <i>How worried are you about climate change?</i> | <i>“Very worried,” “Somewhat worried,” “Not very worried,” “Not at all worried”</i> |
| <i>How much do you think climate change will harm you personally?</i> | <i>“A great deal,” “A moderate amount,” “Only a little,” “Not at all”</i> |
| <i>How much do you think climate change will harm future generations?</i> | <i>“A great deal,” “A moderate amount,” “Only a little,” “Not at all”</i> |
| <i>How important is the issue of climate change to you personally?</i> | <i>“Extremely important,” “Very important,” “Somewhat important,” “Not too important,” “Not at all important”</i> |

16. Appendix 3: Climate Change Audience Profiles

16.1 The Alarmed

16.1.1 Climate Change Beliefs

The Alarmed are the segment most likely to say they know “a lot” (37%) or “a moderate amount” (50%) about climate change. They overwhelmingly think climate change is happening (99%) and most are “extremely sure” that it is (63%).

About 9 in 10 (92%) say that “most scientists think climate change is happening.” Three-quarters (75%) think climate change is caused mostly by human activities, while 21% think it is caused equally by human activities and natural changes.

Only 36%, however, correctly identified agriculture as Ireland’s largest source of the pollution that causes climate change²⁵, while 31% think energy industries are the largest emitter.

16.1.2 Emotional Responses and Perceived Risks of Climate Change

The Alarmed are overwhelmingly “very worried” about climate change (95%). A large majority (70%) think climate change is harming people in Ireland now, while 20% think it will start harming people in Ireland in the next 10 years. Nearly all of the Alarmed (97%) think climate change will harm future generations “a great deal.” A majority think climate change will harm people in Ireland (58%) or people in their community (51%) “a great deal,” while 33% think climate change will harm them personally “a great deal.”

16.1.3 Personal and Social Engagement with Climate Change

The Alarmed overwhelmingly say that climate change is either “extremely” (53%) or “very important” (47%) to them personally.

A large majority say they hear about climate change in the media at least “once a week” (78%) or “once a month” (14%). Likewise, a majority say they discuss climate change with their family and friends “often” (54%) or “occasionally” (38%).

The Alarmed report that they “strongly trust” scientists (75%), the Irish EPA (55%), TV weather reporters (47%), environmental NGOs (43%), educators (41%), their own friends and family (26%), the mainstream news media (20%), journalists (18%), community leaders (12%), religious leaders (6%), political leaders (8%), online celebrities (4%), and corporations or businesses (4%) as sources of information about climate change.

16.1.4 Impacts of Climate Change

The Alarmed overwhelmingly think that climate change is affecting the weather in Ireland (98%) and that over the next 10 years, extreme weather will pose either a “high risk” (49%) or “moderate risk” (45%) to their own communities.

A majority of the Alarmed are worried that water pollution (89%), severe storms (88%), air pollution (81%), and flooding (76%) might harm their local areas.

25 <https://www.epa.ie/our-services/monitoring--assessment/climate-change/ghg/latest-emissions-data/>

16.1.5 Climate Policies

16.1.5.1 Political and social outlook of the Alarmed

The Alarmed overwhelmingly think that climate change should be a “very high” (66%) or “high” (30%) priority for the Government of Ireland.

Most of the Alarmed think taking action to reduce climate change will “improve economic growth and provide new jobs” (69%). Likewise, a large majority think taking action to reduce climate change will “improve Ireland’s quality of life” (86%).

Almost all of the Alarmed think that “we have a responsibility to act on climate change, and Ireland should do what it can to reduce its own greenhouse gas emissions” (96%).

16.1.5.2 Support for climate action policies by the Alarmed

The Alarmed either “strongly” or “somewhat support” government grants to encourage residential and commercial building owners to install cleaner and more efficient heating systems (98%) and to make electric vehicles more affordable (92%).

They also support increasing forests in their own localities to offset greenhouse gas emissions from agriculture (94%), building new infrastructure such as pylons or substations in their local areas to support the increased use of renewable energy (88%), banning peat, coal, and oil for home heating purposes (74%), and higher taxes on cars that use petrol and diesel (69%). They also support the development of public transport infrastructure such as trains instead of motorway construction (95%).

16.1.5.3 Support for use of carbon tax revenues by the Alarmed

The Alarmed also “strongly” or “somewhat support” using the revenues from rising taxes on fossil fuels over the next 10 years for helping pay for energy efficiency improvements in low-income households” (98%), supporting the further development of new clean energy sources such as marine and hydrogen power (97%), funding improvements to Ireland’s transport infrastructure such as rail, bus corridors, and cycling and walking paths (97%), funding programs to help Irish communities prepare for and adapt to the impacts of climate change (95%), assisting workers in the fossil fuel industry who may lose their jobs (87%), and returning the money to all Irish households in equal amounts (57%).

16.1.5.4 Alarmed: Who should do more to address climate change

Large majorities of the Alarmed think almost all actors should be doing “more” or “much more” to address climate change, especially local government (97%), businesses and corporations (96%), politicians (96%), themselves (87%), and the Irish EPA (81%).

16.1.6 Climate-Related Behaviours

Over the last 12 months, 66% of the Alarmed said that they had rewarded a company because they have taken action to reduce climate change at least once. However only 28% had done this “several” or “many times” in the last year. Similarly, 58% of the Alarmed said that they had punished companies that are opposing steps to reduce climate change by NOT buying their products at least once, with only 20% saying they had done this “several” or “many times” in the last year. A majority of the Alarmed (57%) also said that they had “occasionally” or “often” avoided eating red meat for environmental reasons.

However, over the next 12 months, six in ten of the Alarmed intend to increase their buying of goods or services from companies that have taken action to reduce climate change “more frequently than you are now” (60%), or to punish companies that are opposing steps to reduce climate change by NOT buying their products “more frequently than you are now” (60%).

16.1.7 Climate Literacy

16.1.7.1 *Self-reported knowledge and awareness of climate change*

Almost eight in ten of the Alarmed (79%) say they know “a lot,” or “a moderate amount” about climate issues like the “greenhouse effect”. A strong majority also report awareness of the two national climate action campaigns: “Reduce Your Use” (76%); and “Stop Food Waste” (72%). Only about four in ten of the Alarmed (39%) said they were aware of “The National Dialogue on Climate Action.”

The overwhelming majority of the Alarmed (90%) knew that the “greenhouse effect” referred to “gases in the atmosphere that trap heat.” A majority also correctly identified carbon dioxide (76%) and Methane (67%) as being “good at trapping heat from the Earth’s surface.”

16.1.7.2 *Transport*

A majority of the Alarmed (69%) correctly identified that avoiding “a long-distance flight of 6 hours or more” would make a large reduction in the carbon footprint of an average person. However, majorities of the Alarmed also overestimated as large the medium-sized effects of deciding to “walk, cycle or use public transport instead of going by car” (74% of the Alarmed thought this would make a large reduction) and “switching from a conventional car to a hybrid/electric vehicle” (56%).

16.1.7.3 *Home energy use*

An overwhelming majority of the Alarmed correctly identified that switching to “energy from renewable sources” (80%) would make a large reduction in the carbon footprint of an average person. However, the Alarmed also tended to overestimate as large the medium effect of “retrofitting for home heating” (71%) and the small effect of “changing to energy efficient lighting” (51%).

16.1.7.4 *Diet*

The Alarmed were the group most likely to correctly identify that adopting a “plant-based diet” (37%) would make a large contribution to reducing the carbon footprint of an average person. However, a majority of the Alarmed (58%) also underestimated this effect as small or medium, so there was no clear consensus. The Alarmed were also more likely to overestimate as large (41%) the medium effect of eating less meat, which was only correctly identified by one third of the Alarmed (33%). A majority of the Alarmed (55%) overestimated as large the medium effect of “minimising food waste.”

16.1.7.5 *Consumption*

The Alarmed overestimated as large the medium-sized effects of recycling as much as possible” (64%) and “purchasing longer lasting goods” (57%). They also heavily overestimated the small carbon footprint contribution of “reusable shopping bags” (28% medium, 46% large).

16.1.8 Demographics and Social Characteristics

The Alarmed are more likely than other segments to be female (56%). The largest proportion of the Alarmed are in the 30-44 age group (32%). The Alarmed are the group most likely to have completed Further, or Higher Education (80%). The Alarmed are somewhat more likely to live in cities than other audiences (28%), and this is reflected in the highest balance of urban dwellers (69%) within this audience though there is no large urban-rural difference across audiences.

About two-thirds of the Alarmed (64%) are in paid employment, and they are more likely to be Intermediate managerial or junior professionals (17%) or Supervisory, clerical, or administrative workers (47%) than other audiences.

About four in ten of the Alarmed (37%) reported having at least some difficulties making ends meet in the last 12 months.

16.2 The Concerned

16.2.1 Climate Change Beliefs

The Concerned are most likely to say they know “a moderate amount” (60%) or “a little” (25%) about climate change.

They overwhelmingly think climate change is happening (98%) and most are either “very” sure (46%) or “extremely” sure (33%) that it is.

About 8 in 10 (82%) say that “most scientists think climate change is happening.” About half understand that climate change is caused “mostly by human activities” (51%), while 45% think it is caused equally by human activities and natural changes.

However, only 28% understand that agriculture is Ireland’s largest source of the pollution that causes climate change, while 30% think it is transport and 25% think it is energy industries.

16.2.2 Emotional Responses and Perceived Risks of Climate Change

The Alarmed are overwhelmingly “very worried” about climate change (95%). A large majority (70%) think climate change is harming people in Ireland now, while 20% think it will start harming people in Ireland in the next 10 years. Nearly all of the Alarmed (97%) think climate change will harm future generations “a great deal.” A majority think climate change will harm people in Ireland (58%) or people in their community (51%) “a great deal,” while 33% think climate change will harm them personally “a great deal.”

16.2.3 Personal and Social Engagement with Climate Change

The Concerned mostly say that climate change is either “very” (53%) or “somewhat important” (45%) to them personally, but few say it is “extremely important” (7%).

A large majority say they hear about climate change in the media at least “once a week” (74%) or “once a month” (13%). Likewise, a majority say they discuss climate change with their family and friends either “often” (25%) or “occasionally” (52%).

The Concerned say they “strongly trust” scientists (62%), the Irish EPA (42%), TV weather reporters (35%), educators (32%), environmental NGOs (30%), their own friends and family (20%), the mainstream news media (17%), community leaders (12%), journalists (12%), religious leaders (6%), political leaders (5%), corporations (4%), or online celebrities (3%) as sources of information about climate change.

16.2.4 Impacts of Climate Change

The Concerned overwhelmingly think that climate change is affecting the weather in Ireland (92%), but most say that over the next 10 years, extreme weather will pose only a “moderate risk” (59%) to their own communities.

A majority of the Concerned think that water pollution (80%), severe storms (74%), air pollution (69%), and flooding (62%) might harm their local areas.

16.2.5 Climate Policies

16.2.5.1 *Political and social outlook of the Concerned*

The Concerned think climate change should be a “very high” (35%) or “high” (47%) priority for the Government of Ireland.

Most of the Concerned think taking action to reduce climate change will “improve economic growth and provide new jobs” (59%). Likewise, a large majority think that taking action to reduce climate change will “improve Ireland’s quality of life” (79%).

Nine in ten of the Concerned think that “we have a responsibility to act on climate change, and Ireland should do what it can to reduce its own greenhouse gas emissions” (91%).

16.2.5.2 *Support for climate action policies by the Concerned*

The Concerned either “strongly” or “somewhat support” government grants to encourage residential and commercial building owners to install cleaner and more efficient heating systems (98%) and to make electric vehicles more affordable (89%). They also support increasing forests in their own localities to offset greenhouse gas emissions from agriculture (92%), building new infrastructure such as pylons or substations in their local areas to support the increased use of renewable energy (85%), banning peat, coal, and oil for home heating purposes (57%), and higher taxes on cars that use petrol and diesel (50%). They also support the development of public transport infrastructure such as trains instead of motorway construction (95%).

16.2.5.3 *Support for use of carbon tax revenues by the Concerned*

The Concerned also “strongly” or “somewhat support” using the revenues from rising taxes on fossil fuels over the next 10 years for supporting the further development of new clean energy sources such as marine and hydrogen power (96%), helping pay for energy efficiency improvements in low-income households (96%), funding improvements to Ireland’s transport infrastructure such as rail, bus corridors, and cycling and walking paths (96%), funding programs to help Irish communities prepare for and adapt to the impacts of climate change (95%), assisting workers in the fossil fuel industry who may lose their jobs (87%), and returning the money to all Irish households in equal amounts (63%).

16.2.5.4 *Concerned: Who should do more to address climate change*

Large majorities of the Concerned think a number of actors should be doing more to address climate change, with the highest emphasis placed on local Government (90%), businesses and corporations (91%), politicians (90%). Smaller majorities think that they personally (70%) or the Irish EPA (70%) should do more.

16.2.6 Climate-Related Behaviours

Over the last 12 months, about half of the Concerned said that they had rewarded a company because they have taken action to reduce climate change at least once, however only 14% had done this “several” or “many times.” Similarly, about four in ten of the Concerned (38%) said that they had punished companies that are opposing steps to reduce climate change by NOT buying their products at least once, with only 9% saying they had done this “several” or “many times.” A third of the Concerned (33%) also said that they had “occasionally” or “often” avoided eating red meat for environmental reasons.

However, over the next 12 months, nearly half of the Concerned intend to increase their buying of goods or services from companies that have taken action to reduce climate change “more frequently than you are now” (47%), or to punish companies that are opposing steps to reduce climate change by NOT buying their products “more frequently than you are now” (44%).

16.2.7 Climate Literacy

16.2.7.1 *Self-reported knowledge and awareness of climate change*

A majority of the Concerned (59%) say they know “a lot,” or “a moderate amount” about climate issues like the “greenhouse effect”. A majority also report awareness of the two national climate action campaigns: “Reduce Your Use” (72%); and “Stop Food Waste” (68%). Only a minority of the Concerned (36%) said they were aware of “The National Dialogue on Climate Action.”

A large majority of the Concerned (85%) knew that the “greenhouse effect” referred to “gases in the atmosphere that trap heat.” Half or more also correctly identified carbon dioxide (62%) and Methane (51%) as being “good at trapping heat from the Earth’s surface.”

16.2.7.2 *Transport*

A majority of the Concerned (55%) correctly identified that avoiding “a long-distance flight of 6 hours or more” would make a large reduction in the carbon footprint of an average person. However, many of the Concerned also overestimated as large the medium-sized effects of deciding to “walk, cycle or use public transport instead of going by car” (65%) and “switching from a conventional car to a hybrid/electric vehicle” (46%).

16.2.7.3 *Home energy use*

A majority of the Concerned correctly identified that switching to “energy from renewable sources” (71%) would make a large reduction in the carbon footprint of an average person. However, the Concerned also tended to overestimate as large the medium effect of “retrofitting for home heating” (63%) and the small effect of “changing to energy efficient lighting” (46%).

16.2.7.4 *Diet*

A majority of the Concerned (70%) underestimated the large effect that adopting a “plant-based diet” would have on reducing the carbon footprint of an average person. The Concerned were the most likely to correctly estimate the medium effect of “eating less meat” (39%), though a third of the Concerned (33%) underestimated this effect as small. The Concerned were also most likely to accurately estimate the medium effect of “minimising food waste” (37%) with almost half of the Concerned (48%) still overestimating the effect as large.

16.2.7.5 *Consumption*

Many of the Concerned overestimated as large the medium sized effects of “recycling as much as possible” (63%) and “purchasing longer lasting goods” (48%). They also heavily overestimated the small carbon footprint contribution of “reusable shopping bags” (33% medium, 44% large).

16.2.8 Demographics and Social Characteristics

The Concerned are 47% male and 54% female. The Concerned are approximately equally split across all age groups with the largest proportion also in the 30–44-year age group (30%). About seven in ten of the Concerned (69%) have completed Further or Higher Education. About one in five (21%) of the Concerned live in cities and overall, 65% live in urban areas.

About two-thirds of the Concerned (64%) are in paid employment and have the highest proportion of Higher managerial and higher professional staff (6%) of all audiences. The Concerned have a higher proportion of Intermediate managerial, or junior professional staff (12%) than either the Cautious or the Doubtful, and large proportions are also Supervisory, clerical, or administrative workers (39%).

About four in ten of the Concerned (39%) reported having at least some difficulties making ends meet in the last 12 months.

16.3 The Cautious

16.3.1 Climate Change Beliefs

The Cautious are most likely to say they know “a moderate amount” (53%), or “a little” (28%) about climate change. A large majority (84%) think climate change is happening and most are either “somewhat” (33%) or “very” (32%) sure that it is.

A majority (57%) say that “most scientists think climate change is happening,” but three in ten (30%) think that “there is a lot of disagreement among scientists” on the topic of climate change.

A majority think climate change is caused “equally by human activities and natural changes” (59%), while only 21% understand that it is caused “mostly by human activities.” Only 23% understand that agriculture is Ireland’s largest source of the pollution that causes climate change, while 30% think it is energy industries and 23% think it is transport.

16.3.2 Emotional Responses and Perceived Risks of Climate Change

The majority of the Cautious are “not very worried” about climate change (75%), while 12% are “somewhat worried. Only about three in ten of the Cautious (28%) think climate change is harming people in Ireland now, with other opinions spread across longer timelines of 10 years (14%), 25 years (17%), and 50 years (22%). Half of the Cautious think climate change will harm future generations (50%) “a great deal,” but few think it will harm people in Ireland (7%), people in their community (3%), or themselves personally (1%) “a great deal.” Instead, the Cautious are more likely to think climate change will cause “only a little” harm to these groups.

16.3.3 Personal and Social Engagement with Climate Change

The Cautious mostly say that climate change is either “somewhat” (40%) or “not too important” (45%) to them personally.

A large majority say they hear about climate change in the media at least “once a week” (65%) or “once a month” (16%). A majority of the Cautious also say they discuss climate change with their family and friends “occasionally” (38%), or “often” (14%).

Compared with the other audiences, fewer of the Cautious say they “strongly trust” scientists (36%), the Irish EPA (28%), educators (21%), TV weather reporters (21%), their own friends and family (20%), environmental NGOs (11%), the mainstream news media (10%), religious leaders (7%), political leaders (7%), community leaders (5%), journalists (4%), corporations (2%), or online celebrities (1%) as sources of information about climate change.

16.3.4 Impacts of Climate Change

Two-thirds of the Cautious think that climate change is affecting the weather in Ireland (67%), but most say that over the next 10 years, extreme weather will pose only a “moderate risk” (38%) or “low risk” (42%) to their own communities.

A majority of the Cautious think that water pollution (61%), and severe storms (55%) might harm their local areas. Fewer think air pollution (44%), or flooding (39%) pose local risks.

16.3.5 Climate Policies

16.3.5.1 Political and social outlook of the Cautious

Most of the Cautious think that climate change should be a “high” (32%), or “medium priority” (39%) for the Government of Ireland.

The Cautious are almost evenly split about the results of taking action to reduce climate change, with about a third thinking that climate action will “reduce economic growth and cost jobs” (36%), will “improve economic growth and provide new jobs” (33%), or will “have no effect on economic growth or jobs” (32%). Just under half think taking action to reduce climate change will “improve Ireland’s quality of life” (45%), while three in ten think it will “have no effect on Ireland’s quality of life” (30%).

A majority of the Concerned also say that “we have a responsibility to act on climate change, and Ireland should do what it can to reduce its own greenhouse gas emissions” (66%).

16.3.5.2 Support for climate action policies by the Cautious

The Cautious either “strongly” or “somewhat support” government grants to encourage residential and commercial building owners to install cleaner and more efficient heating systems (92%) and to make electric vehicles more affordable (69%). They also support increasing forests in their own localities to offset greenhouse gas emissions from agriculture (83%) and building new infrastructure such as pylons or substations in their local areas to support the increased use of renewable energy (73%). They also support the development of public transport infrastructure such as trains instead of motorway construction (88%).

In contrast, a majority of the Cautious either “strongly” or “somewhat oppose” the banning of peat, coal, and oil for home heating purposes (63%) and higher taxes on cars that use petrol and diesel (82%).

16.3.5.3 Support for use of carbon tax revenues by the Cautious

The Cautious also “strongly” or “somewhat support” using the revenues from rising taxes on fossil fuels over the next 10 years for supporting the further development of new clean energy sources such as marine and hydrogen power (95%), helping pay for energy efficiency improvements in low-income households” (91%), funding improvements to Ireland’s transport infrastructure such as rail, bus corridors, and cycling and walking paths (90%), funding programs to help Irish communities prepare for and adapt to the impacts of climate change (81%), assisting workers in the fossil fuel industry who may lose their jobs (85%), and returning the money to all Irish households in equal amounts” (63%).

16.3.5.4 Cautious: Who should do more to address climate change

Most of the Cautious think most sectors of society should be doing more to address climate change, including local Government (66%), businesses and corporations (64%), and politicians (64%). However, only a minority of the Cautious think that the Irish EPA (46%) or they personally (44%) should take more action regarding climate change.

16.3.6 Climate-Related Behaviours

Over the last 12 months, about three in ten of the Cautious (29%) said that they had rewarded a company because they have taken action to reduce climate change at least once. Only a very small percentage (5%) said they had done this “several” or “many times.” Similarly, only (15%) said that they had punished companies that are opposing steps to reduce climate change by NOT buying their products at least once, with only 4% saying they had done this “several” or “many times.” Accordingly, only one in ten of the Cautious (10%) also said that they had “occasionally” or “often” avoided eating red meat for environmental reasons.

Over the next 12 months, many of the Cautious intend to increase their buying of goods or services from companies that have taken action to reduce climate change “more frequently than you are now” (27%), or to punish companies that are opposing steps to reduce climate change by NOT buying their products “more frequently than you are now” (16%). Instead, the Cautious are much more likely to say that they intend to reward (66%) or punish companies with their purchases (76%) “about the same” as they are now.

16.3.7 Climate Literacy

16.3.7.1 *Self-reported knowledge and awareness of climate change*

Less than half of the Cautious (44%) say they know “a lot,” or “a moderate amount” about climate issues like the “greenhouse effect”. Majorities reported awareness of the two national climate action campaigns: “Reduce Your Use” (61%); and “Stop Food Waste” (56%). Less than a third of the Cautious (28%) said they were aware of “The National Dialogue on Climate Action.”

A majority of the Cautious (70%) knew that the “greenhouse effect” referred to “gases in the atmosphere that trap heat.” About six in ten small majority (58%) also correctly identified carbon dioxide (58%) as being “good at trapping heat from the Earth’s surface,” with a minority also correctly identifying Methane (43%) as doing so.

16.3.7.2 *Transport*

A majority of the Cautious (51%) underestimated the effect of avoiding “a long-distance flight of 6 hours or more” on the carbon footprint of an average person with about four in ten choosing the correct “large” option. Only a minority of the Cautious (33%) correctly identified the medium effect of “switching from a conventional car to a hybrid/electric vehicle.” The Cautious tended to overestimate the effect of deciding to “walk, cycle or use public transport instead of going by car” as large (48%) with only about a quarter correctly identifying that it had a medium effect.

16.3.7.3 *Home energy use*

A majority of the Cautious correctly identified switching to “energy from renewable sources” (53%) as making a large reduction in the carbon footprint of an average person. However, the Cautious also tended to overestimate as large the medium effect of “retrofitting for home heating” (49%) and the greatly overestimated the small effect of “changing to energy efficient lighting” with 37% overestimating the effect as medium, and 39% overestimating as large.

16.3.7.4 *Diet*

A majority of the Cautious greatly underestimated the large effect that adopting a “plant-based diet” would have on reducing the carbon footprint of an average person (53% small, 24% medium). Similarly, a majority of the Cautious underestimated the medium effect of “eating less meat” (54%). A third of the Cautious accurately estimated the medium effect of “minimising food waste” (33%) with about four in ten (41%) overestimating the effect as large.

16.3.7.5 *Consumption*

The Cautious were approximately equally likely to estimate the medium sized effect of “purchasing longer lasting goods” as medium (36%), or large (38%). A majority overestimated the contribution of “recycling as much as possible” (57%). A majority also overestimated the small carbon footprint contribution of “reusable shopping bags” (25% medium, 44% large).

16.3.8 Demographics and Social Characteristics

The majority of the Cautious are male (64%). The largest proportion of the Cautious are 60+ years old (32%). About six in ten of the Cautious (60%) have completed Further or Higher Education. About one in five (20%) of the Cautious live in cities, with 61% living in urban areas.

A little over half of the Cautious are in paid employment (55%), and the Cautious have the highest proportion of unemployed (12%) and retired (28%) members. The largest proportion of the Cautious are employed in supervisory, clerical, or administrative roles (38%), but the Cautious are also more likely to do semi-skilled or unskilled work (27%) than other audiences.

About four in ten of the Cautious (38%) reported having at least some difficulties making ends meet in the last 12 months.

16.4 The Doubtful

16.4.1 Climate Change Beliefs

The Doubtful are the second most likely segment to say that they know “a lot” about climate change (36%), while 41% say they know a “moderate amount,” and 22% say they know only “a little.”

A majority of the Doubtful (57%) think climate change is happening, with 16% saying they are “extremely sure” it is happening. However, 40% of the Doubtful say climate change is not happening, with 17% saying they are “extremely sure” that it is not.

About a quarter of the Doubtful (27%) say that “most scientists think climate change is happening,” but 48% think that “there is a lot of disagreement among scientists,” contrasted with 14% saying “most scientists think climate change is not happening,” and 12% who “don’t know enough to say.”

A little over a third think climate change is caused “mostly by natural changes in the environment” (37%), while 25% say that it is caused “about equally by human activities and natural changes.” Only 14% understand that it is caused “mostly by human activities.”

Only 17% understand that agriculture is Ireland’s largest source of the pollution that causes climate change, while 24% think it is energy industries, 22% think it is transport.

16.4.2 Emotional Responses and Perceived Risks of Climate Change

The majority of the Doubtful are “not at all worried” about climate change (78%). About half of the Doubtful (53%) think that climate change will “never” harm people in Ireland, while about a quarter (26%) think harm will occur on a longer timescale of 25-100 years, and about two in ten (22%) think harm due to climate change will occur in 10 years or less.

When considering the potential amount of harm, a majority of the Doubtful think that climate change will “not at all” harm people in Ireland (66%)²⁶, future generations (57%), people in their community (70%), or themselves personally (80%).

16.4.3 Personal and Social Engagement with Climate Change

The Doubtful mostly say that climate change is either “not too important” (17%) or “not at all important” (71%) to them personally.

A majority say they hear about climate change in the media at least “once a week” (73%). However, a majority also say they discuss climate change with their family and friends only “occasionally” (40%), “rarely” (16%), or “never” (29%).

Few of the Doubtful say they “strongly trust” scientists (19%), their own friends and family (17%), TV weather reporters, (15%), educators (10%), the Irish EPA (10%), community leaders (7%), religious leaders (2%), environmental NGOs (2%), the mainstream news media (3%), journalists (3%), corporations (2%), online celebrities (2%), or political leaders (2%) as sources of information about climate change. However, many of the Doubtful say they “somewhat trust” family and friends (47%), scientists (42%), the Irish EPA (31%) and weather forecasters (31%).

²⁶ The “Not at all” category expressed by the majority of the Doubtful was presented here as the small number of participants from this group meant that small percentages saying “A great deal” which are seemingly higher than those expressed by the Cautious were not statistically different from zero.

16.4.4 Impacts of Climate Change

Relatively few of the Doubtful think that climate change is affecting the weather in Ireland (29%), and most say that over the next 10 years, extreme weather will pose only a “low risk” (43%) or “no risk” (48%) to their own communities.

About half of the Doubtful (52%) are worried that water pollution might harm their local areas. Much smaller proportions worry about the risks posed by severe storms (29%), air pollution (25%), or flooding (21%).

16.4.5 Climate Policies

16.4.5.1 Political and social outlook of the Doubtful

A majority of the Doubtful think climate change should be a “low priority” (78%) for the Government of Ireland.

Almost half of the Doubtful think taking action to reduce climate change will “reduce economic growth and cost jobs” (48%), and another 41% think that it will “have no effect on economic growth or jobs.” Likewise, a majority think that taking action to reduce climate change will either “reduce Ireland’s quality of life” (37%) or “have no effect” (48%).

Only a minority of the Doubtful say that “we have a responsibility to act on climate change, and Ireland should do what it can to reduce its own greenhouse gas emissions” (31%), while most (60%) say “Ireland is too small to make a difference in climate change; we should let other countries take the lead on reducing greenhouse gas emissions.”

16.4.5.2 Support for climate action policies by the Doubtful

The Doubtful either “strongly” or “somewhat support” Government grants to encourage residential and commercial building owners to install cleaner and more efficient heating systems (71%). They also support increasing forests in their own localities to offset greenhouse gas emissions from agriculture (66%) and the development of public transport infrastructure such as trains instead of motorway construction (88%).

A majority either “strongly” or “somewhat oppose” the banning of peat, coal, and oil for home heating purposes (75%), and higher taxes on cars that use petrol and diesel (81%). They also oppose Government grants to make electric vehicles more affordable (63%) and oppose the local construction of renewable energy infrastructure (58%).

16.4.5.3 Support for use of carbon tax revenues by the Doubtful

The Doubtful also “strongly” or “somewhat support” using the revenues from rising taxes on fossil fuels over the next 10 years for supporting the further development of new clean energy sources such as marine and hydrogen power (78%), helping pay for energy efficiency improvements in low-income households (78%), funding improvements to Ireland’s transport infrastructure such as rail, bus corridors, and cycling and walking paths (78%), assisting workers in the fossil fuel industry who may lose their jobs (69%), returning the money to all Irish households in equal amounts (66%), and funding programs to help Irish communities prepare for and adapt to the impacts of climate change (51%).

16.4.5.4 Doubtful: Who should do more to address climate change

Only a minority of the Doubtful think various sectors of society should be doing “much more” or “more” to address climate change, including the Irish EPA (38%), local Government (34%), businesses and corporations (34%), or politicians (32%). Only about one in five (18%) think they personally should take more action regarding climate change.

16.4.6 Climate-Related Behaviours

Over the last 12 months, only about one in ten (10%) of the Doubtful said that they had rewarded a company because they have taken action to reduce climate change at least once. A very small percentage (5%) said that they had done this “several” or “many times.” Similarly, only about one in eight (12%) said that they had punished companies that are opposing steps to reduce climate change by NOT buying their products at least once, with only 5% saying they had done this “several” or “many times.” Accordingly, only a small fraction of the Doubtful (7%) also said that they had “occasionally” or “often” avoided eating red meat for environmental reasons, with the overwhelming majority (90%) saying they had never done this.

Over the next 12 months, very few of the Doubtful intend to increase their buying of goods or services from companies that have taken action to reduce climate change “more frequently than you are now” (7%), or to punish companies that are opposing steps to reduce climate change by NOT buying their products “more frequently than you are now” (5%).

Instead, the Doubtful are much more likely to say that they intend to keep to “about the same” habit of rewarding (81%) or punishing companies with their purchases (86%).

16.4.7 Climate Literacy

16.4.7.1 *Self-reported knowledge and awareness of climate change*

About six in ten of the Doubtful (59%) say they know “a lot,” or “a moderate amount” about climate issues like the “greenhouse effect”. Majorities reported awareness of the two national climate action campaigns: “Reduce Your Use” (64%); and “Stop Food Waste” (61%). Only a minority of the Doubtful (36%) said they were aware of “The National Dialogue on Climate Action.”

A majority of the Doubtful (69%) knew that the “greenhouse effect” referred to “gases in the atmosphere that trap heat.” About half also correctly identified carbon dioxide (51%) as being “good at trapping heat from the Earth’s surface,” with 46% also correctly identifying Methane as a greenhouse gas.

16.4.7.2 *Transport*

The Doubtful were the most likely to underestimate the effect of avoiding “a long-distance flight of 6 hours or more” on the carbon footprint of an average person with only about a third (35%) choosing the correct “large” option. About half of the Doubtful (49%) underestimated as small the medium effect of “switching from a conventional car to a hybrid/electric vehicle.” The Doubtful were the most likely to correctly estimate the effect of deciding to “walk, cycle or use public transport instead of going by car” as medium (38%).

16.4.7.3 *Home energy use*

A majority of the Doubtful (54%) underestimated the large carbon footprint contribution of switching to “energy from renewable sources.” Four in ten of the Doubtful overestimated as large the medium effect of “retrofitting for home heating” (40%). The Doubtful were the most likely (38%) to correctly estimate the small effect of “changing to energy efficient lighting,” with about half still overestimating the effect as either medium (24%), or large (24%).

16.4.7.4 *Diet*

A large majority of the Doubtful greatly underestimated the large effect that adopting a “plant-based diet” would have on reducing the carbon footprint of an average person (66% small, 12% medium). Similarly, a large majority of the Doubtful underestimated the medium effect of “eating less meat” (72%). About a third of the Doubtful accurately estimated the medium effect of “minimising food waste” (33%) with about another third (35%) overestimating the effect as large.

16.4.7.5 Consumption

The Doubtful were approximately equally likely to estimate the medium-sized effect of “purchasing longer lasting goods” as medium (33%), or large (38%). About half overestimated the contribution of “recycling as much as possible” (48%). A majority also overestimated the small carbon footprint contribution of “reusable shopping bags” (28% medium, 35% large).

16.4.8 Demographics and Social Characteristics

A large majority of the Doubtful are male (71%). A majority of the Doubtful are over 45 years of age (63%). About six in ten of the Doubtful (62%) have completed Further or Higher Education, with about one in ten (9%) reporting primary schooling as their highest level of education. About one in seven (14%) of the Doubtful live in cities, with 63% overall living in urban areas.

About two-thirds of the Doubtful (67%) are in paid employment. They have a similar pattern of employment to the Concerned, with the largest proportion (34%) employed in supervisory, clerical, or administrative work, and other large groups spread between skilled (21%), and semi-skilled or unskilled work (20%).

About four in ten of the Doubtful (36%) reported having at least some difficulties making ends meet in the last 12 months. However almost one in five of the Doubtful (17%) did not answer this question.

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