



Public perceptions of climate change and policy action in the UK, China, Sweden and Brazil

This briefing is intended as a useful resource for practitioners and researchers who are interested in public climate change opinions and societal responses to climate change.

Key points

- Many people in the UK, China and Sweden are very or extremely worried about climate change (40-50%) and want to see urgent action (55-58%). In Brazil, climate change worry and feelings of urgency are higher (75% worry, 85% high urgency).
- Most people in these countries (66-84%) agree that tackling climate change requires drastic changes to our current way of living and how we operate as societies. Walking, cycling and using public transport are seen as the most effective way to tackle climate change in all four countries. People are less aware of other strategies, such as eating less red meat and reducing new purchases, especially in China.
- Across all four countries, there is majority (66-76%) support for the international Paris Agreement to keep global temperature increase below 2 degrees Celsius.
- Government, businesses and industry are seen as the most responsible actors to initiate climate action, but most people also feel a strong personal responsibility to act.
- Far-reaching government action and individual behaviour change are perceived to be the most important steps to tackle climate change. Technological solutions, winding down some types of businesses and climate protests are considered less important.



The 26th UN Climate Change Conference of the Parties (COP26), in Glasgow in November 2021, is expected to be the most significant climate meeting since the Paris Agreement was signed in 2015. It follows the publication of the Intergovernmental Panel on Climate Change's Sixth Assessment Report, which warns that global temperature increases may reach or even exceed the target of 1.5 degrees by as early as 2030, and that deep reductions in greenhouse gas emissions are needed to avoid the most dangerous impacts of climate change¹.

While governments around the world have presented their plans to reduce greenhouse gas emissions over the coming decades, including the UK which published a Net Zero Strategy, many experts warn that current plans do not go far enough to avoid catastrophic consequences for the planet².

Public awareness of climate change and worries about its consequences have consistently been on the rise in the UK and other countries over the past few years^{3, 4, 5}. This briefing paper presents the most recent insights into citizens' views of climate change and climate action from the UK and around the world, showing widespread awareness not just of the existence of climate change, but also its urgency and a willingness to consider the changes necessary to avoid a climate crisis.

This briefing paper uses data from the second CAST annual survey, which asked representative samples in the UK, China, Sweden and Brazil about their views on climate change, climate action and the process of change.

Examining public perceptions across four countries, allows for a more in-depth understanding of how different publics engage with climate change around the world. The surveys aim to, a) identify dominant views that are shared across countries and, b) identify differences in views that are shaped by geographical or cultural factors. The comparison countries were chosen to provide a range of countries that differ in their emissions, economic development and geography.

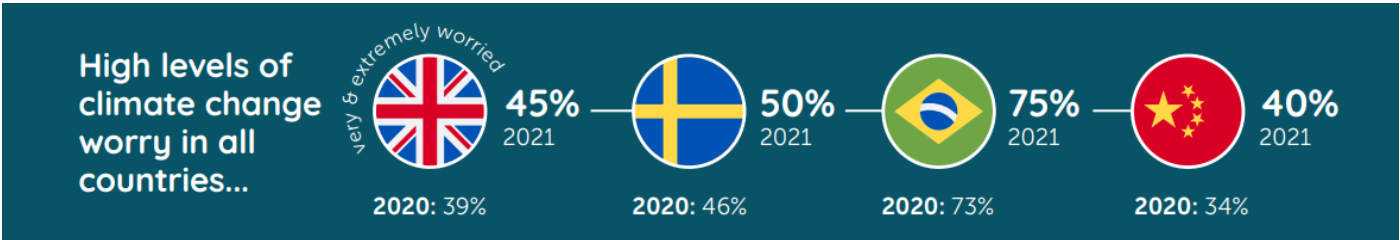
Methods and Sample

The results presented in this briefing are from the second of a series of annual online surveys conducted by the CAST Centre. Data were collected between 28th August and 22nd September 2021 in the UK (n=1,001), China (n=1,001), Sweden (N=1,023) and Brazil (N=1,011). The (quota) samples were representative of the population of the four countries with regards to gender, age, region and socioeconomic status. Post stratification weights were applied to strengthen representativeness; these adjust the weights of undersampled and oversampled subpopulations so the overall sample is more representative of the true distributions within the actual target populations. The questionnaire covered the topics of climate change perceptions, perceived necessity and effectiveness of lifestyle changes, perceived responsibility for action, climate policy support (including the Paris Agreement), and the desirability of different low-carbon futures.

What do people believe?

People across the UK, China, Sweden and Brazil are worried about climate change and want to see urgent action. Climate change worry is at an all-time high in the UK, with 45% now reporting they are very or extremely worried. This is an increase from 39% in 2020 and 25% in 2016⁶. Similar levels of climate change worry were found in China (40%) and Sweden (50%). The figures in China and Sweden

also represent an increase from 2020, when 34% and 39% reported being very or extremely worried, respectively. Climate change worry is particularly high in Brazil: three out of four (75%) indicate being very or extremely worried about climate change. Levels of worry in Brazil were comparably high in 2020 (73%).



A majority of respondents in all four countries believe we are already feeling the effects of climate change and that we need to tackle climate change with a high or extremely high level of urgency. Brazil has a higher number of respondents who think that we are already feeling the effects of climate change (84%) than the other three countries (63-65%). Similarly, more people in Brazil (85%) than in the UK, China and Sweden (55-58%) think that climate change requires a high or an extremely high level of urgency.

People across the all four countries see climate change as a more serious threat to less developed countries than to themselves and their family. When examining climate change risk perceptions in more detail, we see that participants across the four countries consider climate change to be a very serious or extremely serious threat to people in less developed countries (64-86%).

A much lower percentage of respondents perceive climate change to be a threat to themselves or their family; this is lowest in Sweden (19%), followed by China (30%) and the UK (33%). In Brazil, a majority perceive climate change to be a threat to themselves and their family (54%). While a moderate number of respondents in Sweden (37%), China (43%) and the UK (48%) consider climate change a very or extremely serious threat to their country, an overwhelming majority of respondents do in Brazil (80%).

Brazil, therefore, appears to have higher climate change risk perceptions for their country and for themselves than the other three countries. Brazilian respondents are also more likely to believe that they are already feeling the effects of climate change. These beliefs may, in turn, explain why climate change worry and perceived urgency to act is also higher in Brazil compared to the UK, China and Sweden.

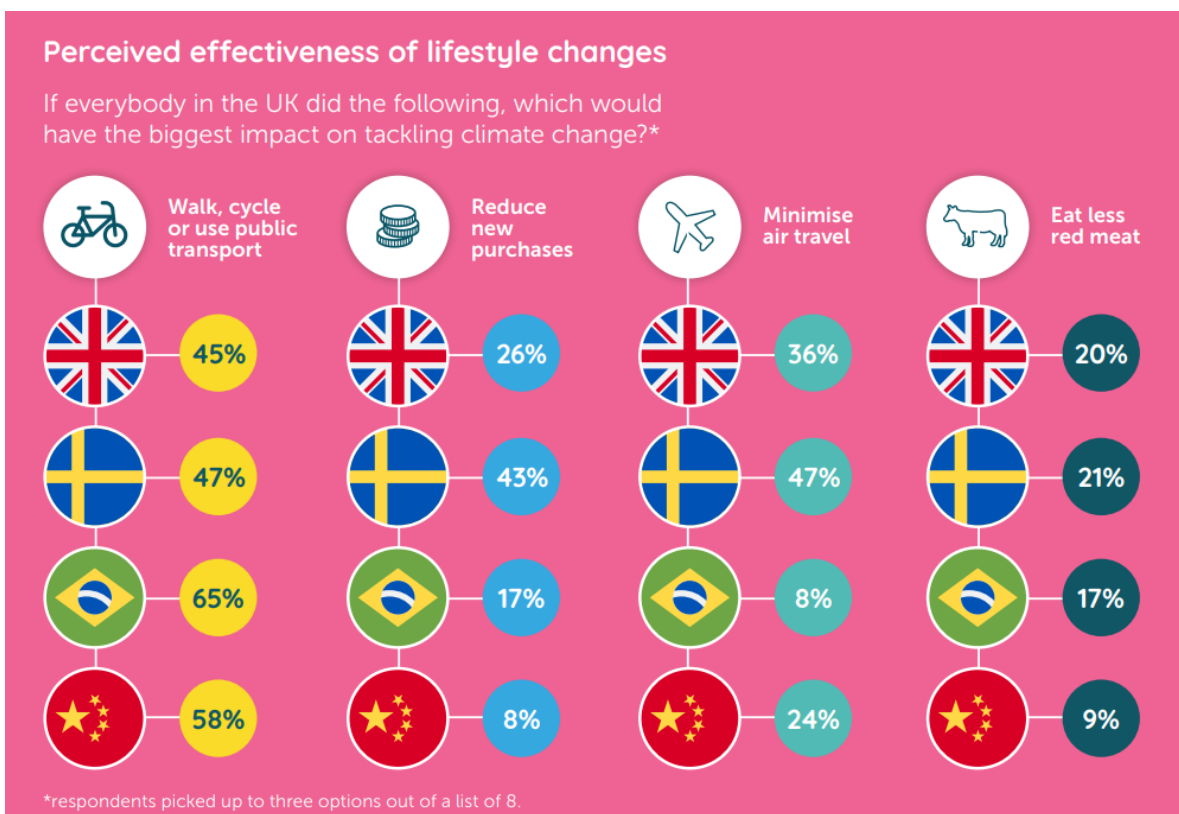


What needs to happen?

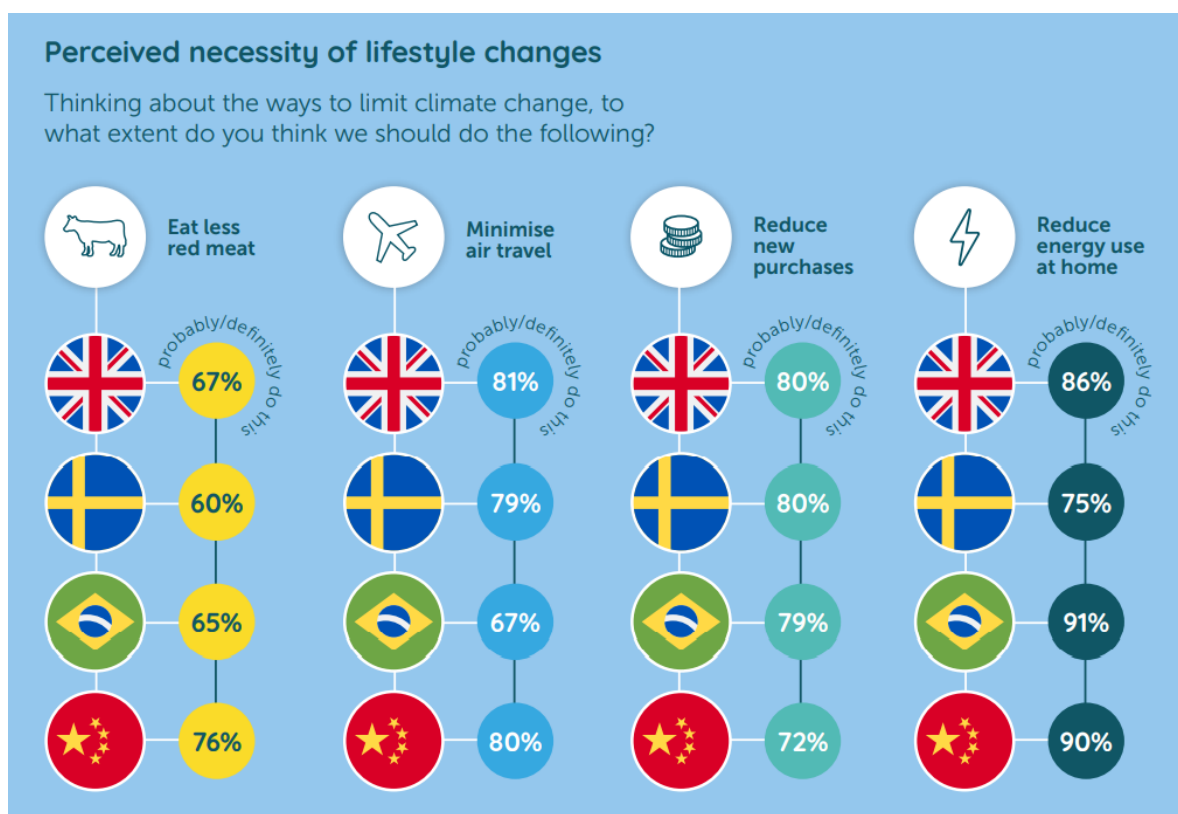
Respondents in all four countries agree that to tackle climate we, as a society, need to drastically change the way we live and how society operates (66% in Sweden, 70% in the UK, 74% in China and 82% in Brazil). There are however differences regarding how this could and should happen.

Walking, cycling and using public transport are seen as the most effective ways to tackle climate change in all the countries. Fewer respondents are aware that eating less red meat and reducing new purchases are effective ways to tackle climate change, especially in China. Respondents were asked to pick three actions (from a list of eight) which they thought would have the biggest impact on climate change if everybody in their country would do them. The largest number of respondents in all four countries think that walking, cycling and using public transport is the most effective strategy (45-65%). People in Sweden and the UK also think that minimising air travel is an effective strategy (47% and 36% respectively), but this is not the case in China (24%) and especially Brazil, where only 8% chose this as one of the actions that would have the biggest impact on tackling climate change.

Eating less red meat and reducing the amount of new things we buy were selected by less than a quarter of respondents in most countries, suggesting that people tend to underestimate the role of emissions from meat consumption or purchase decisions⁶. Awareness of these lifestyle choices being an effective way of tackling climate change was particularly low in China, where only 9% and 8% of respondents selected eating less meat and reducing new purchases, respectively. An exception is Sweden, where 43% of respondents selected the reduction of new purchases as one of the actions that would have the biggest impact on tackling climate change.



Most people believe that changes are necessary across the areas of diet, transport, consumption and heating. Respondents were asked about the necessity of making lifestyle changes in these four areas. Across the countries, substantial majorities (between 67-91%) think that we probably or definitely should minimise air travel, reduce new purchases, and reduce the energy use at home. Fewer respondents believe that it is necessary to eat less meat in order to limit climate change (60-76%), although this still represents a clear majority.



Across all four countries, there is strong support for the international Paris Agreement to keep global temperature increase below 2 degrees Celsius. When asked whether they support or oppose their country being part of the international Paris agreement, a clear majority of respondents in all four countries (66-76%) are supportive.

Approaches that allow citizens' opinions about climate change to be, comprehensively, presented to policymakers are supported in the UK, China and Brazil. Climate citizen assemblies are one such approach recently trialed in multiple European countries – they are a form of climate change public engagement in which citizens learn, discuss and debate ways to address climate change and then offer recommendations⁷. For example, the UK Climate Assembly was held in 2020 and published its recommendations for the UK government to consider later that year⁸. Engaging the general public in climate policy making received majority support in three of our sampled countries: 51% in the UK, 76% in China and 84% in Brazil. However, only a third of respondents in Sweden were in support of allowing citizens' opinions and policy prescriptions to be presented to policymakers in this way.

How will it happen?

Climate action is seen as a joint responsibility between individuals, businesses/industry and government. This is evident across a number of survey questions relating to the governance of climate action. The survey explored how much people see themselves, businesses and industry, and their government being responsible for addressing climate change. In all four countries, a large majority feel it is the responsibility of businesses and industry (79-92%) and of government (67-82%) to try to reduce the risk of climate change. Most respondents also indicate they themselves have some personal responsibility to try to prevent climate change from worsening. This is lowest in Sweden (50%) and highest in Brazil (81%).

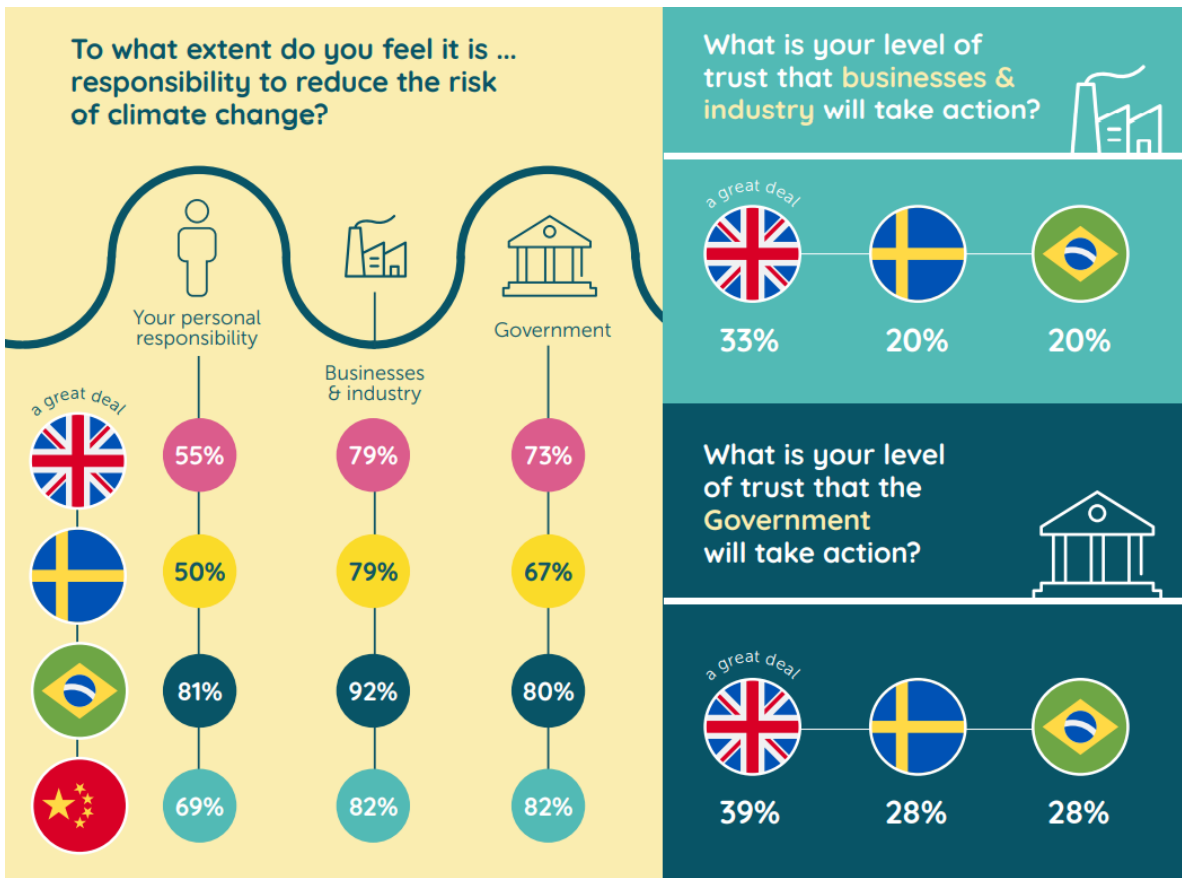
Government action and behaviour change are seen as important steps towards effective climate action, with technological solutions and large-scale protests being seen as less important by many. Respondents ranked a number of statements that represent possible steps towards enabling drastic societal changes to tackle climate change (see Table 1). In the UK, Sweden and China, far-reaching government action was the option chosen as most important by most people, closely followed by individual behaviour change. In Brazil, this is reversed with individual behaviour change being chosen as the most important followed by government action. Other options such as mass climate protests, technological solutions and winding down businesses were ranked as less important. It is notable that individual behaviour change was more popular as a first step, over technological solutions, that could be perceived as relieving the need for individual action.

	Displays % having picked this step as most important				
	Individuals will have to start making major changes to the way they live	Governments need to start introducing far reaching policies such as raising taxes to pay for investments in a green economy	Some types of businesses will need to be restricted and/or wound down	All types of technological solutions need to be explored and considered (such as creating 'fake' clouds)	Large-scale protests and activism to push for rapid action on climate change
UK	25%	30%	15%	11%	4%
Brazil	40%	19%	10%	10%	9%
China	26%	35%	13%	8%	7%
Sweden	19%	29%	19%	10%	7%

Table 1. How do you think drastic societal changes that help to tackle climate change can be realised? Rank the statements in the order you view as being the most important to bring about change.

While most respondents ascribe high levels of responsibility to both government and businesses/industry to address climate change, they have limited trust that these actors will actually take action. Only about a third of respondents in the UK have a great deal of trust that businesses/industry (33%) and government (39%) would take action to address climate change. This is even lower in Brazil

and Sweden, where only 20% and 28% expressed trust that businesses/industry and government will take action, respectively.



Recommendations

At a time when world leaders start to discuss more concretely how to fulfil the international commitment to avoid the worst consequences of the climate crisis, it is important to understand what the public think needs to happen and what they expect from their governments.

The findings in this briefing demonstrate that people around the world are worried about climate change and believe that the effects can already be felt. They also recognise the need for urgent and drastic action. Furthermore, people believe that changes to diet and consumption are likely needed as part of the solution. This is despite lower awareness that eating less meat and purchasing fewer products are as effective strategies to tackle climate change as other lifestyle changes, most notably walking, cycling and taking more public transport.

The four surveyed countries, the UK, China, Sweden and Brazil, show similar patterns of opinion across most of the questions explored in the survey. However, our findings clearly highlight that people in Brazil are more alarmed about climate change than people in China, Sweden and the UK. These high levels of concern and feelings of urgency may be driven by extreme events having affected the country over the last few years, such as reoccurring and devastating wildfires, droughts⁹ and more recently the COVID-19 pandemic¹⁰.

Policy makers should note that citizens expect their government to take responsibility and start to take effective action on climate change, while a large proportion of people also feels a personal responsibility to act. Individual behaviour change alongside far-reaching government action are thought to be crucial steps towards a low-carbon future. Overall these results send a positive message that many people are at a point where they want to see citizens and government working together to solve the challenge that the climate crisis poses to all of us. To ensure co-development of effective climate change policies between citizens and government, its important that governments strengthen their strategies for public engagement.

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