

# Executive Summary

# THE IMPACTS OF CLIMATE DISINFORMATION ON PUBLIC PERCEPTION



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Despite the global concern over climate misinformation and the very real impacts it can have on climate action, research on the prevalence of belief in climate misinformation is limited. Various international organisations and nonprofit organisations have conducted research on public opinion on climate change and the impacts of climate communications. Although these studies well-documented differences and variations in public opinion about climate change, the impact of climate misinformation on public perception needed to be analysed in more detail to better understand the scale of the problem.

Climate Action Against Disinformation and Conscious Advertising Network have commissioned a unique survey, to produce this report, on the origin and impact of climate misinformation on public perception in different regions of the globe. The study was conducted online with respondents recruited through YouGov's online panel in Australia, Brazil, India, Germany, the UK and the USA. Non-probability, quota sampling was used to draw representative samples, and the data was then weighted by the variables listed below using the Random Iterative Method (RIM).

**The results of the survey are stark and reflect how prevalent climate disinformation beliefs and narratives are around the world. There is a big gap in public perception and the science on issues as basic as whether climate change exists or whether it is mainly caused by humans. This perception gap weakens the public mandate for climate action and undermines the negotiations to achieve the goals of the Paris Climate Agreement.**

## Key findings include:

- Overall, between 6 and 23% of the populations of the countries covered within this report do not believe in climate change or are uncertain about whether climate change is happening. A further 22 to 38% believe that humans are only partly responsible for the change in climate. In this regard, people in the United States are most likely to hold this belief.
- The results show beliefs about the role of fossil gas are contrary to what climate science shows are rampant methane leaks and emissions the carbon budget can not afford. 34% of Australians, 40% of Brazilians, 1/4 of Germans, 57 % of Indians and 39 % of US citizens believe that gas is a climate friendly energy source. Only 14% of population in the UK believes this disinformation.
- When the data is combined, between 55% and 85% of the populations surveyed believe at least one of the climate change misinformation statements included in the questionnaire with the highest share in India and the lowest in the UK.
- 20% or more of people surveyed in each country believe that 'the climate has always changed, global warming is a natural phenomenon and is not a direct result of human activity.' Populations in the US and Australia are most likely to hold this belief with 33% in each country believing this statement.
- One quarter or more people surveyed in each of the six countries believe that their country 'cannot afford to reach the target of net zero emissions by 2050.'
- News consumption is not an indicator of whether people are better informed on climate science.

# Background

Climate misinformation is a threat to climate action. As the IPCC Report on Climate Change 2022: Impacts, Adaptation, and Vulnerability indicated this year, vested interests have been organising and financing fake and unsubstantiated narratives and anti-climate communication activities to influence public opinion on climate change and hinder progress on climate action.

Various studies conducted by Climate Action Against Disinformation members show that climate misinformation runs rampant all over the world and hinders climate action by influencing public opinion and shaping governments' actions and their inaction on the issue of climate change. While the world is running out of time to stave off the most devastating consequence of climate change, these deliberate anti-climate communication attacks in the public space weaken public demand for the mitigation and adaptation measures that would protect the public and the planet from the climate crisis.

Climate disinformation no longer simply refers to outright climate denialism. In recent years as public support for climate action has risen along with the toll of extreme weather, professional climate disinformation producers continue to do their job to delay climate action by presenting more reasonable-seeming arguments, using "common sense" appeals, concerns about "free speech" or "free market" pretences for not regulating polluters. The playbook of those who oppose climate action because of vested interests or financial incentives for maintaining reliance on fossil fuels has been updated. Its expansion includes new talking points for those who want to appear more reasonable than the deniers saying 'climate change is a hoax.' But they're still utilising tactics such as cherry-picking information to present false accounts, or even fraudulently claiming polluting technologies as supportive of climate goals despite clear guidance from the International Energy Agency that we can't build any new fossil fuel infrastructure if we want to hit 1.5 degrees warming.

## CAAD's universal definition of climate disinformation and misinformation

Recognising the shift in messaging, tactics, and the overall ecosystem, the CAAD coalition defines climate disinformation as content that:

- Undermines the existence or impacts of climate change, the unequivocal human influence on climate change, and the need for corresponding urgent action according to the IPCC scientific consensus and in line with the goals of the Paris Climate Agreement;
- Misrepresents scientific data, including by omission or cherry-picking, in order to erode trust in climate science, climate-focused institutions, experts, and solutions; or
- Falsely publicises efforts as supportive of climate goals that in fact contribute to climate warming or contravene the scientific consensus on mitigation or adaptation.

# Key Finding

## Prevalence of climate misinformation across the globe

The first part of the report looks at the prevalence of climate misinformation across different countries, including Australia, Brazil, Germany, India, UK and US. The areas of climate misinformation are categorised into six sections, including beliefs contrary to scientific consensus about climate change, fossil fuel and energy consumption, renewables, energy prices and crisis, net-zero transition, climate action and climate policy (like electric vehicles and heat pumps).

## Beliefs contrary to scientific consensus about climate change:

- Overall, between 28% and 53% of the populations of the countries covered within this report do not believe in climate change, think that climate change is not primarily caused by human activity, or are uncertain about whether climate change is happening, with populations in the US most likely to hold this belief.
- When the data is combined, between 55% and 85% of the populations surveyed believe at least one of the climate change misinformation statements included in the questionnaire with the highest share in India and the lowest in the UK.

### Australia:

- In Australia, only 44% believe that climate change is caused mainly by human activity.
- 37% of the population believes that “A significant number of scientists disagree on the cause of climate change, 33% believe that climate change is a natural phenomenon and 31% says that “ climate change mitigation efforts punish citizens (e.g. through lifestyle changes, rising prices, livelihoods etc.)

### Brazil:

- In Brazil, 30% believe that climate change is not caused mainly by human activity.
- 29% of the population also believes that “A significant number of scientists disagree on the cause of climate change” and 24% believe that “The temperature record is unreliable or rigged”.

### Germany

- In Germany, only 49% believe that climate change is mainly caused by human activity.
- 36% of the population believes that “A significant number of scientists disagree on the cause of climate change, 28% say that “Climate models are not accurate” and again 28% believe that “ climate change mitigation efforts punish citizens (e.g. through lifestyle changes, rising prices, livelihoods etc.)

### India

- In India, nearly half the population (49%) believe that India is leading the world on climate action, having signed international climate agreements and put plans into place to address climate change. A similar share reported that (47%) we should focus our efforts on technologies such as carbon capture and storage rather than trying to cut carbon emissions.

### The UK

- In the United Kingdom, the belief that a significant number of scientists disagree on the cause of climate change was the most commonly held misinformation belief (29%).
- Only 54% believe that climate change is mainly caused by human activity.

## The USA

- In the United States, the belief that a significant number of scientists disagree on the cause of climate change was the most commonly believed narrative (35%)
- 46% believe that climate change is not caused mainly by human activity.
- 23% of population believe that climate change is a hoax made up by elite organisations, such as the World Economic Forum (WEF)
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## Fossil fuel and energy consumption:

### Australia:

- The data indicates that in Australia, two in five people believe that oil and gas are essential components of our national economy, and it would be impossible for us to do without them (43%) and that natural gas is an essential and important fuel needed to be utilised for the low-carbon energy transition (42%).

### Brazil:

- In Brazil, roughly half the public (49%) believes that oil and gas are essential components of their national economy, and it would be impossible for us to do without them.
- 47% of Brazilians also believe that “Natural gas is essential and important fuel needed to be utilised for the low-carbon energy transition”

### Germany

- In Germany, the belief that actions to help the climate will generate high costs which will be paid by the middle class (45%), and natural gas is essential and important fuel needed to be utilised for the low-carbon energy transition (44%) were the most common misinformation narratives the public believes around fossil fuels.

## India

- In India, a majority of the public (57%) believe that natural gas is a climate-friendly energy source and that natural gas is essential and important fuel needed to be utilised for the low-carbon energy transition

### The UK:

- In the United Kingdom, the belief that oil and gas are essential components of our national economy and it would be impossible for us to do without them is the most commonly held misinformation belief, with one third of the public (32%) believing this.

### The US:

- In the United States, the statement oil and gas are essential components of our national economy and it would be impossible for us to do without them was the most common misinformation belief (40%).

## Renewable energy

### Australia:

- In Australia, renewable energy is more expensive than energy from fossil fuels is the most commonly held misinformation belief, with 37% of the public reporting it is true.
- One in four (23%) report that renewable energy is not projected to reduce energy bills in the medium term, the least commonly held piece of misinformation around climate in Australia.

### Brazil

- In Brazil, the belief that renewable energy is more expensive than energy from fossil fuels was believed by one in three respondents in Brazil (33%).

## Germany

- In Germany, one-third of the respondents (33%) believe that fossil fuels are the only way to stabilise and back up variable wind and solar power.
- A third also believes that because solar and wind energy can be generated only when the sun is shining or the wind is blowing, there is no way of making them the basis of a grid that has to provide electricity 24/7, year-round.

## India

- In India, the belief that because solar and wind energy can be generated only when the sun is shining or the wind is blowing, there is no way of making them the basis of a grid that has to provide electricity 24/7, year-round was believed by roughly half the public (47%).
- Again 43% of the public believes that renewable energy is more expensive than energy from fossil fuels.

## The UK

- In the United Kingdom, the most commonly reported misinformation narrative was that because solar and wind energy can be generated only when the sun is shining or the wind is blowing, there is no way of making them the basis of a grid that has to provide electricity 24/7, year-round, with 27% reporting a belief in this narrative.

## The US

- In the United States, one in three Americans (34%) believe that renewable energy is more expensive than energy from fossil fuels.
- Also, 32% says that “because solar and wind energy can be generated only when the sun is shining or the wind is blowing, there is no way of making them the basis of a grid that has to provide electricity 24/7, year round”

## Net-zero transition

### Australia

- In Australia 29% of society believes that “Australia cannot afford to reach the target of net zero emissions by 2050” and 28% of them say that “the main reason our bills are increasing is due to climate and net-zero policies”.

### Brazil

- In Brazil 25% of society believes that “Brazil cannot afford to reach the target of net zero emissions by 2050” and 21% of them say that “the main reason our bills are increasing is due to climate and net-zero policies”.

### Germany

- In Germany 26% of society believes that “Germany cannot afford to reach the target of net zero emissions by 2050” and again 26% of them say that “the main reason our bills are increasing is due to climate and net-zero policies”.

### India

- In India 33% of society believes that “India cannot afford to reach the target of net zero emissions by 2050” and again 33% of them say that “the main reason our bills are increasing is due to climate and net-zero policies”.

### The UK

- In the UK 25% of society believes that “the UK cannot afford to reach the target of net zero emissions by 2050”.

## The US

- In the United States, the two most common net zero misinformation narratives were that the US cannot afford to reach the target of net zero emissions by 2050 and that the world does not need to rapidly de-carbonise and achieve net-zero by 2050 to ensure the prosperity and welfare of humans across the world. Approximately one in four Americans (26%) believe each of these narratives.

## Misinformation about electric vehicles

### Australia and Brazil

- In Australia and Brazil, the belief that the batteries from electric vehicles cannot be reused or recycled, and will pollute the environment was most common, with 37% and 26% of the public in the respective countries reporting a belief in this narrative.

### Germany

- In Germany, 43% of the population believes that it would not be possible to produce enough lithium to supply the world with electric vehicles, and 45% think that the electricity grid would never be able to handle the increase in electric vehicles.

### India

- In India, roughly equal shares believed that it would not be possible to produce enough lithium to supply the world with electric vehicles (43%) as believed that the battery from electric vehicles cannot be reused or recycled (41%).

## The UK

- In the UK, 34% of the population believes that it would not be possible to produce enough lithium to supply the world with electric vehicles, and 35% think that the electricity grid would never be able to handle the increase in electric vehicles.

## The US

- In the USA, 31% of the population believes that it would not be possible to produce enough lithium to supply the world with electric vehicles, and 36% think that the electricity grid would never be able to handle the increase in electric vehicles.

## Climate misinformation and news consumption

Numerous studies have documented public opinion of climate change among audiences of different news sources. To understand if there is a correlation between the prevalence of beliefs (identified and studied in section one of the report) and media consumption, the survey also included questions about news consumption in the questionnaire. This includes sources of news (TV news, online news outside of social media and social media platforms) and media outlets - these vary according to news sources available within the regions.

Across regions, participants who consumed news five days or more per week were more likely to believe in 41% or more of the misinformation statements compared to those who do not consume news. This suggests that news outlet's reporting regularly includes misinformation narratives, which are negatively influencing their readers' opinions.

Respondents were asked about how frequently they consumed a number of different outlets as a part of the survey. Their responses are also crossed with their beliefs about climate misinformation narratives.

**Key findings include:**

- In the United Kingdom, belief in the top misinformation narratives was consistently highest among regular consumers of the Daily Mail.
- In the United States, misinformation belief was consistently highest among regular Fox News consumers.
- In Brazil, users of Joven Pam, GloboNews, CNN, BandNews, Folha de São Paulo, Folha de São Paulo, and Twitter were more likely to believe a variety of the top pieces of misinformation than the general public.
- In Germany, misinformation belief was more heavily concentrated among regular Die Welt and Focus consumers than among other outlets.
- In India, regular consumers of the Hindustan Times, the Times of India, the Indian Express, India Today, and Wion reported relatively high levels of belief in a number of top misinformation narratives compared with the general public.

## Climate disinformation monitored at COP27 climate summit in Egypt

Throughout the duration of the COP27 climate summit, the Climate Action Against Disinformation (CAAD) coalition's Intelligence Unit, has been monitoring misinformation trends threatening domestic climate action and wider negotiations at the summit. The Unit has witnessed no shortage of disinformation activities, from associations and front groups falsifying broad support for highly unpopular fossil fuel policies, to bad faith actors attempting to make 'climate reparations' a toxic wedge issue. Opposition actors are seeking to muddy the water on informed discussions around climate action, and reduce the public mandate for climate action CAAD has found.

