

Consent

Introduction

In the current era, decarbonization is increasingly recognized as a crucial approach for humanity to address the global crisis of climate change. Governments have been making efforts to design and implement public policies that guide or influence people's daily behaviors, aiming to promote a low-carbon lifestyle. This study aims to investigate the impact of policy narratives, specifically the depiction of victims, on public support for nudge-based decarbonization policies. As a participant, you will be invited to take part in an online experiment where you will read and respond to policy narratives presented to you (Please note that some images in the experiment may evoke discomfort). Your task will involve providing your reactions and opinions based on the narratives you encounter. The experiment is expected to take approximately 10 minutes to complete.

This survey is hosted on the Qualtrics platform and ensures a secure connection. The Terms of Service, which address confidentiality, can be viewed at <http://qualtrics.com/security-statement/>. Your responses in this study will be kept completely confidential. The results will be stored on a computer without any participant identification information. The research team will retain your answers for a period of 5 years to review and validate the findings. While individuals other than the investigators may have access to your study records, your answers will remain anonymous. If you choose to participate, kindly click on the "Accept" button below to begin the survey. Please remember that you have the right to withdraw from the study at any time, even after participation. If you prefer not to participate, please select the "Decline" button, and your session will end. Should you have any questions regarding this study, please feel free to contact the research team at: zyliu22@m.fudan.edu.cn.

☐ Accept

☐ Decline

Climate Change Article for Multiple Victims Condition

Climate Change Article

Between 1880 and 2022, the temperature average on earth rose by 1.11°C. The ten warmest years since the beginning of systematic measurement all occurred after 1997. Scientists argue that this accumulation of hot years is beyond coincidence and cannot be explained without climate change.

The experts of the intergovernmental Panel on Climate Change (IPCC) assume that humans significantly influence this trend. The greenhouse gas carbon dioxide (CO₂) is increased in the earth's atmosphere by burning fossil fuels such as coal, oil and gas as well as by cutting down forests which absorb carbon. Agriculture and livestock farming produce methane and nitrous oxide, which are also greenhouse gases. The increase of these greenhouse gases leads to a warming of the planet's lower atmosphere and surface.

How Hot Could It Get?

The IPCC have developed different scenarios that could describe the future of the earth's climate. In the most optimistic case, average temperature will only rise by a further 0.5 °C by 2100. Compared to the pre-industrial era this would be a total increase of 1.5 °C. However, this scenario assumes that CO₂ emissions will only slightly increase in the next decade and will massively drop from 2030 onwards. After 2070, humanity would have to stop emitting greenhouse gases entirely. At the other extreme lies a darker vision of the future: Power generating plants, factories and cars will emit more and more climate-damaging gases in the upcoming years. Climate protective measures will only slowly be effective after 2050. This would mean that in 2100, the 4°C threshold will be crossed and in 2150 the earth would be 7°C warmer. At the moment, greenhouse gas emissions are increasing every year by approximately two percent. In 2013, 36 million tons of CO₂ were released into the atmosphere, around sixty percent more than in 1990. It is the political goal to keep global warming "well below 2°C".

What Are the Consequences of Climate Change for Human Society?

According to IPCC, climate change significantly impacts human society, particularly the food system. It has far-reaching consequences for food production, availability, and accessibility. Rising temperatures, shifting precipitation patterns, and extreme weather events disrupt agricultural practices, leading to reduced crop yields and availability. Heatwaves, droughts, and floods damage crops, resulting in food shortages and increased vulnerability. Changing temperature and rainfall patterns disturb the timing of planting and harvesting, affecting crop quality and quantity. Climate change also exacerbates pest and disease outbreaks, further threatening crop productivity. These climate-related impacts contribute to increased food prices, heightened food insecurity, and heightened risks of malnutrition, particularly for marginalized populations. It is imperative to address climate change by mitigating greenhouse gas emissions and implementing adaptive strategies to build a sustainable and resilient food system capable of meeting the needs of a growing global population. Urgent and collective action is essential to safeguard our food systems from the detrimental effects of climate change.

Here are eight images of the victims of climate change.



An emaciated child in Madagascar is slowly starving and reduced to eating cactus.



Because of the extreme weather caused by climate change, the citizens in China have experience heavy rains and floods.



Because of the drought caused by climate change, the citizens in Zimbabwe have experienced food shortages.



Because of the drought caused by climate change, the indigenous farmers in Guatemala have experienced a failure of their maize crop.



Because of the elevated heat caused by climate change, residents of Evia Island in Greece were impacted by wildfires.



Because of extreme weather fueled by climate change, the homes of Filipino residents were destroyed by powerful storms.



Because of the elevated heat caused by climate change, the homes of California residents were destroyed by wildfires.



Because of the extreme weather caused by climate change, the citizens in Texas were flooded by Hurricane Harvey.

Climate Change Article for Single Victim Condition

Climate Change Article

Between 1880 and 2022, the temperature average on earth rose by 1.11°C . The ten warmest years since the beginning of systematic measurement all occurred after 1997. Scientists argue that this accumulation of hot years is beyond coincidence and cannot be explained without climate change.

The experts of the intergovernmental Panel on Climate Change (IPCC) assume that humans significantly influence this trend. The greenhouse gas carbon dioxide (CO_2) is increased in the earth's atmosphere by burning fossil fuels such as coal, oil and gas as well as by cutting down forests which absorb carbon. Agriculture and livestock farming produce methane and nitrous oxide, which are also greenhouse gases. The increase of these greenhouse gases leads to a warming of the planet's lower atmosphere and surface.

How Hot Could It Get?

The IPCC have developed different scenarios that could describe the future of the earth's climate. In the most optimistic case, average temperature will only rise by a further 0.5°C by 2100. Compared to the pre-industrial era this would be a total increase of 1.5°C . However, this scenario assumes that CO_2 emissions will only slightly increase in the next decade and will massively drop from 2030 onwards. After 2070, humanity would have to stop emitting greenhouse gases entirely. At the other extreme lies a darker vision of the future: Power generating plants, factories and cars will emit more and more climate-damaging gases in the upcoming years. Climate protective measures will only slowly be effective after 2050. This would mean that in 2100, the 4°C threshold will be crossed and in 2150 the earth would be 7°C warmer. At the moment, greenhouse gas emissions are increasing every year by approximately two percent. In 2013, 36 million tons of CO_2 were released into the atmosphere, around sixty percent more than in 1990. It is the political goal to keep global warming "well below 2°C ".

What Are the Consequences of Climate Change for Human Society?

According to IPCC, climate change significantly impacts human society, particularly the food system. It has far-reaching

consequences for food production, availability, and accessibility. Rising temperatures, shifting precipitation patterns, and extreme weather events disrupt agricultural practices, leading to reduced crop yields and availability. Heatwaves, droughts, and floods damage crops, resulting in food shortages and increased vulnerability. Changing temperature and rainfall patterns disturb the timing of planting and harvesting, affecting crop quality and quantity. Climate change also exacerbates pest and disease outbreaks, further threatening crop productivity. These climate-related impacts contribute to increased food prices, heightened food insecurity, and heightened risks of malnutrition, particularly for marginalized populations. It is imperative to address climate change by mitigating greenhouse gas emissions and implementing adaptive strategies to build a sustainable and resilient food system capable of meeting the needs of a growing global population. Urgent and collective action is essential to safeguard our food systems from the detrimental effects of climate change. Here is an image of the victims of climate change.



Because of the drought caused by climate change, the citizens in Zimbabwe have experienced food shortages.

Compassion and Policy Support

Compassion and Policy Support

Please answer the following questions.

	Not at all	2	3	4	Extremely
How sympathetic do you feel toward the victim?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How warm do you feel toward the victim?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How compassionate do you feel toward the victim?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How touched were you by the victim?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How urgent do the needs of the victim seem?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent do you feel that it is appropriate to give money to aid the victim?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much do you value the welfare of the victim whose picture(s) you saw?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How important is it to you that this victim whose picture(s) you saw be happy?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How important is it to you that this victim whose picture(s) you saw not suffer?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Since decision makers prefer not to change the status quo due to switching costs and loss aversion, a new system is required to be adopted, in which households would be automatically enrolled in a contract consisting of green electricity (e.g., Wind/solar electricity) , which produces less CO2 emissions compared to conventional electricity, but households could opt-out if they wished, to facilitate local citizens to adopt green power and reduce electricity-related carbon emissions. To what extent would you support this nudge-based decarbonization policy?

Strongly oppose

☐

2

☐

3

☐

4

☐

Strongly support

☐

Demographic

Demographics

Your age:

Your gender:

☐

Male

☐

Female

Your highest level of **education**:

High school or lower

☐

Bachelors

☐

Masters

☐

Doctorates

☐

Your monthly **income**:

☐

<\$2000 (< £ 1500)

☐

\$2000–3999 (£ 1500-2999)

☐

\$4000 – 5999(£ 3000-4499)

☐

>\$6000 (> £ 4500)

How do you feel about your **social economic status**?

Clearly below average

☐

Below average

☐

Average

☐

Above average

☐

Clearly above average

☐

How do you describe your **political orientation**?

Extremely Liberal

☐

Liberal

☐

Slightly Liberal

☐

Moderate

☐

Slightly
Conservative

☐

Conservative

☐

Extremely
Conservative

☐

Conclusion

Thank you for completing the survey! Please make note of the following Completion Code. You will need to input it through Prolific to indicate your completion of the study.

Completion Code: \${e://Field/completecode}

Now please provide your worker ID here :