

# Climate survey - US

OECD

Results for the US: (partial) sample of 1,789 respondents (full will be 2,000).

April 2021

# Table of Contents

- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

- United States:
  - ▶ 1,789 responses collected (focus of this presentation).
  - ▶ Remaining responses will be collected over the next 2 weeks, analysis has already started.
- Denmark:
  - ▶ translation done
  - ▶ upcoming feedback from the Denmark desk
  - ▶ ongoing production of the video
- France: translation done
- India, UK, Spain, Germany:
  - ▶ Video script adjusted
  - ▶ Translation and video will start soon as we validate the questionnaire from the US experience

## Key findings

- People worry about the negative impacts of climate change; Knowledge of climate change related impacts is relatively good.
- Most people agree that CC is a problem and that ambitious policies are needed.
- A majority under-estimate the necessary policy stringency to reduce emissions.
- Two-thirds are willing to change their behavior as long as it doesn't affect their comfort and they have enough financial means (one-third is willing to forego some comfort).
- Support for our three specific policies is mixed, lower than in the pilot.
- The policy treatment increases public support for carbon tax and the ban on combustion-engine cars.

# Table of Contents

- 1 Summary
- 2 **Socio-Demographics**
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

## Education and ethnicity/race

**Education level:** Master degree should be 13% to be representative. The rest is pretty much representative (population: 10% without high school degree, 30% only high school).

Figure 1: What is the highest level of education you have completed?

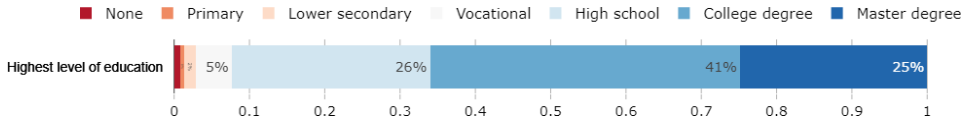


Figure 2: What race or ethnicity do you identify with? (Multiple answers are possible)

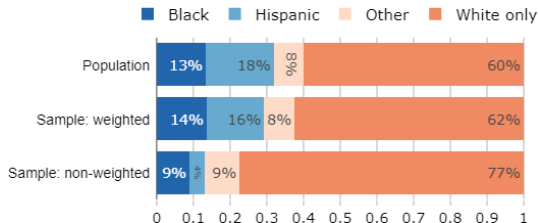


Figure 3: Which candidate did you vote for in the last presidential election?

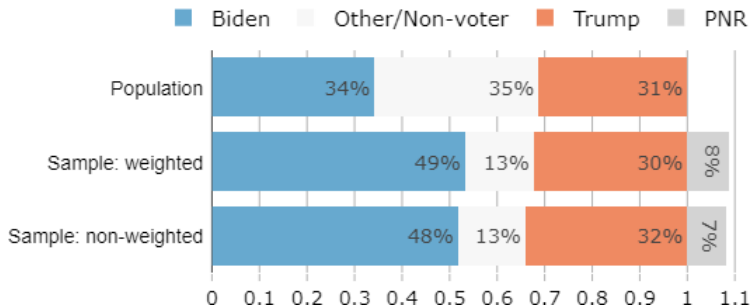


Figure 4: On economic policy matters, where do you see yourself on the liberal/conservative spectrum?

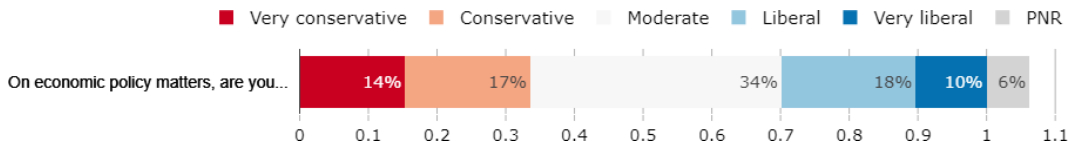




Figure 5: Lives in core metropolitan area, retrieved from zipcode

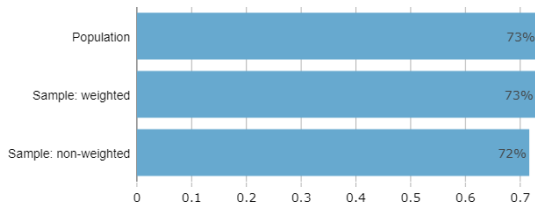
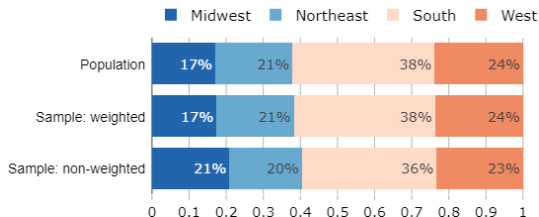


Figure 6: Region, retrieved from zipcode



## Gender and age

Figure 7: What is your gender?

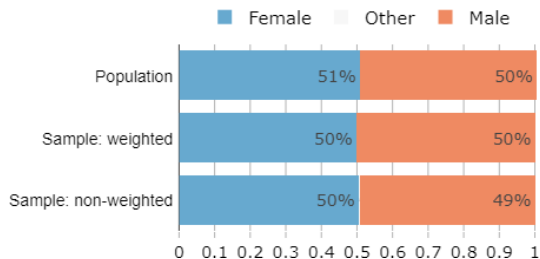
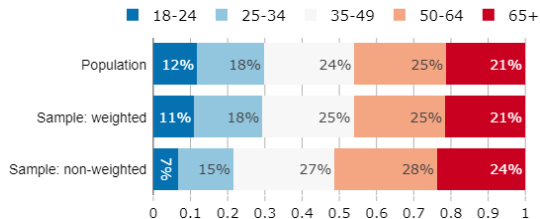
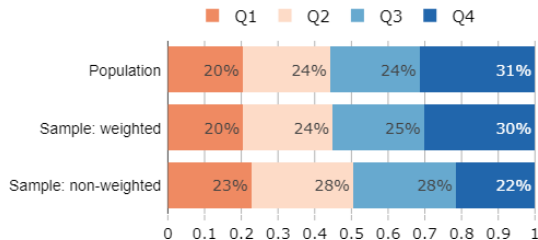


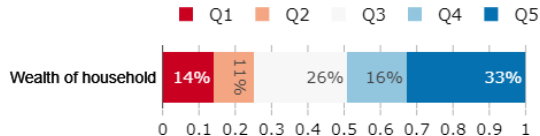
Figure 8: How old are you?



**Figure 9:** What was the annual income of your household in 2019 (before withholding tax, for you and those who live with you)?



**Figure 10:** What is the estimated value of your assets, or the assets of your household if you are married (in U.S. dollars)? Include here all your possessions (home, car, savings, etc.) net of debt. For example, if you own a house worth \$300,000 and you have \$100,000 left to repay on your mortgage, your assets are \$200,000.



## Employment and hit by covid

Figure 11: What is your employment status?

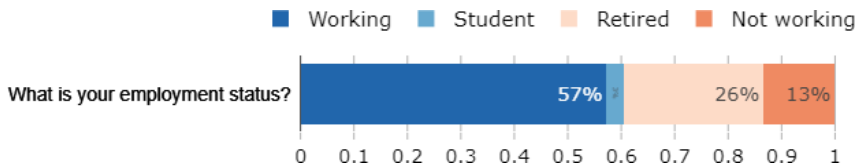
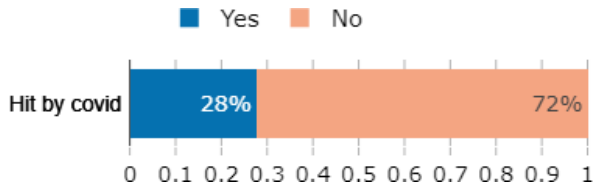


Figure 12: Have you or a member of your household been laid off or had to take a cut in your salary or wages due to the COVID-19 pandemic?



# Table of Contents

- 1 Summary
- 2 Socio-Demographics
- 3 **Political Views**
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

## Interest in politics and environmental organizations

Figure 13: To what extent are you interested in politics?

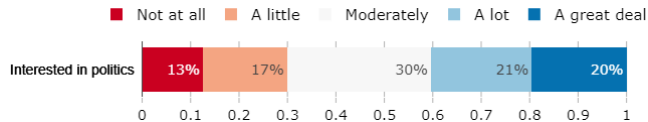


Figure 14: Are you member of an environmental organization?

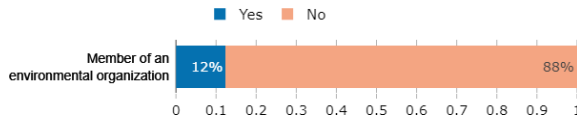
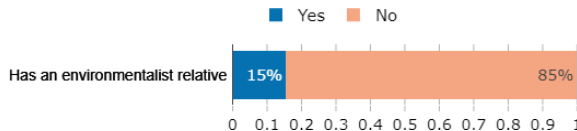


Figure 15: Do you have any relatives who are environmentalists?



## Presidential election vote

Figure 16: Did you vote in the 2020 U.S. presidential election?

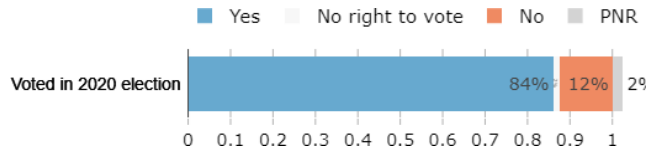


Figure 17: Which candidate did you vote / would you have voted for in the last presidential election?

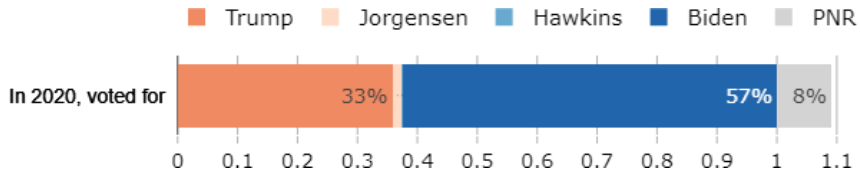


Figure 18: On economic policy matters, where do you see yourself on the liberal/conservative spectrum?

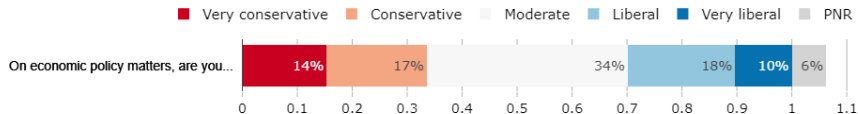
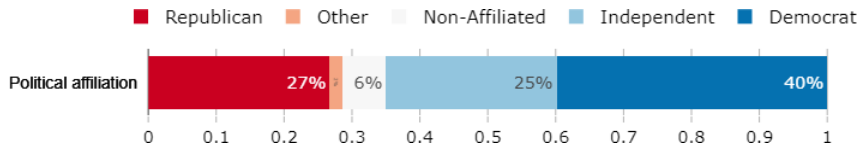


Figure 19: What do you consider to be your political affiliation, as of today?





# Table of Contents

- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics**
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

Figure 20: What is the main way you heat your home

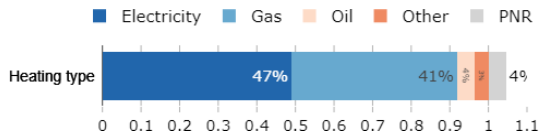


Figure 21: In a typical month, how much do you spend on heating for your accommodation?

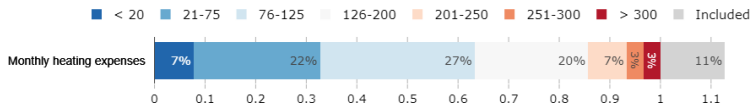


Figure 22: How do you rate the insulation of your accommodation?

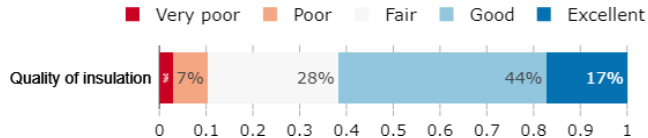


Figure 23: In a typical month, how much do you spend on gas for driving?

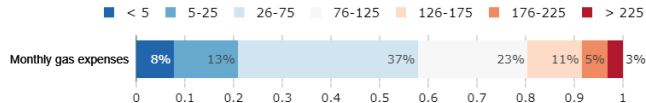


Figure 24: How many round-trip flights did you take between 2017 and 2019?

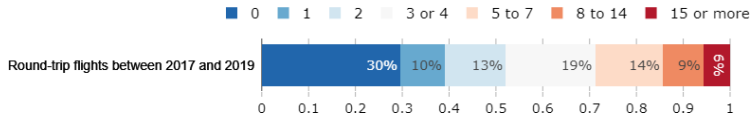


Figure 25: How often do you eat beef?

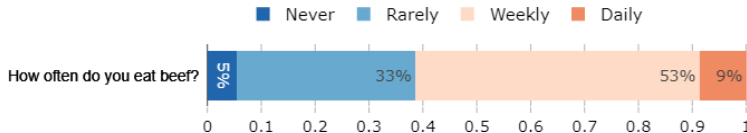


Figure 26: Which mode of transport did you mainly use for each of the following trips in 2019?

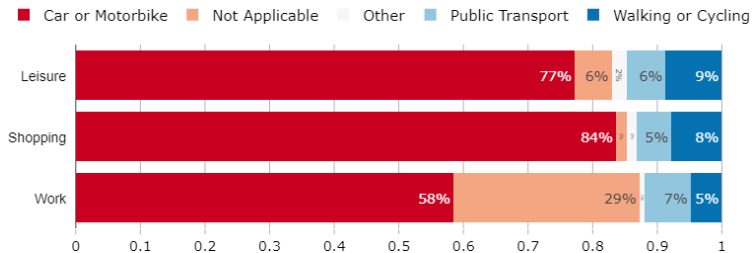
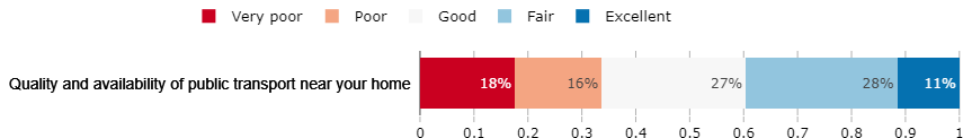


Figure 27: How do you rate the availability (ease of access and frequency) of public transportation where you live?



# Table of Contents

- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay**
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

Figure 28: Word cloud – When thinking about climate change, what are your main considerations? What should the U.S. federal government do regarding climate change? Please write as much as you would like, your response will be very useful.



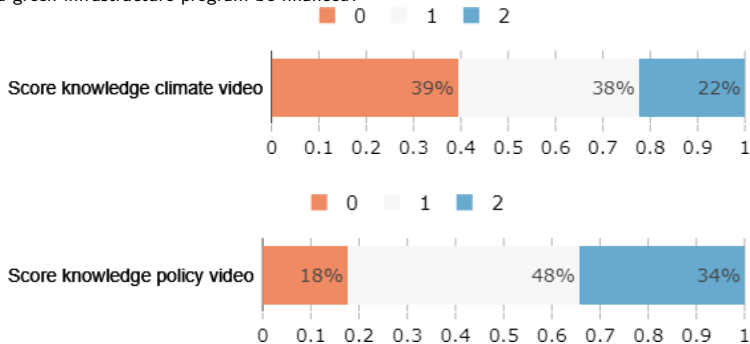
# Table of Contents

- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments**
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

## Watched climate and/or policy videos attentively

Figure 29: Number of wrong answers when answering knowledge questions about the content of the videos

- What will be the rise in global average temperature in 2100 if greenhouse gas emissions continue on their current trend?
- In the absence of ambitious action against climate change, how frequent will extreme temperatures occur across the U.S. by the end of the century?
- What is the emission limit described in the video?
- How would a green infrastructure program be financed?





# Table of Contents

- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge**
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

- People worry; knowledge is mixed.
- In line with previous research, we find that about 60% of Americans acknowledge that climate change exists and is anthropogenic.
- A majority under-estimate the stringency of needed emission reductions.
- Most people understand what activities are most polluting, except for transport where knowledge is mixed. Most struggle identifying the correct ranking of regional per capita footprint.
- Most people correctly understand that climate change will entail more natural disasters, but wrongly think that volcanic eruptions will be more frequent.
- A majority thinks that CC puts humanity at risk of extinction, which is extremely pessimistic.
- A relative majority thinks they will be personally affected by CC.

Figure 30: How often do you think or talk with people about climate change?

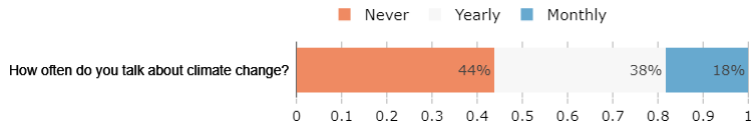
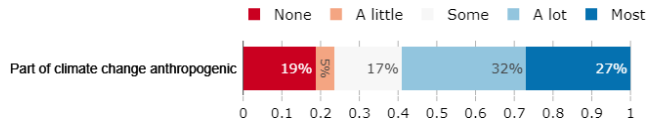


Figure 31: What part of climate change do you think is due to human activity?



## Climate change knowledge: general

Figure 32: How knowledgeable do you consider yourself about climate change?

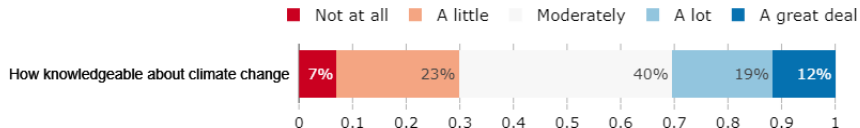


Figure 33: Do you agree or disagree with the following statement: "Climate change is an important problem."

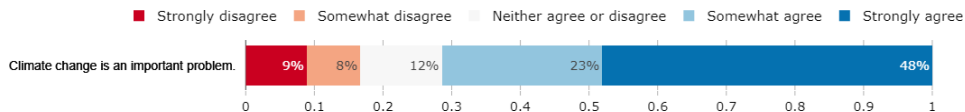
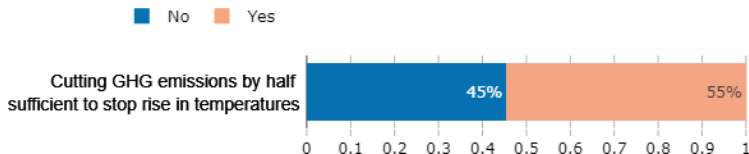
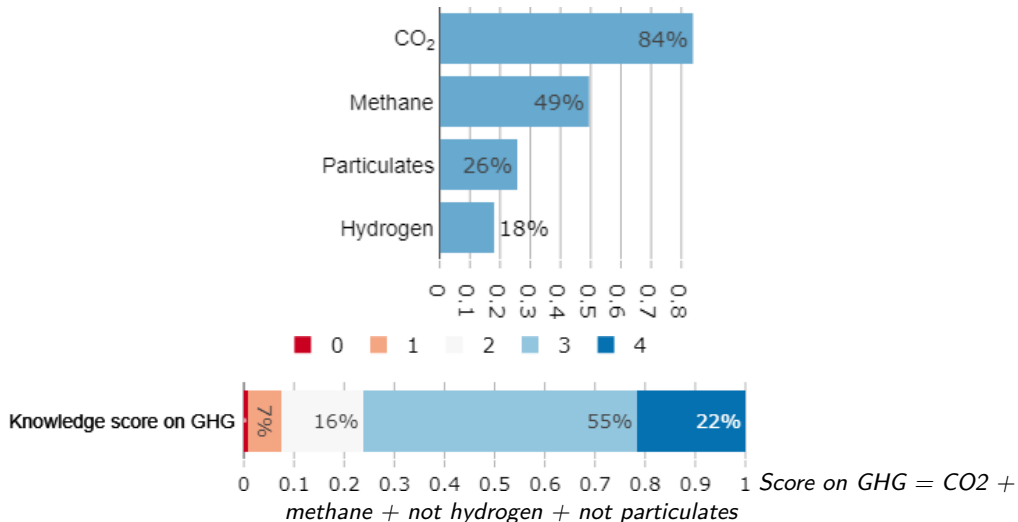


Figure 34: Do you think that cutting global greenhouse gas emissions by half would be sufficient to eventually stop temperatures from rising? (Right answer: No)



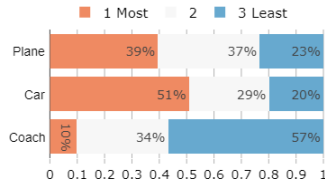
## Climate change knowledge: general

Figure 35: Which of the following elements contribute to climate change? (Multiple answers are possible)

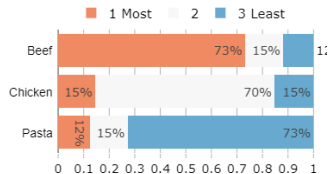


## Climate change knowledge

**Figure 36:** If a family of 4 travels 500 miles from New York to Toronto, with which mode of transportation do they emit the most greenhouse gases? Please rank the items from 1 (most) to 3 (least).

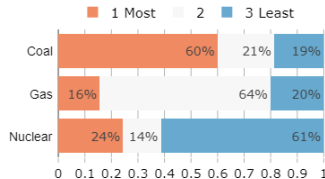


**Figure 37:** Which dish emits the most greenhouse gases? We consider that each dish weighs half a pound. Please rank the items from 1 (most) to 3 (least).

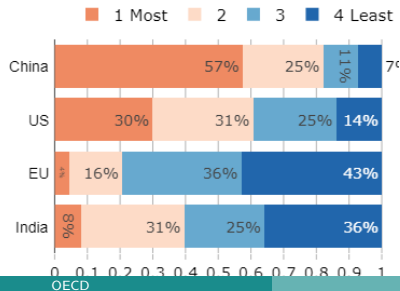


# Climate change knowledge

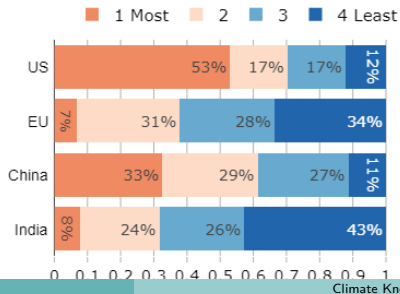
Figure 38: Which source of electric energy emits the most greenhouse gases to provide power for a house?



(a) Which region contributes most to global greenhouse gas emissions?

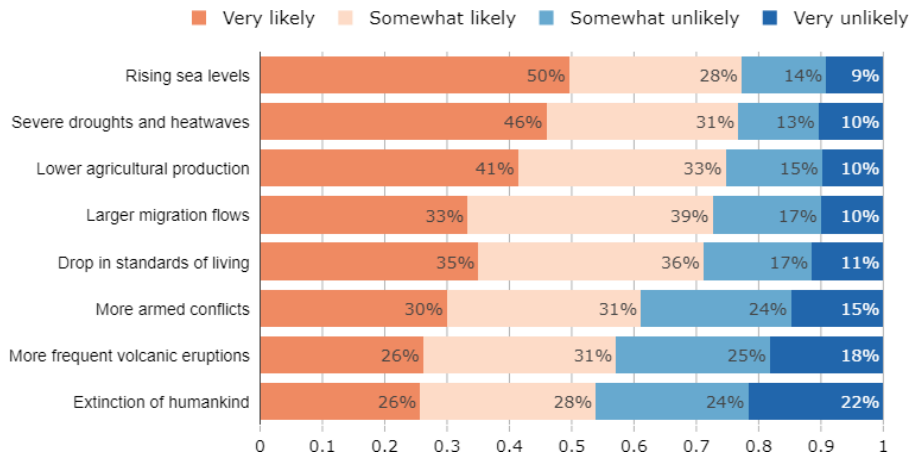


(b) In which region does the consumption of an average person contribute most to climate change?



## Impacts of climate change

**Figure 40:** If nothing is done to limit climate change, how likely do you think it is that climate change will lead to the following events?



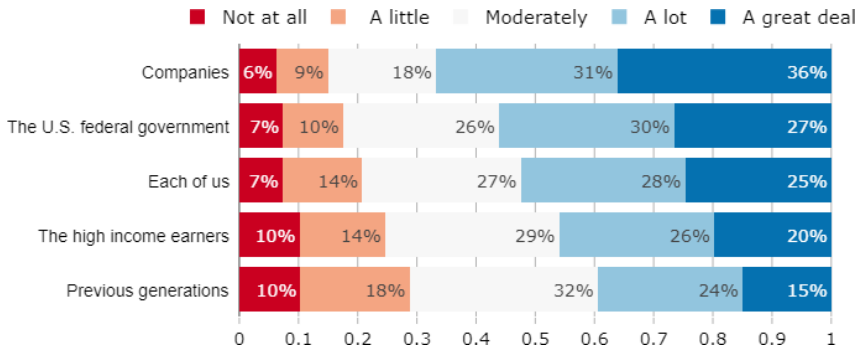


# Table of Contents

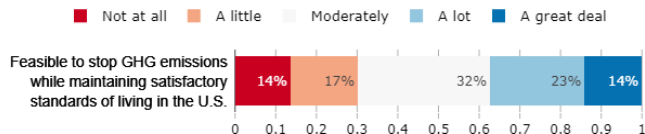
- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes**
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

- Most people agree CC is a problem and ambitious policies are needed.
- People are divided between optimistic and pessimistic (regarding future standards of living, technical feasibility to stop CC, and likelihood it will happen).
- People are divided between those who foresee positive effects of climate policies and a third who foresees negative effects.
- A third of people is willing to forego some comfort, two-thirds are willing to change behavior as long as it doesn't affect their comfort and they have enough financial means.

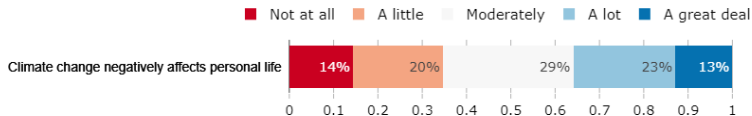
Figure 41: To what extent are the following groups responsible for climate change in the U.S.?



**Figure 42:** To what extent do you think that it is technically feasible to stop greenhouse gas emissions while maintaining satisfactory standards of living in the U.S.?



**Figure 43:** To what extent do you think climate change already affects or will negatively affect your personal life?



## Beliefs about ambitious climate policies

Figure 44: How likely is it that human kind halt climate change by the end of the century?

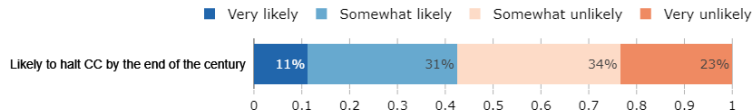


Figure 45: If we decide to halt climate change through ambitious policies, to what extent do you think it would negatively affect your lifestyle?

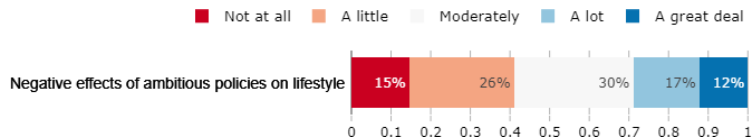
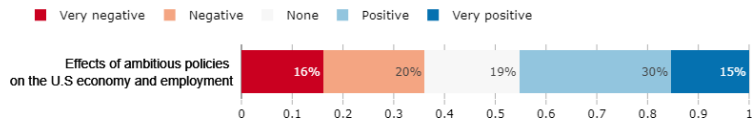
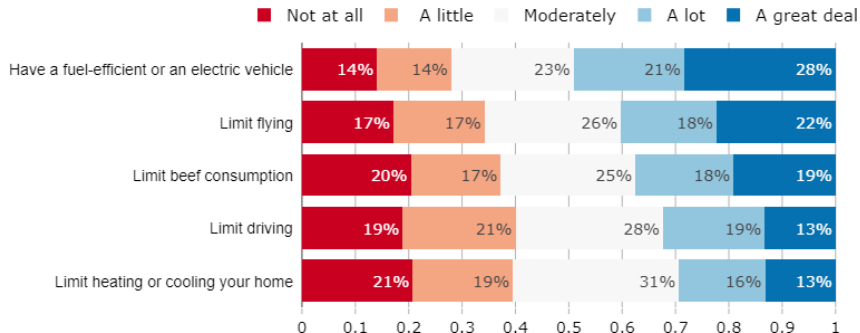


Figure 46: If we decide to halt climate change through ambitious policies, what would be the effects on the U.S economy and employment?



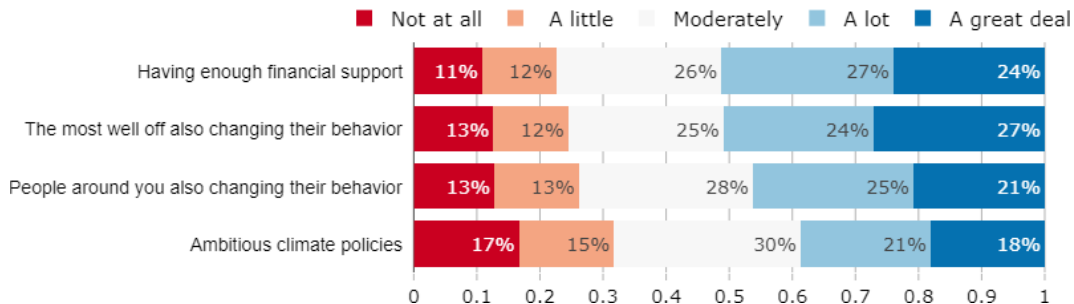
## Willingness to change behaviors

**Figure 47:** Here are possible habits that experts say would help reduce greenhouse gas emissions. To what extent would you be willing to adopt the following behaviors?



## Factors needed to change lifestyle

**Figure 48:** How important are the factors below in order for you to adopt a sustainable lifestyle (i.e. limit driving, flying, and consumption, cycle more, etc.)?



# Table of Contents

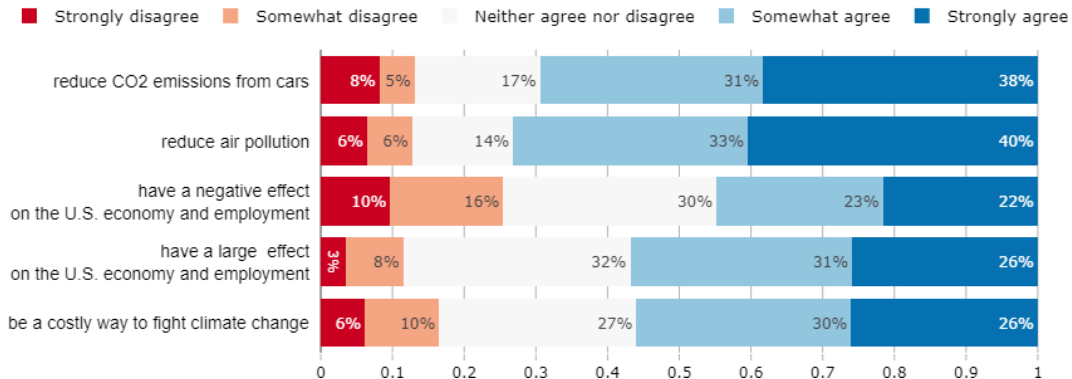
- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars**
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects



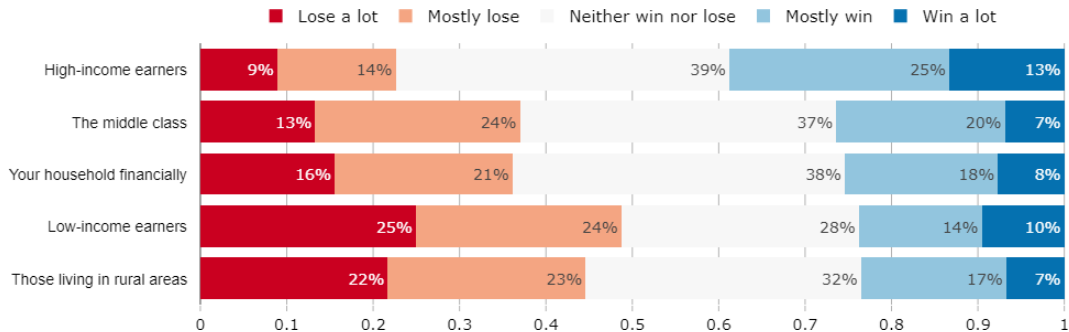
## Policy description

To fight climate change, car producers can be required by law to produce cars that emit less CO<sub>2</sub> per mile of the cars they sell. The emission limit is lowered every year so that only electric or hydrogen vehicles can be sold after 2030. This policy is called a *ban on combustion-engine cars*.

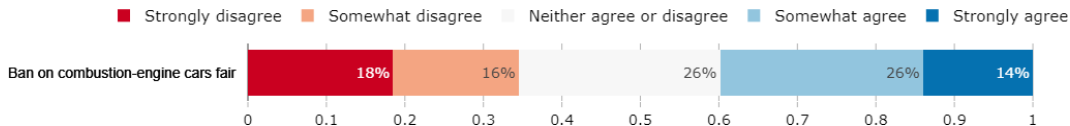
Figure 49: Do you agree or disagree with the following statements? A ban on combustion-engine cars would...



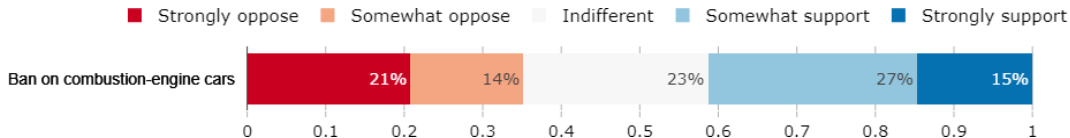
**Figure 50:** In your view, would the following groups win or lose if a ban on combustion-engine cars was implemented in the U.S.?



**Figure 51:** Do you agree or disagree with the following statement: “A ban on combustion-engine cars is fair”?

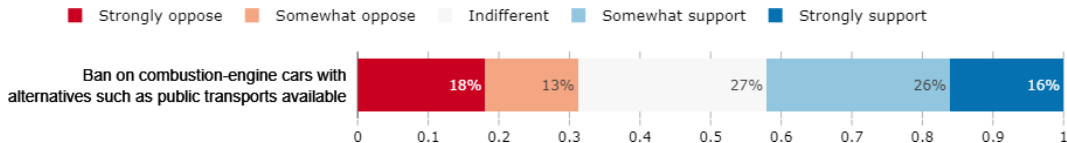


**Figure 52:** Do you support or oppose a ban on combustion-engine cars?



**Support decreased** from 61% in pilot, where it concerned “an emission limit for cars”.

**Figure 53:** Do you support or oppose a ban on combustion-engine cars where alternatives such as public transports are made available to people?



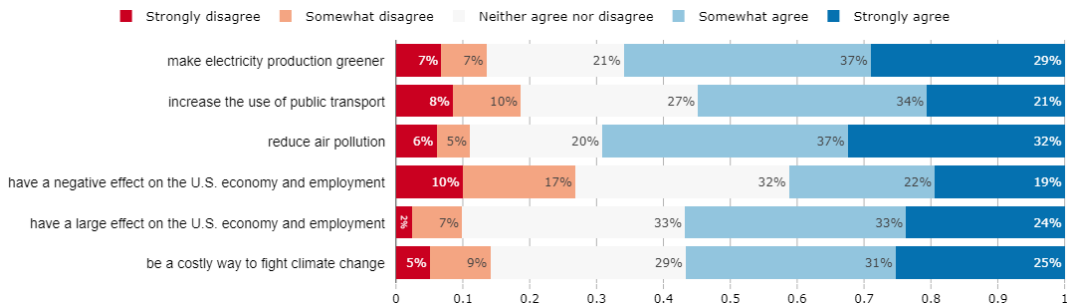
# Table of Contents

- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program**
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

A green infrastructure program is a large public investment program, which would be financed by additional public debt, to accomplish the transition needed to cut greenhouse gases emissions. Investments would concern renewable power plants, public transportation, thermal renovation of building, and sustainable agriculture.

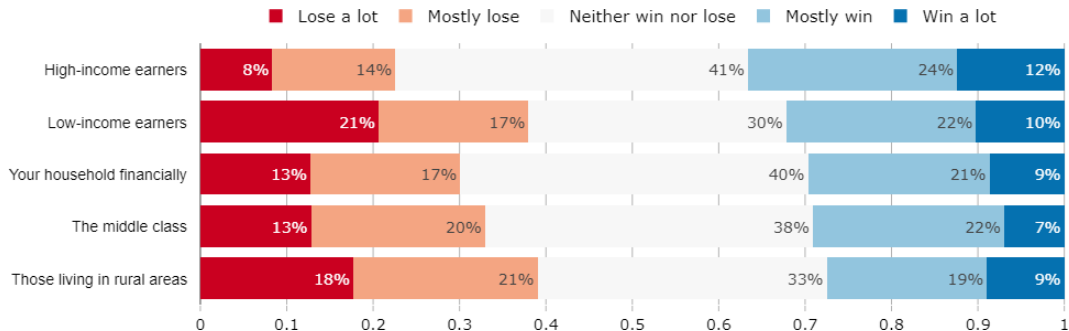
**Problem:** strong acquiescence bias. In the pilot, 57% agreed that it was “cost-effective”. Formulation changed to “costly” and 57% agree.

Figure 54: Do you agree or disagree with the following statements? A green infrastructure program would...



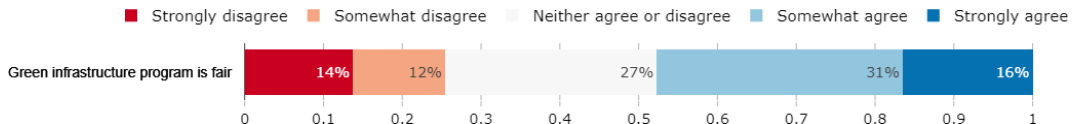


**Figure 55:** In your view, would the following groups win or lose with a green infrastructure program?

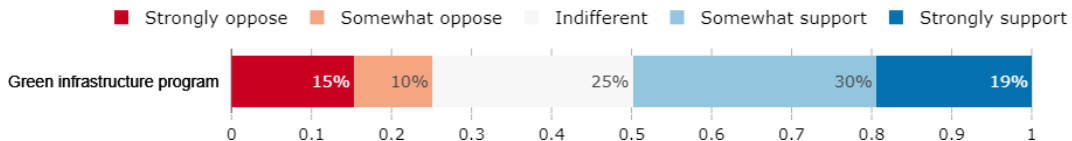


## Fairness and support

**Figure 56:** Do you agree or disagree with the following statement: "A green infrastructure program mainly financed by public debt is fair."

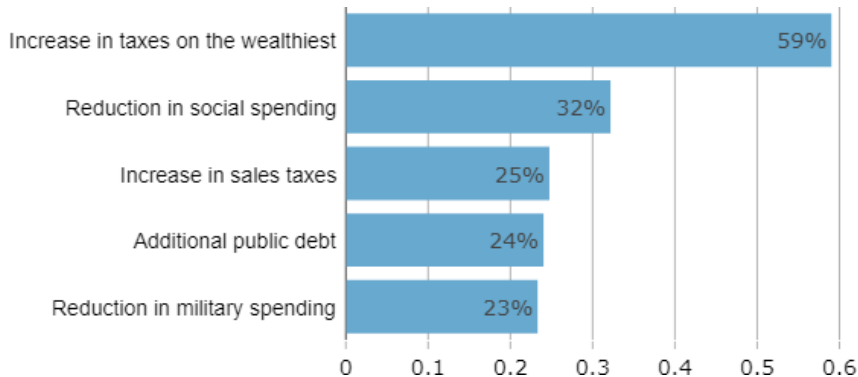


**Figure 57:** Do you support or oppose a green infrastructure program?



**Support decreased** from 69% in pilot.

**Figure 58:** Until now, we have considered that a green infrastructure program would be financed by public debt, but other sources of funding are possible. What sources of funding do you find appropriate for a green infrastructure program? (Multiple answers are possible)



# Table of Contents

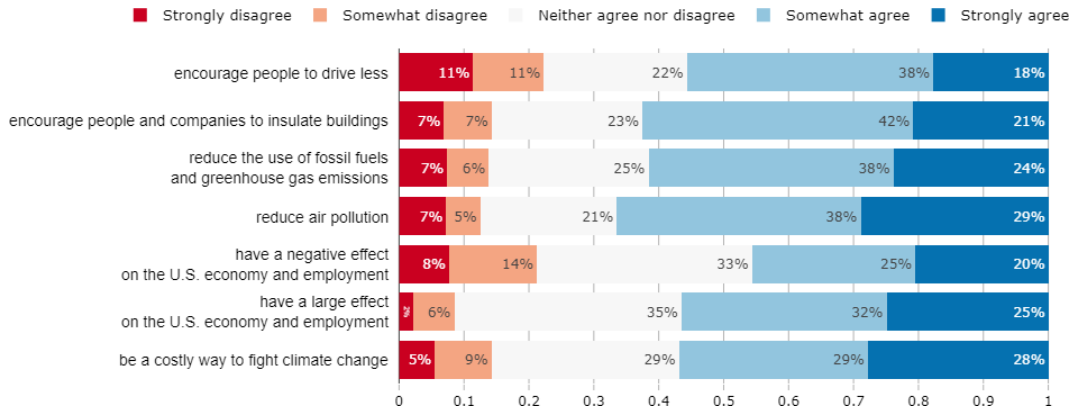
- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

To fight climate change, the U.S. federal government can make greenhouse gas emissions costly, to make people and firms change their equipment and reduce their emissions. The government could do this through a policy called a carbon tax with cash transfers. Under such a policy, the government would tax all products that emit greenhouse gas. For example, the price of gasoline would increase by 40 cents per gallon. To compensate households for the price increases, the revenues from the carbon tax would be redistributed to all households, regardless of their income. Each adult would thus receive \$600 per year.

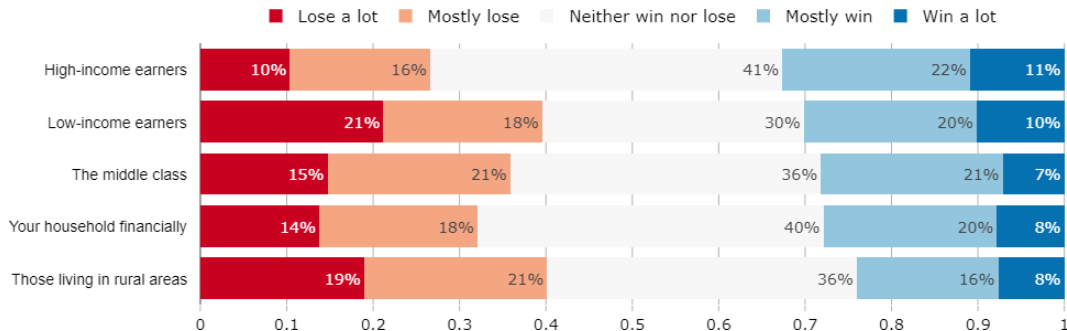
## Policy effects

**Problem:** strong acquiescence bias. In the pilot, 53% agreed that it was “cost-effective”. Formulation changed to “costly” and 57% agree.

Figure 59: Do you agree or disagree with the following statements? A carbon tax with cash transfers would...



**Figure 60:** In your view, would the following groups win or lose under a carbon tax with cash transfers?



## Fairness and support

Figure 61: Do you agree or disagree with the following statement: “A carbon tax with cash transfers is fair.”

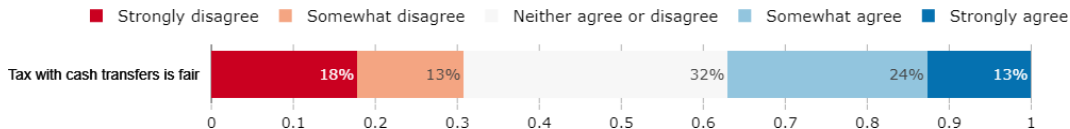
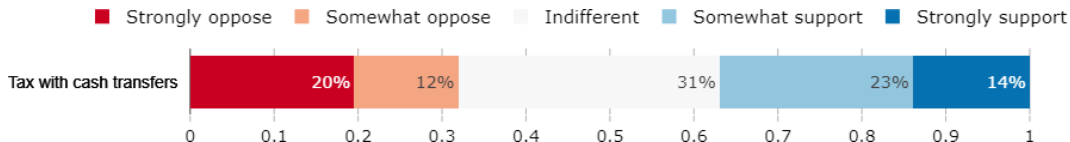


Figure 62: Do you support or oppose a carbon tax with cash transfers?



**Support decreased** from 48% in pilot, where it concerned “an emission limit for cars”.

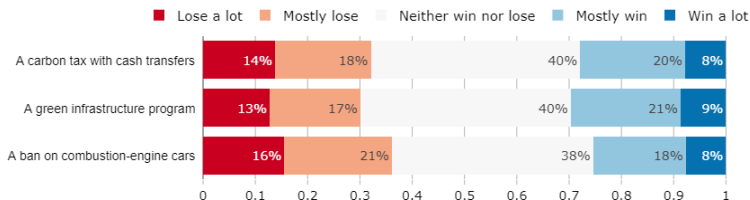


# Table of Contents

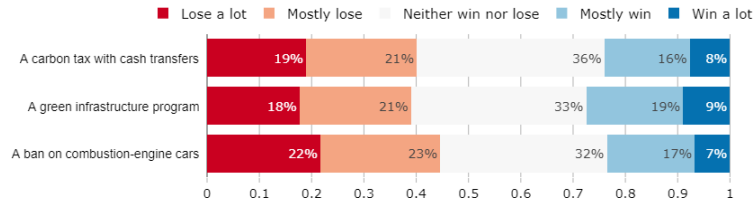
- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

## Policy Incidence

**Figure 63:** Comparison of responses to each policy question: Do you think that financially your household would win or lose from the policy?

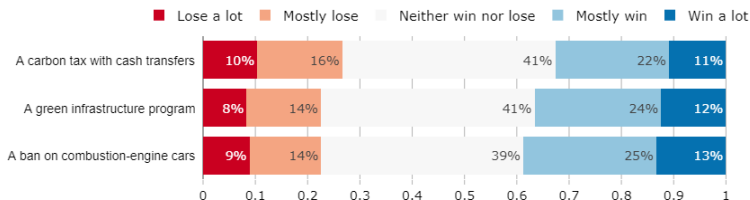


**Figure 64:** Comparison of responses to each policy question: In your view, would those living in rural areas win or lose from the following policy?

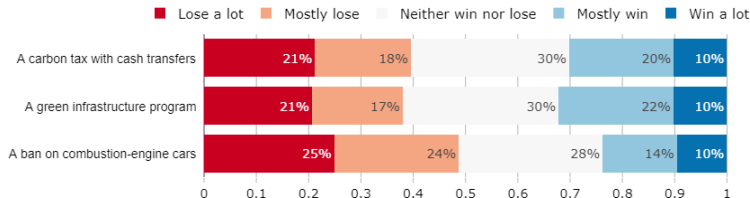


## Policy Incidence

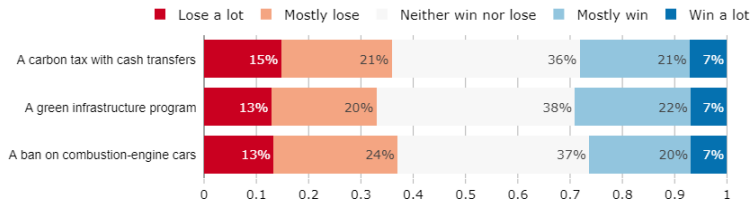
**Figure 65:** Comparison of responses to each policy question: In your view, would high-income earners win or lose from the following policy?



**Figure 66:** Comparison of responses to each policy question: In your view, would low-income earners win or lose from the following policy?

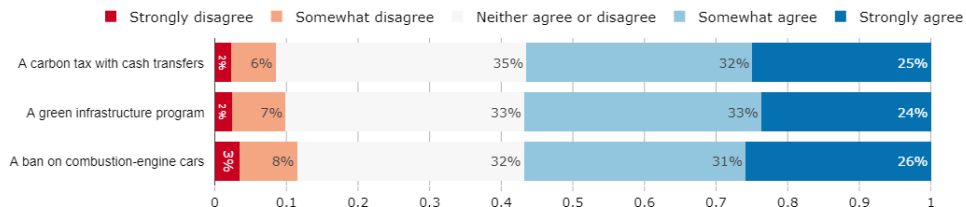


**Figure 67:** *Comparison of responses to each policy question: In your view, would the middle-class win or lose from the following policy?*

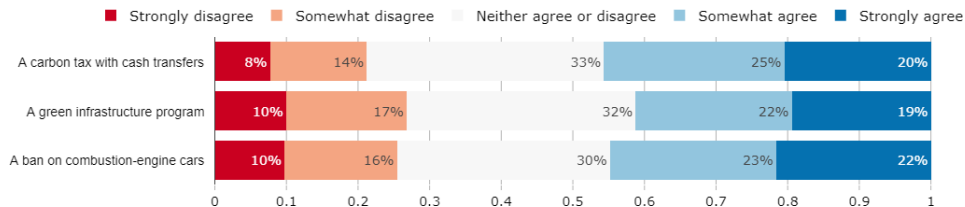


## Policy effects

**Figure 68:** Comparison of responses to each policy question: Do you agree or disagree with the following statement? *The policy would have a large effect on the U.S. economy and employment.*

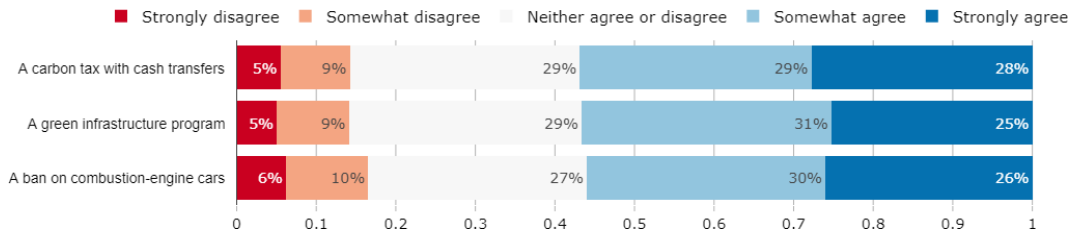


**Figure 69:** Comparison of responses to each policy question: Do you agree or disagree with the following statement? *The policy would have a negative effect on the U.S. economy and employment.*



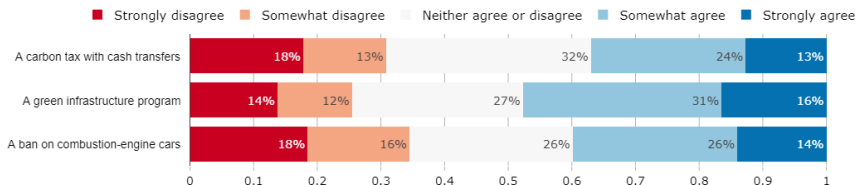
**Problem:** strong acquiescence bias. In the pilot, 53-59% agreed that it was “cost-effective”. Formulation changed to “costly” and 56-57% agree.

**Figure 70:** Comparison of responses to each policy question: Do you agree or disagree with the following statement? *The policy would be costly to fight climate change*

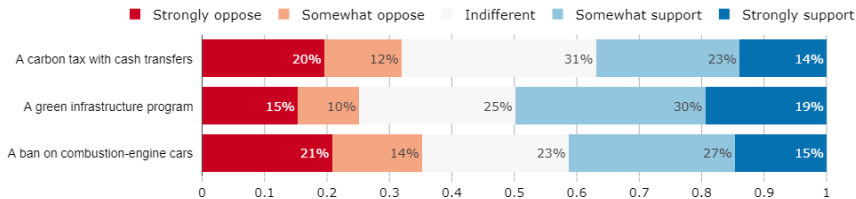


## Fairness and support

**Figure 71:** Comparison of responses to each policy question: Do you agree or disagree with the following statement: "The policy is fair."



**Figure 72:** Comparison of responses to each policy question: do you support or oppose the following policy?



**Support decreased** from 48-61% in pilot to 37-49%. Largest drop for cars which was the most supported when it concerned "an emission limit for cars" .

# Table of Contents

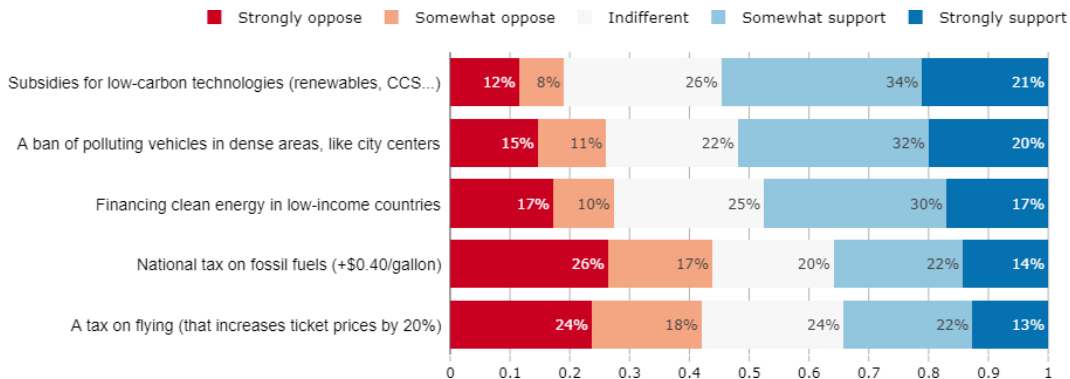
- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies**
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects



## Preferences for climate policies: summary

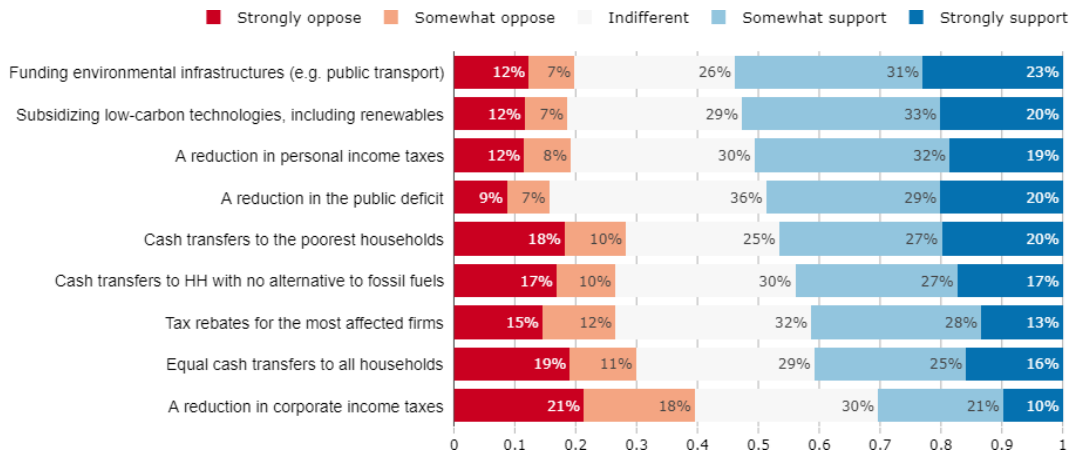
- Each specific policy proposed gathers more support than opposition but the only one with more “Strongly support” than “Strongly oppose” is the green infrastructure program.
- People are divided regarding the properties of these policies, and the answers may suffer from acquiescence or other bias.
- A majority supports each climate policy proposed (including coercive measures such as mandatory insulation of buildings) except tax policies and policies against meat.
- Earmarking carbon tax revenues to green investments is the preferred option while uses of revenue for firms are the least favored.
- A majority is willing to pay \$100/year to halt climate change, which is higher than the pilot' median at \$50/year (before we switched to binary question), but is still low.
- However, the median amount people are willing to donate to a charity is \$25 (over a potential gain of \$100).
- Most people are willing to insulate or replace heating of their accommodation, the cost of doing so is the bigger obstacle.

Figure 73: Do you support or oppose the following climate policies?



## Revenue recycling of carbon tax

**Figure 74:** Governments can use the revenues from carbon taxes in different ways. Would you support or oppose introducing a carbon tax that would raise gasoline prices by 40 cents per gallon, if the government used this revenue to finance...



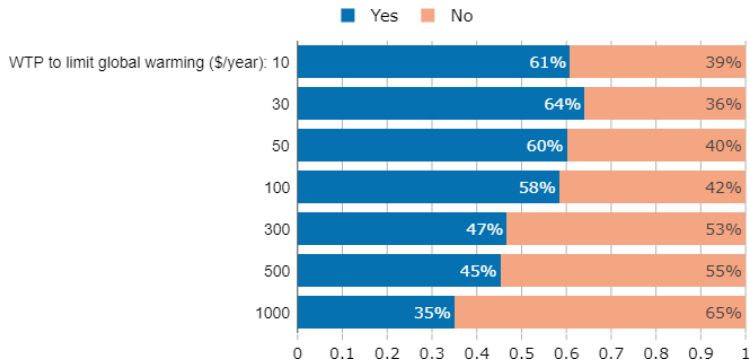
# Table of Contents

- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 **Willingness to Pay**
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

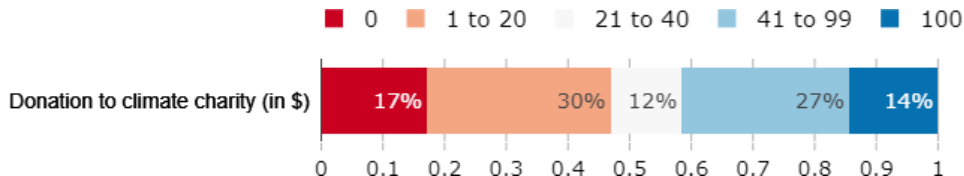
**Figure 75:** To fight global warming, the U.S. federal government could implement a policy package to reduce emissions, for example by investing in clean technologies (renewable energy, electric vehicles, public transport, more efficient insulation, etc.).

The funding for these investments could be collected annually through an additional individual contribution for the foreseeable future. Assume that everyone in the U.S. as well as citizens of other countries would be required to contribute according to their means.

Are you willing to pay [amount] annually through an additional individual contribution to limit global warming to safe levels (less than 3.6 degrees Fahrenheit)?



**Figure 76:** By taking this survey, you are entered into a lottery to win \$100. You can also donate a part of this additional compensation (should you be selected in the lottery) to a reforestation project through the charity The Gold Standard. If you win the \$100 lottery, how much will you donate to the Gold Standard charity?



**We have a winner** who decided to donate the \$100 prize.

# Table of Contents

- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing**
  - 16 Housing/Preferences for Bans vs. Incentives
  - 17 Trust and institutions
  - 18 Feedback
  - 19 Heterogeneity Analysis
    - Republican vs. Democrat
    - Low-income vs. High-income
- 20 Treatment Effects

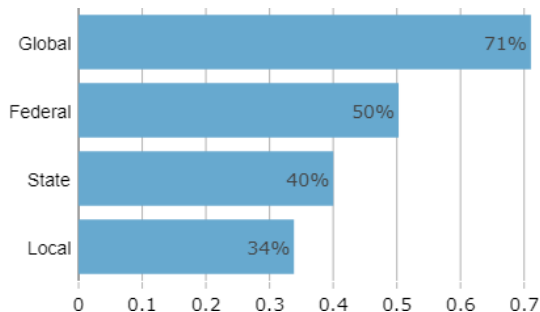
## International burden-sharing: summary

- The majority thinks that the U.S. should do more whether other countries do more or less.
- The favored burden sharing is the polluter-pays principle, although principles attributing a higher burden on high-income countries receive a relative majority support.
- A solid majority supports global policies, in particular a global democratic assembly on CC, and a global tax on millionaires to finance low-income countries that comply with international standards regarding climate action.



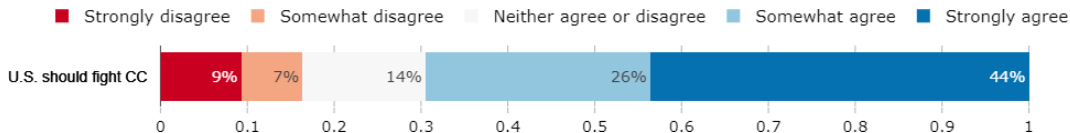
## Governance of climate policies

**Figure 77:** At which level(s) do you think public policies to tackle climate change need to be put in place?  
(Multiple answers are possible)

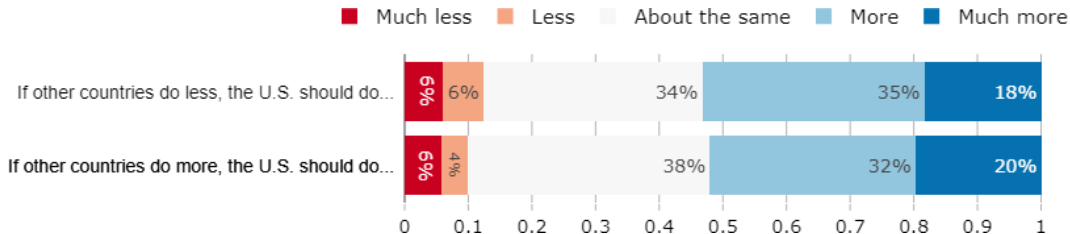


## US climate policy

**Figure 78:** Do you agree or disagree with the following statement: "The U.S. should take measures to fight climate change."



**Figure 79:** How should U.S. climate policies depend on what other countries do?



**Figure 80:** To achieve a given reduction of greenhouse gas emissions globally, costly investments are needed. Ideally, how should countries bear the costs of fighting climate change?

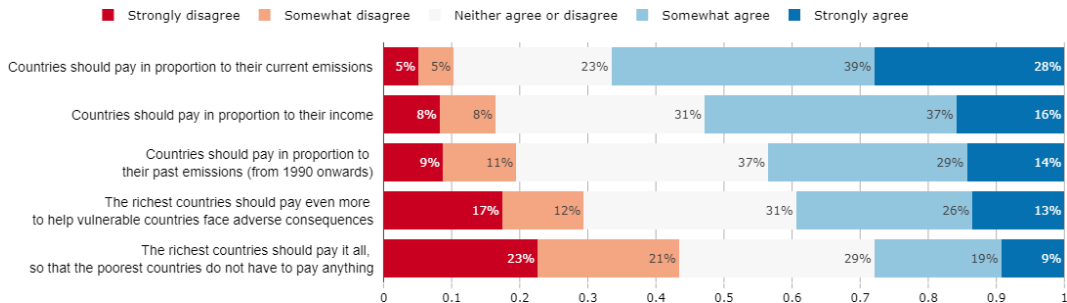
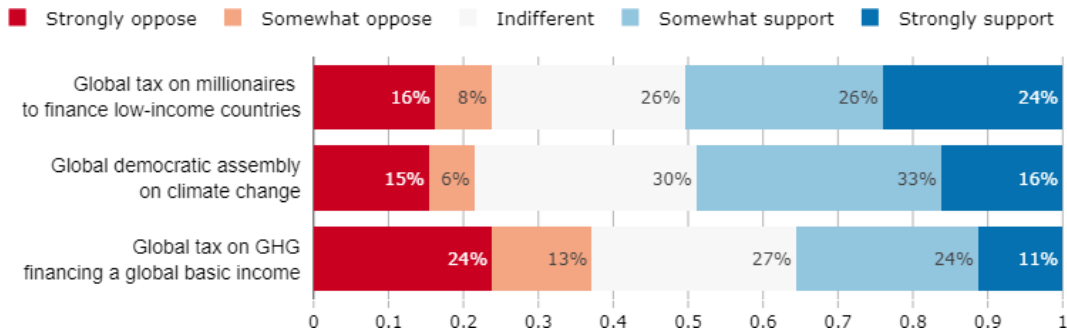


Figure 81: Do you support or oppose the following policies?

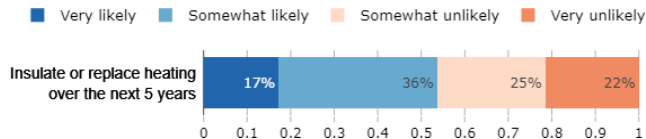


# Table of Contents

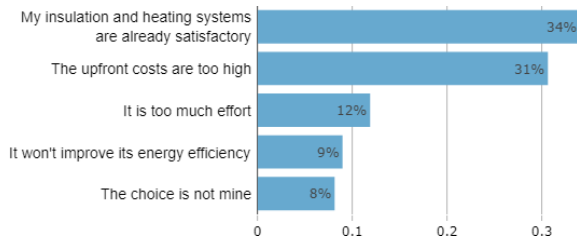
- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 **Housing/Preferences for Bans vs. Incentives**
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

## Insulation

**Figure 82:** How likely is it that you will improve the insulation or replace the heating system of your accommodation over the next 5 years?



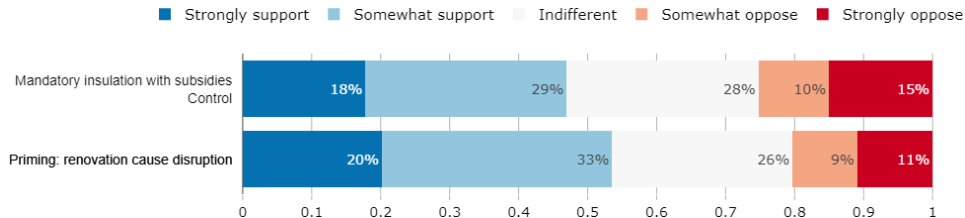
**Figure 83:** What are the main hurdles preventing you from improving the insulation or replace the heating system of your accommodation? (Multiple answers are possible)



**Figure 84:** Imagine that the U.S. federal government makes it mandatory for all residential buildings to have insulation that meets a certain energy efficiency standard before 2040. The government would subsidize half of the insulation costs to help households with the transition.

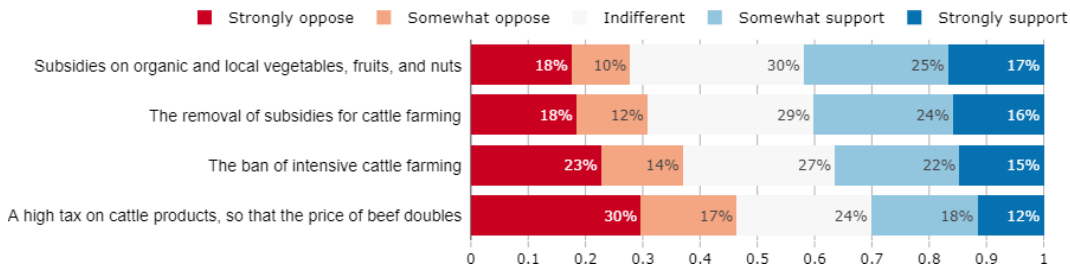
Displayed in disruption variant: [Insulating your home can take long, may cause disruptions to your daily life during the renovation works, and may even require you to leave your home until the renovation is completed.]

Do you support or oppose such policy?



## Cattle products

**Figure 85:** Imagine that, in order to fight climate change, the U.S. federal government decides to limit the consumption of cattle products like beef and dairy. Do you support or oppose the following options?

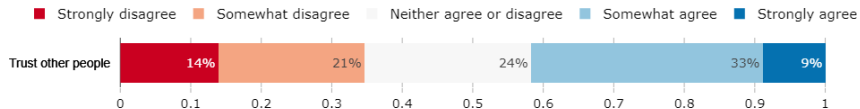




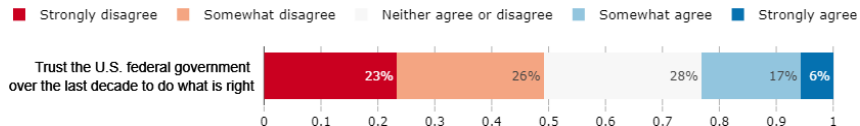
# Table of Contents

- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions**
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

**Figure 86:** Do you agree or disagree with the following statement: “Most people can be trusted.”

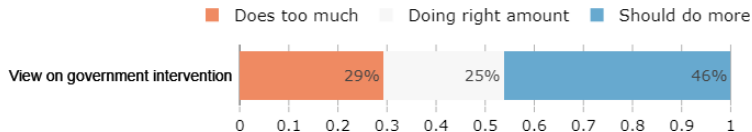


**Figure 87:** Do you agree or disagree with the following statement: “Over the last decade the U.S. federal government could generally be trusted to do what is right.”

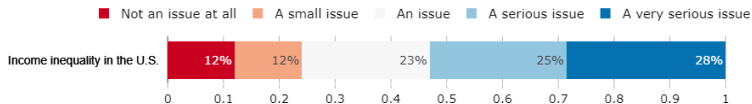


## Perception of institutions, inequality, and the future

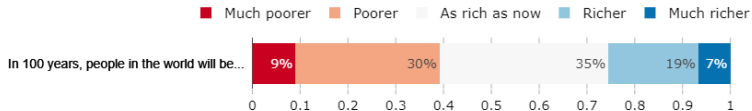
**Figure 88:** Some people think the government is trying to do too many things that should be left to individuals and businesses. Others think that government should do more to solve our country's problems. Which come closer to your own view?



**Figure 89:** How big of an issue do you think income inequality is in the U.S.?



**Figure 90:** Do you think that overall people in the world will be richer or poorer in 100 years from now?



# Table of Contents

- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 **Feedback**
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

## Feedback on the survey

Figure 91: Do you feel that this survey was politically biased?

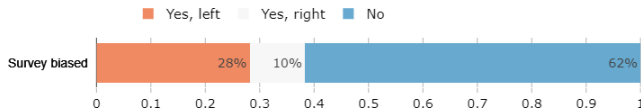


Figure 92: The survey is nearing completion. You can now enter any comments, thoughts or suggestions in the field below.



# Table of Contents

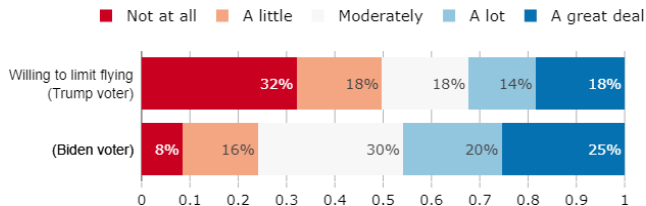
- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 **Heterogeneity Analysis**
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

# Table of Contents

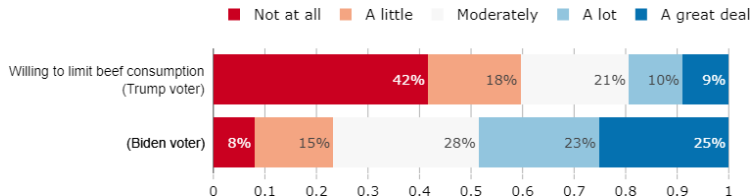
- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

## Willingness to change behavior

**Figure 93:** To what extent would you be willing to adopt the following behaviors? -- Limit Flying, by Political Affiliation

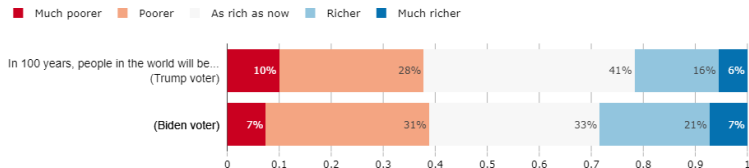


**Figure 94:** To what extent would you be willing to adopt the following behaviors? – Limit Beef Consumption, by Political Affiliation

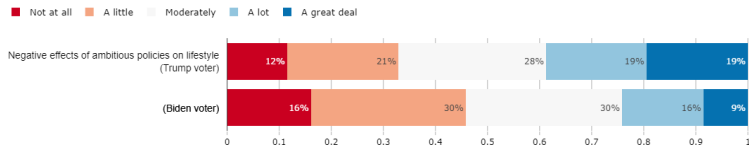




**Figure 95:** Do you think that overall people in the world will be richer or poorer in 100 years from now? -- by Political Affiliation

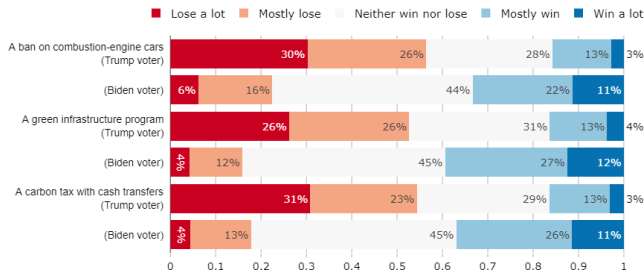


**Figure 96:** If we decide to halt climate change through ambitious policies, to what extent do you think it would negatively affect your lifestyle? – by Political Affiliation

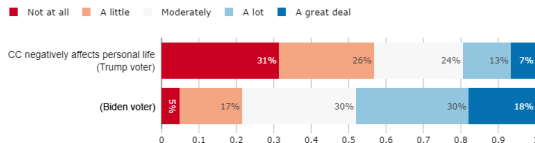


## Effects on own household

**Figure 97:** Do you think that financially your household would win or lose from the following policy? – by Political Affiliation



**Figure 98:** To what extent do you think climate change already affects or will negatively affect your personal life? – by Political Affiliation



## Policies – support

Figure 99: Do you support or oppose the following policy? – by Political Affiliation

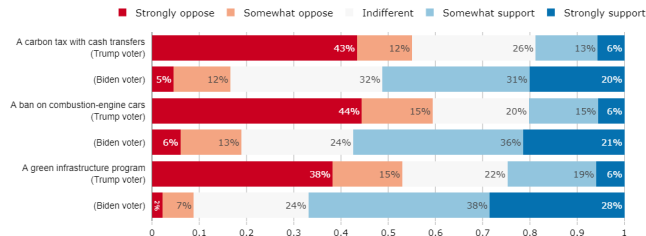
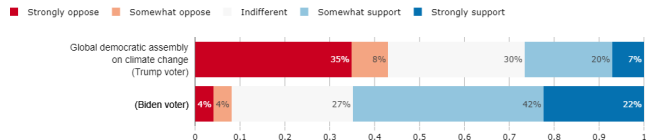
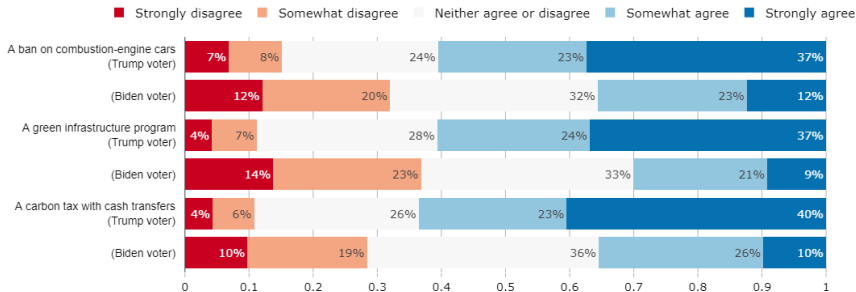


Figure 100: Do you support or oppose establishing a global democratic assembly whose role would be to draft international treaties against climate change? Each adult across the world would have one vote to elect members of the assembly. – by Political Affiliation



## Policies – negative effects

**Figure 101:** Do you agree or disagree with the following statement? This policy would have a negative effect on the U.S. economy and employment – by Political affiliation



# Table of Contents

- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

## Willingness to change behavior

Figure 102: To what extent would you be willing to adopt the following behaviors? -- Limit Flying, by Income

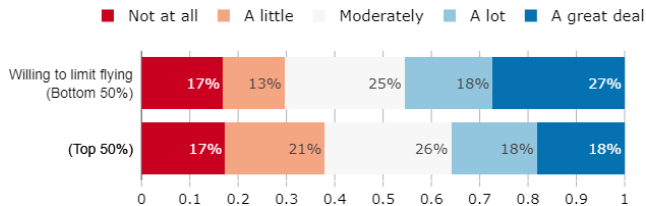
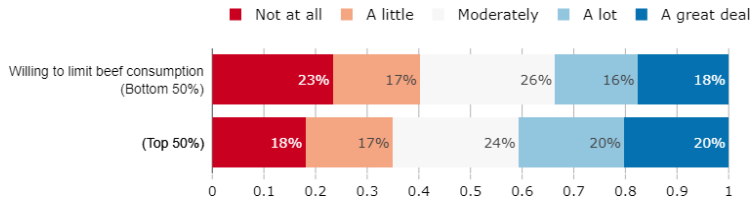
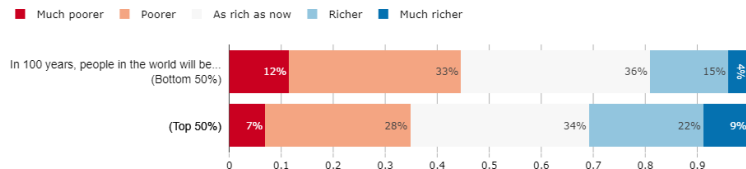


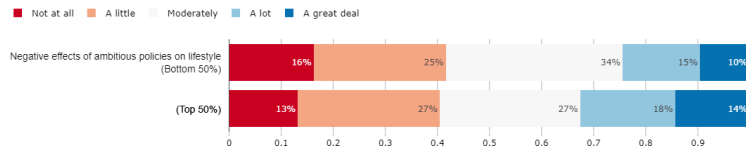
Figure 103: To what extent would you be willing to adopt the following behaviors? – Limit Beef Consumption, by Income



**Figure 104:** Do you think that overall people in the world will be richer or poorer in 100 years from now? -- by Income

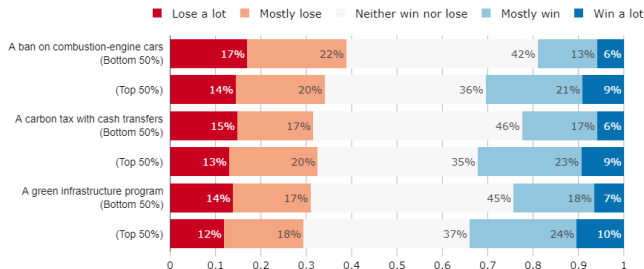


**Figure 105:** If we decide to halt climate change through ambitious policies, to what extent do you think it would negatively affect your lifestyle? -- by Income

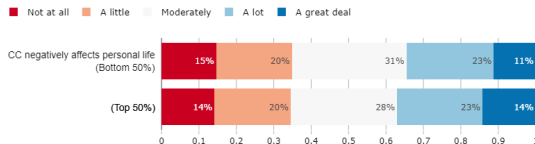


## Effects on own household

**Figure 106:** Do you think that financially your household would win or lose from the following policy? – by Income



**Figure 107:** To what extent do you think climate change already affects or will negatively affect your personal life? – by Income





## Policies – support

Figure 108: Do you support or oppose the following policy? – by Income

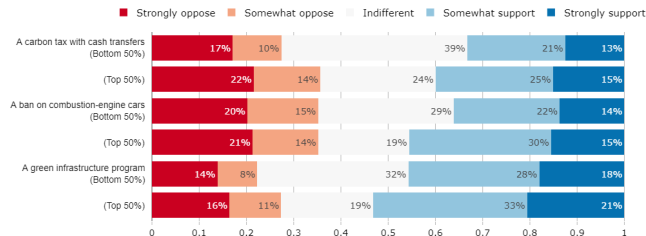
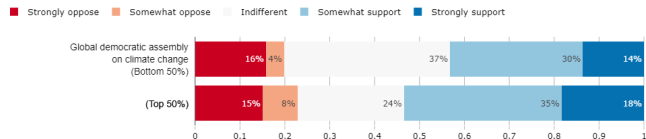
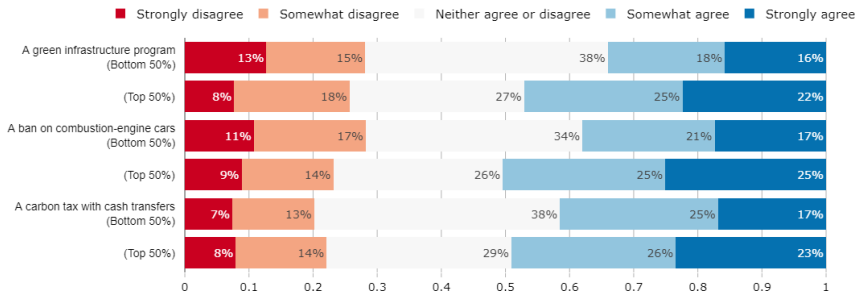


Figure 109: Do you support or oppose establishing a global democratic assembly whose role would be to draft international treaties against climate change? Each adult across the world would have one vote to elect members of the assembly. – by Income



## Policies – negative effects

**Figure 110:** Do you agree or disagree with the following statement? This policy would have a negative effect on the U.S. economy and employment – by Income



# Table of Contents

- 1 Summary
- 2 Socio-Demographics
- 3 Political Views
- 4 Household Composition and Energy Characteristics
- 5 Essay
- 6 Treatments
- 7 Climate Knowledge
- 8 Climate Attitudes
- 9 Policy 1: A ban on combustion-engine Cars
- 10 Policy 2: Green Infrastructure Program
- 11 Policy 3: Carbon Tax with Cash Transfers
- 12 Comparison across the 3 Policies:
- 13 Preferences for Climate Policies
- 14 Willingness to Pay
- 15 International Burden-Sharing
- 16 Housing/Preferences for Bans vs. Incentives
- 17 Trust and institutions
- 18 Feedback
- 19 Heterogeneity Analysis
  - Republican vs. Democrat
  - Low-income vs. High-income
- 20 Treatment Effects

## Treatment effects: summary

- When the treatments have almost no effect on general attitudes towards CC.
- The Policy treatment has a large positive effect on support for a carbon tax with transfers (+13 p.p.), which can be linked to its effect on fairness and incidence on poor for this policy.
- The Policy treatment also has a positive effect on support for the ban on combustion-engine (8 p.p.) and green infrastructure program (4 p.p.).
- The Climate treatment has a negative effect on willingness to limit driving and support for green infrastructure program, which might be spurious correlation.
- Low or null treatment effects may also be the result of respondents not updating the information on the policies (ban of combustion-engine cars and green infrastructure program), or due to lack of attentiveness to the videos (knowledge score on the videos seem low).

**Table 1: Attitudes towards Climate Change**

	CC caused by humans	CC likely to cause extinction	Donation (in \$)	US should fight CC	Willing to limit driving
Control group mean	0.62	0.555	37.202	0.729	0.341
Treatment: Climate	0.004 (0.028)	-0.024 (0.031)	3.421 (2.198)	-0.009 (0.027)	-0.078*** (0.030)
Treatment: Policy	-0.025 (0.028)	-0.009 (0.030)	0.015 (2.133)	-0.019 (0.026)	0.024 (0.029)
Treatment: Both	0.042 (0.029)	0.004 (0.031)	6.561*** (2.220)	-0.016 (0.027)	0.005 (0.030)
Observations	1,781	1,785	1,785	1,785	1,785

Note: The *CC caused by humans* indicator variable equals one if the respondent thinks a lot or most of climate change is due to human actions. The *CC likely to cause extinction* indicator variable equals one if the respondent thinks climate change is somewhat likely or very likely to cause the extinction of humankind if nothing is done to limit it. The *Donation* variable is a continuous variable equal to the amount the respondent is willing to give to a charity. The *Ambitious policies needed* indicator variable equals one if the respondent thinks policy must be a lot or a great deal ambitious in order to halt climate change. The *Willing to limit driving* indicator variable equals one if the respondent is willing a lot or a great deal to limit driving. The three *treatment* indicator variables indicate difference in mean compared to the control group (people who did not see any video). Controls include socio-demographic, economic affiliation, last vote and whether the respondent's household was hit by the COVID-19 pandemic. Standard errors are in parentheses.

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table 2: Support for policies

	Support			
	Carbon tax with transfers	Green Infrastructure Program	Ban on combustion-engine cars	Average over 3 policies
Control group mean	0.318	0.528	0.397	0.483
Treatment: Climate	0.026 (0.029)	−0.056* (0.030)	0.022 (0.029)	0.016 (0.029)
Treatment: Policy	0.126*** (0.028)	0.001 (0.029)	0.064** (0.029)	0.055* (0.029)
Treatment: Both	0.137*** (0.029)	0.037 (0.030)	0.073** (0.030)	0.100*** (0.030)
Observations	1,785	1,785	1,785	1,785

Note: The dependent variables are indicator variables equal to one if the respondent ‘Strongly supports’ or ‘Somewhat supports’ the policy. The *Average over 3 policies* takes the average of the respondent’s answers for the three policies. It equals one if the respondent support all three policies, 2/3 if she supports two, 1/3 if she support only one, and 0 if she supports none.

See notes under previous Table for a description of the covariates.

Controls include socio-demographic, economic affiliation, last vote and whether the respondent’s household was hit by the COVID-19 pandemic. Standard errors are in parentheses. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**Table 3: Attitudes towards policies**

	Fair	HH would win	Poor would win	Large economic effect	Negative economic effect
Control group mean	0.463	0.323	0.266	0.686	0.508
Treatment: Climate	0.055* (0.030)	-0.003 (0.030)	-0.029 (0.029)	-0.060** (0.030)	-0.051 (0.031)
Treatment: Policy	0.069** (0.029)	0.040 (0.029)	0.129*** (0.028)	0.025 (0.029)	-0.024 (0.030)
Treatment: Both	0.091*** (0.030)	0.095*** (0.030)	0.146*** (0.029)	0.009 (0.030)	0.057* (0.031)
Observations	1,785	1,688	1,762	1,785	1,785

Note: The dependent variables are discrete variables equal either to 0, 1/3, 2/3, or 1. They are equal to the average over the three policies mentioned in Table "Support policies". The *Fair* variable equals one if the respondent strongly agrees or somewhat agrees that each of the three policies are fair. The *HH/Poor would win* variables equal one if the respondent thinks her household/the poorest would win a lot or mostly win from the three policies. The *Large/Negative economic effect* variables equal one if the respondent strongly agrees or somewhat agrees that the three policies would have a large/negative impact on the U.S. economy and employment.

Controls include socio-demographic, economic affiliation, last vote and whether the respondent's household was hit by the COVID-19 pandemic.

Standard errors are in parentheses. \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$