

Climate survey - US pilot

OECD

Results of the third US pilot: sample of 582 respondents, representative along the gender, age, income, region and rural/urban dimensions.

March 2021

1 Climate knowledge

2 Climate Attitudes

3 Policies

4 Treatment effects

Knowledge: general

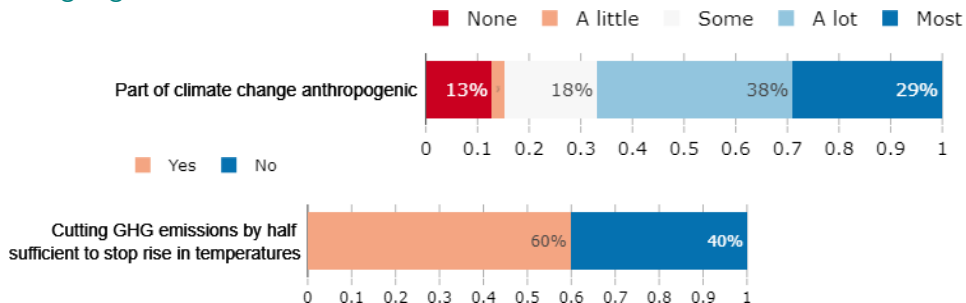


Figure: Right answer: No.

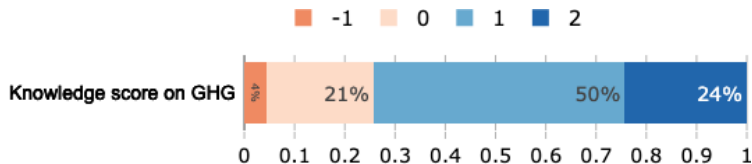
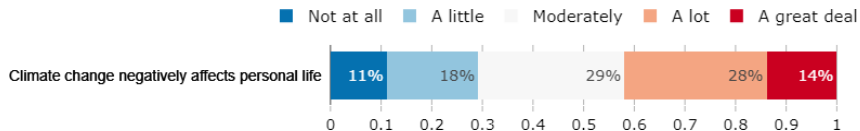
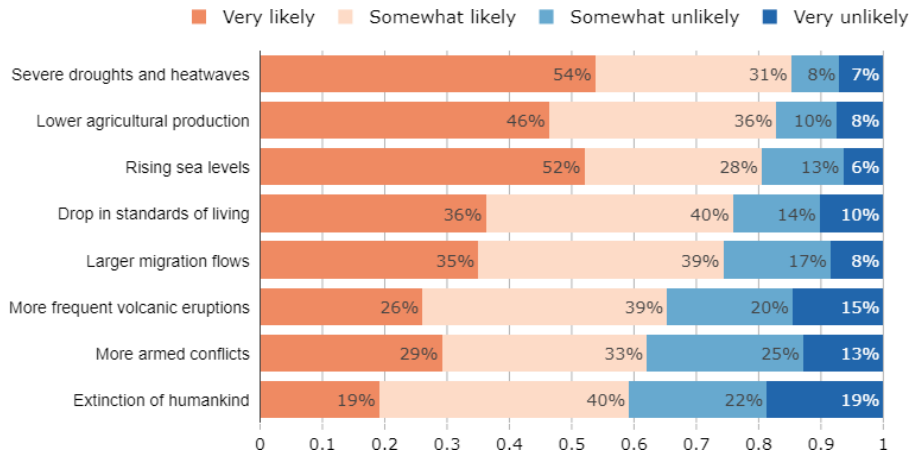


Figure: Score on GHG = CO₂ + methane - hydrogen - particulates

Impacts of CC



- People worry; knowledge is mixed.
- In line with previous research, we find that about 65% of Americans acknowledge that CC 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 think they will be personally affected by CC.

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Attitudes and risks

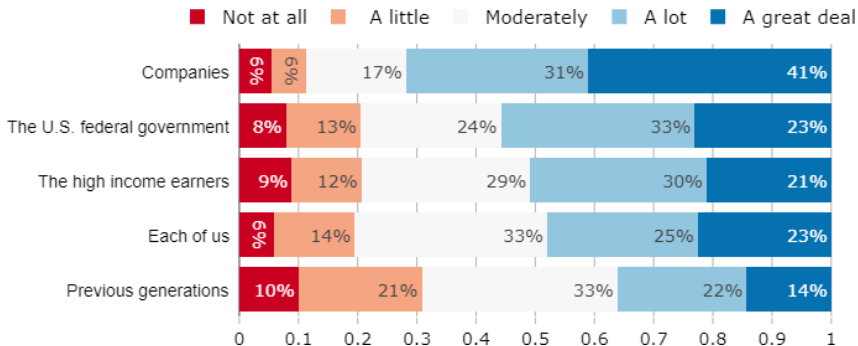
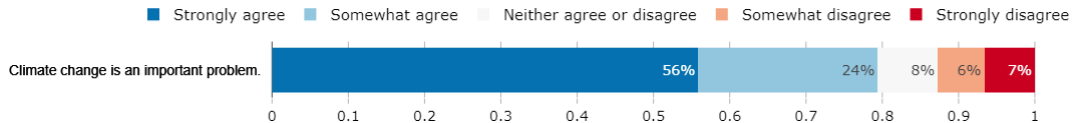
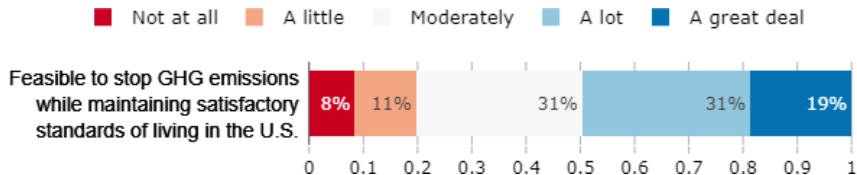
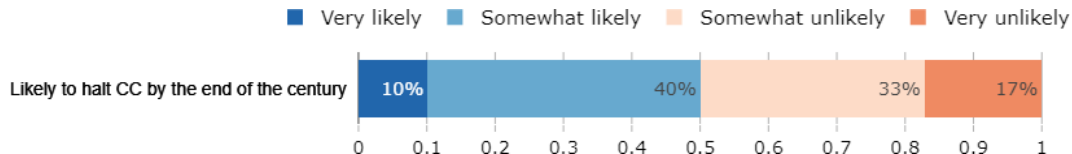
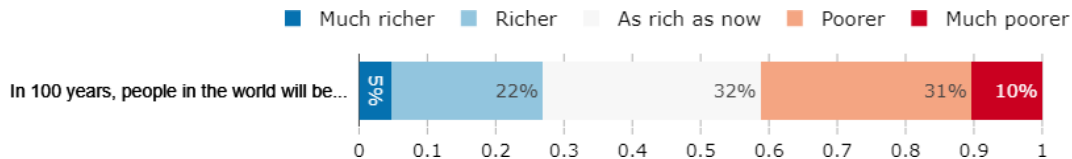


Figure: Perceived responsible entities

Beliefs about the future



Beliefs about ambitious climate policies

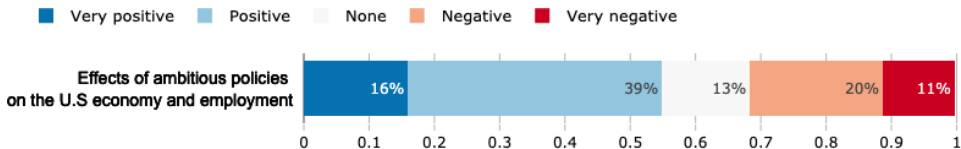
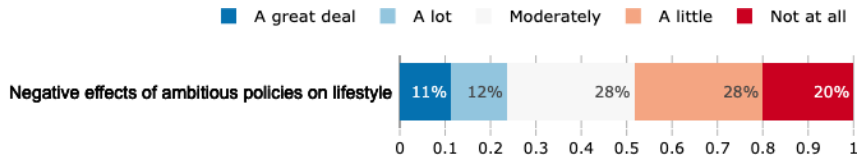
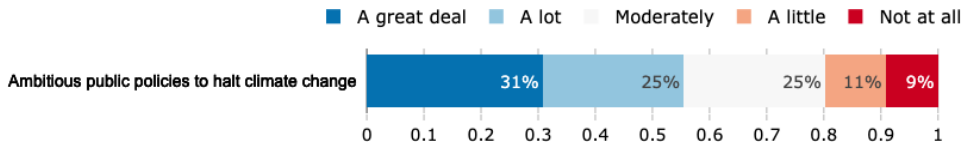
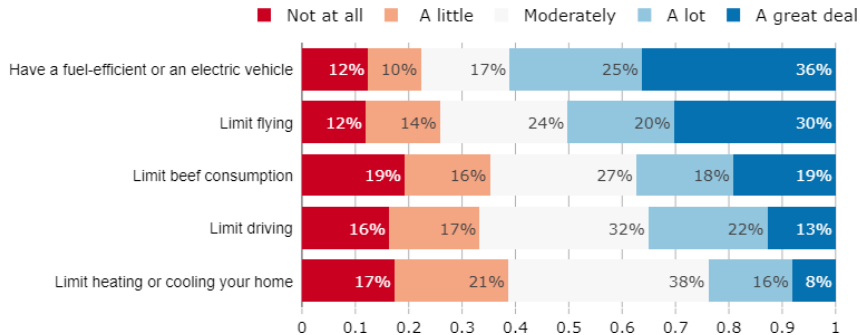


Figure: Willing to adopt following behaviors



Climate attitudes: summary

- 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 willing to forego some comfort, two-thirds willing to change behavior as long as it doesn't affect their comfort and they have enough financial means.

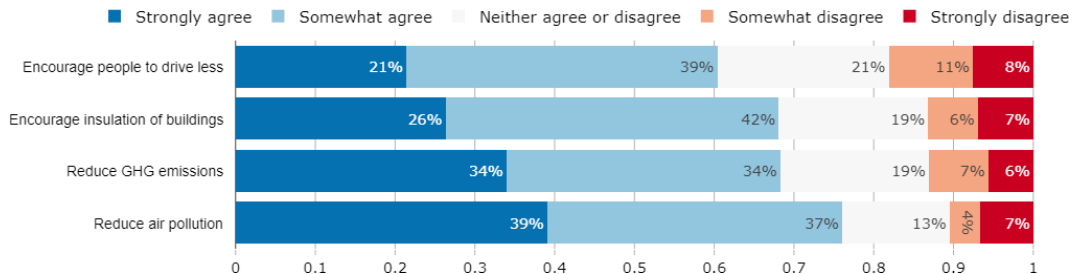
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Figure: A carbon tax with cash transfers would...



Economic effects of the 3 policies

Figure: Large effect on US economy and employment

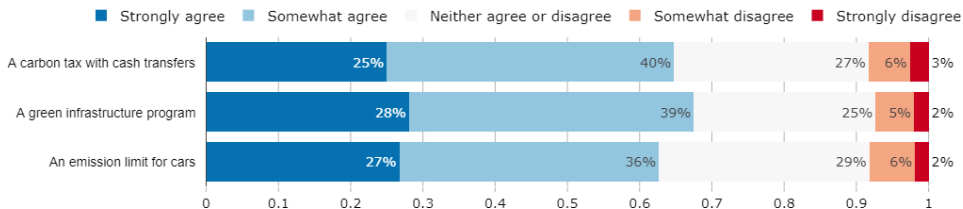


Figure: Negative effect on US economy and employment

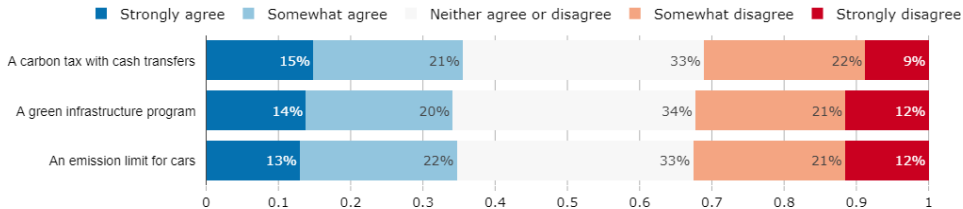


Figure: Cost-effective way to fight CC

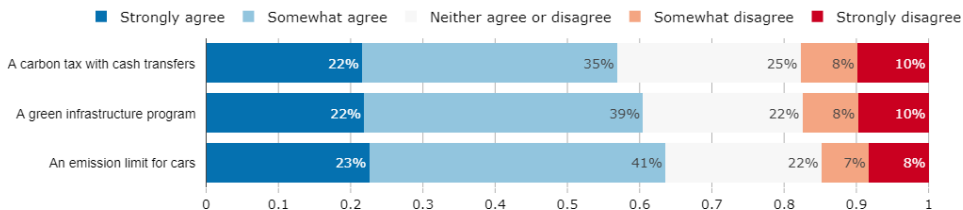
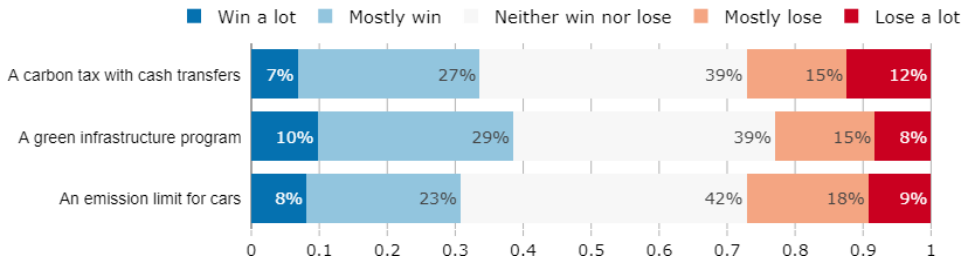


Figure: Effects on own household



Fairness and support

Figure: Fairness for policies

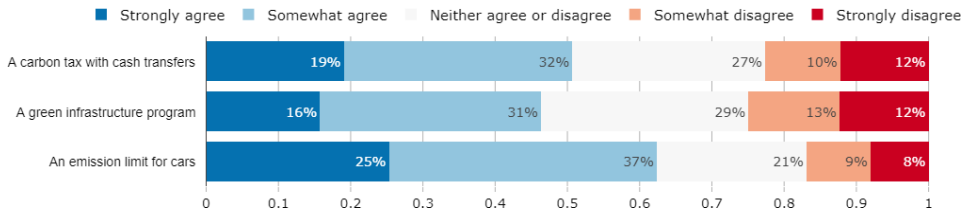
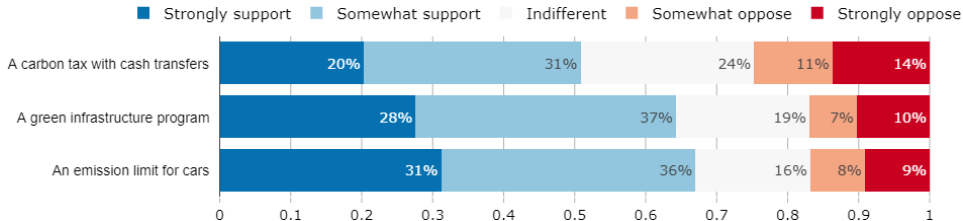
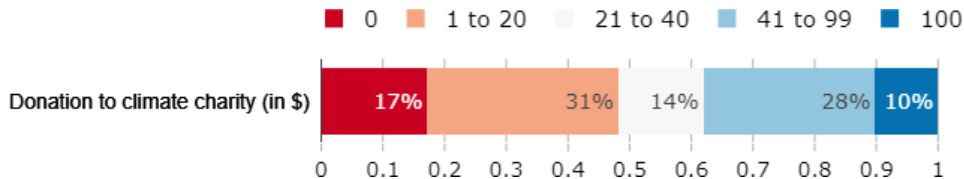
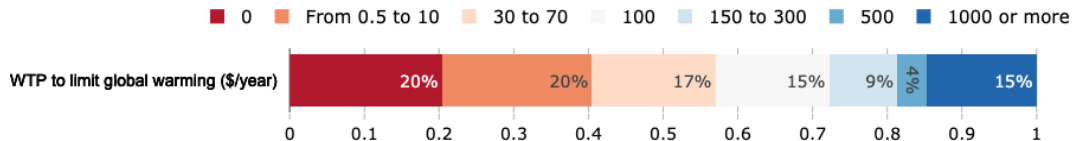


Figure: Support of policies





Policy attitudes: summary

- Each specific policy proposed gathers a majority, the most favored being an emission limit for cars.
- People are divided regarding the properties of these policies, although most think that a green infrastructure program and an emission limit for cars would be cost-effective to fight CC.
- A majority supports each climate policy proposed except tax policies but including coercive measures such as mandatory insulation of buildings.
- The results regarding taxes go in the other direction than the first two pilots (maybe because of the more accurate level of taxes mentioned).
- Earmarking carbon tax revenues to green investments is the preferred option while uses of revenue for firms are the least favored.
- WTP to halt climate change is higher in this pilot (median at \$50/year) than in previous waves \$18/year, but is still low.
- However the median amount people are willing to donate to a charity is \$21 (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.

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Table: Attitudes towards Climate Change

	CC caused by humans	CC likely to cause extinction	Donation (in \$)	Ambitious policies needed	Willing to limit driving
Control group mean	0.634	0.494	40.335	0.554	0.296
Treatment: Climate	0.117** (0.047)	0.123** (0.053)	-1.704 (3.432)	0.050 (0.052)	0.067 (0.052)
Treatment: Policy	0.055 (0.046)	0.128** (0.051)	-3.017 (3.331)	0.062 (0.051)	0.079 (0.051)
Treatment: Both	0.122** (0.053)	0.203*** (0.059)	0.506 (3.846)	-0.008 (0.059)	0.164*** (0.059)
Observations	576	577	577	577	577

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: Support policies

	Support			
	Carbon tax with transfers	Green Infrastructure Program	Emission standard for cars	Average over 3 policies
Control group mean	0.501	0.666	0.708	0.709
Treatment: Climate	-0.021 (0.049)	0.038 (0.046)	-0.005 (0.047)	0.010 (0.044)
Treatment: Policy	0.144*** (0.048)	0.052 (0.044)	0.032 (0.046)	0.048 (0.042)
Treatment: Both	0.131** (0.055)	0.013 (0.051)	0.016 (0.053)	0.060 (0.049)
Observations	577	577	577	577

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: Attitudes towards policies

	Fair	HH would win	Poor would win	Large economic effect	Negative economic effect
Control group mean	0.608	0.429	0.368	0.764	0.426
Treatment: Climate	0.065 (0.048)	0.055 (0.052)	0.030 (0.053)	-0.041 (0.048)	-0.017 (0.054)
Treatment: Policy	0.079* (0.046)	0.023 (0.051)	0.163*** (0.052)	0.062 (0.047)	-0.063 (0.052)
Treatment: Both	0.104* (0.053)	0.103* (0.058)	0.271*** (0.060)	0.090* (0.054)	-0.067 (0.061)
Observations	577	556	575	577	577

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

Treatment effects: summary

- When the treatments have some positive effects on general attitudes towards CC.
- In particular, all treatments are associated with the belief that CC can cause the extinction of human kind.
- The Climate treatment has a positive effect on belief that CC is anthropogenic.
- The Policy treatment has a positive effect on support for a carbon tax with transfers, which can be linked to its effect on fairness and incidence on poor for this policy.