

Public Acceptability of Climate Change Mitigation Policies

Building evidence from large scale and cross-country surveys



Motivation

Policies to address climate change have been difficult to implement

Resistance to climate change mitigation action arises largely from:

- Legitimate concerns about distributional and lifestyle impacts
- Misconceptions or ignorance about the impacts of climate change and the effects of climate policies on the economy and the environment

Addressing concerns and misconceptions may be difficult, as they are influenced by personal attributes, country specificities and political views

The political economy and public acceptability needs to play an important role in the design of climate policies





Limitations of existing research

Scope is narrow: typically limited to a single (developed) country, focus on carbon pricing, and international surveys include only very general questions

• For reviews of the surveys, see: Carattini et al. 2018, Drews and van den Bergh, 2016

Evidence is mainly descriptive: cross-country evidence remains largely descriptive.

• The effectiveness of information provision and the willingness to update perceptions and beliefs following new information remains unclear

Comparability is limited: it is difficult to know if differences in people's perceptions and preferences are driven by individual survey characteristics (e.g. format and phrasing) or by true cross-country differences

Studies on willingness to support climate policies usually do not offer an incentive relying on an actual payment and tangible actions



The role of the OECD

The OECD is well-placed to conduct large-scale surveys across multiple countries using a homogeneous methodology that can identify such country-specific aspects

First wave: United States, France, Denmark, and India

Second wave: United Kingdom, Germany, and Spain





Project objectives

Overall goal: construct country-specific advice on policies to deal with the transition to a low-carbon economy

Mechanism: understand people's perceptions about climate change and preferences over available climate policies

Methodology: large-scale cross-country surveys with three different and randomized information treatment groups about the impacts of climate change and related policies

~2,000 respondents/country, representative of the population





Main research questions

Drivers of policy support: reveal how social attitudes, values, and perceptions drive support or opposition for climate policies

Cross-country comparisons: analyze how social preferences on climate change mitigation policies differ between countries

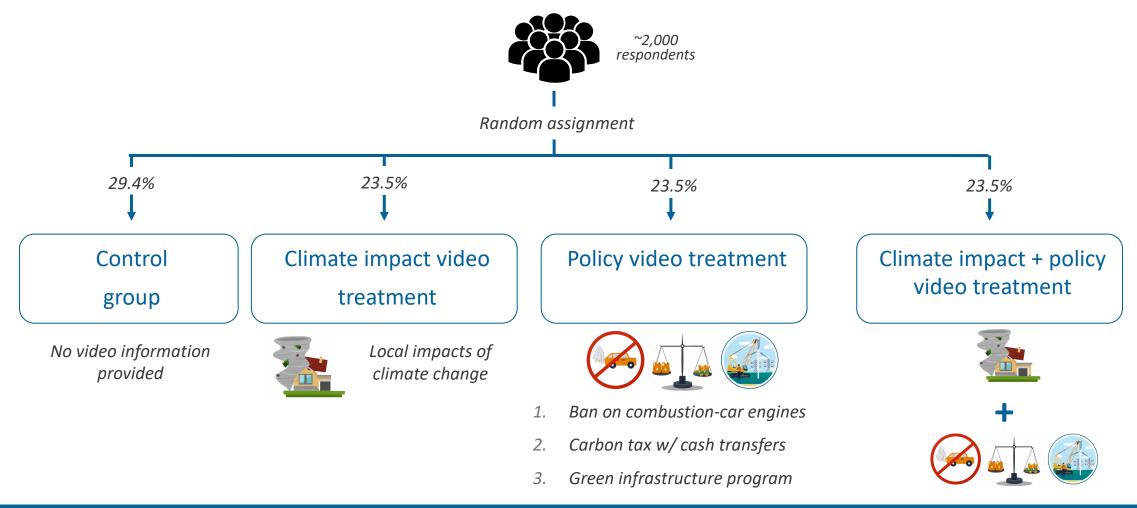
Effects of targeted information: understand how perceptions may change after receiving new information on the effects of policies/climate change (in a video format) and how it translates into beliefs and support





Information treatments

Treatment consists in watching 2-5min. videos either informing the participant about the **effects of the three** main climate policies, or underlying the **effects of climate change in their country**





Timeline

Milestones:	Jan-20	Fev-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21
Pilot survey in the U.S.							
Analyse results from the U.S. pilot and refine questionnaire.							
Full survey in the U.S.							
Pilot in France, and refine questionnaire							
Full survey in France							
Survey in Denmark							
Survey in India							
Analyse data and draft of a first paper							
Scoping note to attract additional funding							
Additional surveys (conditional on funding)							
Draft a policy note for CAE							
Draft the full paper with the analysis for US, France, Denmark and India.							



Survey structure



Survey structure

- 1. Socio-demographics
- 2. Political views
- Household composition and energy characteristics
- 4. Open-ended question about climate change considerations
- 5. Information treatments
- 6. Climate knowledge
- 7. Climate attitudes
- Policy 1: Ban on sale of combustionengine cars

- 9. Policy 2: Green infrastructure program
- 10. Policy 3: Carbon tax with cash transfers
- 11. Preferences for climate policies
- 12. Willingness to pay
- 13. International burden-sharing
- 14. Housing policies/Preferences for bans vs. incentives
- 15. Trust, perceptions of institutions, inequality, and the future
- 16. Feedback

Total number of questions: 110

Median survey completion time: 28'



Information video-treatment examples

Local climate impact



With the mix of more hurricanes, rising sea levels, more heatwaves, and lower agricultural output

Ban on combustion-engine cars



so that only electric or hydrogen vehicles can be sold after 2030.

Green infrastructure program



In the US, such a programme could create 4 million jobs in green sectors, such as public transportation, renewable power plants, buildings' insulation, or sustainable agriculture.

Carbon tax with cash transfers



To compensate people for the higher prices, the revenues of the carbon tax would be redistributed to all households, regardless of their income.



Climate knowledge examples: Understanding of the impacts of climate change

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

None A little Some A lot Most

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

Please rank the items from 1 (most) to 3 (least) (by clicking and dragging the items).

Gas-fired power plant

Nuclear power plant

Coal-fired power station



Climate attitudes examples: From climate risks to climate policies

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

Very negative effects Somewhat negative effects

No noticeable effects Somewhat positive effects

Very positive effects

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.)?

	Not at all	A little	Moderately	A lot	A great deal
Ambitious climate policies	0	0	0	0	0
Having enough financial support	0	0	0	0	0
People around you also changing their behavior	0	0	0	0	0
The most well off also changing their behavior	0	0	0	0	0



Policy preferences examples

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

Strongly oppose

Somewhat oppose

Neither support nor oppose

Somewhat support

Strongly support

What sources of funding do you find appropriate for public investments in green infrastructure? (Multiple answers are possible)

Additional public debt

Increase in sales taxes

Increase in taxes on the wealthiest

Reduction in social spending

Reduction in military spending



WTP example

By taking this survey, you are automatically entered into a lottery to win \$100. In a few days you will know whether you have been selected in the lottery. The payment will be made to you in the same way as your compensation for this survey, so no further action is required on your part.

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. This charity has already proven effective to reduce 151 million tons of CO2 to fight climate change and has been carefully selected by our team. The Gold Standard is highly transparent and ensures that its projects feature the highest levels of environmental integrity and contribute to sustainable development.

Should you win the lottery, please enter your donation amount using the slider below:

0

20

40

60

80

100

Donation amount (in U.S. dollars)



U.S. Pilot



U.S. Pilot: key results

Sample: 582 respondents, not representative along the education, ethnicity/race, vote and occupation dimensions

Causes of climate change: a majority (67%) attributes climate change to human activity

Support for policies: A majority supports each climate policy proposed, with the except of carbon taxes

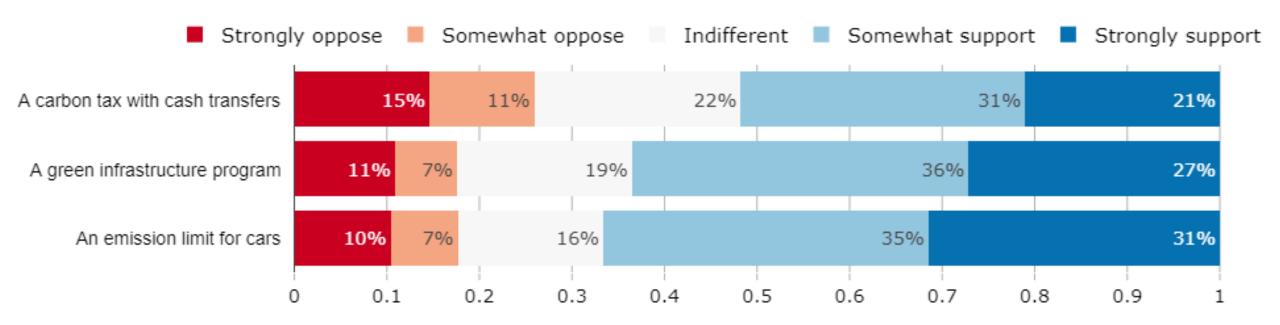
- Preferred use of carbon tax revenues: earmarking to green investments
- Least-favored use of revenues: compensating affected firms

Effectiveness to reduce GHG emissions: carbon tax with cash transfers is seen as the least cost-effective policy to reduce emissions (57% believe it's cost-effective) followed by a green infrastructure program (60%) and an emission limit for cars (64%)

Effect of information treatments: targeted and clear information campaigns on the mechanisms of carbon taxes can significantly increase support for this type of policy



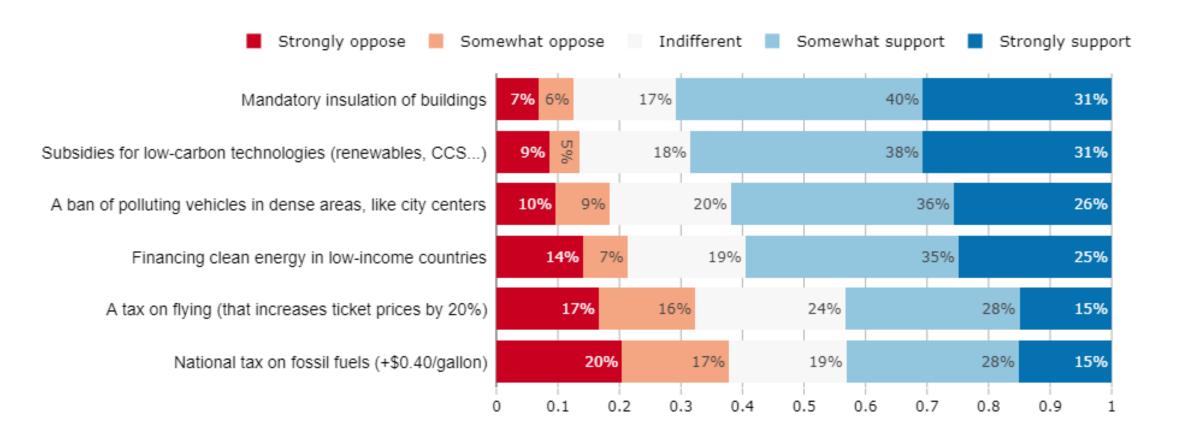
Support for main policies



Notes: 582 respondents. Representative along the gender, age, income, region and rural/urban dimensions but not representative along the education, ethnicity/race, vote and occupation dimensions. Weighted along the gender, income, region, living in a metropolitan area, age, and race dimensions



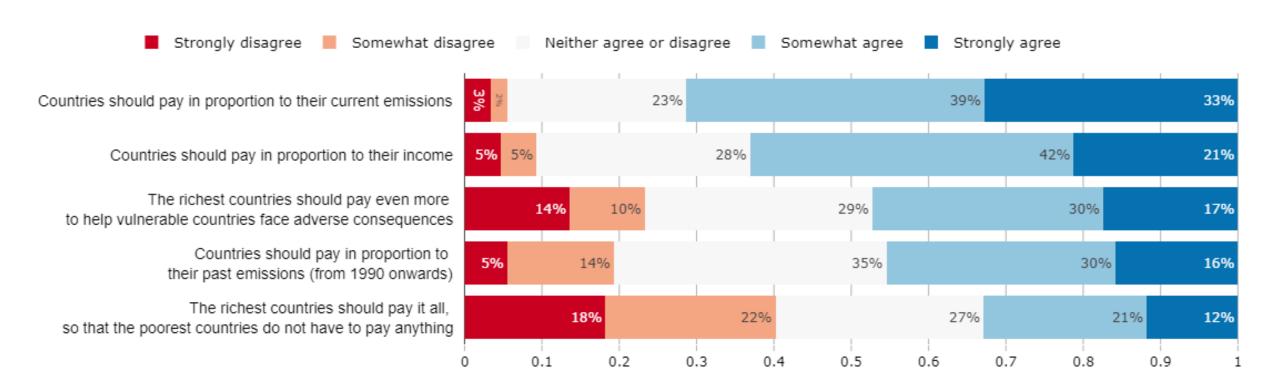
Support for different climate policies



Notes: 582 respondents. Representative along the gender, age, income, region and rural/urban dimensions but not representative along the education, ethnicity/race, vote and occupation dimensions. Weighted along the gender, income, region, living in a metropolitan area, age, and race dimensions



How should countries bear the costs of fighting climate change?



Notes: 582 respondents. Representative along the gender, age, income, region and rural/urban dimensions but not representative along the education, ethnicity/race, vote and occupation dimensions. Weighted along the gender, income, region, living in a metropolitan area, age, and race dimensions



Thank you

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 Yellow Vests, Pessimistic Beliefs, and Carbon Tax Aversion, American Economic Journal: Economic Policy, forthcoming.





Related Literature

Alesina, A., A. Miano, and S. Stantcheva (2018). Immigration and Redistribution, *NBER Working Paper*, 24733, https://scholar.harvard.edu/files/stantcheva/files/alesina_miano_stantcheva_immigration.pdf

Alesina, A., A. Miano, and S. Stantcheva (2020). The Polarization of Reality, *American Economic Review: Papers and Proceedings*, 110, 324-328. https://scholar.harvard.edu/files/stantcheva/files/polarization_reality.pdf

Alesina, A., and S. Stantcheva (2020). Diversity, Immigration, and Redistribution, *American Economic Review: Paper and Proceedings*, 110, 329-334. https://scholar.harvard.edu/files/stantcheva/files/alesina_stantcheva_diversity.pdf

Carattini, S., M. Carvalho, and S. Fankhauser (2018). Overcoming public resistance to carbon taxes, WIRES Climate Change, Vol. 9 (5), pp. 1-26.

Cohn, A., E. Fehr, and M. A. Maréchal (2014). Business culture and dishonesty in the banking industry, *Nature*, 516, 86-89.

Douenne, T., and A. Fabre (2019). French Attitudes on Climate Change, Carbon Taxation and Other Climate Policies, Ecological Economics, 169: 106496.

Drews, S., and J.C.J.M, van den Bergh (2016). What explains public support for climate policies? A review of empirical and experimental studies, *Climate Policy*, Vol. 16 (7), pp. 855-876.

Rodrik, D., and R. Di Tella (2019). Labor Market Shocks and the Demand for Trade Protection: Evidence from Online Surveys, Copy at http://j.mp/2FrXwYC.

