Fighting Climate Change: International Attitudes Toward Climate Policies

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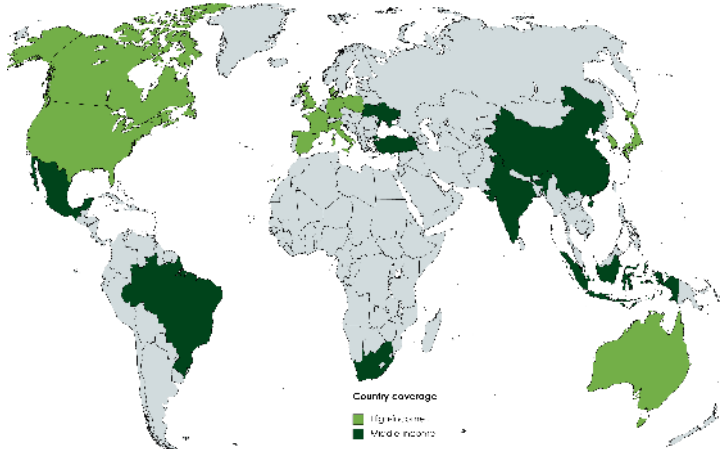
An international survey

Large-scale cross-country survey to analyse attitudes on climate change and climate policies.

Wide country coverage:

- 20 countries in all world regions, middle-income as well as high-income,
- covering 72% of global CO_2 emissions, including 18 out of the 21 largest polluters.



Filling some gaps in existing research

A large literature has shown that:

Most people across the World are concerned about CC and want to fight it

Stokes, Wike & Carle (15); Ipsos (20); Leiserowitz et al. (21); UNDP (21)

Three beliefs are key for carbon tax support: that it is effective, fair, and in one's self-interest

Thalmann (04); Bristow et al. (10); Kallbekken & Sælen (11); Brannlund & Persson (12); Carattini et al. (17); Bergquist et al. (20); Sommer, Mattauch & Pahle (22); Douenne & Fabre (22)

Political identity and trust shape beliefs more than information

Kahan (13); Sunstein et al. (17); Levi, Flachsland & Jakob (20); Mildenberger et al. (22)

Already various reviews

Carattini, Carvalho & Fankhauser (18), Klenert et al. (18) and Maestre-Andrés, Drews & van den Bergh (19) on carbon pricing; Drews & van den Bergh (16) and Fairbrother (22) on all kinds of policies; Boon-Falleur et al. (22) on social cognition

Our survey fills gaps in existing research:

Wide scope: past surveys are typically limited to a single (developed) country, focus on carbon pricing, and existing international surveys include only very general questions.

Detailed questions on various policies, including global policies

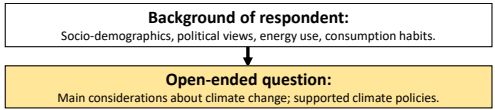
Causal evidence on what info works and incentive compatibility

Questionnaire

Questionnaire

Background of respondent:
Socio-demographics, political views, energy use, consumption habits.

Questionnaire



Questionnaire

Background of respondent:
Socio-demographics, political views, energy use, consumption habits.

Open-ended question:
Main considerations about climate change; supported climate policies.

Video Treatment

~2,000 respondents

Random assignment

29%	24%	24%	24%
Control group	Climate Impacts	Climate Policy	Climate + Policy
No video information provided	*Local impacts of climate change*	1. *Ban on combustion-car engines* 2. *Carbon tax w/ cash transfers* 3. *Green infrastructure program*	

Questionnaire

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.

See US climate video

See US policy video

Questionnaire

Background of respondent:
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Open-ended question:
Main considerations about climate change; supported climate policies.

Video Treatment

No Video	**Climate Impacts**: local impacts	**Climate Policy**: info on 3 policies	**Both**: Climate Impacts + Climate Policy

Knowledge
Factual, quantitative questions on climate dynamics, factors and impacts of climate change, footprints.

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?

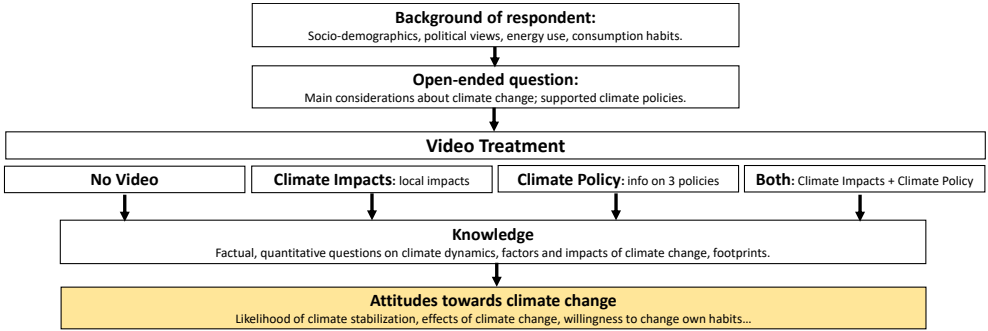
Please rank the items from 1 (most) to 3 (least) (by clicking and dragging the items).

Gas-fired power plant

Nuclear power plant

Coal-fired power station

Questionnaire



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.?

Not at all	A little	Moderately	A lot	A great deal

Questionnaire

Background of respondent:
Socio-demographics, political views, energy use, consumption habits.

↓

Open-ended question:
Main considerations about climate change; supported climate policies.

↓

Video Treatment

No Video	**Climate Impacts**: local impacts	**Climate Policy**: info on 3 policies	**Both**: Climate Impacts + Climate Policy

↓

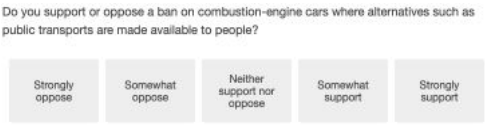
Knowledge
Factual, quantitative questions on climate dynamics, factors and impacts of climate change, footprints.

↓

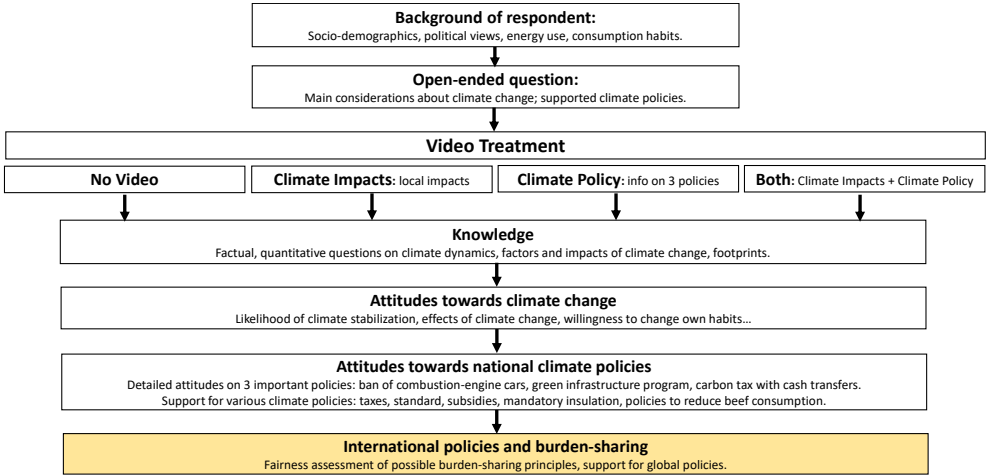
Attitudes towards climate change
Likelihood of climate stabilization, effects of climate change, willingness to change own habits…

↓

Attitudes towards national climate policies
Detailed attitudes on 3 important policies: ban of combustion-engine cars, green infrastructure program, carbon tax with cash transfers.
Support for various climate policies: taxes, standard, subsidies, mandatory insulation, policies to reduce beef consumption.



Questionnaire



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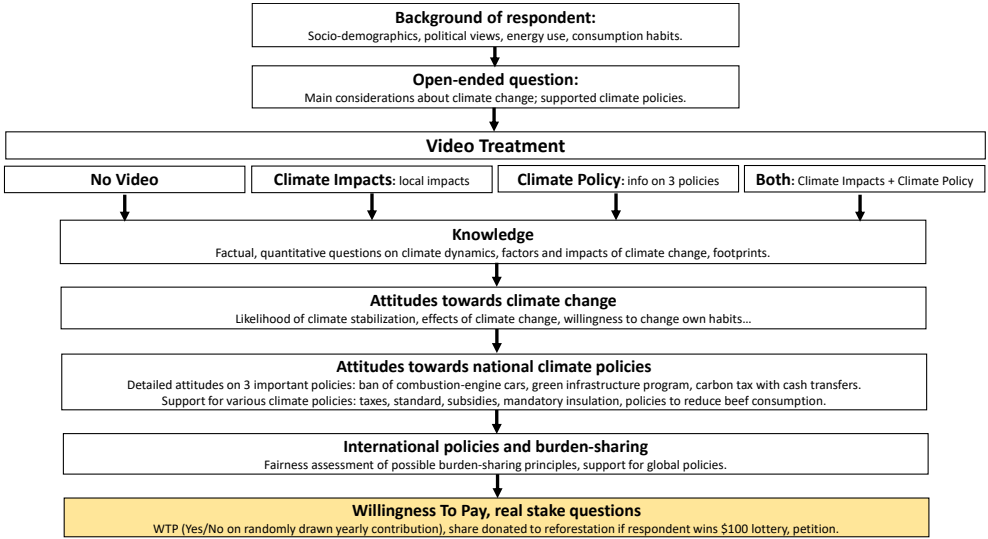

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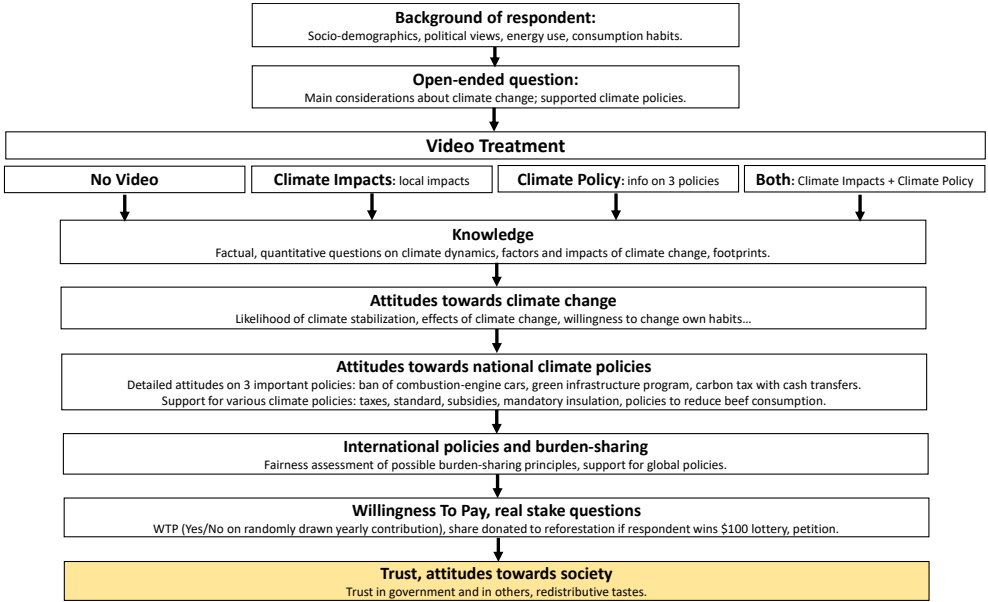
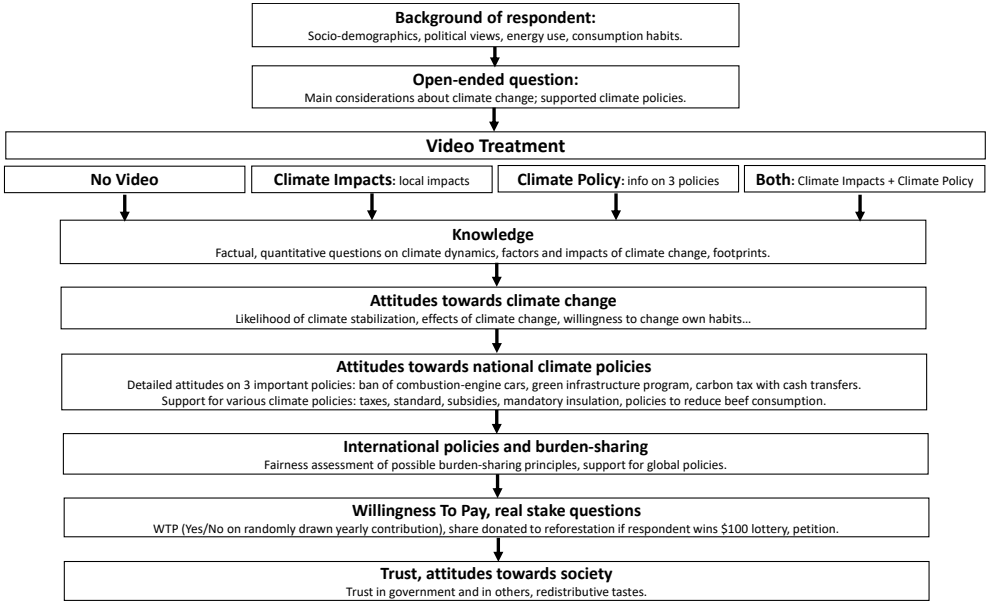


Questionnaire



Sample quality

Ensuring data quality

In each country, ≈2,000 respondents selected through quotas that ensure representativeness along: gender, age, income, region, urban/rural. ▸ See table

All results are re-weighted along quota variables to increase representativeness even further.

Screening question in the middle of the survey.

Appeal to people's social responsibility by insisting they should answer carefully and honestly, for the sake of science.

Warn that "incoherent and rushed responses" (< 11 min) are dismissed and disqualified for monetary compensation.

Record time spent on separate questions & overall survey (median: 28 min).

Ask for feedback post survey, whether felt survey was biased (74% find it unbiased). ▸ Details

Open field

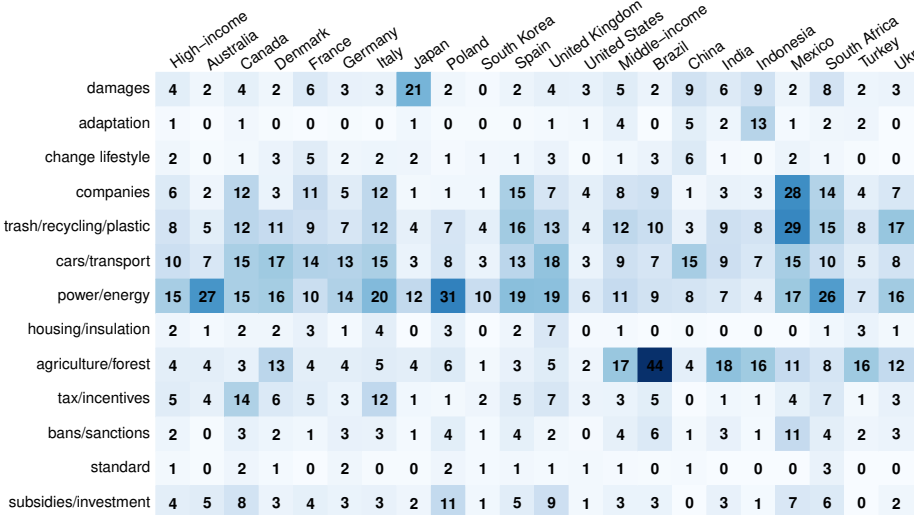
Open field – categories ▸ Details

“When thinking about climate change, what are your main considerations? What should the [country] government do regarding climate change?”

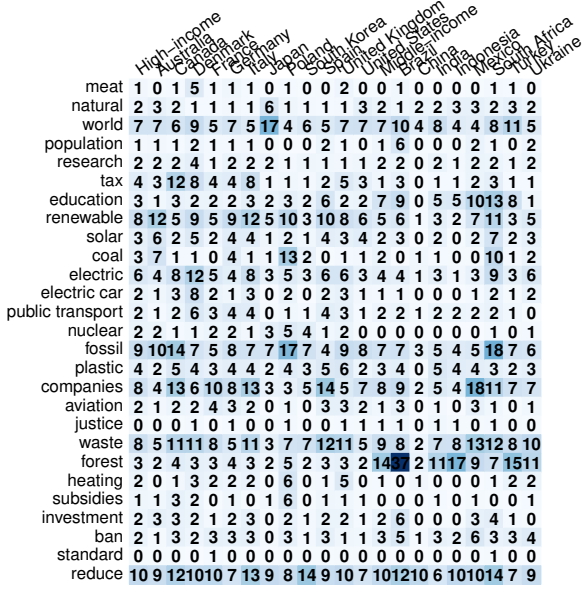
	High–income	Australia	Canada	Denmark	France	Germany	Italy	Japan	Poland	South Korea	Spain	United Kingdom	United States	Middle–income	Brazil	China	India	Indonesia	Mexico	South Africa	Turkey	Ukraine
Worry / Should act	55	56	63	64	62	62	75	39	60	34	80	71	30	64	77	47	53	59	91	72	68	52
Activity/ies mentioned	33	27	43	44	39	37	44	21	45	16	41	37	17	39	63	21	30	39	49	51	28	36
Instrument(s) mentioned	13	9	25	13	14	10	20	6	18	5	14	20	5	10	16	8	8	3	20	20	3	7
No worry / Should not act	7	14	7	5	6	11	3	4	6	1	5	10	12	2	4	1	1	0	1	3	3	5
Do not know	6	9	8	10	10	9	6	2	7	2	5	6	5	2	3	1	1	1	0	1	4	4
Empty	9	6	4	13	14	9	3	16	9	8	2	7	9	11	3	16	19	29	1	2	4	5
Ambiguous	6	10	9	0	16	8	0	5	7	5	9	6	4	9	0	13	12	9	6	2	20	14

Open field – sectors and instruments ▸ Details

“When thinking about climate change, what are your main considerations? What should the [country] government do regarding climate change?”



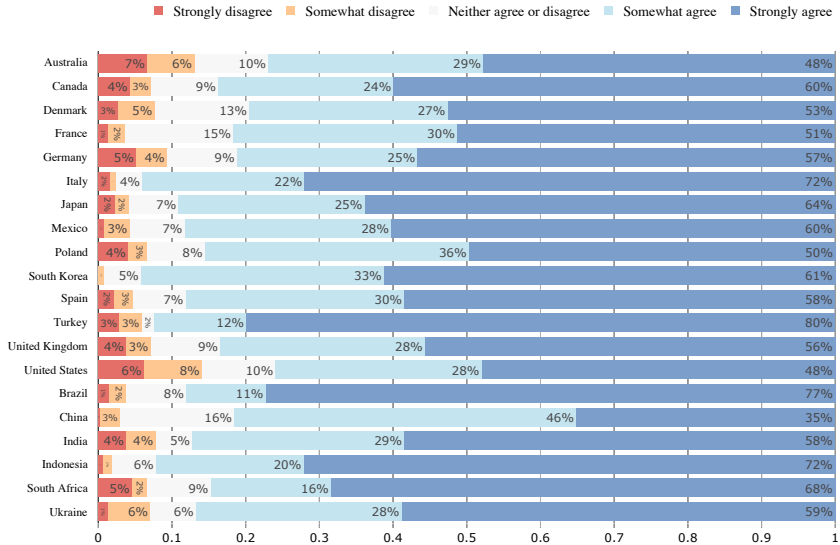
Open field – automatic search of mentions



Climate Knowledge

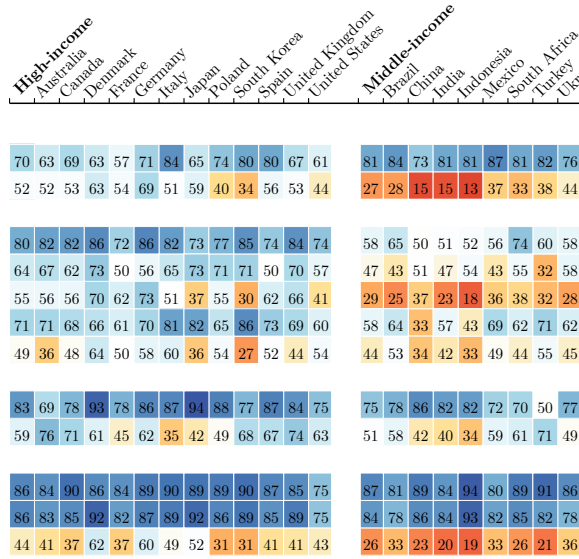
Consensus that CC is an important problem

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



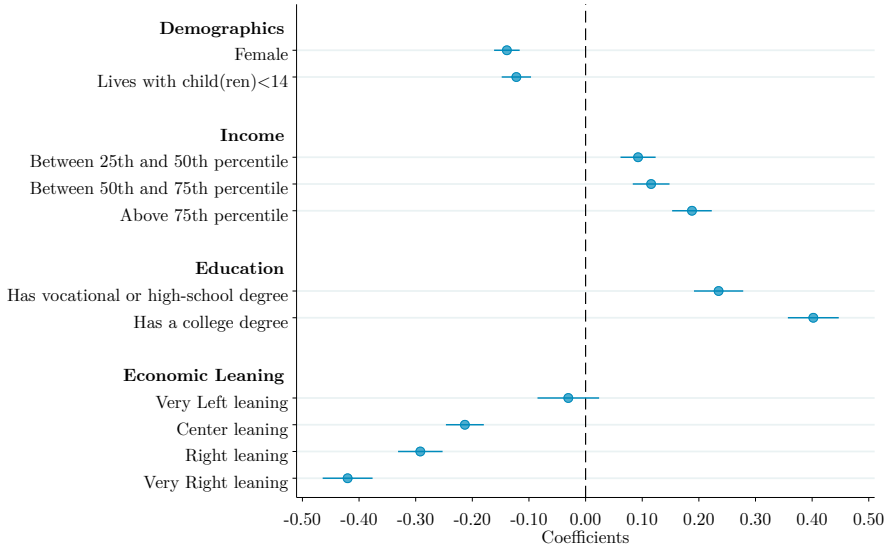
Mixed knowledge

% of respondents who agree with the following statements: ▸ Detailed results



Who has better knowledge?

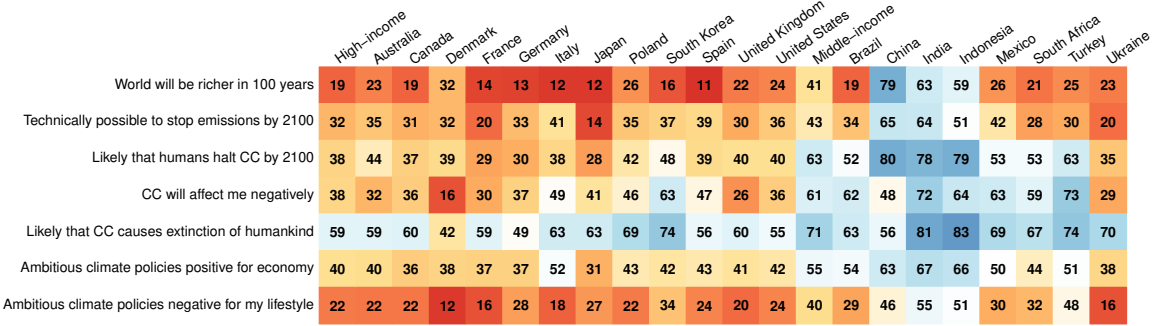
Who has better knowledge about climate change? ▸ Definition index



Climate Attitudes

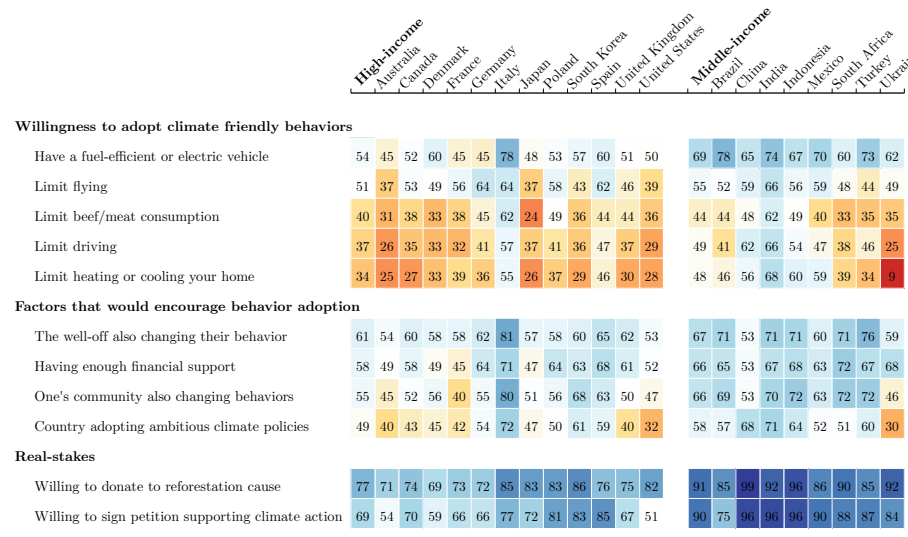
Grim views on the future

% of positive answers ▸ Detailed results



Willing to adopt climate-friendly behavior under certain conditions

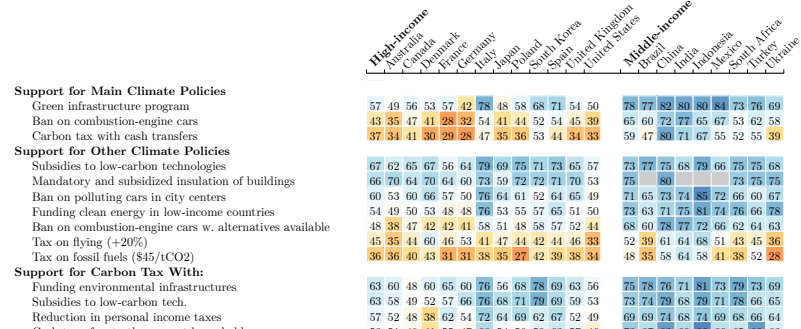
% “A lot” willing to adopt behavior, or factor “a lot” important to adopt a sustainable lifestyle. ▸ Details , ▸ WTP



Support for climate action

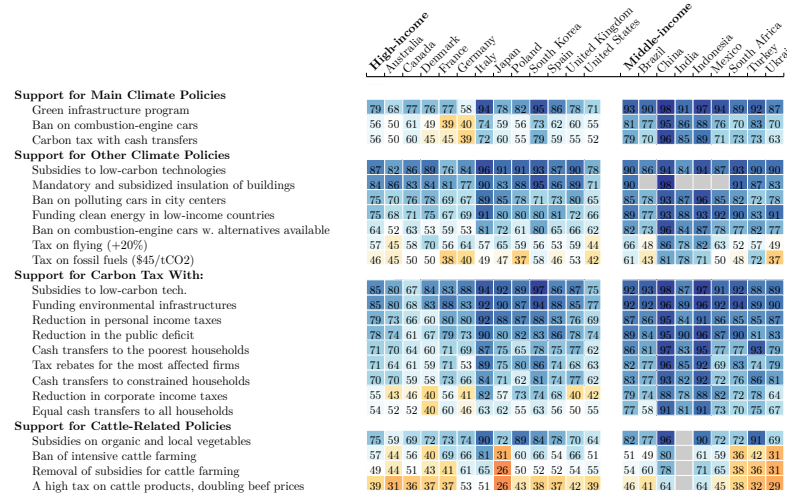
Green investments are plebiscited.

Share of support (somewhat or strongly) for the national policies. ▸ Detailed results , ▸ description



Most policies receive a relative majority support.

Share of support for the national policies among non-Indifferent. ▸ Detailed results



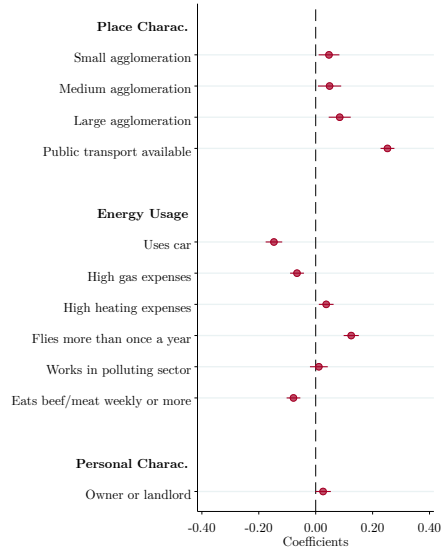
Global policies are strongly supported.

Share of support (somewhat or strongly) for the main global policies among non-*indifferent*. ▸ Detailed results

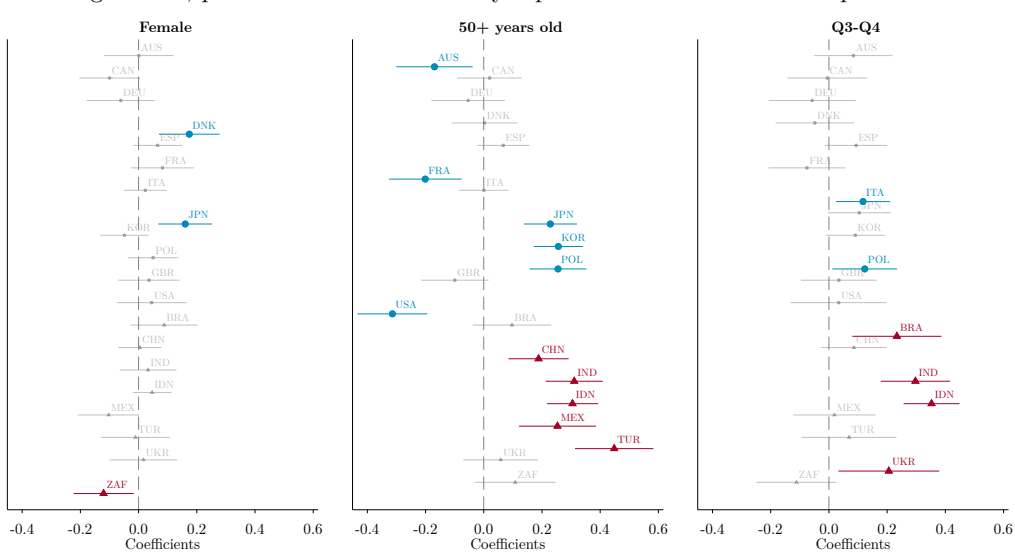
	High−income	Australia	Canada	Denmark*	France*	Germany	Italy	Japan	Poland	South Korea	Spain	United Kingdom	United States*	Middle−income	Brazil	China	India	Indonesia	Mexico	South Africa	Turkey	Ukraine
Level of climate policies needed: global	85	78	87	81	85	88	92	94	88	86	88	88	70	85	88	87	78	86	88	90	82	76
Level of climate policies needed: federal/continental	46	67	58	48	37	48	30	NA	40	NA	40	47	52	48	48	61	67	50	41	42	41	24
Level of climate policies needed: state/national	44	54	50	45	27	45	28	50	38	65	34	53	41	42	36	32	59	35	26	53	58	35
Level of climate policies needed: local	36	48	45	33	26	37	24	35	37	41	30	43	35	35	35	29	50	24	28	42	41	27
If other do more, [country] should do more	88	84	91	87	88	82	91	92	82	90	89	90	87	91	89	95	86	94	92	89	93	80
If other do less, [country] should do more	88	82	86	91	87	82	95	91	89	90	91	85	86	93	93	93	89	96	97	93	92	87
Global carbon budget (+2°C) divided in tradable country shares	84	79	85	NA	NA	74	89	82	81	92	85	90	NA	90	82	95	89	95	92	90	88	88
Emission share should be in proportion to population*	88	87	87	90	90	85	91	84	89	91	89	88	87	91	84	96	91	94	92	93	90	85
Emission share should be in proportion to current emissions	54	55	53	NA	NA	47	46	63	57	68	49	48	NA	69	53	86	77	88	56	55	77	46
Countries that have emitted more since 1990 should receive a lower share*	72	69	73	57	80	76	80	69	71	75	74	72	68	82	79	92	86	91	75	73	81	74
Countries that will be hurt more by CC should receive a higher share*	71	71	68	62	74	67	71	84	80	72	75	68	59	84	78	95	90	91	77	81	83	69
Global democratic assembly on climate change	81	74	80	77	82	76	90	88	85	85	88	77	71	91	84	97	88	96	94	89	87	93
Global tax on GHG financing a global basic income	49	41	44	57	51	52	55	53	47	53	50	40	49	79	76	92	88	91	83	54	60	77
Global tax on millionaires to finance low−income countries	82	74	84	72	86	83	90	88	80	89	86	85	73	92	86	98	92	97	93	89	87	94

Less support among car users and right-wing people.

Support for main policies regressed on social, political, and energy characteristics.

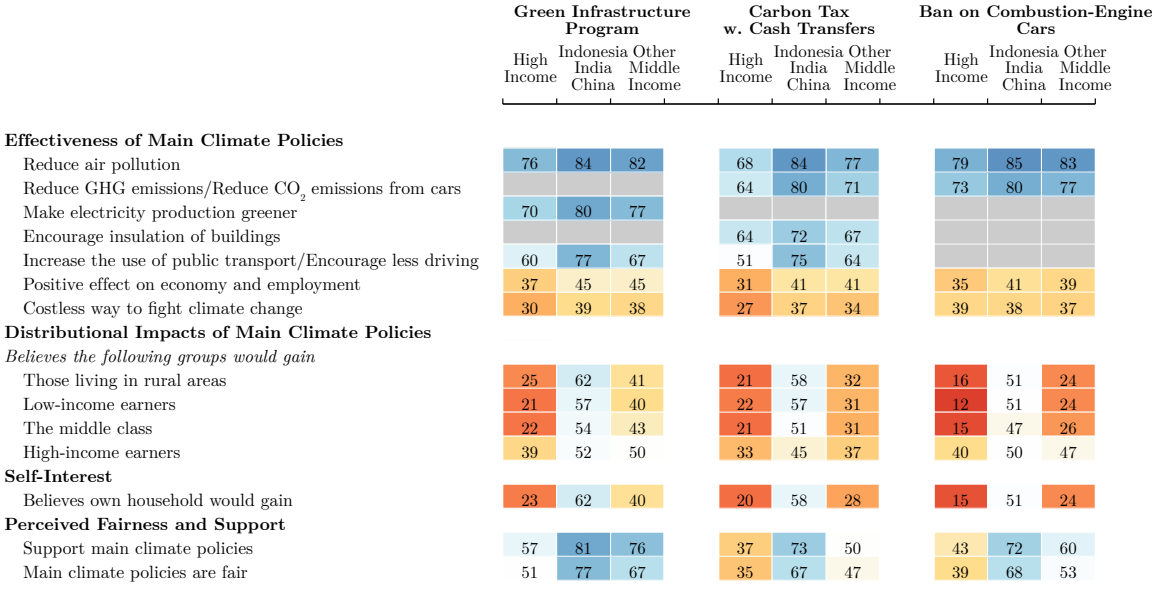


Heterogeneous effects of gender, age, and income across countries



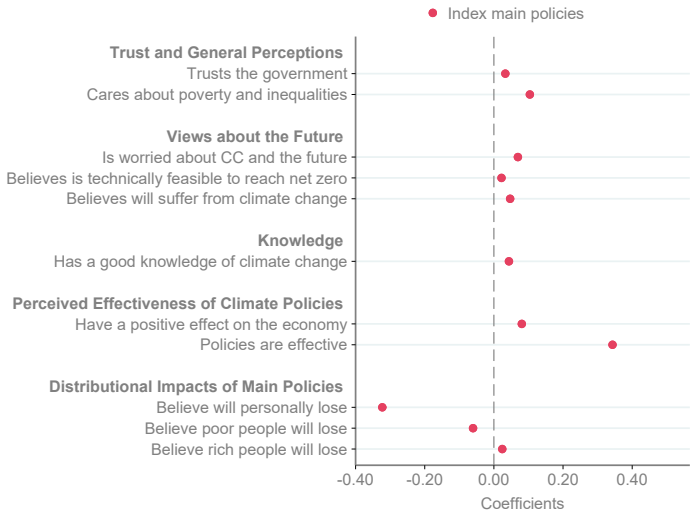
Beliefs supporting climate policies

Main policies seen as effective but not progressive ▸ Details , ▸ relative



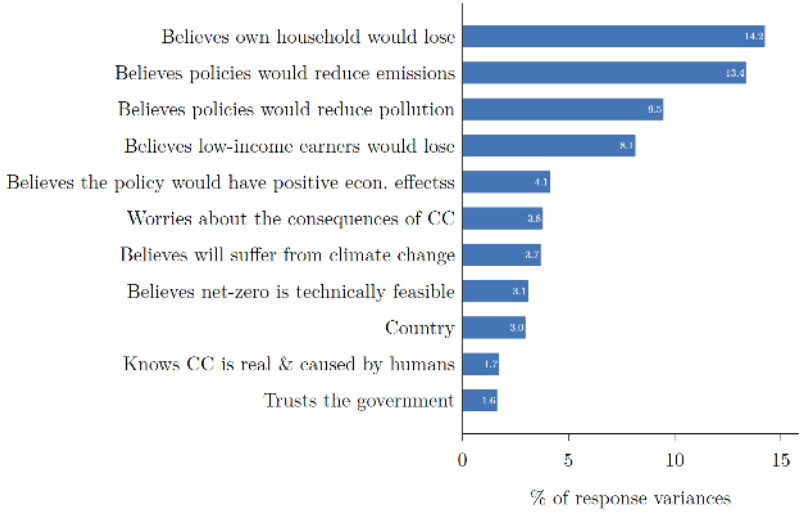
Beliefs in effectiveness and self-interest are key for policy support.

Support for main policies regressed on supporting beliefs ▸ See desc stats



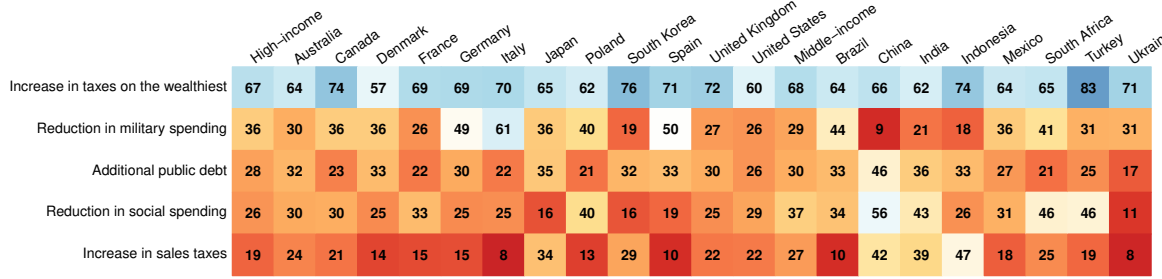
Variance in main policies' support explained by supporting beliefs

R^2 = 70%



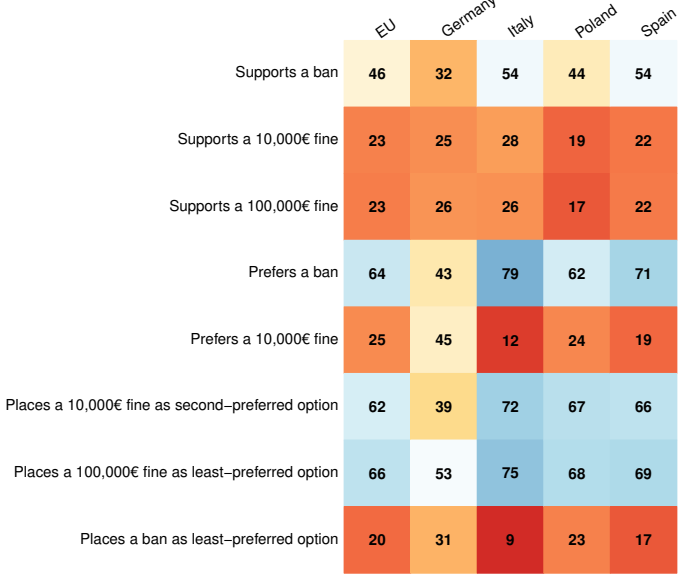
The distributional dimension is critical.

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



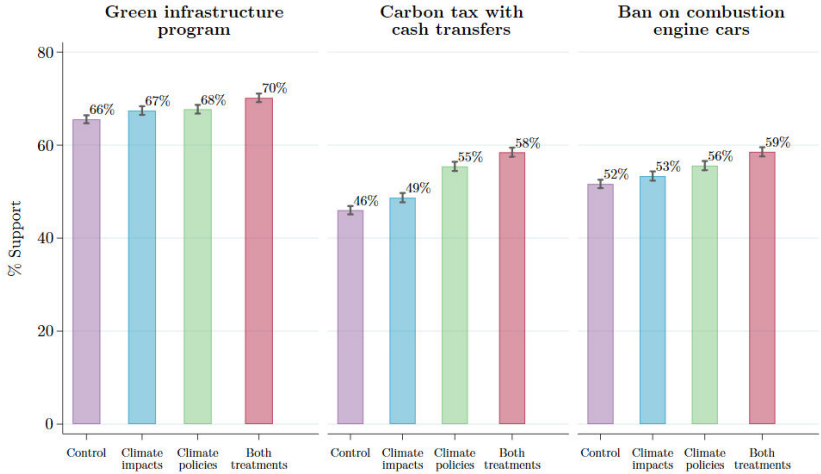
People do not like it if rich can buy their way out

Preferences about combustion-engine cars: ban vs. penalties. ▸ See more



Can information change attitudes?

Treatment effects (of watching informational videos) in regressions of support for the main policies on socio-demographics. ▸ See more



Conclusion

Key take-home messages for policy-making

1. Can information change attitudes? *Yes, providing information on climate change and policies can increase understanding and support, especially information on policies.*
   - Policy implication: Launch information campaigns on climate policies.

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3. Which national policies are popular? *There is strong support for green infrastructure program, a ban on polluting vehicles in dense areas or mandatory and subsidized insulation of buildings. A ban on combustion-engine cars and a carbon tax are less supported.*
   - Policy implication: Make sure that alternatives to fossils are available to all through public investments, e.g. in public transport. Implement popular policies with co-benefits (low-emission zones, subsidized mandatory insulation).

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4. Are people ready for international solidarity? *Yes, a global ETS with equal right to emit per capita is largely supported, as are other global policies.*
   - Policy implication: Countries should negotiate climate treaties guided by commonly agreed fairness principles rather than national (short-term financial) interest.

Appendix

Representativeness

Summary statistics

Table 1: Summary Statistics – High-income countries 1 Go back

	Australia		Canada		Denmark		France	
	Population	Raw sample	Population	Raw sample	Population	Raw sample	Population	Raw sample
Sample size	NA	1,978	NA	2,022	NA	2,013	NA	2,006
Male	0.49	0.56	0.49	0.45	0.50	0.50	0.48	0.44
18-24 years old	0.11	0.10	0.10	0.09	0.11	0.09	0.12	0.10
25-34 years old	0.19	0.19	0.17	0.14	0.16	0.12	0.15	0.15
35-49 years old	0.26	0.27	0.24	0.25	0.23	0.25	0.24	0.25
More than 50 years old	0.44	0.44	0.48	0.52	0.50	0.54	0.49	0.50
Income Q1	0.25	0.45	0.25	0.25	0.26	0.29	0.25	0.31
Income Q2	0.25	0.31	0.25	0.28	0.23	0.25	0.25	0.31
Income Q3	0.25	0.17	0.25	0.28	0.28	0.26	0.25	0.23
Income Q4	0.25	0.07	0.25	0.20	0.22	0.19	0.25	0.14
Region 1	0.33	0.30	0.07	0.06	0.32	0.30	0.19	0.19
Region 2	0.20	0.23	0.06	0.07	0.23	0.23	0.22	0.24
Region 3	0.07	0.10	0.26	0.23	0.10	0.10	0.20	0.22
Region 4	0.28	0.28	0.39	0.39	0.14	0.16	0.25	0.20
Region 5	0.11	0.09	0.23	0.24	0.21	0.21	NA	NA
Urban	0.72	0.76	0.83	0.89	0.53	0.53	0.60	0.59
College education (25-64)	0.49	0.46	0.60	0.56	0.36	0.44	0.40	0.42
Share of voters	0.72	0.86	0.56	0.83	0.76	0.89	0.70	0.78
Voters: Left	0.44	0.44	0.60	0.65	0.44	0.48	0.28	0.24
Voters: Center	NA	NA	NA	NA	0.09	0.06	0.24	0.12
Voters: Right	0.41	0.41	0.39	0.30	0.43	0.37	0.47	0.53

Summary statistics

Table 2: Summary Statistics – High-income countries 2 Go back

	Germany		Italy		Japan		Poland	
	Population	Raw sample	Population	Raw sample	Population	Raw sample	Population	Raw sample
Sample size	NA	2,006	NA	2,088	NA	1,990	NA	2,053
Male	0.49	0.48	0.48	0.49	0.48	0.54	0.48	0.44
18-24 years old	0.09	0.06	0.08	0.09	0.08	0.08	0.09	0.09
25-34 years old	0.15	0.16	0.12	0.13	0.12	0.13	0.17	0.18
35-49 years old	0.22	0.22	0.24	0.26	0.24	0.27	0.28	0.30
More than 50 years old	0.54	0.56	0.56	0.52	0.56	0.53	0.46	0.42
Income Q1	0.25	0.25	0.25	0.28	0.25	0.27	0.25	0.22
Income Q2	0.25	0.25	0.25	0.28	0.25	0.27	0.25	0.27
Income Q3	0.25	0.23	0.25	0.23	0.25	0.27	0.25	0.27
Income Q4	0.25	0.27	0.25	0.21	0.25	0.19	0.25	0.25
Region 1	0.10	0.10	0.20	0.20	0.17	0.18	0.12	0.10
Region 2	0.15	0.16	0.11	0.12	0.18	0.19	0.14	0.13
Region 3	0.18	0.16	0.19	0.17	0.35	0.38	0.23	0.21
Region 4	0.29	0.27	0.27	0.30	0.11	0.10	0.29	0.33
Region 5	0.28	0.31	0.23	0.21	0.20	0.16	0.22	0.23
Urban	0.80	0.76	0.83	0.89	0.70	0.76	0.57	0.66
College education (25-64)	0.31	0.32	0.20	0.38	0.53	0.72	0.33	0.46
Share of voters	0.67	0.86	0.59	0.87	0.54	0.79	0.63	0.87
Voters: Left	0.41	0.42	0.24	0.31	0.29	0.22	0.02	0.06
Voters: Center	0.07	0.07	0.36	0.20	0.31	0.15	0.16	0.13
Voters: Right	0.49	0.40	0.39	0.32	0.35	0.44	0.81	0.76

Summary statistics

Table 3: Summary Statistics – High-income countries 3 Go back

	South Korea		Spain		U.K.		U.S.	
	Population	Raw sample	Population	Raw sample	Population	Raw sample	Population	Raw sample
Sample size	NA	1,932	NA	2,268	NA	2,025	NA	2,218
Male	0.50	0.56	0.49	0.49	0.50	0.52	0.50	0.47
18-24 years old	0.10	0.09	0.08	0.10	0.10	0.09	0.12	0.12
25-34 years old	0.16	0.19	0.12	0.14	0.17	0.19	0.18	0.18
35-49 years old	0.27	0.31	0.28	0.29	0.24	0.24	0.24	0.25
More than 50 years old	0.47	0.40	0.51	0.48	0.49	0.48	0.46	0.45
Income Q1	0.25	0.27	0.25	0.25	0.25	0.27	0.20	0.26
Income Q2	0.25	0.28	0.25	0.27	0.25	0.25	0.24	0.28
Income Q3	0.25	0.32	0.25	0.23	0.25	0.21	0.24	0.26
Income Q4	0.25	0.13	0.25	0.25	0.25	0.27	0.31	0.20
Region 1	0.25	0.24	0.19	0.21	0.21	0.21	0.21	0.20
Region 2	0.34	0.37	0.30	0.28	0.13	0.13	0.17	0.18
Region 3	0.19	0.23	0.11	0.10	0.24	0.23	0.38	0.39
Region 4	0.22	0.17	0.13	0.15	0.11	0.10	0.24	0.23
Region 5	NA	NA	0.28	0.26	0.31	0.33	NA	NA
Urban	0.92	0.95	0.70	0.75	0.82	0.84	0.73	0.72
College education (25-64)	0.51	0.74	0.40	0.57	0.49	0.62	0.61	0.60
Share of voters	0.75	0.87	0.63	0.85	0.60	0.82	0.62	0.82
Voters: Left	0.47	0.63	0.41	0.45	0.39	0.37	0.51	0.57
Voters: Center	0.21	0.11	0.07	0.09	0.12	0.11	NA	NA
Voters: Right	0.31	0.17	0.36	0.25	0.46	0.47	0.47	0.36

Summary statistics

Table 4: Summary Statistics – Middle-income countries 1 Go back

	Brazil		China		India		Indonesia	
	Population	Raw sample	Population	Raw sample	Population	Raw sample	Population	Raw sample
Sample size	NA	1,860	NA	1,717	NA	2,472	NA	2,488
Male	0.49	0.45	0.51	0.54	0.51	0.58	0.50	0.52
18-24 years old	0.15	0.16	0.10	0.12	0.18	0.23	0.17	0.19
25-34 years old	0.22	0.23	0.20	0.26	0.24	0.27	0.23	0.26
35-49 years old	0.30	0.32	0.28	0.35	0.29	0.24	0.31	0.31
More than 50 years old	0.34	0.29	0.42	0.27	0.28	0.26	0.29	0.24
Income Q1	0.25	0.24	0.25	0.13	0.25	0.27	0.25	0.28
Income Q2	0.25	0.30	0.25	0.25	0.25	0.24	0.25	0.24
Income Q3	0.25	0.24	0.25	0.29	0.25	0.25	0.25	0.23
Income Q4	0.25	0.22	0.25	0.32	0.25	0.24	0.25	0.25
Region 1	0.08	0.07	0.29	0.31	0.27	0.20	0.08	0.07
Region 2	0.09	0.04	0.12	0.17	0.26	0.25	0.30	0.31
Region 3	0.27	0.28	0.08	0.05	0.13	0.15	0.13	0.11
Region 4	0.14	0.15	0.29	0.23	0.20	0.24	0.21	0.20
Region 5	0.42	0.45	0.22	0.24	0.14	0.17	0.27	0.31
Urban	0.69	0.77	0.63	0.53	0.36	0.46	0.57	0.62
College education (25-64)	0.20	0.64	0.10	0.59	0.09	0.72	0.13	0.45
Share of voters	0.67	0.92	NA	NA	0.65	0.79	0.74	0.90
Voters: Left	0.30	0.24	NA	NA	0.39	0.27	0.19	0.42
Voters: Center	0.19	0.10	NA	NA	NA	NA	0.17	0.06
Voters: Right	0.50	0.52	NA	NA	0.46	0.61	0.54	0.39

Summary statistics

Table 5: Summary Statistics – Middle-income countries 2 Go back

	Mexico		Turkey		South Africa		Ukraine	
	Population	Raw sample	Population	Raw sample	Population	Raw sample	Population	Raw sample
Sample size	NA	2,045	NA	1,932	NA	2,003	NA	1,564
Male	0.48	0.49	0.49	0.43	0.49	0.46	0.45	0.61
18-24 years old	0.18	0.18	0.16	0.18	0.21	0.21	0.08	0.12
25-34 years old	0.23	0.24	0.21	0.24	0.28	0.29	0.18	0.25
35-49 years old	0.30	0.31	0.30	0.34	0.28	0.28	0.28	0.40
More than 50 years old	0.29	0.27	0.33	0.24	0.22	0.22	0.46	0.24
Income Q1	0.25	0.26	0.25	0.14	0.25	0.16	0.25	0.17
Income Q2	0.25	0.27	0.25	0.28	0.25	0.24	0.25	0.24
Income Q3	0.25	0.24	0.25	0.28	0.25	0.32	0.25	0.24
Income Q4	0.25	0.22	0.25	0.30	0.25	0.27	0.25	0.36
Region 1	0.33	0.38	0.25	0.28	0.12	0.09	0.31	0.37
Region 2	0.22	0.18	0.18	0.12	0.24	0.29	0.21	0.17
Region 3	0.10	0.10	0.30	0.34	0.18	0.17	0.22	0.26
Region 4	0.13	0.12	0.26	0.26	0.33	0.26	0.25	0.20
Region 5	0.23	0.22	NA	NA	0.13	0.18	NA	NA
Urban	0.64	0.81	0.87	0.96	0.49	0.63	0.70	0.88
College education (25-64)	0.19	0.66	0.16	0.65	0.16	0.49	NA	0.67
Share of voters	0.53	0.86	0.83	0.88	0.44	0.67	0.53	0.76
Voters: Left	0.56	0.54	0.35	0.30	0.68	0.45	0.16	0.19
Voters: Center	0.18	0.10	0.10	0.07	0.21	0.32	0.67	0.69
Voters: Right	0.19	0.20	0.55	0.50	0.06	0.04	0.13	0.03

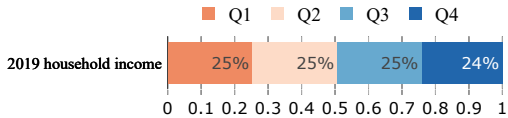
Descriptive statistics

on the control group

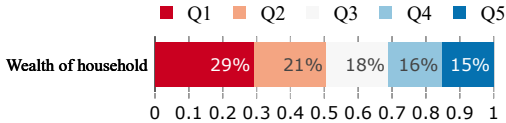
Household Characteristics

Income/wealth

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

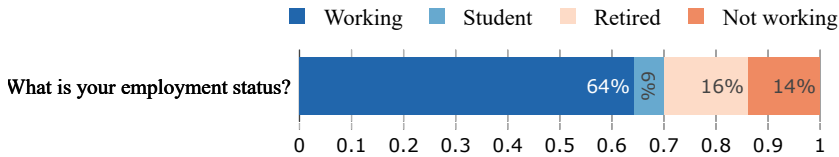


What is the estimated value of your assets, or the assets of your household if you are married (in [currency])? Include here all your possessions (home, car, savings, etc.) net of debt. For example, if you own a house worth $300,000 and you have $100,000 left to repay on your mortgage, your assets are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

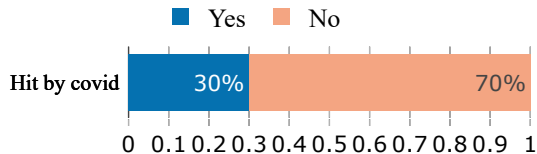


Employment and hit by covid

What is your employment status?

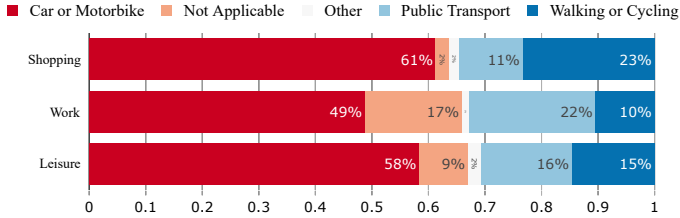


Have you or a member of your household been laid off or had to take a cut in your salary or wages due to the COVID-19 pandemic?

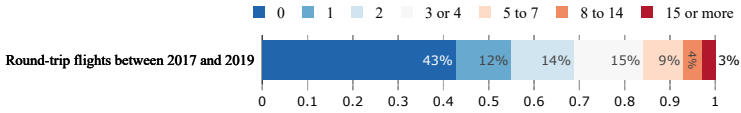


Drivers more than fliers

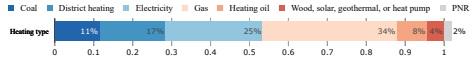
Which mode of transport did you mainly use for each of the following trips in 2019?



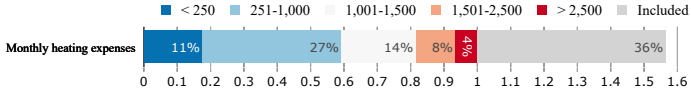
How many round-trip flights did you take between 2017 and 2019?



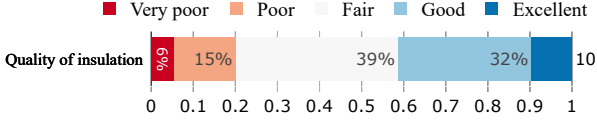
What is the main way you heat your home



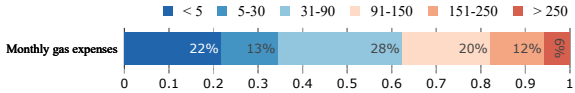
In a typical month, how much do you spend on heating for your accommodation (in €)?



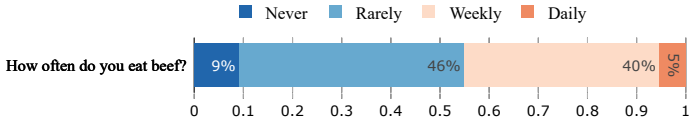
How do you rate the insulation of your accommodation?



In a typical month, how much do you spend on gas for driving (in €)?



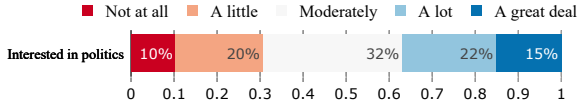
How often do you eat beef?



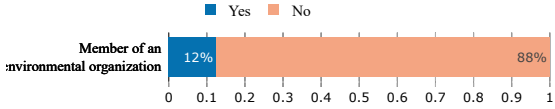
Political leaning

Little interest for politics

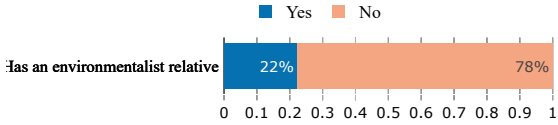
To what extent are you interested in politics?



Are you member of an environmental organization?

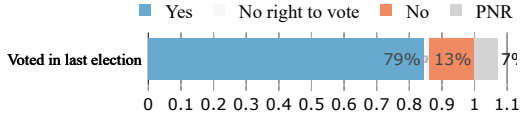


Do you have any relatives who are environmentalists?

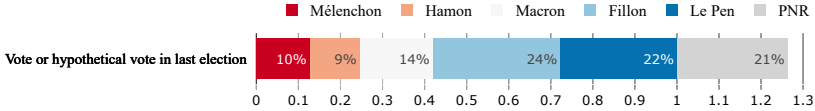


Broadly representative political leaning

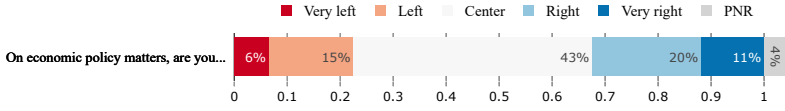
Did you vote in the [last Country] election?



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



On economic policy matters, where do you see yourself on the left/right spectrum?



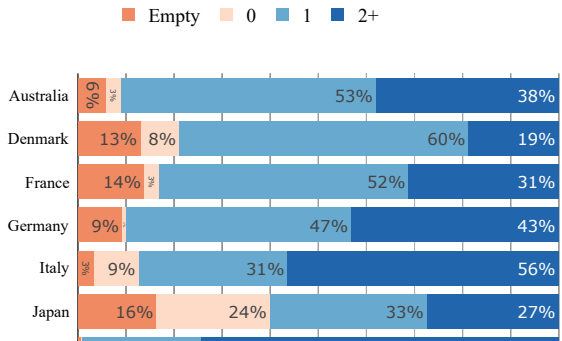
Open field

Open field – broad classification

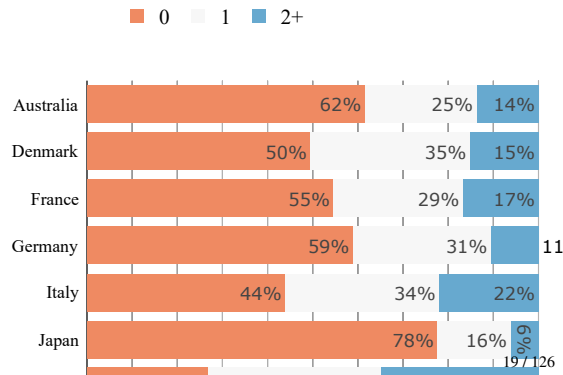
When thinking about climate change, what are your main considerations? What should the [country] government do regarding climate change? Please write as much as you would like, your response will be very useful.

I manually treated a fourth of fields in Denmark, France and the U.S.: read them and classified them. Go back

Number of elements present



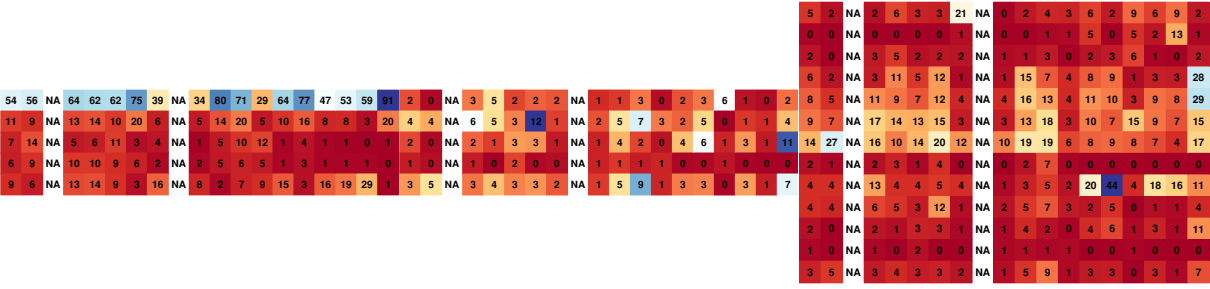
Number of actions mentioned



Open field – mentions

Go back

Content of the field (left) | Instruments mentioned (middle) | Elements mentioned (right)



US: “I live by some of the largest plants in the country. I worry about the jobs of people in my area getting cut before there is a safe sustainable alternative.”

“Cutting my carbon footprint has become increasingly important to me. I’m WFH now during Covid & hope to stay that way post-Covid. I found my 3 hour a day commute on public transportation to be inconvenient but I stuck with it because I felt it was the responsible thing to do”

DK: “shoot all vegans, they fart at least as much as cows”

“Introduction of a uniform tax of DKK 1,500 per tonnes of CO2 equivalents”

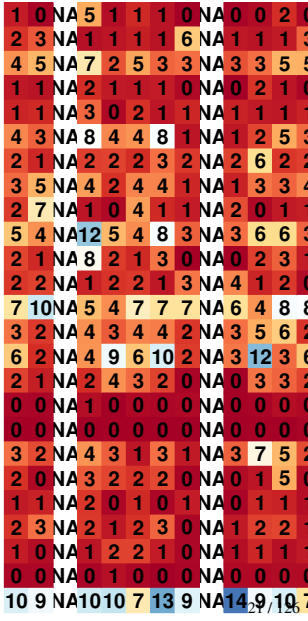
“That we should have more wind farms. And biogas plants. But do not cut back on beef and agriculture”

FR: “Use less gas and solar panels.”

“First of all, it must be tackled on a global level, which is far from being the case. If it is to be tackled, it is necessary to warn the populations and tell them what awaits them, which is not being done at the moment”

“not my problem”

“we are screwed”



Open field – subjective impressions

Go back

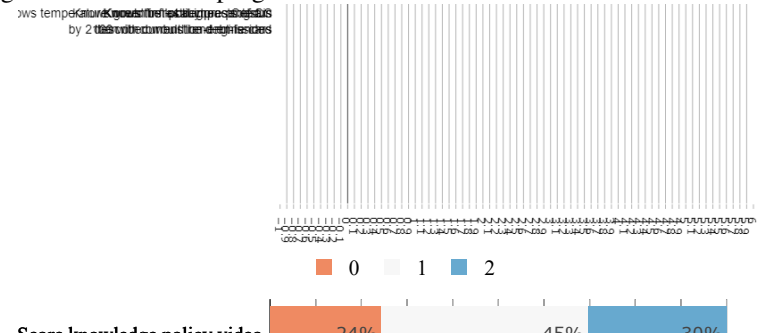
- **U.S.: heated.** Debate is about whether climate change is natural or man-made, if we can do something against it (or too late) and if it is worth it to do so (as later generations will adapt by natural selection anyway).
  U.S.-specific topics: No mention of meat whatsoever, very few of plane; CC denial: CC is natural; too late to act / impossible to curb climate change; less harm adapting than mitigating; solar; need that other countries act / international cooperation; questions; climate education; retraining; research.
- **Denmark: thoughtful.** Debate is about speed and extent of the transition, notably on legislation regarding meat. Need for transition seem acknowledged, the critical comments are often like: be reasonable, don't go faster than other countries otherwise pollution will just be relocated through more imports.
  Denmark-specific topics: Talk a lot about meat, not at all of plane; sometimes: international; overpopulation; education; social justice; nuclear.
- **France: disillusioned.**
  France-specific topics: Pollution; reduce mobility; sensibilise/educate; tax firms (not people).

Treatments

Watched climate and/or policy videos attentively

Number of wrong answers when answering two knowledge questions about the content of the videos

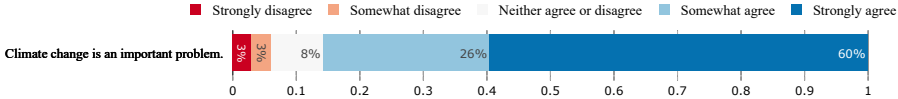
- What will be the rise in global average temperature in 2100 if greenhouse gas emissions continue on their current trend?
- In the absence of ambitious action against climate change, how frequent will extreme temperatures occur across the [country] by the end of the century?
- What is the emission limit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



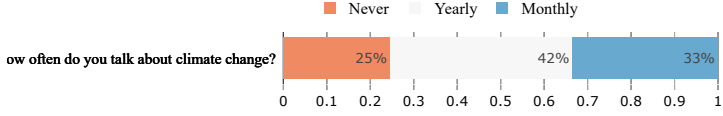
Climate Knowledge

Climate change acknowledged as a serious problem

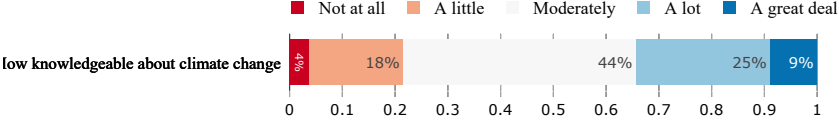
Do you agree or disagree with the following statement: “Climate change is an important problem."



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

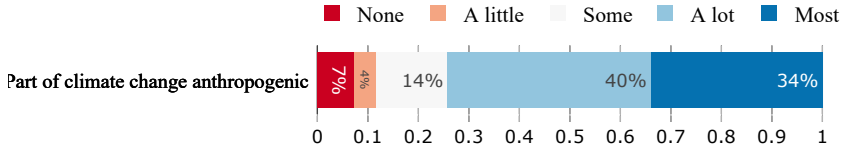


How knowledgeable do you consider yourself about climate change? ▸ Go back

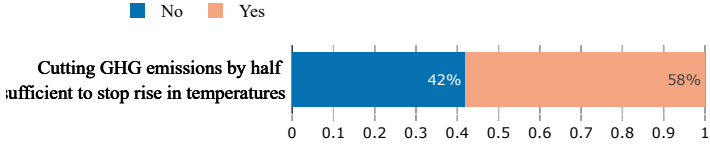


Limited understanding of climate science

What part of climate change do you think is due to human activity? *Right answer: Most*

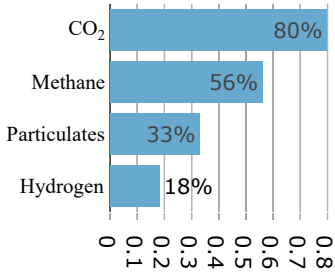


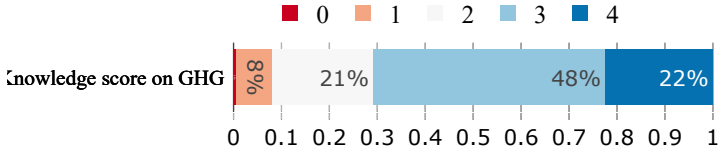
Do you think that cutting global greenhouse gas emissions by half would be sufficient to eventually stop temperatures from rising? *Right answer: No* ▸ Go back



Some mistakes on the factors of climate change

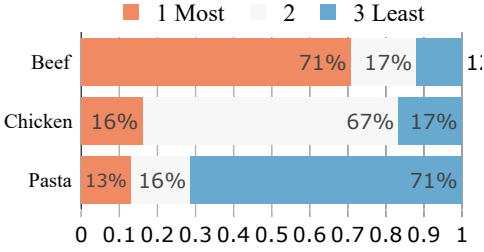
Which of the following elements contribute to climate change? (Multiple answers are possible)
Right answer: CO_2; Methane





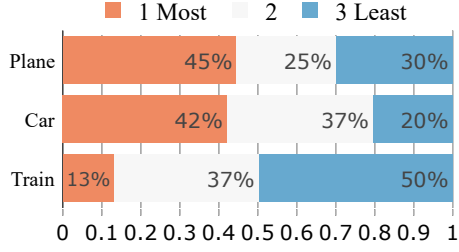
Which dish emits the most greenhouse gases? We consider that each dish weighs 200g. Please rank the items from 1 (most) to 3 (least).

Right answer: Beef (1), Chicken (2), Pasta (3)



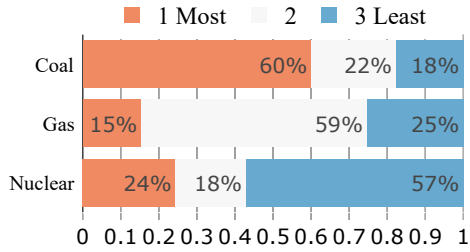
If a family of 4 travels 800 km from Bordeaux to Nice, with which mode of transportation do they emit the most greenhouse gases? Please rank the items from 1 (most) to 3 (least).

Right answer: Plane (1), Car (2), Train (3)



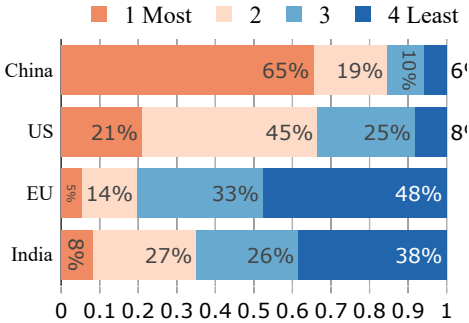
Which source of electric energy emits the most greenhouse gases to provide power for a house?

Right answer: Coal (1), Gas (2), Nuclear (3) ‣ Go back

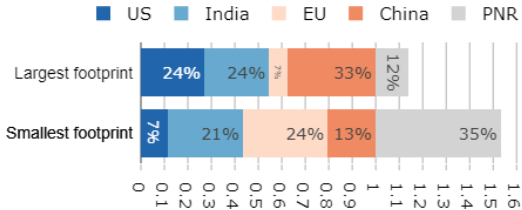


Underestimation of EU emissions

(a) Which region contributes most to global greenhouse gas emissions?
Right answer: China (1), US (2), EU (3), India (4)



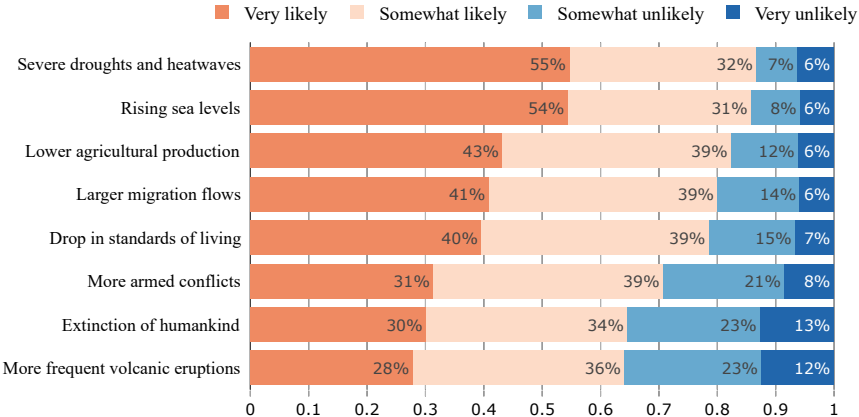
(b) In which region does the consumption of an average person contribute most to climate change?
Right answer: US (1), EU (2), China (3), India (4)



Impacts of climate change: Credit a lot of effects

If nothing is done to limit climate change, how likely do you think it is that climate change will lead to the following events? ‣ Go back

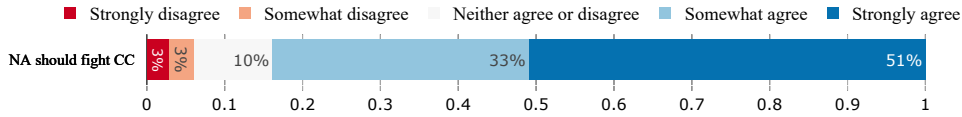
Right answer: Very likely: Severe droughts and heatwaves; Rising sea levels
Very unlikely: More frequent volcanic eruptions (No scientific certainty on the other items)



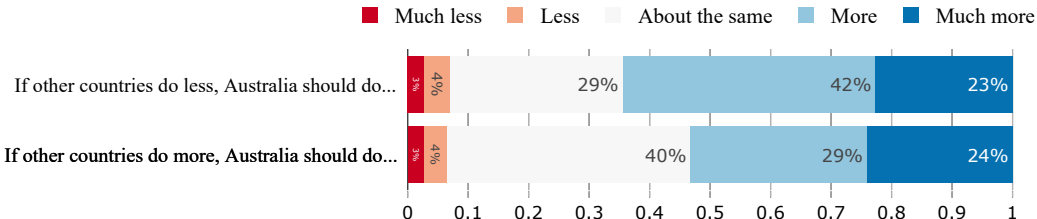
Climate Attitudes

In principle, high support for climate action

Do you agree or disagree with the following statement: “[Country] should take measures to fight climate change.” ▸ Go back

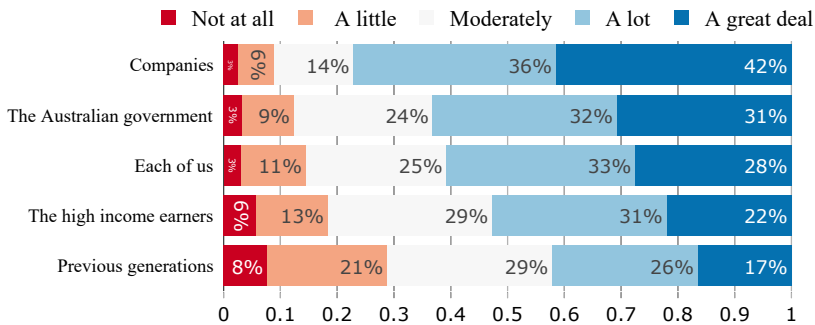


How should [country] climate policies depend on what other countries do?



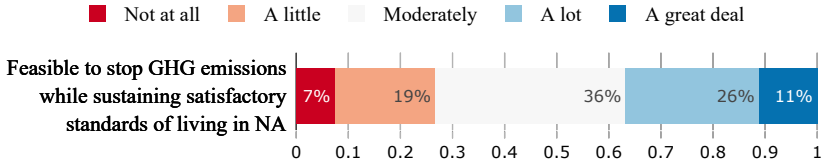
Companies held responsible

To what extent are the following groups responsible for climate change in [Country]? Go back

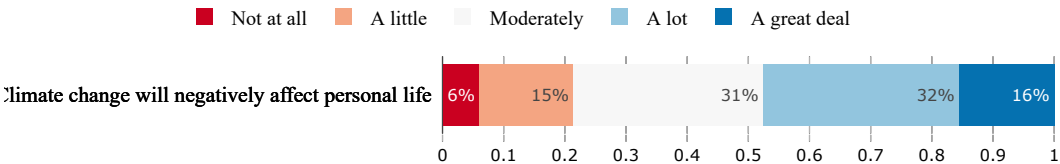


Balance between optimistic and pessimistic

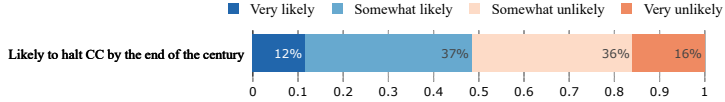
To what extent do you think that it is technically feasible to stop greenhouse gas emissions while maintaining satisfactory standards of living in [Country]?



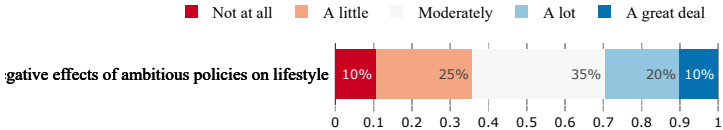
To what extent do you think climate change already affects or will negatively affect your personal life? Go back



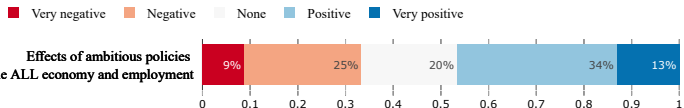
How likely is it that human kind halt climate change by the end of the century?



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

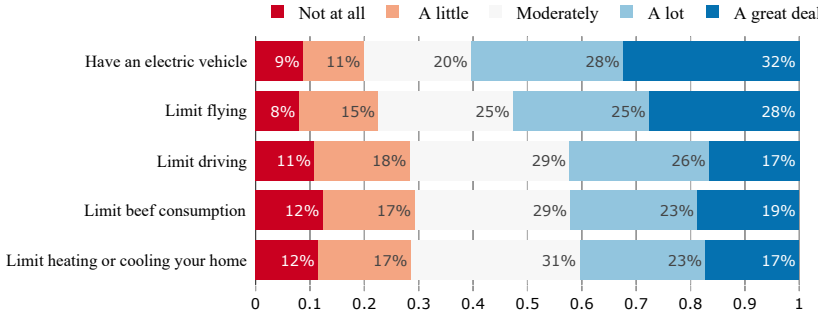


If we decide to halt climate change through ambitious policies, what would be the effects on the [country] economy and employment? ‣ Go back



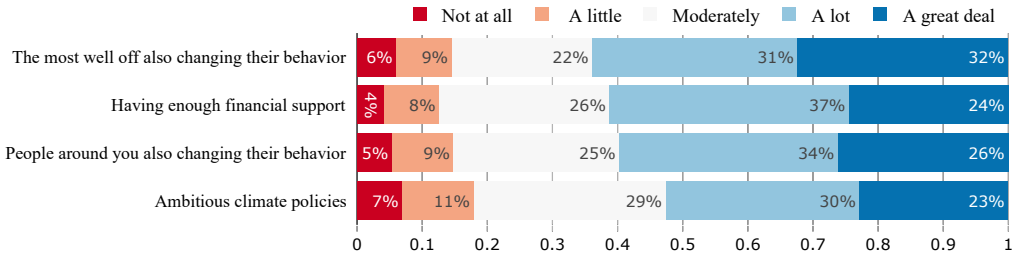
Willing to adopt the less restrictive behaviors

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? ‣ Go back

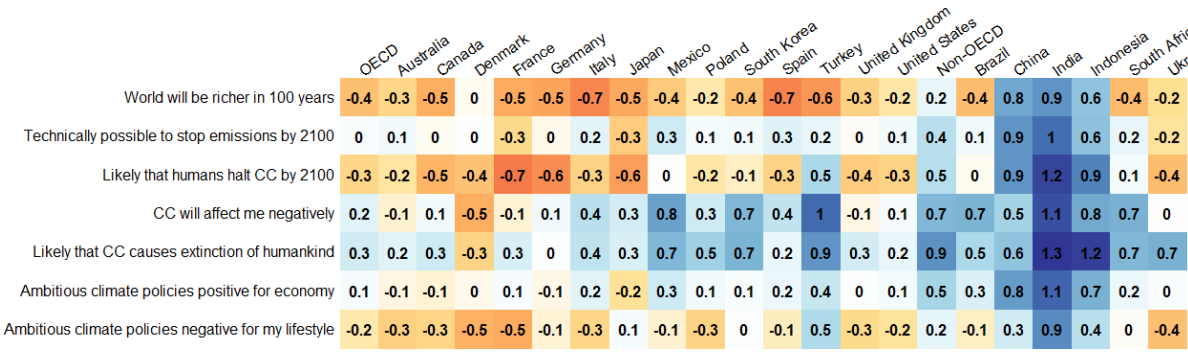


Main factor needed to change lifestyle: fairness

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.)? ‣ Go back



Average answer on different questions recoded as [-2;+2]. ▸ Go back



	OECD	Australia	Canada	Denmark	France	Germany	Italy	Japan	Mexico	Poland	South Korea	Spain	Turkey	United Kingdom	United States	Non-OECD	Brazil	China	India	Indonesia	South Africa	Ukrai
World will be richer in 100 years	-0.4	-0.3	-0.5	0	-0.5	-0.5	-0.7	-0.5	-0.4	-0.2	-0.4	-0.7	-0.6	-0.3	-0.2	0.2	-0.4	0.8	0.9	0.6	-0.4	-0.2
Technically possible to stop emissions by 2100	0	0.1	0	0	-0.3	0	0.2	-0.3	0.3	0.1	0.1	0.3	0.2	0	0.1	0.4	0.1	0.9	1	0.6	0.2	-0.2
Likely that humans halt CC by 2100	-0.3	-0.2	-0.5	-0.4	-0.7	-0.6	-0.3	-0.6	0	-0.2	-0.1	-0.3	0.5	-0.4	-0.3	0.5	0	0.9	1.2	0.9	0.1	-0.4
CC will affect me negatively	0.2	-0.1	0.1	-0.5	-0.1	0.1	0.4	0.3	0.8	0.3	0.7	0.4	1	-0.1	0.1	0.7	0.7	0.5	1.1	0.8	0.7	0
Likely that CC causes extinction of humankind	0.3	0.2	0.3	-0.3	0.3	0	0.4	0.3	0.7	0.5	0.7	0.2	0.9	0.3	0.2	0.9	0.5	0.6	1.3	1.2	0.7	0.7
Ambitious climate policies positive for economy	0.1	-0.1	-0.1	0	0.1	-0.1	0.2	-0.2	0.3	0.1	0.1	0.2	0.4	0	0.1	0.5	0.3	0.8	1.1	0.7	0.2	0
Ambitious climate policies negative for my lifestyle	-0.2	-0.3	-0.3	-0.5	-0.5	-0.1	-0.3	0.1	-0.1	-0.3	0	-0.1	0.5	-0.3	-0.2	0.2	-0.1	0.3	0.9	0.4	0	-0.4

Comparison across the 3 Policies:

Main policies seen as effective but not progressive

Go back

	Green Infrastructure Program			Carbon Tax w. Cash Transfers			Ban on Combustion-Engine Cars		
	High Income	Indonesia India China	Ohter Middle Income	High Income	Indonesia India China	Ohter Middle Income	High Income	Indonesia India China	Ohter Middle Income
Effects of Main Climate Policies									
Reduce air pollution	92	95	93	86	96	90	91	95	93
Reduce GHG emissions/Reduce CO_2 emissions from cars				84	94	86	88	92	90
Make electricity production greener	89	94	91						
Encourage insulation of buildings				84	91	85			
Increase the use of public transport/Encourage less driving	82	93	85	69	90	79			
Positive effect on economy and employment	59	62	63	51	58	58	54	56	54
Costless way to fight climate change	43	50	51	39	49	47	40	49	49
Distributional Impats of Main Climate Policies									
Believes the following groups would gain									
Own household	44	89	67	37	82	46	27	75	40
Those living in rural areas	39	87	58	33	81	45	23	76	34
Low-income earners	32	82	56	32	76	43	17	69	33
The middle class	39	79	64	35	74	45	24	68	38
High-income earners	73	72	74	63	71	61	73	67	67
Perceived Fairness and Support									
Support main climate policies	79	95	91	56	90	70	56	90	75
Main climate policies are fair	75	94	88	55	88	68	55	87	71

Policies precisely described

Ban on Combustion Engine Cars: To fight climate change, car producers can be required by law to produce cars that emit less CO_2 per km 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*.

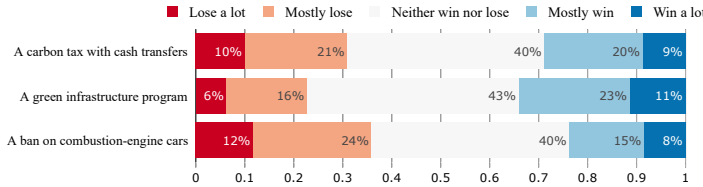
Green Infrastructure Program: A green infrastructure program is a large public investment program, which would be financed by additional public debt, to accomplish the transition needed to cut greenhouse gases emissions. Investments would concern renewable power plants, public transportation, thermal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

Carbon Tax with Cash Transfers: To fight climate change, the [country] 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 10 cents per liter. 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 160€ per year.

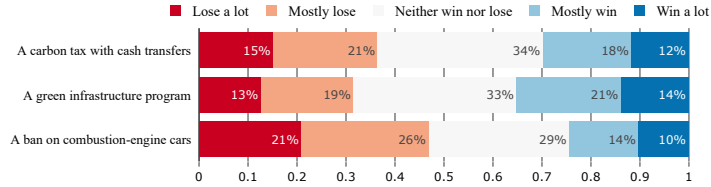
▸ Go back

Many think they would lose out

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

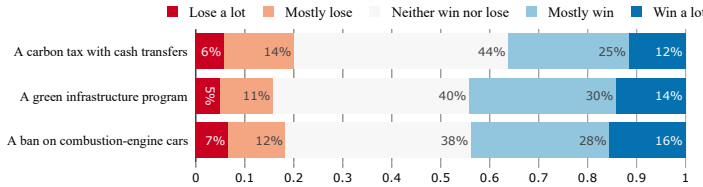


Comparison of responses to each policy question: In your view, would those living in rural areas win or lose from *the following policy*?

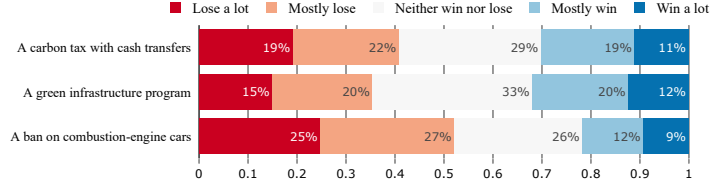


Most view rich winning and poor losing

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

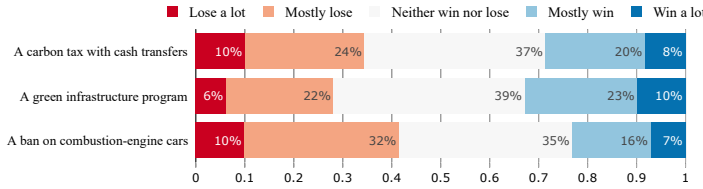


Comparison of responses to each policy question: In your view, would low-income earners win or lose from *the following policy*?

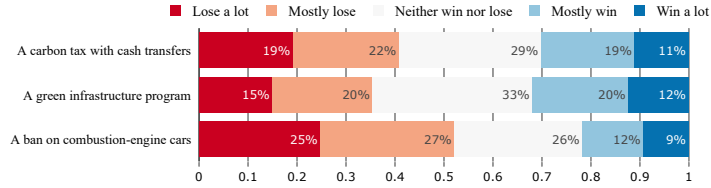


See the middle class gains close to the poor's

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

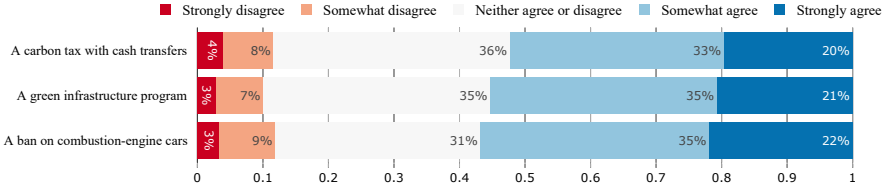


Comparison of responses to each policy question: In your view, would low-income earners win or lose from *the following policy*?

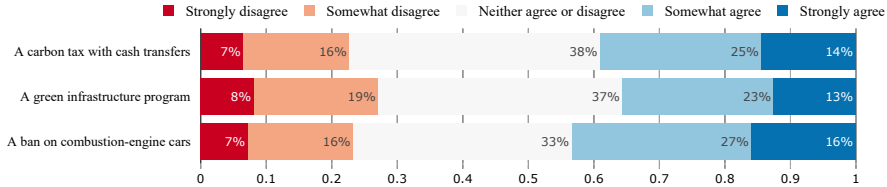


Only investments gather more positive than negative views

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 [country] economy and employment.

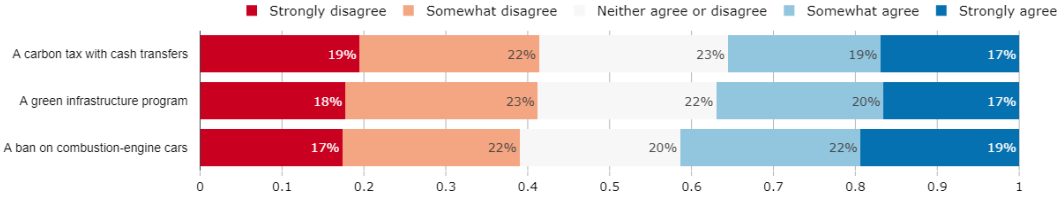


Comparison of responses to each policy question: Do you agree or disagree with the following statement? *The policy* would have a **negative** effect on the [country] economy and employment.

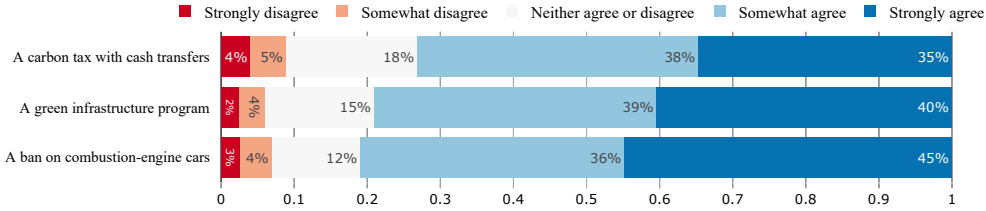


Policies seen as costly but effective

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

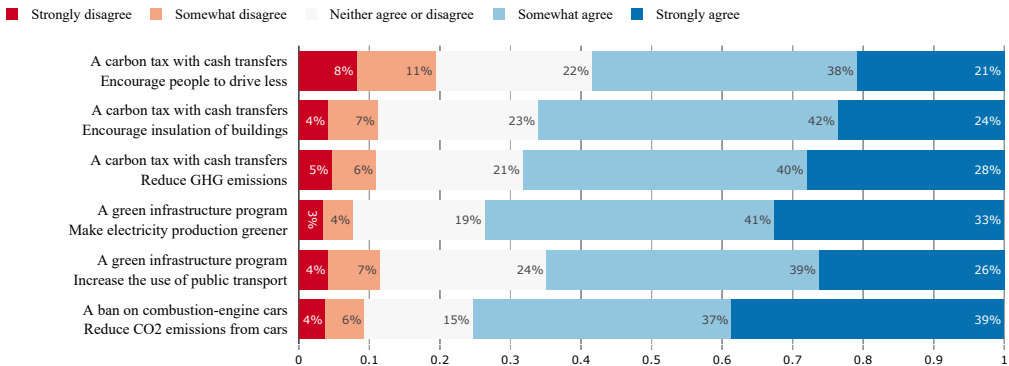


would reduce air pollution



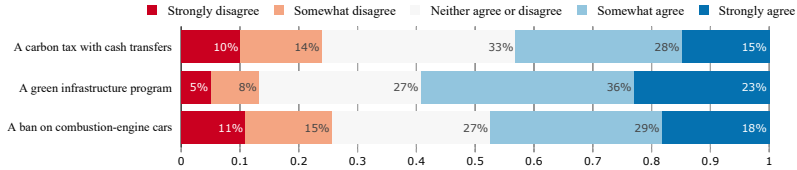
Incentives are acknowledged

Comparison of responses to each policy question: Do you agree or disagree with the following statement? *The policy* would ...

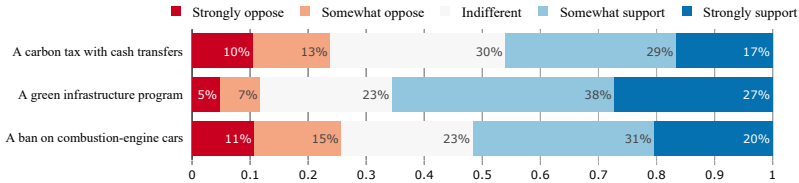


Fairness as main motive for support

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

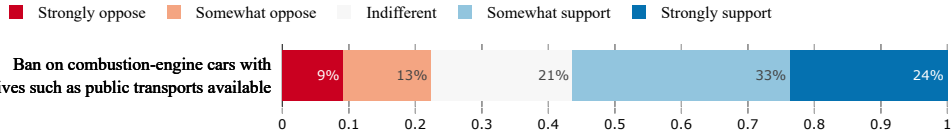


Comparison of responses to each policy question: Do you support or oppose *the following policy*?

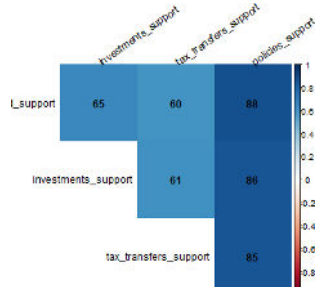


Ban on thermal cars supported if completed by investments

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

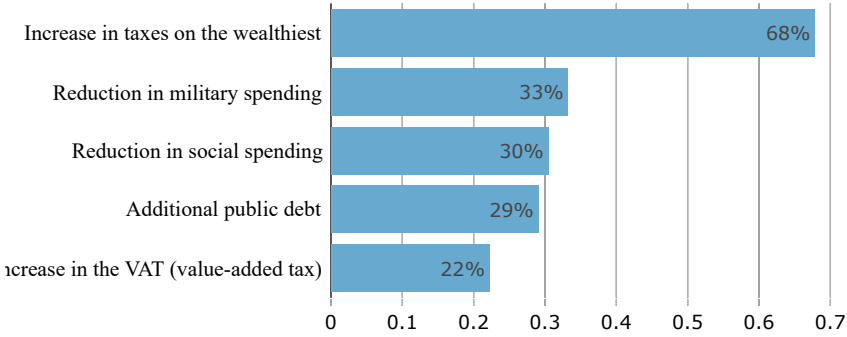


Sizable correlation between support of the 3 policies (coded as [-2;+2]).



Redistributive taxes foster support

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)

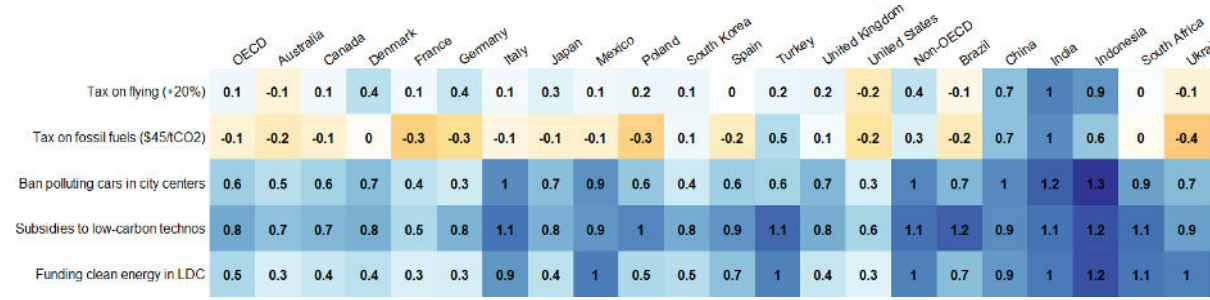


Average answer on different questions recoded as [-2;+2].

	OECD	Australia	Canada	Denmark	France	Germany	Italy	Japan	Mexico	Poland	South Korea	Spain	Turkey	United Kingdom	United States	Non-OECD	Brazil	China	India	Indonesia	South Africa	Ukra
A carbon tax with cash transfers	0.1	-0.1	0.1	0	-0.2	-0.3	0.3	0.1	0.4	0	0.5	0.1	0.6	0.1	0	0.7	0.4	0.9	1.2	1	0.5	0.2
A green infrastructure program	0.7	0.4	0.5	0.5	0.5	0.1	1.1	0.5	1.2	0.6	0.8	0.8	1.2	0.6	0.4	1.1	1.1	1.1	1.2	1.3	1	0.8
A ban on combustion-engine cars	0.2	0	0.2	0	-0.3	-0.3	0.4	0.2	0.7	0.1	0.4	0.3	0.8	0.2	0.1	0.8	0.6	0.8	1.2	1	0.5	0.4
Ban on combustion cars where public transport made available	0.3	0.1	0.2	0.1	0.1	0	0.6	0.4	0.7	0.2	0.6	0.4	0.8	0.3	0.2	0.9	0.6	1	1.1	1.1	0.7	0.6

Other Climate Policies

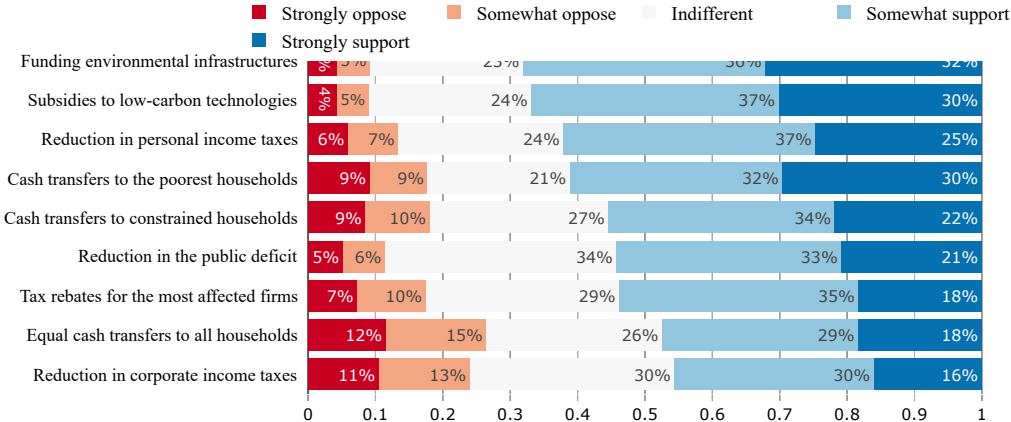
Average answer on different questions recoded as [-2;+2].



	OECD	Australia	Canada	Denmark	France	Germany	Italy	Japan	Mexico	Poland	South Korea	Spain	Turkey	United Kingdom	United States	Non-OECD	Brazil	China	India	Indonesia	South Africa	Ukra
Tax on flying (+20%)	0.1	-0.1	0.1	0.4	0.1	0.4	0.1	0.3	0.1	0.2	0.1	0	0.2	0.2	-0.2	0.4	-0.1	0.7	1	0.9	0	-0.1
Tax on fossil fuels ($45/tCO2)	-0.1	-0.2	-0.1	0	-0.3	-0.3	-0.1	-0.1	-0.1	-0.3	0.1	-0.2	0.5	0.1	-0.2	0.3	-0.2	0.7	1	0.6	0	-0.4
Ban polluting cars in city centers	0.6	0.5	0.6	0.7	0.4	0.3	1	0.7	0.9	0.6	0.4	0.6	0.6	0.7	0.3	1	0.7	1	1.2	1.3	0.9	0.7
Subsidies to low-carbon technos	0.8	0.7	0.7	0.8	0.5	0.8	1.1	0.8	0.9	1	0.8	0.9	1.1	0.8	0.6	1.1	1.2	0.9	1.1	1.2	1.1	0.9
Funding clean energy in LDC	0.5	0.3	0.4	0.4	0.3	0.3	0.9	0.4	1	0.5	0.5	0.7	1	0.4	0.3	1	0.7	0.9	1	1.2	1.1	1

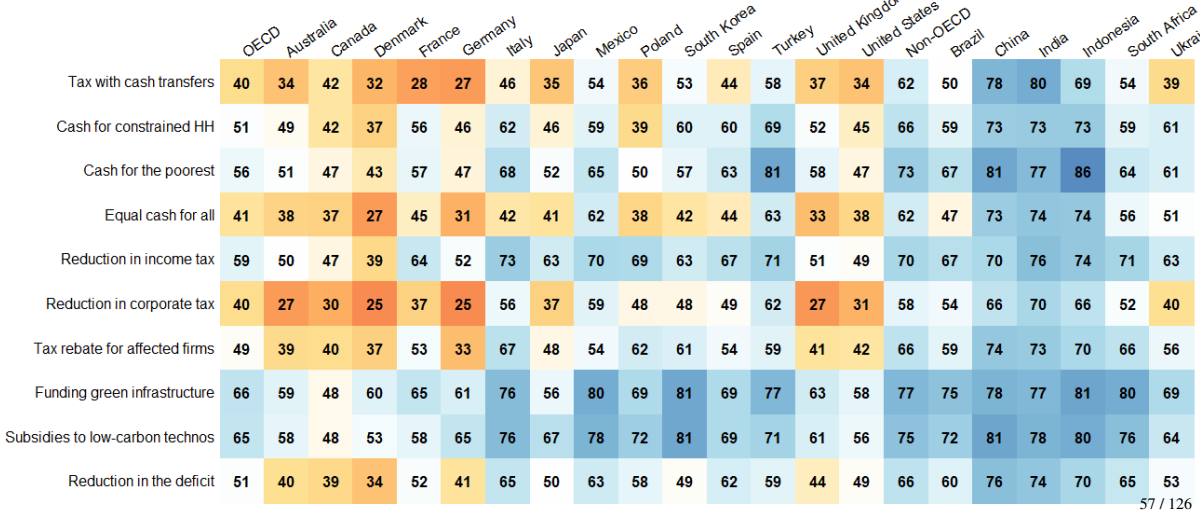
Carbon tax support higher when benefits are made salient

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 10 centimes par litre, if the government used this revenue to finance...



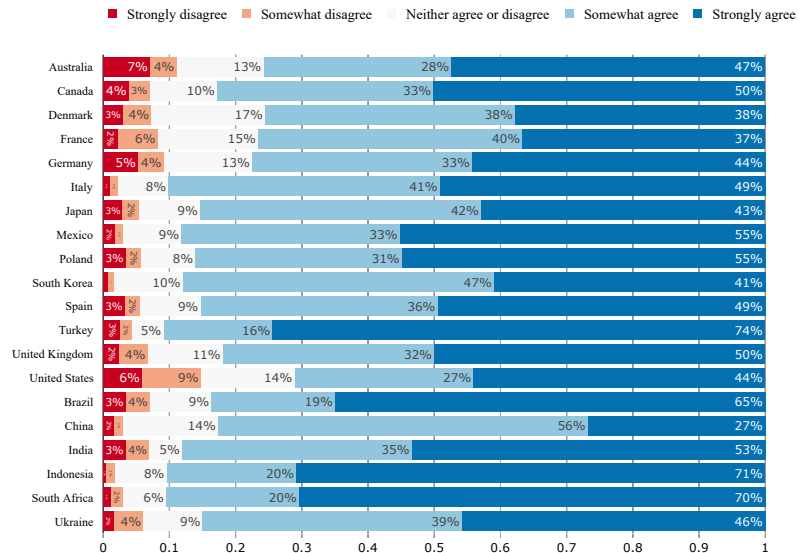
Carbon tax

Percentage of somewhat/strongly support for carbon tax depending on revenue use.

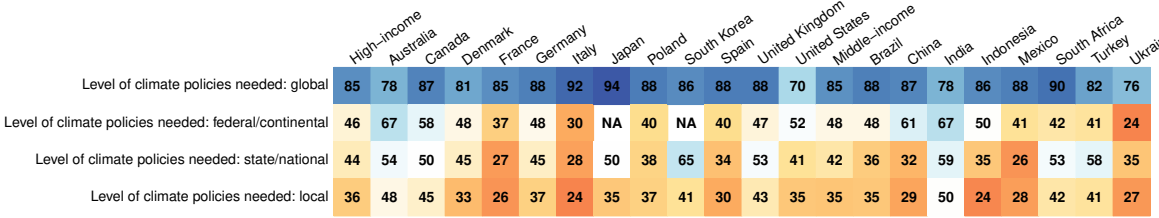


International Burden-Sharing

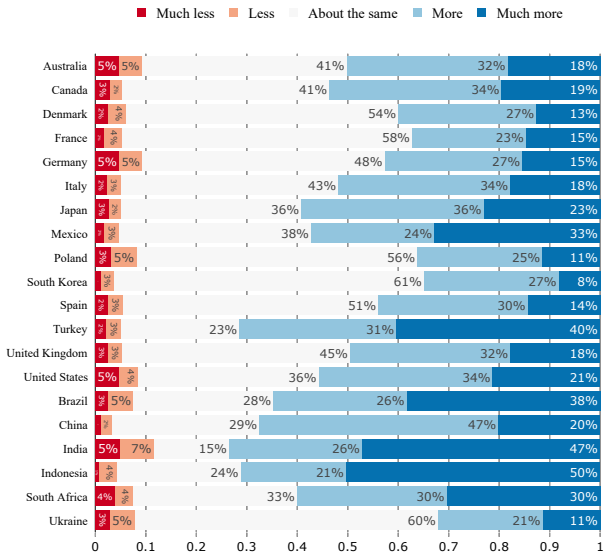
Do you agree or disagree with the following statement: “[country] should take measures to fight climate change.” ▸ Go back



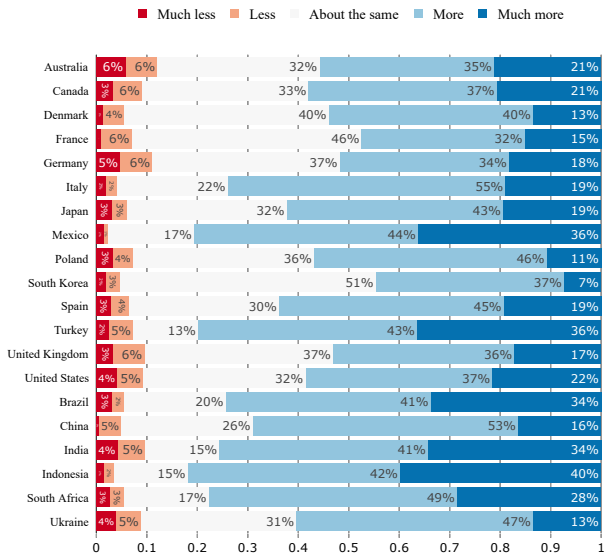
At which level(s) do you think public policies to tackle climate change need to be put in place? (Multiple answers are possible) ▸ Go back



How should [country] climate policies depend on what other countries do?
If other countries do more, [country] should do... ▸ Go back

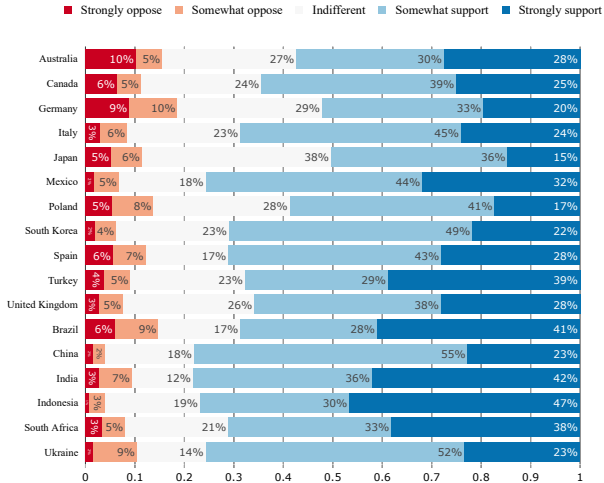


How should [country] climate policies depend on what other countries do?
If other countries do less, [country] should do... ▸ Go back



[Question non posée aux U.S., au Danemark et en France] All countries have signed the Paris agreement that aims to contain global warming “well below +2 °C”. To limit global warming to this level, there is a maximum amount of greenhouse gases we can emit globally, called the carbon budget. Each country could aim to emit less than a share of the carbon budget. To respect the global carbon budget, countries that emit more than their national share would pay a fee to countries that emit less than their share.

Do you support such a policy? ‣ Go back



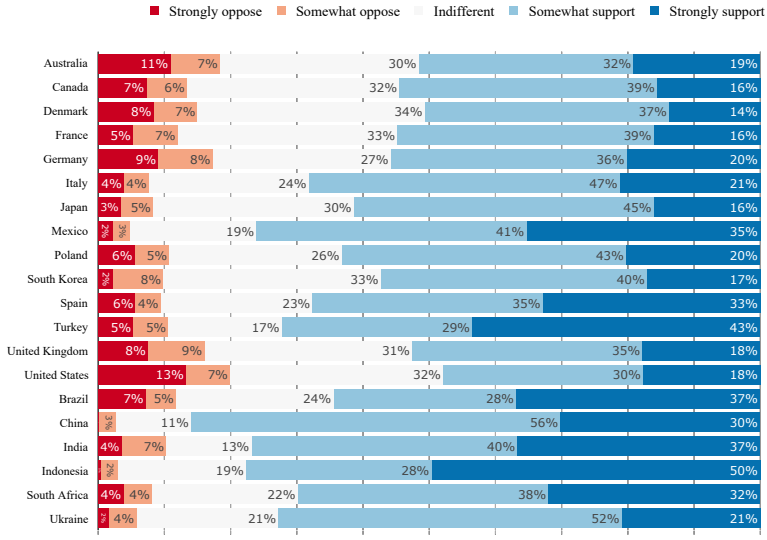
[*Question not asked in the U.S., Denmark and France, answers to a similar question are displayed]
Suppose the above policy is in place. How should the carbon budget be divided among countries?
The emission share of a country should be proportional to its population, so that each human has an equal right to emit.; The emission share of a country should be proportional to its current emissions, so that those who already emit more have more rights to emit.; Countries that have emitted more over the past decades (from 1990 onwards) should receive a lower emission share, because they have already used some of their fair share.; Countries that will be hurt more by climate change should receive a higher emission share, to compensate them for the damages.
Percentage of support (somewhat or strong) among: *Strongly oppose; Somewhat oppose; Neither support nor oppose; Somewhat support; Strongly support*

Go back

	High−income	Australia	Canada	Denmark*	France*	Germany	Italy	Japan	Poland	South Korea	Spain	United Kingdom	United States*	Middle−income	Brazil	China	India	Indonesia	Mexico	South Africa	Turkey	Ukrai
Emission share should be in proportion to population*	63	62	59	55	71	55	68	53	65	66	66	62	67	72	65	76	75	73	71	75	71	63
Emission share should be in proportion to current emissions	35	35	35	NA	NA	29	33	39	37	42	35	30	NA	50	41	65	60	62	40	38	55	31
Countries that have emitted more since 1990 should receive a lower share*	44	42	45	28	54	45	51	42	44	48	48	42	41	58	56	65	67	63	47	53	58	52
Countries that will be hurt more by CC should receive a higher share*	44	42	39	41	51	37	42	51	53	43	48	38	41	63	58	74	72	70	54	61	60	47

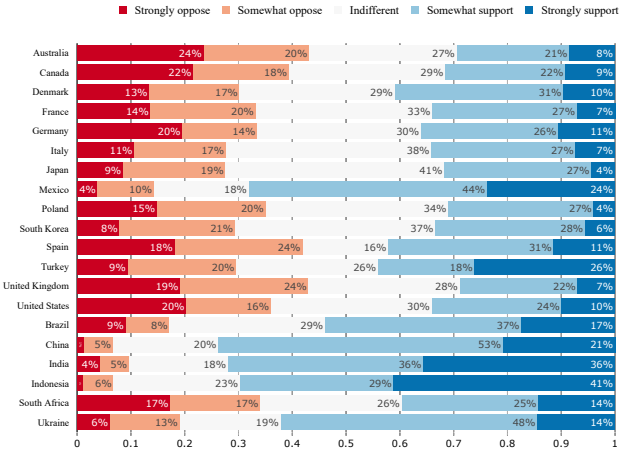
Do you support or oppose establishing a global democratic assembly whose role would be to draft international treaties against climate change? Each adult across the world would have one vote to elect members of the assembly.

Go back



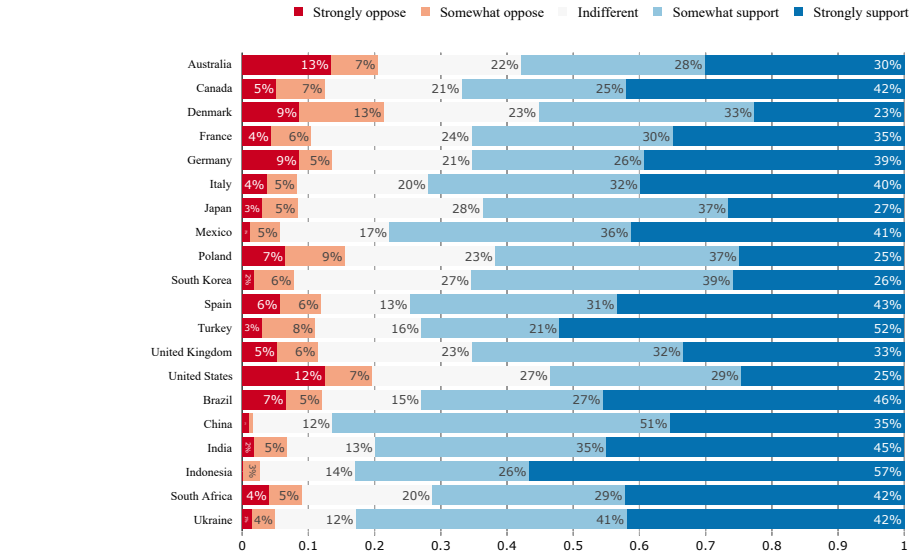
Imagine the following policy: a global tax on greenhouse gas emissions funding a global basic income. Such a policy would progressively raise the price of fossil fuels (for example, the price of gasoline would increase by [40 cents per gallon] in the first years). Higher prices would encourage people and companies to use less fossil fuels, reducing greenhouse gas emissions. Revenues from the tax would be used to finance a basic income of [$30] per month to each human adult, thereby lifting the 700 million people who earn less than $2/day out of extreme poverty. The average British person would lose a bit from this policy as they would face [$130] per month in price increases, which is higher than the [$30] they would receive.

Do you support or oppose such a policy? ‣ Go back



o you support or oppose a tax on all millionaires around the world to finance low-income countries that comply with international standards regarding climate action? This would finance infrastructure and public services such as access to drinking water, healthcare, and education.

Go back



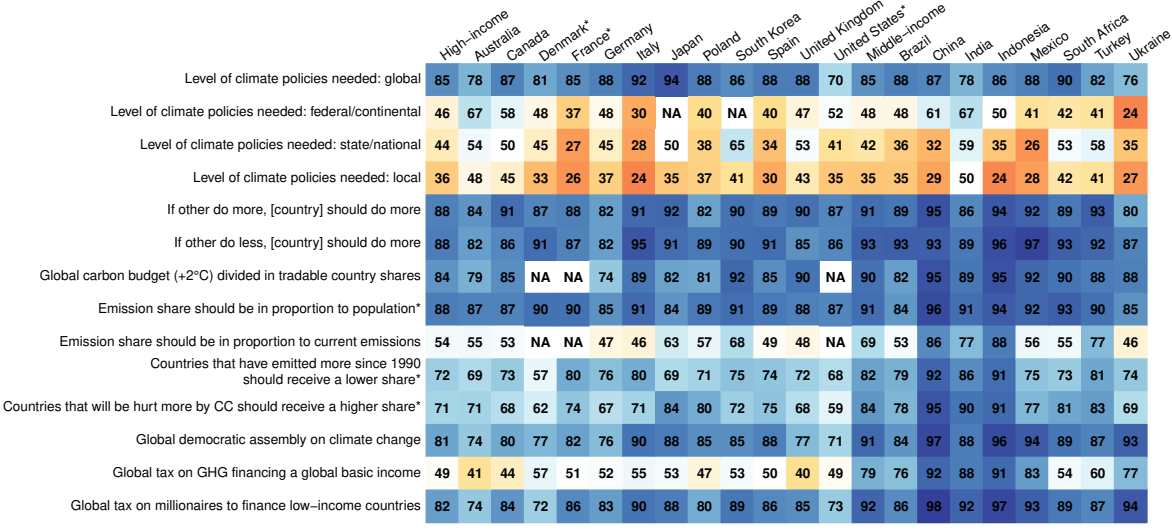
Synthèse : Pourcentage de réponses positive (e.g. Plutôt/Très favorable).

Go back

	High−income	Australia	Canada	Denmark*	France*	Germany	Italy	Japan	Poland	South Korea	Spain	United Kingdom	United States*	Middle−income	Brazil	China	India	Indonesia	Mexico	South Africa	Turkey	Ukraine
Level of climate policies needed: global	85	78	87	81	85	88	92	94	88	86	88	88	70	85	88	87	78	86	88	90	82	76
Level of climate policies needed: federal/continental	46	67	58	48	37	48	30	NA	40	NA	40	47	52	48	48	61	67	50	41	42	41	24
Level of climate policies needed: state/national	44	54	50	45	27	45	28	50	38	65	34	53	41	42	36	32	59	35	26	53	58	35
Level of climate policies needed: local	36	48	45	33	26	37	24	35	37	41	30	43	35	35	35	29	50	24	28	42	41	27
If other do more, [country] should do more	46	50	53	40	37	42	52	59	36	35	44	49	55	63	65	67	73	71	57	60	71	32
If other do less, [country] should do more	56	55	57	54	47	51	74	62	57	44	64	53	58	76	74	69	75	82	80	78	79	60
Global carbon budget (+2°C) divided in tradable country shares	62	57	64	NA	NA	52	69	50	59	71	71	66	NA	74	69	78	78	77	76	71	68	76
Emission share should be in proportion to population*	63	62	59	55	71	55	68	53	65	66	66	62	67	72	65	76	75	73	71	75	71	63
Emission share should be in proportion to current emissions	35	35	35	NA	NA	29	33	39	37	42	35	30	NA	50	41	65	60	62	40	38	55	31
Countries that have emitted more since 1990 should receive a lower share*	44	42	45	28	54	45	51	42	44	48	48	42	41	58	56	65	67	63	47	53	58	52
Countries that will be hurt more by CC should receive a higher share*	44	42	39	41	51	37	42	51	53	43	48	38	41	63	58	74	72	70	54	61	60	47
Global democratic assembly on climate change	57	52	54	51	55	56	68	61	63	57	68	53	48	75	64	86	77	78	76	70	72	73
Global tax on GHG financing a global basic income	34	29	32	41	34	36	34	32	31	33	42	29	34	61	54	74	72	70	68	40	44	62
Global tax on millionaires to finance low−income countries	64	58	67	55	65	65	72	64	62	65	75	65	53	78	73	86	80	83	78	71	73	83

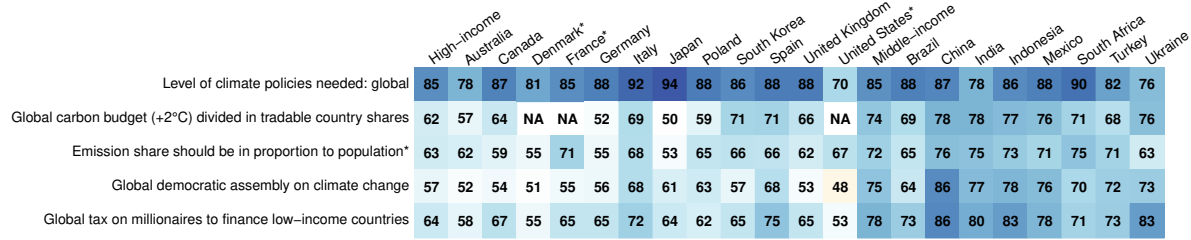
Synthèse : Pourcentage de réponses positive (e.g. *Plutôt/Très favorable*) parmi les non *indifférents*.

Go back



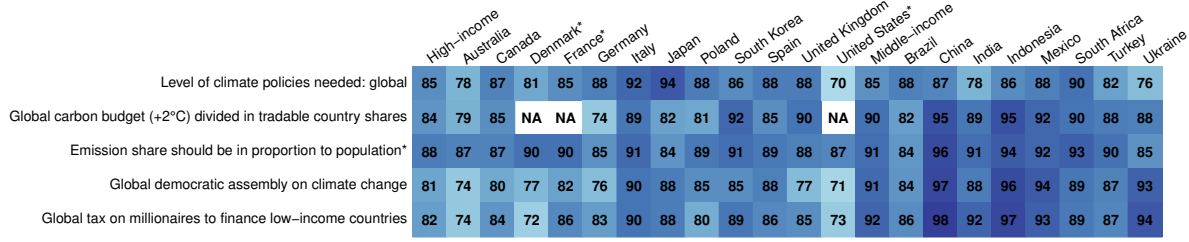
Principales des attitudes sur les politiques mondiales

Pourcentage de réponses positive (e.g. Plutôt/Très favorable). Go back



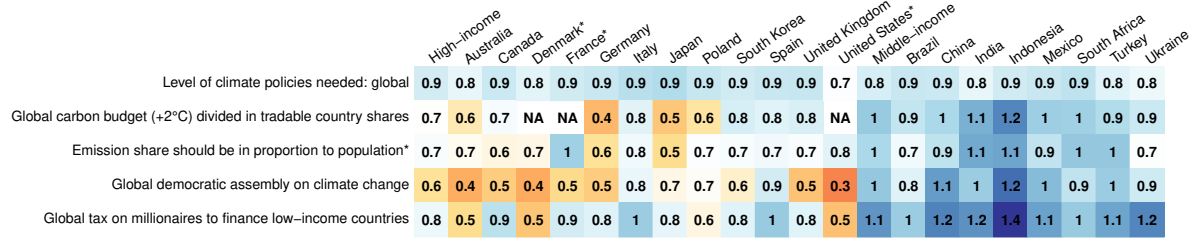
Principales attitudes sur les politiques mondiales

Pourcentage de réponses positive (e.g. *Plutôt/Très favorable*) parmi les non *indifférents*. Go back



Principales attitudes sur les politiques mondiales

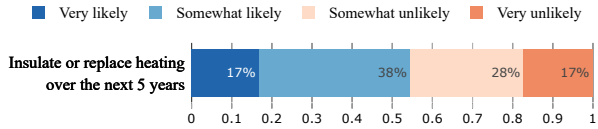
Moyennes des réponses, recodées en $[-2; +2]$. ▸ Go back



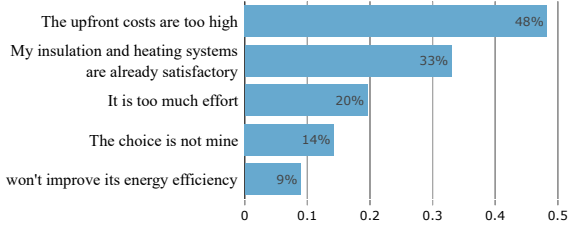
Housing/Preferences for Bans vs. Incentives

Many people ready to insulate if it is paid for

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

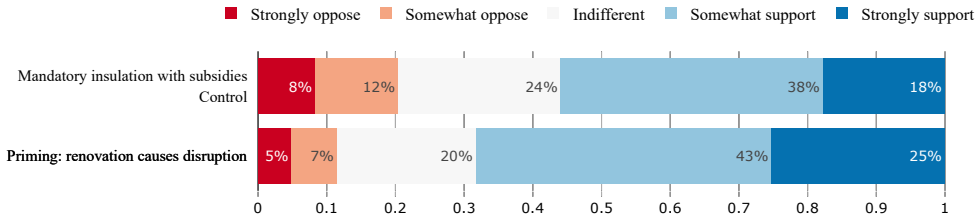


What are the main hurdles preventing you from improving the insulation or replace the heating system of your accommodation? (Multiple answers are possible)



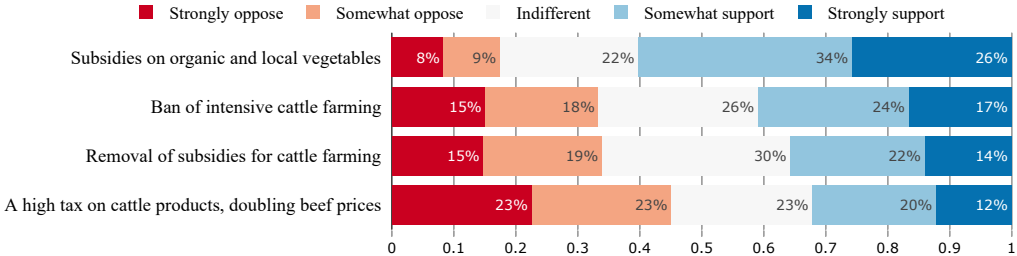
Large support for mandatory insulation with 50% subsidy

Imagine that the [country] 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?



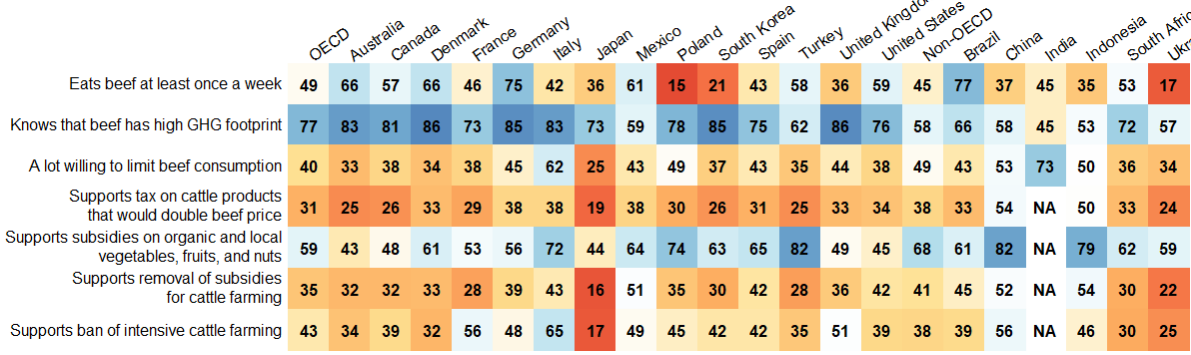
Majority support for ban of intensive farming

Imagine that, in order to fight climate change, the [country] government decides to limit the consumption of cattle products like beef and dairy. Do you support or oppose the following options?



Beef policies

Percentage of positive answers on different questions recoded as [-2;+2].

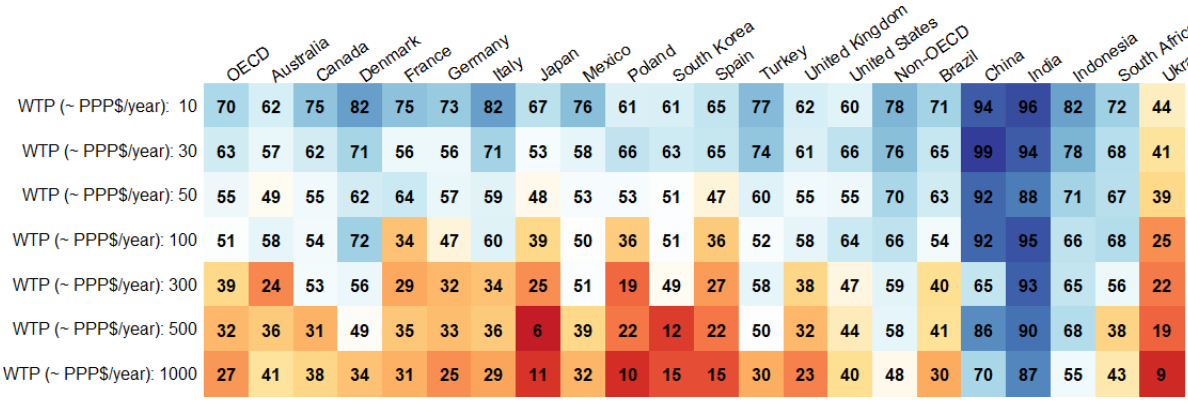


	OECD	Australia	Canada	Denmark	France	Germany	Italy	Japan	Mexico	Poland	South Korea	Spain	Turkey	United Kingdom	United States	Non-OECD	Brazil	China	India	Indonesia	South Africa	Ukrai
Eats beef at least once a week	49	66	57	66	46	75	42	36	61	15	21	43	58	36	59	45	77	37	45	35	53	17
Knows that beef has high GHG footprint	77	83	81	86	73	85	83	73	59	78	85	75	62	86	76	58	66	58	45	53	72	57
A lot willing to limit beef consumption	40	33	38	34	38	45	62	25	43	49	37	43	35	44	38	49	43	53	73	50	36	34
Supports tax on cattle products that would double beef price	31	25	26	33	29	38	38	19	38	30	26	31	25	33	34	38	33	54	NA	50	33	24
Supports subsidies on organic and local vegetables, fruits, and nuts	59	43	48	61	53	56	72	44	64	74	63	65	82	49	45	68	61	82	NA	79	62	59
Supports removal of subsidies for cattle farming	35	32	32	33	28	39	43	16	51	35	30	42	28	36	42	41	45	52	NA	54	30	22
Supports ban of intensive cattle farming	43	34	39	32	56	48	65	17	49	45	42	42	35	51	39	38	39	56	NA	46	30	25

Real stakes questions

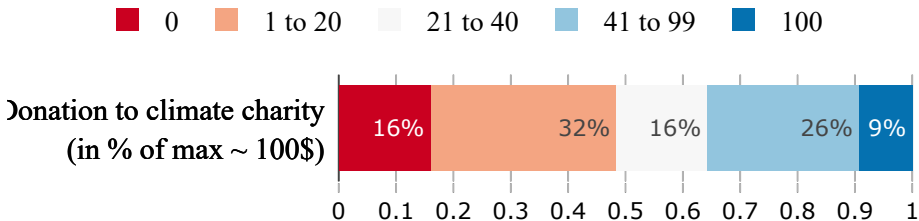
WTP

Percentage of Yes answers to the WTP question:
(...) Are you willing to pay [random amount] annually through an additional individual contribution to limit global warming to safe levels (less than 2 °C)? ▸ Go back ▸ See treatment effects



Donation

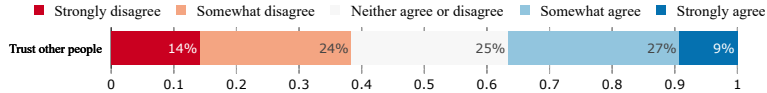
By taking this survey, you are entered into a lottery to win 100€. You can also donate a part of this additional compensation (should you be selected in the lottery) to a reforestation project through the charity The Gold Standard. If you win the 100€ lottery, how much will you donate to the Gold Standard charity? ▸ See treatment effects



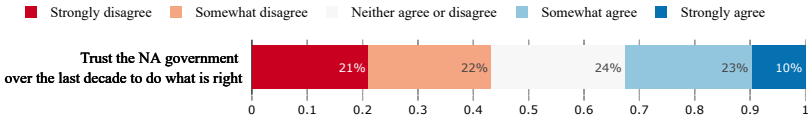
Trust and institutions

Trust

Do you agree or disagree with the following statement: “Most people can be trusted."

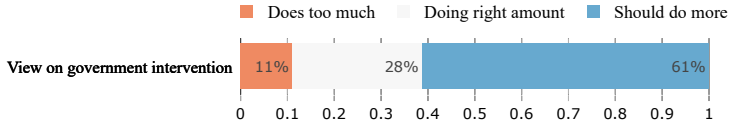


Do you agree or disagree with the following statement: “Over the last decade the [country] government could generally be trusted to do what is right."

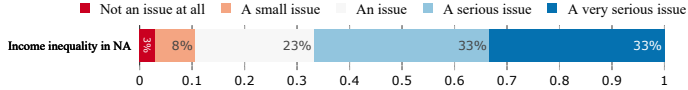


Perception of institutions, inequality, and the future

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?



How big of an issue do you think income inequality is in [Country]?

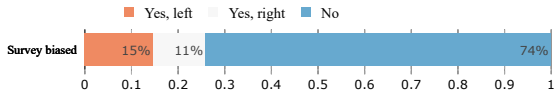


Do you think that overall people in the world will be richer or poorer in 100 years from now?

Feedback

Feedback on the survey

Do you feel that this survey was politically biased?



The survey is nearing completion. You can now enter any comments, thoughts or suggestions in the field below.
Right: recoded in *Non empty/Liked/Disliked*. ‣ Go back

Policy 1: A ban on combustion-engine Cars

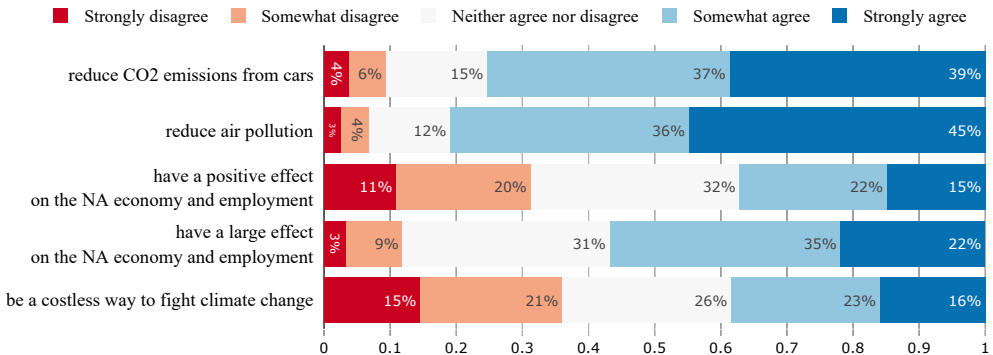
Go back

Policy description

To fight climate change, car producers can be required by law to produce cars that emit less CO_2 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*.

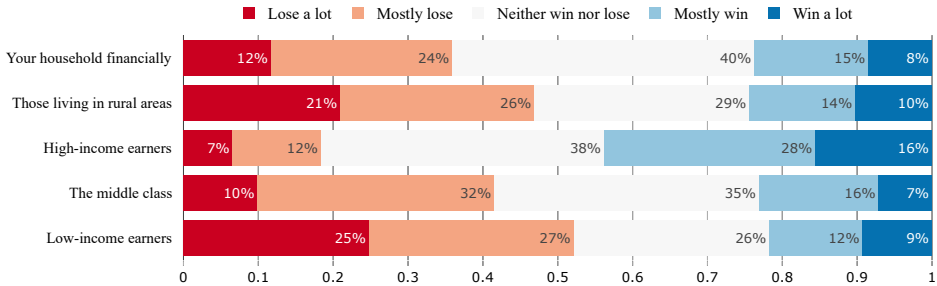
Effects of the policy

Do you agree or disagree with the following statements? A ban on combustion-engine cars would…



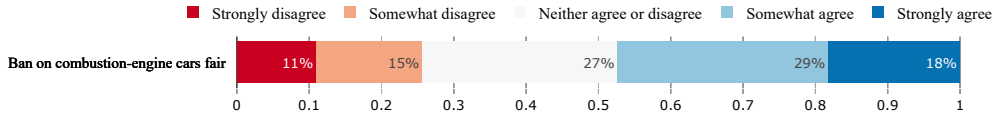
Incidence

In your view, would the following groups win or lose if a ban on combustion-engine cars was implemented in [Country]?

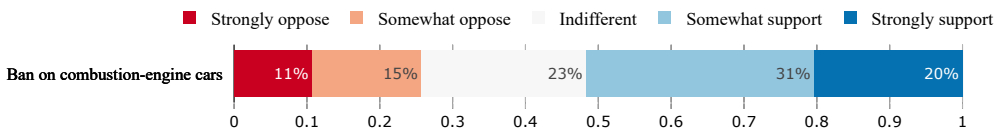


Fairness and support

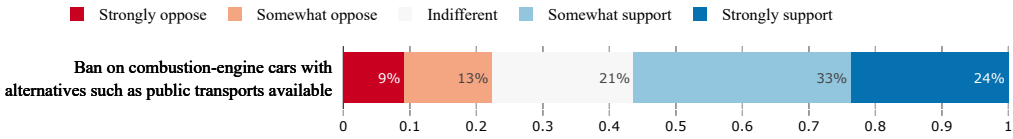
Do you agree or disagree with the following statement: “A ban on combustion-engine cars is fair"?



Do you support or oppose a ban on combustion-engine cars?



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



Policy 2: Green Infrastructure Program

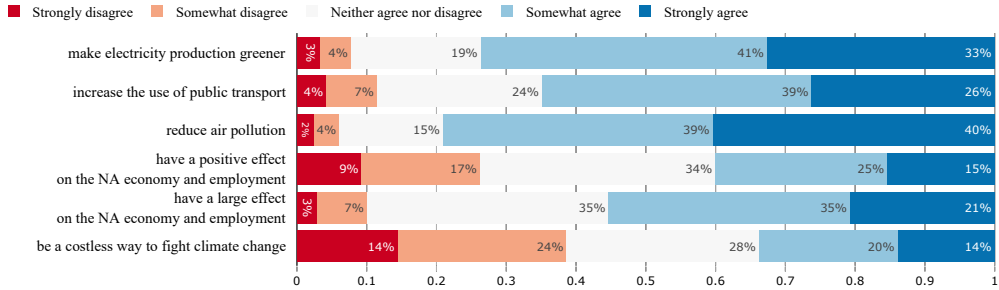
Go back

Policy description

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.

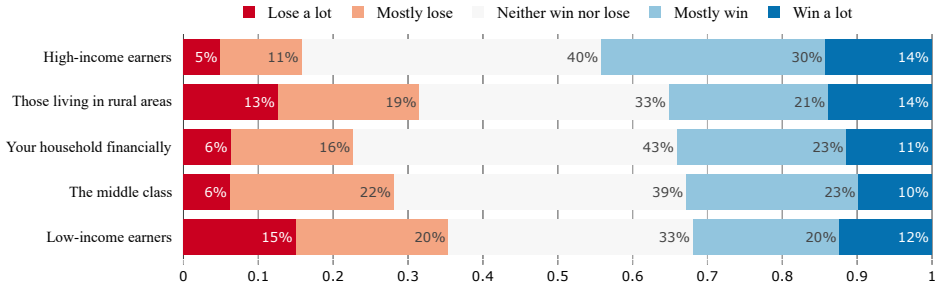
Effects of the policy

Do you agree or disagree with the following statements? A green infrastructure program would…



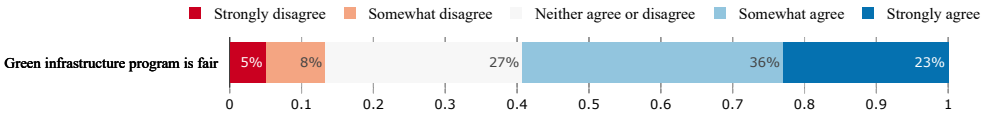
Incidence

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

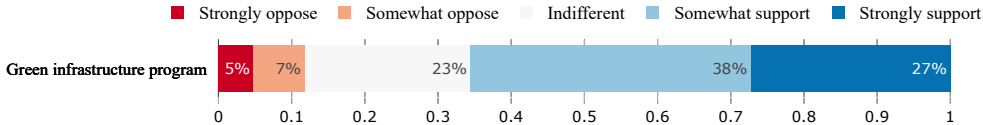


Fairness and support

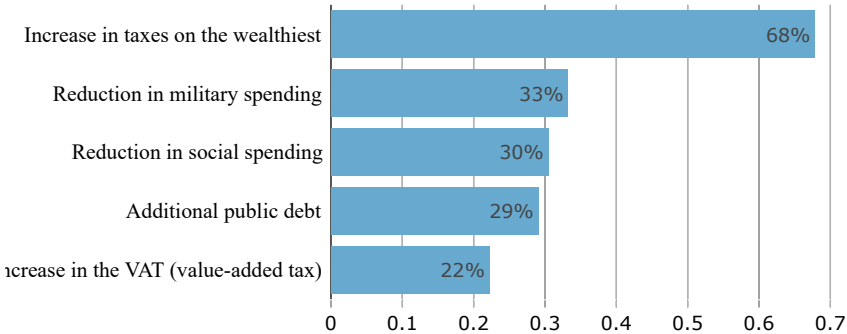
Do you agree or disagree with the following statement: “A green infrastructure program mainly financed by public debt is fair."



Do you support or oppose a green infrastructure program?



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)



Policy 3: Carbon Tax with Cash Transfers

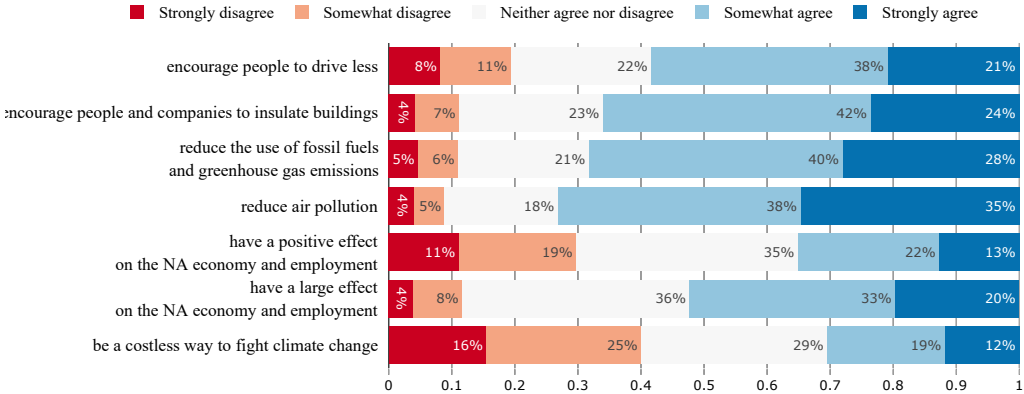
Go back

Policy description

To fight climate change, the [country] 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 10 cents per liter. 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 160€ per year.

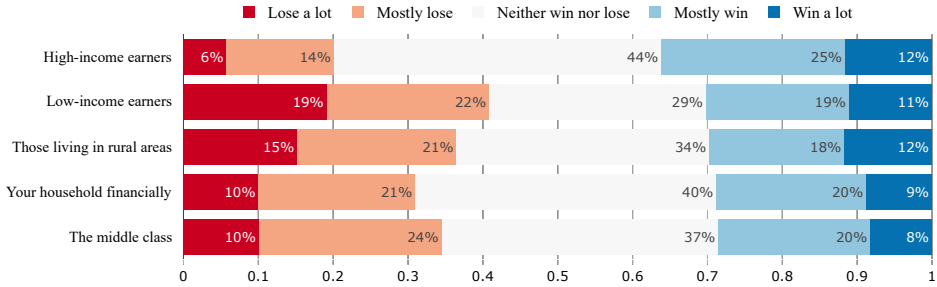
Effects of the policy

Do you agree or disagree with the following statements? A carbon tax with cash transfers would…



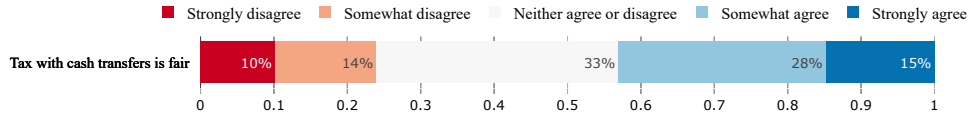
Incidence

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

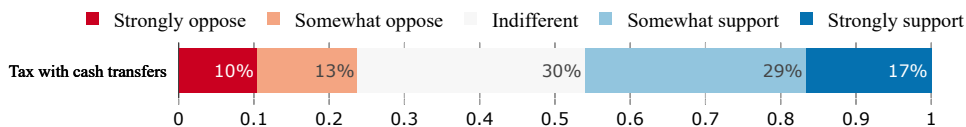


Fairness and support

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



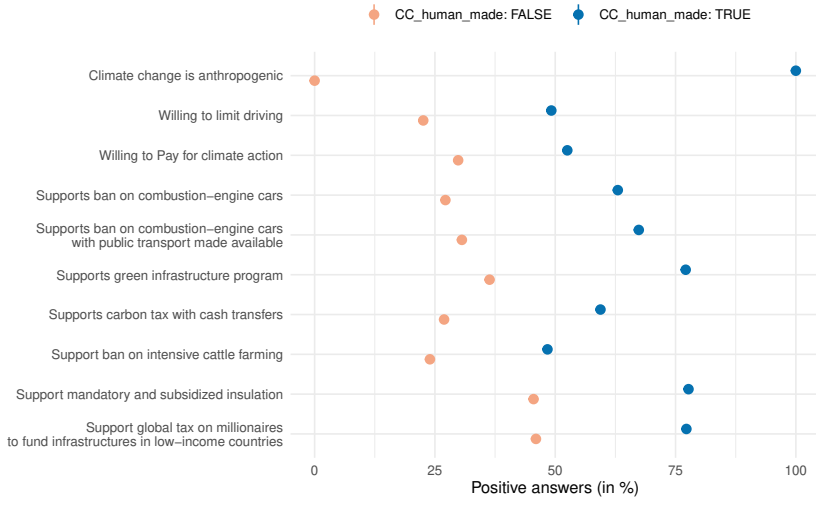
Do you support or oppose a carbon tax with cash transfers?



Heterogeneity Analysis

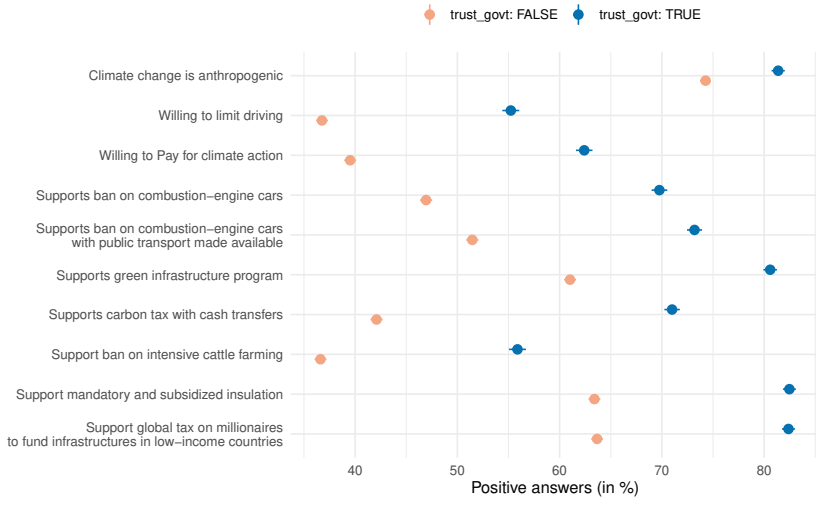
% of positive responses by beliefs about climate change

Go back



% of positive responses by trust in government

Go back



% of positive responses by avalaibility of public transport

Go back

% of positive responses by urban category

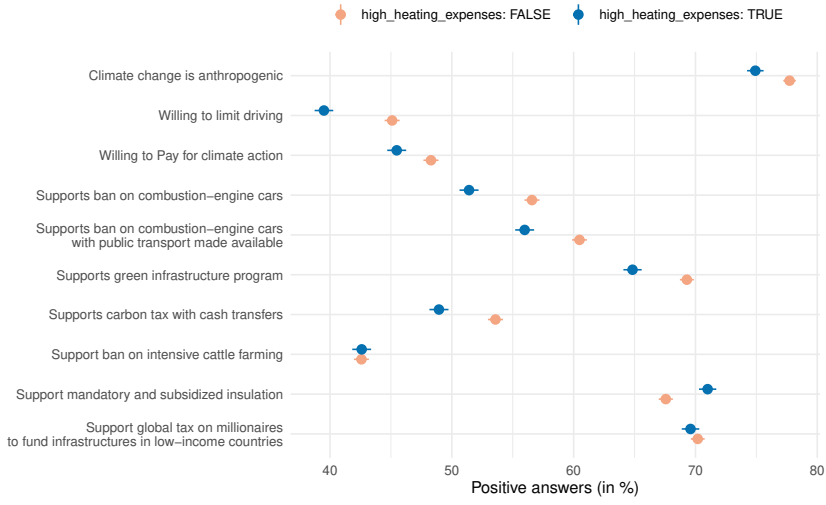
Go back

% of positive responses by gas expenses

Go back

% of positive responses by heating expenses

Go back

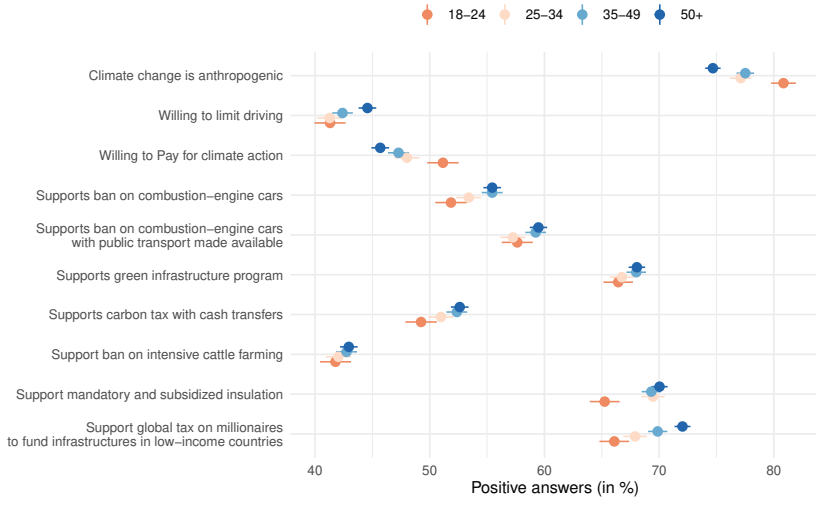


% of positive responses by income

Go back

% of positive responses by age

Go back



% of positive responses by diploma

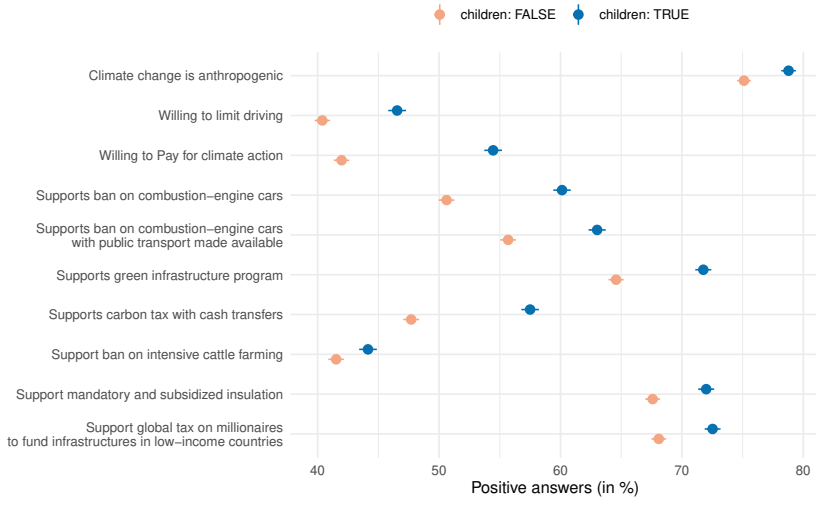
Go back

% of positive responses by gender

Go back

% of positive responses by living with child(ren) below 14

Go back



% of positive responses by working sector

Go back

Treatment Effects

Effects of the treatments on support for climate action

Go back

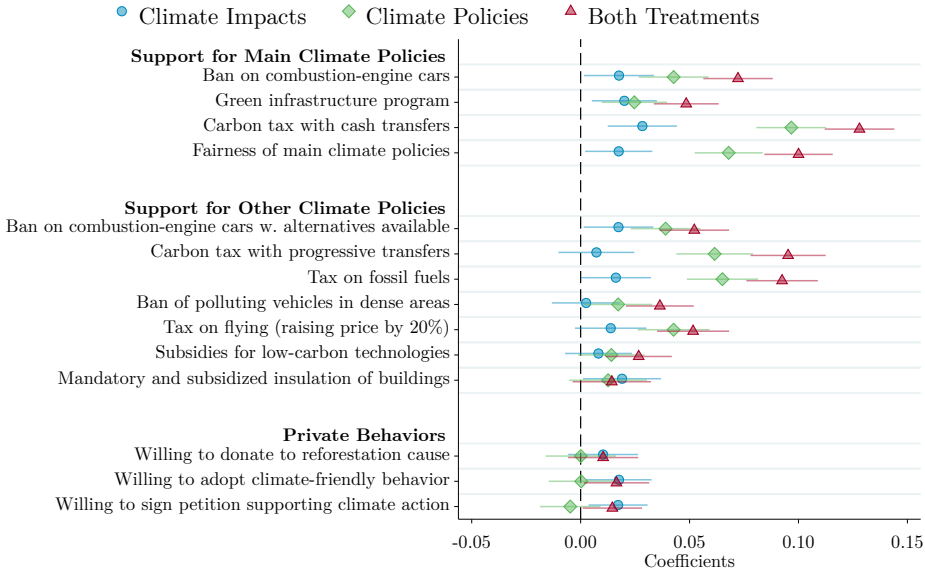


Table 6: Attitudes towards Climate Change

Go back

	CC caused by humans	CC likely to cause extinction	[Country] should fight CC	A lot willing to limit driving	Net zero is feasible
	(1)	(2)	(3)	(4)	(5)
Control group mean	0.742	0.64	0.509	0.364	0.473
Treatment: Climate	0.048***	0.028***	0.025***	0.049***	0.039***
	(0.007)	(0.008)	(0.008)	(0.008)	(0.008)
Treatment: Policy	0.018**	0.018**	0.009	0.022***	0.018**
	(0.007)	(0.008)	(0.008)	(0.008)	(0.008)
Treatment: Both	0.041***	0.035***	0.015*	0.061***	0.031***
	(0.007)	(0.008)	(0.008)	(0.008)	(0.008)
Observations	40,636	40,680	40,680	40,680	40,680
R^2	0.070	0.064	0.098	0.100	0.131

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 *should fight CC* indicator variable equals one if the respondent strongly agrees that their country "should take measures to fight 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-economic characteristics, energy usage characteristics, and country fixed effects. Standard errors are in parentheses. *p<0.1; **p<0.05; ***p<0.01

Table 7: Support for policies

Go back

	Support			
	Carbon tax with transfers	Green Infrastructure Program	Ban on combustion-engine cars	Average over 3 policies
	(1)	(2)	(3)	(4)
Control group mean	0.46	0.656	0.517	0.632
Treatment: Climate	0.030***	0.021***	0.019**	0.027***
	(0.008)	(0.008)	(0.008)	(0.008)
Treatment: Policy	0.097***	0.025***	0.043***	0.048***
	(0.008)	(0.008)	(0.008)	(0.008)
Treatment: Both	0.128***	0.049***	0.072***	0.076***
	(0.008)	(0.008)	(0.008)	(0.008)
Observations	40,680	40,680	40,680	40,680
R^2	0.120	0.115	0.110	0.123

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 supports all three policies, 2/3 if she supports two, 1/3 if she supports only one, and 0 if she supports none.

Controls include socio-economic characteristics, energy usage characteristics, and country fixed effects. Standard errors are in parentheses. *p<0.1; **p<0.05; ***p<0.01

Table 8: Attitudes towards policies

Go back

	Fair	HH would win	Poor would win	Large economic effect	Positive economic effect
	(1)	(2)	(3)	(4)	(5)
Control group mean	0.594	0.361	0.308	0.683	0.448
Treatment: Climate	0.024***	0.025***	0.025***	0.010	0.007
	(0.008)	(0.008)	(0.007)	(0.008)	(0.008)
Treatment: Policy	0.054***	0.067***	0.152***	0.040***	0.015*
	(0.008)	(0.008)	(0.008)	(0.008)	(0.009)
Treatment: Both	0.077***	0.098***	0.195***	0.048***	0.024***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.009)
Observations	40,680	40,092	40,404	40,680	40,680
R^2	0.125	0.136	0.152	0.041	0.033

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 [country] economy and employment.

Controls include socio-economic characteristics, energy usage characteristics, and country fixed effects. Standard errors are in parentheses.

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

Table 9: Real behavior

Go back

	Donation (in % of max)	Willingness To Pay	Signed petition	A lot willing to limit driving	A lot willing to have a clean car
	(1)	(2)	(3)	(4)	(5)
Control group mean	33.634	0.468	0.308	0.773	0.42
Treatment: Climate	1.080**	−0.003	0.025***	0.018***	0.014*
	(0.507)	(0.008)	(0.007)	(0.007)	(0.008)
Treatment: Policy	0.481	0.005	0.152***	−0.005	0.009
	(0.508)	(0.008)	(0.008)	(0.007)	(0.008)
Treatment: Both	1.009**	0.016*	0.195***	0.015**	0.028***
	(0.505)	(0.008)	(0.008)	(0.007)	(0.008)
Observations	40,680	40,680	40,404	36,946	40,680
R^2	0.113	0.125	0.152	0.125	0.100

Note: The dependent variables are indicator (binary) variables.

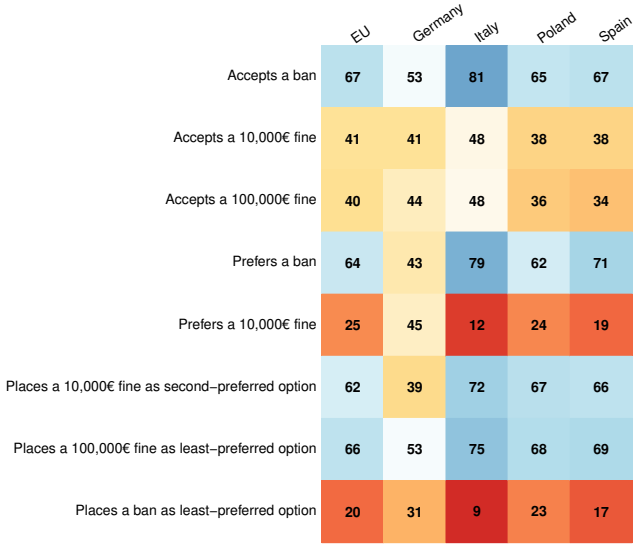
Controls include socio-economic characteristics, energy usage characteristics, and country fixed effects. Standard errors are in parentheses.

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

Miscellanous

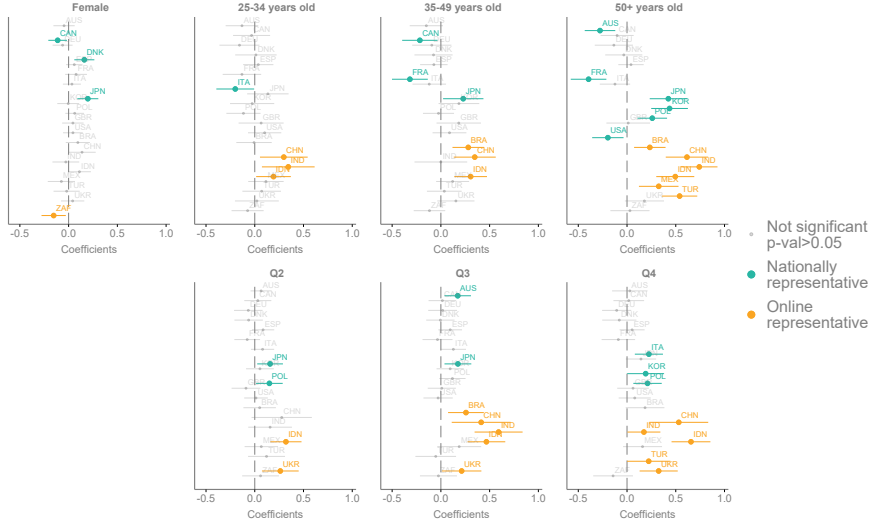
People do not like it if rich can buy their way out

Preferences about combustion-engine cars: ban vs. penalties. Go back



Higher income are more supportive of policies, heterogeneous results for age

Heterogeneous country-patterns for gender, age, and income. Go back



Variable Definitions

Knowledge Index

Index knowledge: average of following variables transformed in z-scores:

Score footprint transport: respondent's Kendall distance with true ranking on knowledge questions about transport emissions.

Score footprint electricty: respondent's Kendall distance with true ranking on knowledge questions about electricty production emissions.

Score footprint food: respondent's Kendall distance with true ranking on knowledge questions about food emissions.

Score footprint countries per capita: respondent's Kendall distance with true ranking on knowledge questions about countries' emissions per capita.

Score footprint countries total: respondent's Kendall distance with true ranking on knowledge questions about total countries' emissions.

Heating expenses: respondent's yearly heating or cooling expenses.

Climate change real: respondent indicates that climate change is real.

Dynamic of Climate change: respondent indicates that halving global emissions would not be sufficient to stop temperatures from rising.

Climate change anthropogenic: respondent indicates that "a lot" or "most" of climate change is due to human activity.

Score impacts of climate change: respondent's number of good responses on questions related to the impacts of climate change. Where we add 1 if the respondent indicates that it is "somewhat likely" or "very likely" that climate change will lead to severe droughts and heatwaves, and 1 if the respondent indicates that it is "somewhat likely" or "very likely" that it will lead to rising sea levels, and 1 if the respondent indicates that it is "somewhat unlikely" that climate change will lead to more frequent volcanic eruptions, and 2 if the respondent indicates that it is "very unlikely" that climate change will lead to more frequent volcanic eruptions.).

Score greenhouse gases: respondent's number of good responses minus wrong responses scaled up on [0,4] regarding whether CO_2, methane, hydrogen and particulate matter are greenhouse gases.

Go back