

Climate survey

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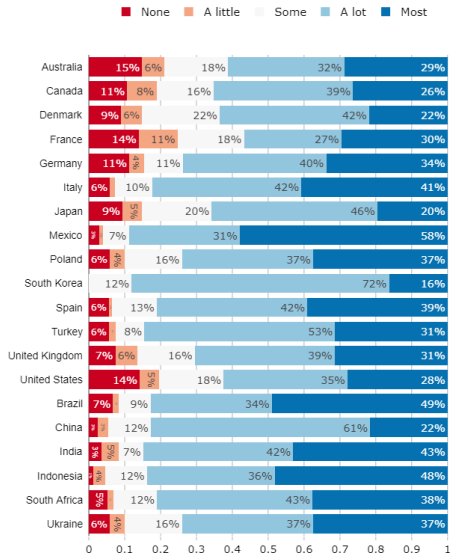
OECD/CAE

November 2021

(Mis)perceptions of causes and impacts of climate change

Most do not realize that climate change is entirely anthropogenic

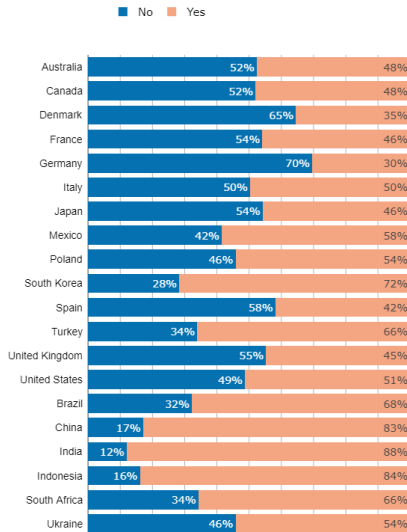
What part of climate change do you think is due to human activity? *Right answer: Most*



Limited understanding of climate science

Do you think that cutting global greenhouse gas emissions by half would be sufficient to eventually stop temperatures from rising?

Right answer: No



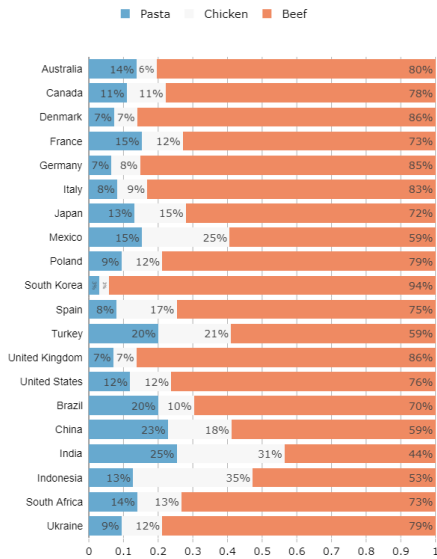
Some mistakes on the factors of climate change

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

Right answer: CO₂; Methane

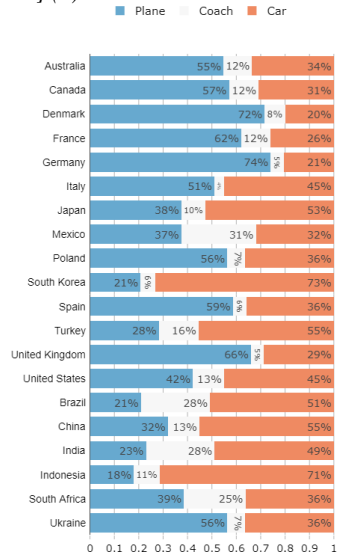
	Australia	Canada	Denmark	France	Germany	Italy	Japan	Mexico	Poland	South Korea	Spain	Turkey	United Kingdom	United States	Brazil	China	India	Indonesia	South Africa	Ukraine
CO2 (Yes)	68	77	93	78	86	88	96	80	89	74	88	53	85	78	77	93	88	83	75	89
Methane (Yes)	76	72	63	47	63	34	39	62	48	61	67	75	73	65	63	45	42	41	58	48
Hydrogen (No)	20	25	11	15	9	8	8	18	10	4	17	37	19	23	14	26	24	24	30	10
Particulates (No)	32	39	25	47	53	32	16	39	32	56	32	50	31	37	35	47	20	23	26	32

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)*

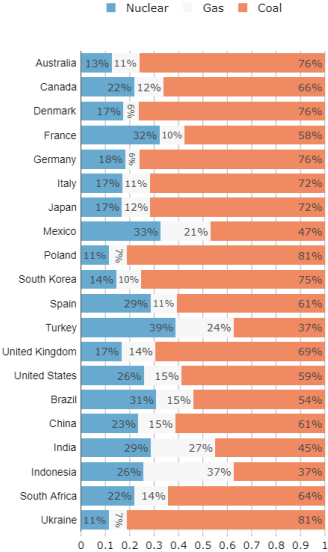


If a [couple/family of 4] travels [distance] km from [City 1] to [City 2], with which mode of transportation do they emit the most greenhouse gases? Please rank the items from 1 (most) to 3 (least).

Right answer: Plane (1), Car (2), [Train/Coach] (3)



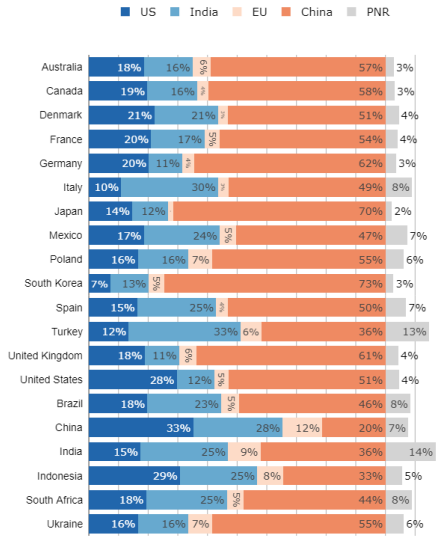
Which source of electric energy emits the most greenhouse gases to provide power for a house?
Right answer: Coal (1), Gas (2), Nuclear (3)



Correct understanding of total contributions

Which region contributes most to global greenhouse gas emissions?

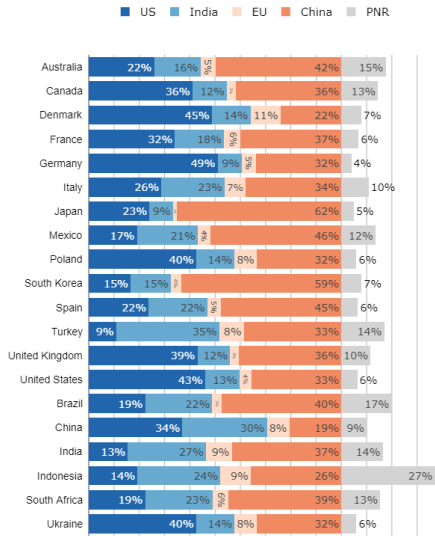
Right answer: China (1), US (2), EU (3), India (4)



Poor understanding of per capita emissions

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?

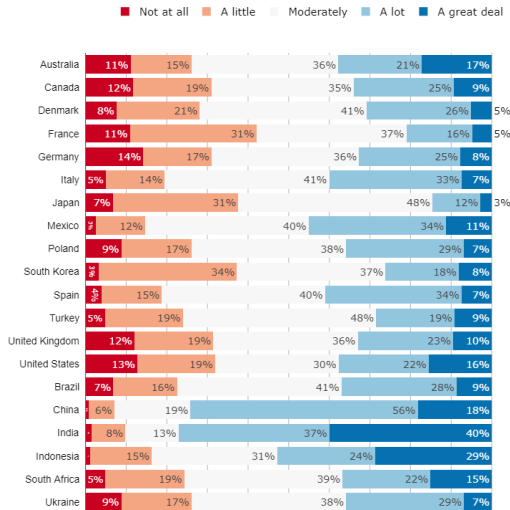
Right answer: Very likely: Severe droughts and heatwaves; Rising sea levels

Very unlikely: More frequent volcanic eruptions (No scientific certainty on the other items)

	Australia	Canada	Denmark	France	Germany	Italy	Japan	Mexico	Poland	South Korea	Spain	Turkey	United Kingdom	United States	Brazil	China	India	Indonesia	South Africa	Ukraine
Severe droughts and heatwaves	86	88	89	85	88	90	89	86	90	95	87	90	86	77	82	91	87	94	90	90
More frequent volcanic eruptions	59	58	37	62	41	49	48	65	66	74	56	76	59	56	66	76	86	81	78	66
Rising sea levels	85	84	93	83	88	88	90	83	87	94	84	84	89	78	79	91	90	92	88	87
Lower agricultural production	83	81	71	77	81	83	85	80	84	82	78	91	76	75	77	87	89	94	88	84
Drop in standards of living	76	79	67	73	75	81	70	77	83	80	75	91	76	72	79	86	88	90	84	83
Larger migration flows	76	84	83	84	85	83	65	78	86	69	79	93	80	74	77	82	87	89	85	86
More armed conflicts	68	68	75	71	75	70	60	71	78	65	67	83	68	63	71	76	87	80	77	78
Extinction of humankind	57	56	41	59	50	60	60	73	69	80	54	76	60	56	68	67	88	85	70	69

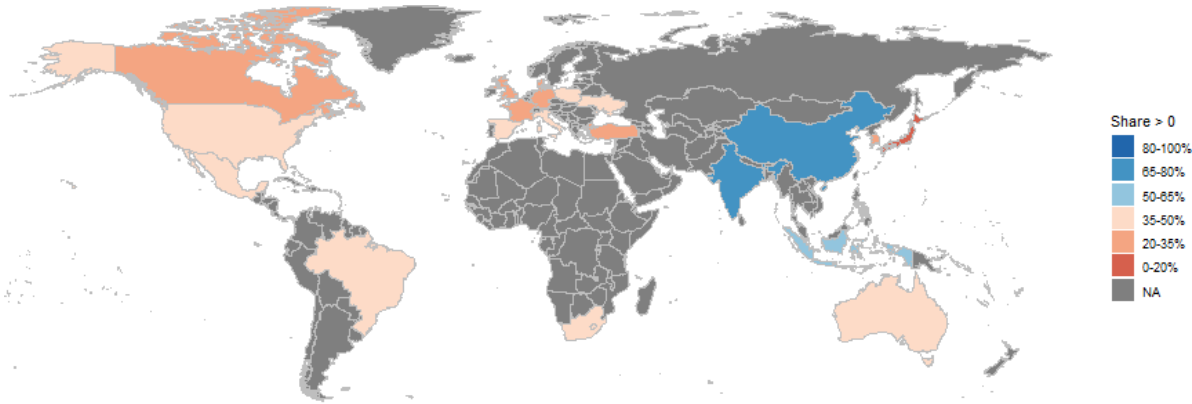
Diverging views on whether net zero is feasible

To what extent do you think that it is technically feasible to stop greenhouse gas emissions by the end of the century while sustaining satisfactory standards of living in [country]?



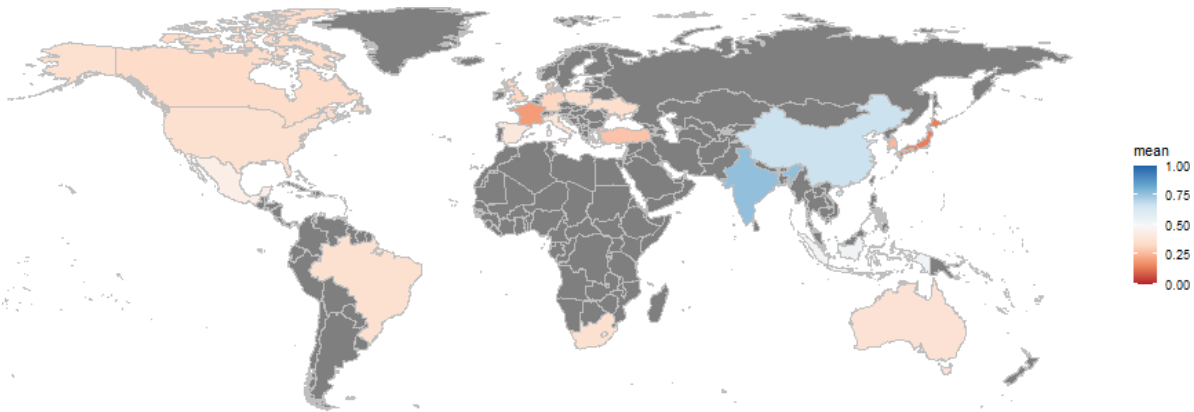
Diverging views on whether net zero is feasible

To what extent do you think that it is technically feasible to stop greenhouse gas emissions by the end of the century while sustaining satisfactory standards of living in [country]?



Diverging views on whether net zero is feasible

To what extent do you think that it is technically feasible to stop greenhouse gas emissions by the end of the century while sustaining satisfactory standards of living in [country]?



Diverging views on whether net zero is feasible



Diverging views on whether net zero is feasible

	Australia	Canada	Denmark	France	Germany	Italy	Japan	Mexico	Poland	South Korea	Spain	Turkey	United Kingdom	United States	Brazil	China	India	Indonesia	South Africa	Ukraine
Feels affected by climate change	31	34	15	28	37	48	39	64	46	81	46	72	29	36	63	51	84	66	61	46
Net zero by 2100 feasible	38	34	31	20	33	40	15	45	36	26	41	28	33	37	37	68	77	53	37	36
Likely that climate change ends by 2100	45	42	38	28	29	39	32	50	43	51	43	66	41	39	53	77	90	79	56	43
World in 100 years will be richer	20	18	32	14	14	13	14	19	26	29	12	22	21	22	20	77	75	60	27	26

(Mis)perceptions of climate policies

Policies precisely described

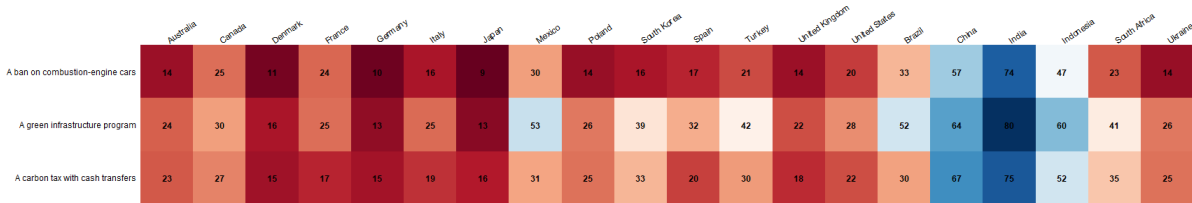
Ban on Combustion Engine Cars: To fight climate change, car producers can be required by law to produce cars that emit less CO₂ per km of the cars they sell. The emission limit is lowered every year so that only electric or hydrogen vehicles can be sold after 2030. This policy is called a *ban on combustion-engine 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.

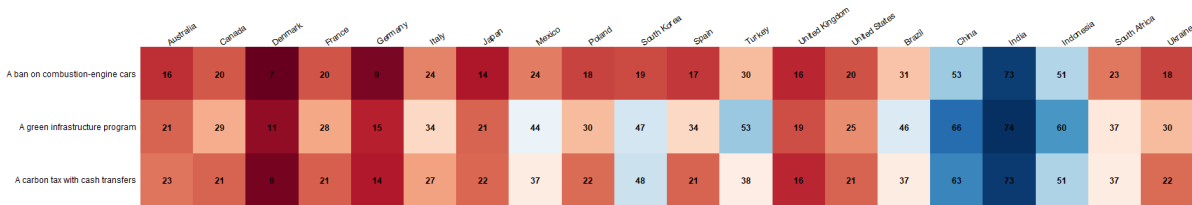
Carbon Tax with Cash Transfers: To fight climate change, the French government can make greenhouse gas emissions costly, to make people and firms change their equipment and reduce their emissions. The government could do this through a policy called a carbon tax with cash transfers. Under such a policy, 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.

Many think they would lose out

Do you think that **financially your household** would win or lose from *the policy*?

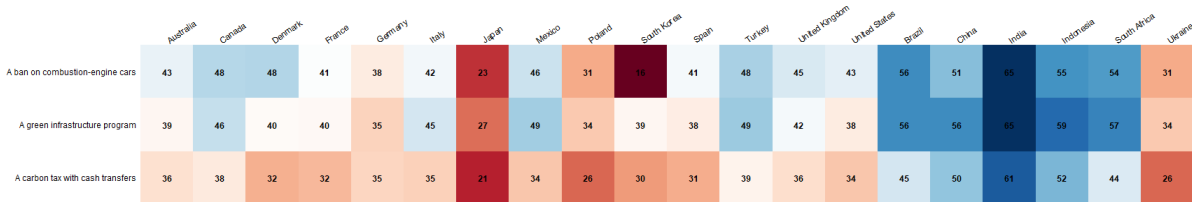


In your view, would those living in **rural areas** win or lose from *the following policy*?

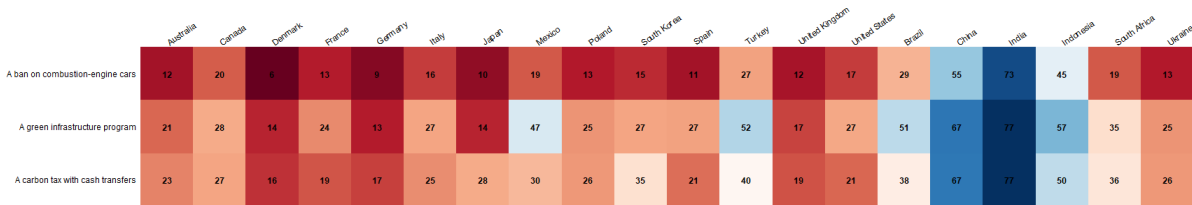


Most view rich winning and poor losing

In your view, would **high-income** earners win or lose from *the following policy*?

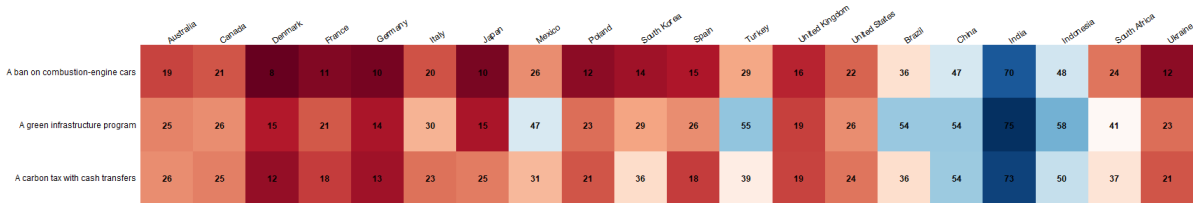


In your view, would **low-income** earners win or lose from *the following policy*?

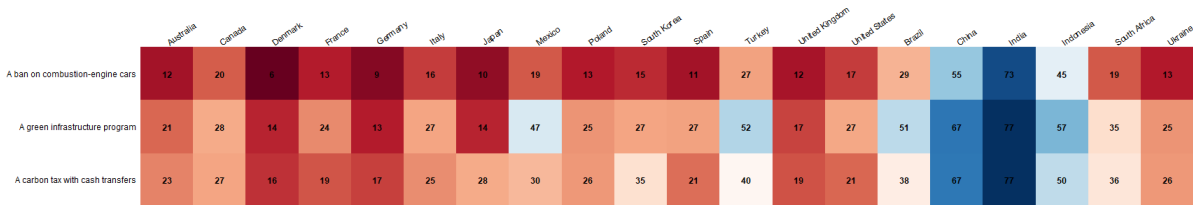


See the middle class gains close to the poor's

In your view, would the **middle-class** win or lose from *the following policy*?



In your view, would **low-income** earners win or lose from *the following policy*?



Some acquiescence bias

Do you agree or disagree with the following statement? *The policy would have a **positive** effect on the French economy and employment.*

	Australia	Canada	Denmark	France	Germany	Italy	Japan	Mexico	Poland	South Korea	Spain	Turkey	United Kingdom	United States	Brazil	China	India	Indonesia	South Africa	Ukraine
A ban on combustion-engine cars	32	31	25	24	41	24	37	25	29	36	28	32	34	30	28	31	32	31	41	29
A green infrastructure program	26	24	29	26	30	14	27	17	20	33	20	21	27	40	17	31	32	25	30	20
A carbon tax with cash transfers	28	29	32	32	34	23	28	27	27	29	24	23	29	44	26	31	34	27	31	27

Incentives are acknowledged

Do you agree or disagree with the following statement? *The policy would ...*

	Australia	Canada	Denmark	France	Germany	Italy	Japan	Mexico	Poland	South Korea	Spain	Turkey	United Kingdom	United States	Brazil	China	India	Indonesia	South Africa	Ukraine
A ban on combustion-engine cars Reduces CO2 emissions from cars	72	74	71	59	69	80	79	80	73	94	76	77	78	70	86	81	90	83	82	73
A green infrastructure program Increases the use of public transport	54	56	49	53	56	65	71	64	71	86	64	77	56	54	72	77	87	82	68	71
A green infrastructure program Makes electricity production greener	70	67	69	58	61	79	78	81	78	92	72	85	72	66	85	81	88	83	80	78
A carbon tax with cash transfers Reduces GHG emissions	62	61	63	55	53	72	73	70	68	83	63	73	64	59	71	79	83	82	81	68
A carbon tax with cash transfers Encourages insulation of buildings	61	64	63	65	51	66	72	61	69	71	57	78	63	60	48	76	84	73	76	69
A carbon tax with cash transfers >Encourages people to drive less	49	49	52	42	40	48	57	59	55	65	56	70	49	53	65	78	86	73	72	55

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...

	Australia	Canada	Denmark	France	Germany	Italy	Japan	Mexico	Poland	South Korea	Spain	Turkey	United Kingdom	United States	Brazil	China	India	Indonesia	South Africa	Ukraine
Cash for constrained HH	49	37	37	56	46	62	43	61	39	47	59	68	52	44	59	73	75	73	62	39
Cash for the poorest	55	43	43	57	47	67	50	64	48	57	59	79	57	44	70	81	77	86	65	48
Equal cash for all	38	37	27	45	31	41	41	57	39	54	45	61	35	36	46	72	76	74	58	39
Reduction in income tax	50	42	39	64	52	71	61	67	70	70	65	72	49	46	68	71	78	74	73	70
Reduction in corporate tax	26	30	25	37	24	53	34	52	49	65	46	63	25	29	54	66	71	66	53	49
Tax rebate for affected firms	43	37	37	53	33	64	47	52	62	62	53	61	41	38	61	74	75	70	67	62
Funding green infrastructure	58	45	60	65	61	75	56	77	71	87	68	74	64	57	79	78	79	81	81	71
Subsidies to low-carbon technos	57	47	53	58	66	76	67	75	73	86	70	70	63	54	72	81	81	80	77	73
Reduction in the deficit	42	37	34	52	41	64	49	60	59	53	62	57	46	47	61	76	77	70	66	59

(Un)willingness to change behavior

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?

	Australia	Canada	Denmark	France	Germany	Italy	Japan	Mexico	Poland	South Korea	Spain	Turkey	United Kingdom	United States	Brazil	China	India	Indonesia	South Africa	Ukraine
Willing to Limit flying	39	55	51	57	65	64	37	57	57	25	61	43	52	40	52	61	77	54	48	57
Willing to Limit driving	30	38	34	32	42	53	35	48	44	37	47	44	41	32	42	57	77	53	38	44
Willing to Have a fuel-efficient or electric vehicle	43	50	62	45	43	75	49	71	55	65	61	75	55	52	79	67	79	67	63	55
Willing to Limit beef consumption	31	36	34	38	45	62	24	40	51	43	42	32	44	38	41	53	74	50	38	51
Willing to Limit heating or cooling your home	31	28	31	39	36	52	26	57	40	52	44	32	31	30	45	52	80	60	43	40

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.)?

	Australia	Canada	Denmark	France	Germany	Italy	Japan	Mexico	Poland	South Korea	Spain	Turkey	United Kingdom	United States	Brazil	China	India	Indonesia	South Africa	Ukraine
Ambitious climate policies	39	43	47	41	56	73	48	61	54	81	61	62	42	36	59	65	83	65	56	54
Having enough financial support	46	56	49	45	64	70	47	69	65	81	71	69	60	55	68	58	78	69	73	65
People around you also changing their behavior	44	50	57	39	54	78	51	69	54	84	63	72	49	47	72	51	78	70	71	54
The most well off also changing their behavior	54	59	58	59	62	80	57	63	57	57	64	76	61	54	74	56	79	71	74	57

Effects of informational video treatments

Table 1: Attitudes towards Climate Change

	CC caused by humans	CC likely to cause extinction	Donation (in % of max)	FR should fight CC	Willing to limit driving
Control group mean	0.609	0.519	100.877	0.412	0.327
Treatment: Climate	0.073*** (0.016)	-0.022 (0.017)	5.910 (5.673)	0.015 (0.017)	-0.035** (0.016)
Treatment: Policy	0.004 (0.016)	-0.023 (0.017)	-6.393 (5.595)	-0.017 (0.016)	-0.010 (0.016)
Treatment: Both	0.063*** (0.016)	0.004 (0.018)	1.346 (5.730)	0.022 (0.017)	-0.005 (0.016)
Observations	5,989	6,005	6,005	6,005	6,005

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-demographic, left-right leaning, last vote and whether the respondent’s household was hit by the COVID-19 pandemic. Standard errors are in parentheses. *p<0.1; **p<0.05; ***p<0.01

Table 2: Support for policies

	Support			
	Carbon tax with transfers	Green Infrastructure Program	Ban on combustion-engine cars	Average over 3 policies
Control group mean	0.282	0.582	0.274	0.444
Treatment: Climate	0.061** (0.030)	0.037 (0.030)	0.032 (0.029)	0.035 (0.031)
Treatment: Policy	0.079*** (0.029)	0.033 (0.029)	0.061** (0.028)	0.051* (0.030)
Treatment: Both	0.146*** (0.029)	0.037 (0.030)	0.100*** (0.029)	0.099*** (0.030)
Observations	1,988	1,988	1,988	1,988

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-demographic, left-right leaning, last vote and whether the respondent’s household was hit by the

Table 3: Attitudes towards policies

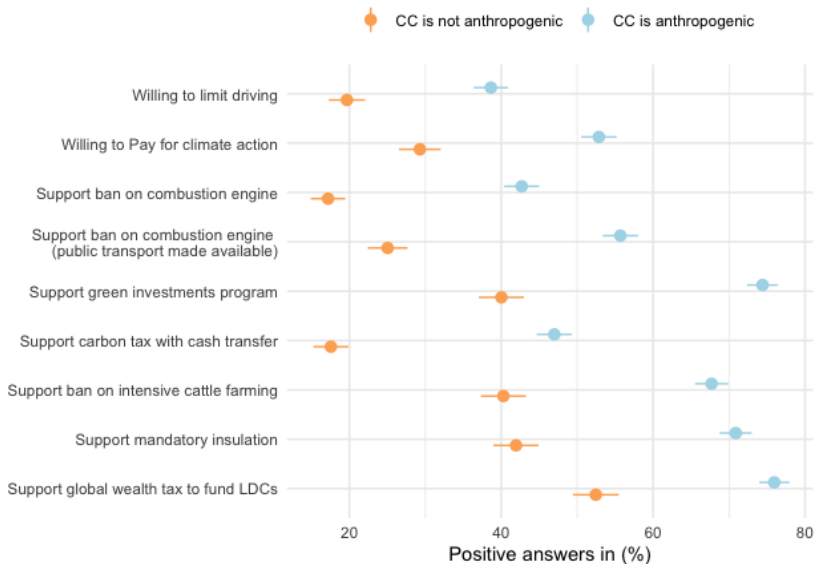
	Fair	HH would win	Poor would win	Large economic effect	Negative economic effect
Control group mean	0.443	0.297	0.182	0.596	0.4
Treatment: Climate	0.009 (0.031)	0.021 (0.030)	0.003 (0.026)	0.004 (0.031)	0.015 (0.031)
Treatment: Policy	0.014 (0.030)	0.035 (0.029)	0.080*** (0.026)	0.022 (0.030)	0.029 (0.030)
Treatment: Both	0.068** (0.031)	0.067** (0.030)	0.117*** (0.026)	0.063** (0.030)	0.040 (0.030)
Observations	1,988	1,870	1,969	1,988	1,988

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 French economy and employment.

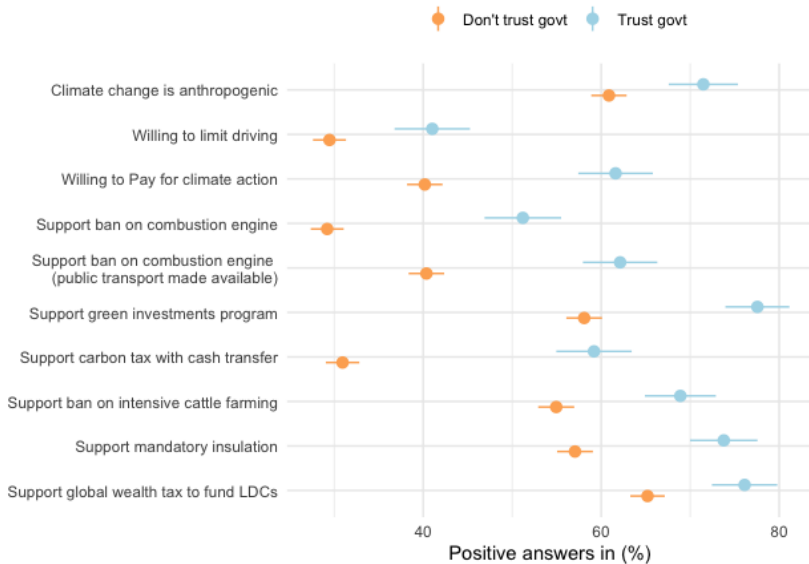
Controls include socio-demographic, left-right leaning, last vote and whether the respondent’s household was hit by the COVID-19

Determinants of policy support (for France)

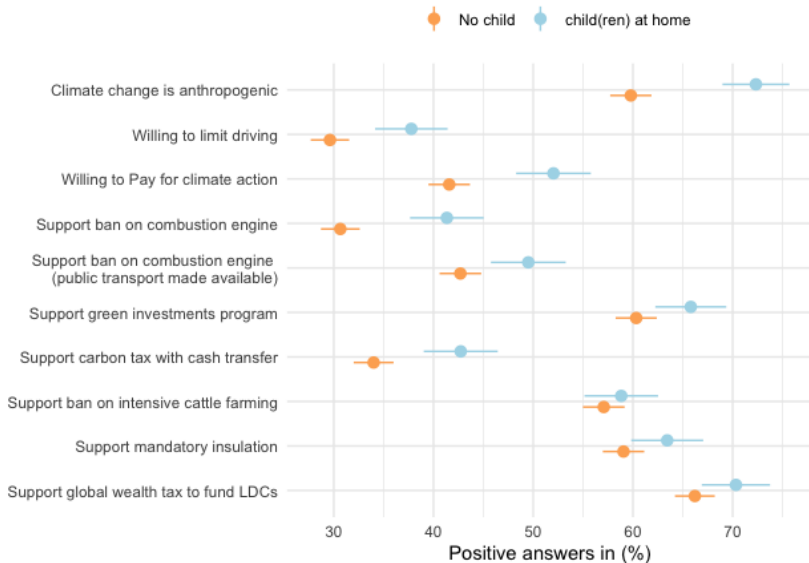
% of positive responses by beliefs about climate change



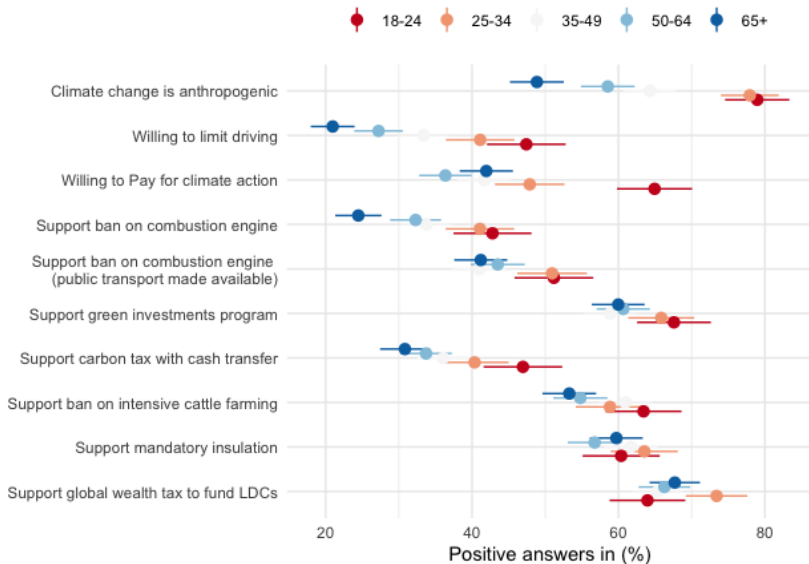
% of positive responses by trust in government



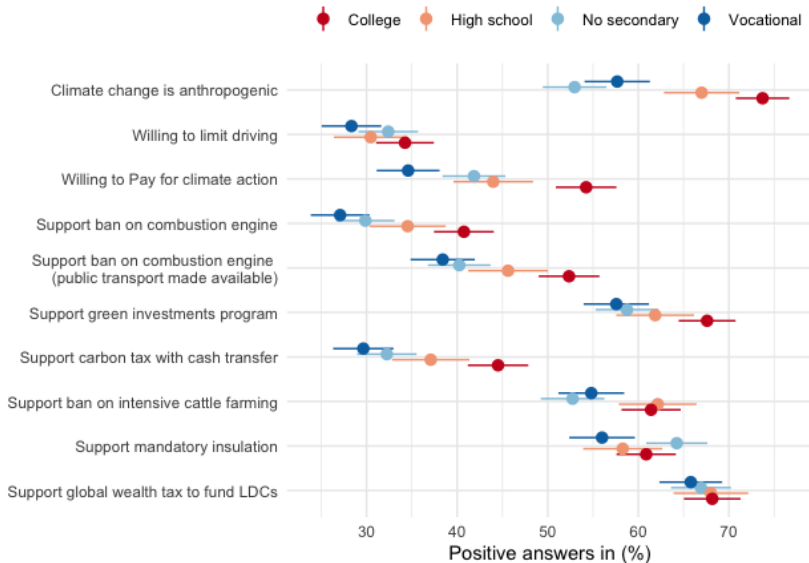
% of positive responses by living with child(ren) below 14



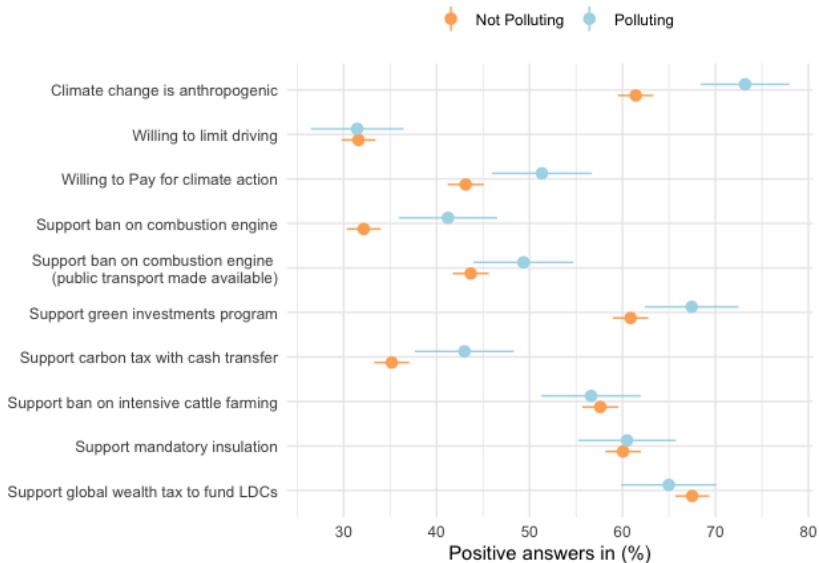
% of positive responses by age



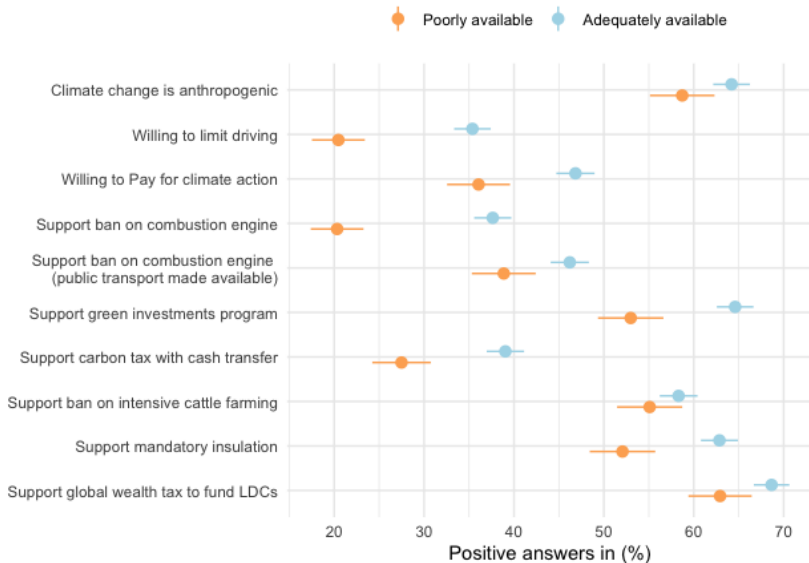
% of positive responses by diploma



% of positive responses by working sector



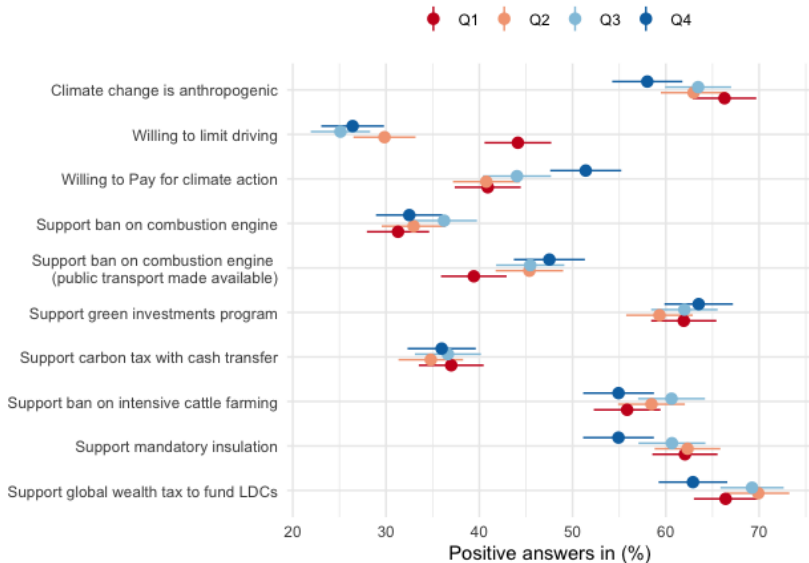
% of positive responses by availability of public transport



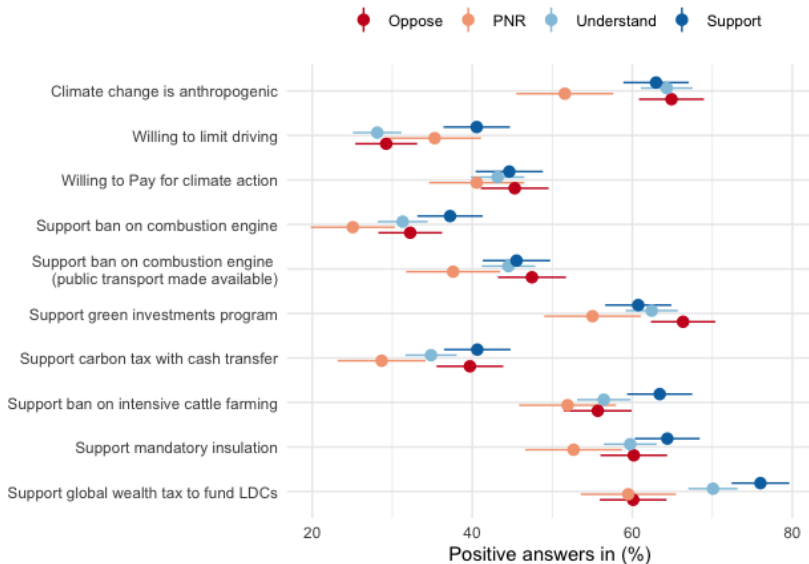
% of positive responses by urban category



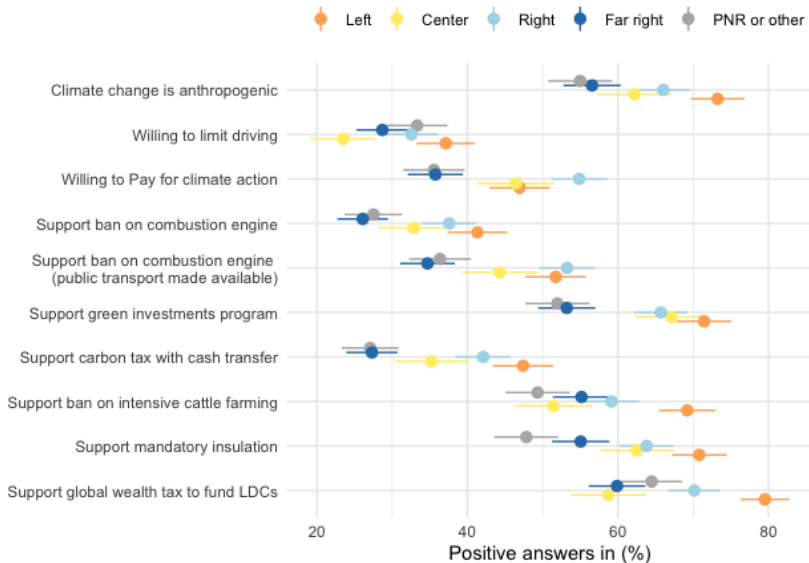
% of positive responses by income



% of positive responses by support for the Yellow Vests



% of positive responses by vote



% of positive responses by gas expenses

