Fighting Climate Change: Attitudes Toward Climate Policies in Australia

Supplement for "Fighting Climate Change: International Attitudes Toward Climate Policies" by Antoine Dechezleprêtre, Adrien Fabre, Tobias Kruse, Bluebery Planterose, Ana Sanchez Chico, and Stefanie Stantcheva

This supplement to "Fighting Climate Change: International Attitudes Toward Climate Policies" presents results for Australia, based on a sample of 1,978 respondents.

The full questionnaire for Australia is available through the following link:

https://lse.eu.qualtrics.com/jfe/form/SV_OHrxQpnzN85dR2K?Q_Language=EN-GB

The climate policies video is available here:

https://lse.eu.qualtrics.com/WRQualtricsControlPanel/File.php?F=F_3gagRLUpgyAicVE. The climate impacts video is available here:

https://lse.eu.qualtrics.com/WRQualtricsControlPanel/File.php?F=F_6zC4wlmsEXrDnYq.

	Australia				
	Population	Sample			
Sample size	NA	1,978			
Male	0.49	0.56			
18-24 years old 25-34 years old 35-49 years old More than 50 years old	$\begin{array}{c} 0.11 \\ 0.19 \\ 0.26 \\ 0.44 \end{array}$	$0.10 \\ 0.19 \\ 0.27 \\ 0.44$			
Income Q1 Income Q2 Income Q3 Income Q4	$\begin{array}{c} 0.25 \\ 0.25 \\ 0.25 \\ 0.25 \end{array}$	$0.45 \\ 0.31 \\ 0.17 \\ 0.07$			
Region 1 Region 2 Region 3 Region 4 Region 5	$\begin{array}{c} 0.33 \\ 0.20 \\ 0.07 \\ 0.28 \\ 0.11 \end{array}$	$\begin{array}{c} 0.30 \\ 0.23 \\ 0.10 \\ 0.28 \\ 0.09 \end{array}$			
Urban	0.72	0.76			
College education $(25-64)$	0.49	0.46			
Share of voters Voters: Left Voters: Center Voters: Right Voters: Other Voters: Not reported	0.72 0.44 NA 0.41 0.15 NA	0.86 0.44 NA 0.41 0.08 0.06			
Inactivity rate (15-64) Unemployment rate (15-64) Employment rate (15-64)	$0.22 \\ 0.07 \\ 0.73$	$0.22 \\ 0.12 \\ 0.69$			

Table 1: Sample representativeness – Australia

Note: This table displays summary statistics of the sample alongside nationally representative statistics. For College education (25-64), the sample statistics are provided for respondents aged between 25 and 64 years old. For the Share of voters, the sample statistics include the share of people who indicated having voted. For the Voters variables, the sample statistics include the share of respondents who indicated voted for a party/candidate classified in each category, among respondents who indicated having voted. The Voters: Not reported category includes people who indicated having voted but did not report the candidate/party they voted for. For Inactivity rate (15-64), the sample statistics include the share of respondents aged between 15 and 64 years old who indicated being either "Inactive (not searching for a job)," a "Student," or "Retired." For Unemployment rate (15-64), the sample statistics include the share of respondents aged between 15 and 64 years old who indicated being "Unemployed (searching for a job)," a mong active people ('Unemployed (searching for a job)," a "Student," or "Retired." For Lasting for a job)," "Full-time employed," "Part-time employed," or "Self-employed"). For Employment rate (15-64), the sample statistics include the share of respondents aged between 15 and 64 years old who indicated being "Unemployed," "Part-time employed," or "Self-employed." Detailed sources for each variable, as well as the definitions of regions, college education, urban, and voting categories are available in Appendix A-7 of "Fighting Climate Change: International Attitudes Toward Climate Policies."

	Economic leaning							
	Very left	Left	Center	Right	Very right	Not reported		
Greens	0.23	0.12	0.07	0.03	0.04	0.13		
Labor	0.43	0.50	0.30	0.20	0.15	0.30		
Liberal/National coalition	0.12	0.18	0.30	0.60	0.56	0.22		
Other	0.05	0.05	0.08	0.05	0.10	0.09		
Vote not reported	0.02	0.03	0.09	0.03	0.02	NA		
Did not vote	0.15	0.12	0.16	0.10	0.13	0.26		

Table 2: Distribution of economic leaning by vote

Note: This table displays for each economic leaning the share of votes (among people who indicated having voted), as well as the share of respondents who did not indicate having voted.

(A) "What part of climate change do you think is due to human activity?"

(B) "Do you think that cutting global GHG emissions by half would be sufficient to eventually stop temperatures from rising?"

Part of climate change anthropogenic					Cutting GHG emissions by half sufficient to stop rise in temperatures			
None A little Some A lot Most			No Yes					
14	7	16	22	30		50	48	
14	'	10	55	50		- 52	40	

(C) GHG Emission Ranking



(D) "If nothing is done to limit climate change, how likely do you think it is that climate change will lead to the following events?"



Note: Panel A, B, and C show the distribution of answers to each of the questions mentioned. Panel C shows the percentage of respondents who gave the correct ranking in terms of greenhouse gas emissions for each topic. The shares represented are based on respondents in the control group only (who did not see any pedagogical videos)

Figure 2: Correlation between knowledge (*Knowledge index*) and socioeconomic characteristics



Note: The figure shows the coefficients from an OLS regression of the *Knowledge index* on indicators for individual socioeconomic characteristics. Treatment indicators are included but not displayed. The omitted categories are "male" for *gender* (*gender*: "other" is not displayed), "18-34 years old" for *age*, lowest income quartile for *income*, "no schooling, or highest level achieved is primary or lower secondary education" for *education*, "left leaning" for *economic leaning*. See Appendix A-1 of "Fighting Climate Change: International Attitudes Toward Climate Policies" for variable definitions.



Figure 3: Willingness to adopt climate-friendly behaviors

Note: Panel A shows the distribution of answers to two questions, Willingness to adopt climate-friendly behaviors are answers to the question "To what extent would you be willing to adopt the following behaviors?" and Factors that would encourage behavior adoption correspond to answers to the question "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.)?". Panel B displays the percentage of the prize people are willing to donate (0%, between 0% and 25%, between 25% and 50%, between 50% and 75%, above 75%). Panel C shows the shares of respondents willing to sign a petition to "stand up for real climate action". All results are based on answers from respondents in the control group only (who did not see any pedagogical videos).

Figure 4: Share of respondents who support or oppose climate change policies.

Strongly oppose Somewhat oppose Indifferent Somewhat support Strongly support

Main Policies Studied:	11%	129	%	1	28%			310	/0	18%
Green infrastructure program										
Ban on combustion-engine cars		21%		15%			29%		21%	14%
Carbon tax with cash transfers	-	18%	15	5%			32%		24%	11%
Transportation Policies:	14%	9%	, 0		25%			32%		21%
Ban on polluting cars in city centers Ban on combustion-engine vehicles				100/		2.00			220/	4.50/
w. alternatives available	-	18%		18%		265	/0		23%	15%
Tax on flying (+20%)		24	4%	19	9%		21%		22%	13%
Energy Policies:	8% 6%			24%				38%		23%
Mandatory and subsidized insulation of buildings	706 506		1.00/-				2004			2004
Wandatory and subsidized insulation of bundings	770 370		1970		1		3970			30%
Funding clean energy in low-income countries	13%	11	%		28%			31	%	17%
Tax on fossil fuels (\$45/tCO2)			26%	1	8%	2	21%		24%	11%
Food Policies:		18%	11%	I	1	29%	1	23%		19%
Subsidies on organic and local vegetables			1170		1	2570	1	237		1970
Ban of intensive cattle farming		24	4%	17%	6		26%		18%	14%
Removal of subsidies for cattle farming		22%		18%			30%		18%	13%
A high tax on cattle products, doubling beef prices				36%	18	%		22%	16%	9%
Support for Carbon Tax With: Funding environmental infrastructures	9% 5%	0	1	25%			32	%		28%
Subsidies to low-carbon tech.	9% 6%			28%	6			35%		23%
Reduction in personal income taxes	10%	10%	I	1	28%			33%		20%
Cash transfers to the poorest households	14%	8%		1	28%			28%		23%
Cash transfers to constrained households	12%	9%		I	29%			32%	6	18%
Tax rebates for the most affected firms	12%	119	/ <mark>0</mark>	1	I	36%			30%	11%
Reduction in the public deficit	7% 7%			1	I	46%		:	25%	15%
Progressive transfers		19%	14	.%	I	27%		2	4%	16%
Equal cash transfers to all households	15%	/0	18	%		3	0%		26%	11%
Reduction in corporate income taxes		20%		18%			33%	6	21%	7%
	0 0.1	0.2	2 0.	3 0.	4 0.5	5 0	.6 0.	.7 0.	8 0.9	1

Note: The figure shows the distribution of support to each policy, based on answers from respondents in the control group only (who did not see any pedagogical videos). For the exact phrasing of each question, see Appendix A-5 of "Fighting Climate Change: International Attitudes Toward Climate Policies."

Figure 5: Correlation between "Support for main climate policies index" and socioeconomic and energy usage characteristics



• Support for main climate policies index: All countries (N=40,680, R^2 =0.18)

Note: The figure shows the coefficients from a regression of the *Support for main climate policies* index on socioeconomic indicators (left panel) and energy usage indicators (right panel). In the right panel, we control for but do not display the coefficients on socioeconomic indicators. Treatment indicators are included but not displayed. The omitted category for *Place characteristics* is "Rural or very small agglomeration." For a list of all omitted categories, see the notes to Figure 2. See Appendix A-1 of "Fighting Climate Change: International Attitudes Toward Climate Policies" for detailed definitions of the variables.

Figure 6: Share who support the main climate policies by socioeconomic, energy usage characteristics, and treatment group



Note: The figure shows the share of respondents who support (somewhat or strongly) each of the three main policies, by group. Except for the rows labeled "Treatment" all means are taken over respondents in the control group only (who did not see any pedagogical videos). A 90% confidence interval is displayed. See Appendix A-1 of "Fighting Climate Change: International Attitudes Toward Climate Policies" for detailed variable definitions.

Australia High Middle Inc. Inc.	Australia High Middle Inc. Inc.	Australia High Middle
		me. me.
Effectiveness of Main Climate Policies		
Reduce air pollution 71 76 83	64 68 80	77 79 84
Reduce GHG emissions/Reduce CO ₂ emissions from cars	60 64 75	70 73 78
Make electricity production greener 68 70 78		
Encourage insulation of buildings	59 64 69	
Increase the use of public transport/Encourage less driving 57 60 71	46 51 69	
Positive effect on economy and employment 41 37 45	34 31 42	33 35 40
Costless way to fight climate change 30 30 39	24 27 36	25 29 38
Distributional Impacts of Main Climate Policies		
Believes the following groups would gain		
Those living in rural areas 23 25 50	20 21 43	13 16 36
Low-income earners 20 21 48	19 22 42	10 12 35
The middle class 25 22 49	22 21 40	15 15 35
High-income earners 42 39 51	38 33 41	44 40 49
Self-Interest		
Believes own household would gain 23 23 50	22 20 41	15 15 36
Perceived Fairness and Support		
Support main climate policies 49 57 78	34 37 59	35 43 65
Main climate policies are fair 45 51 72	33 35 55	35 39 59

Figure 7: Perceived characteristics of the main policies

Note: The questions on the effectiveness and fairness have answer options Strongly disagree/Somewhat disagree/Neither agree nor disagree/Somewhat agree/Strongly agree. We report the share of respondents who answer "Somewhat agree" or "Strongly agree." Questions on the distributional impacts and self-interest have answer options Lose a lot/Mostly lose/Neither win nor lose/Mostly win/Win a lot. Depicted is the share of respondents who say "Mostly win" or "Win a lot." "Support main climate policies" has answer options Strongly oppose/Somewhat oppose/Neither support nor oppose/Somewhat support. We show the share of respondents who "Somewhat support" or "Strongly support." The shares represented are based on respondents in the control group only (who did not see any pedagogical videos). For the exact phrasing of each question, see Appendix A-5 of "Fighting Climate Change: International Attitudes Toward Climate Policies."

Figure 8: How different groups perceive the effectiveness and distributional effects of the three main climate policies



Note: The figure shows the coefficients from two regressions. In the left panel, the indices listed in the legend are regressed on indicator variables for socioeconomic characteristics, as well as treatment indicators (not shown). In the right panel, the same indices are regressed on energy usage indicators, as well as treatment indicators, and socioeconomic characteristics (not shown). Each index is constructed by averaging the z-scores of the answers to a given question (e.g., "believes policies would have economic effects") across all three main policies and standardizing again. See Appendix A-1 of "Fighting Climate Change: International Attitudes Toward Climate Policies" for detailed variable definitions. See the notes to Figure **??** for a list of the omitted categories.

Figure 9: Beliefs underlying support for the main climate policies

(A) Correlation between support for the three main policies and beliefs



(B) Share of the variation in Support for main policies explained by different beliefs



Note: Panel A shows the coefficients from a regression of support for each policy (indicator variable equal to 1 if the respondent supports the policy somewhat or strongly) on standardized variables measuring respondents' beliefs and perceptions. Treatment indicators, and individual socioeconomic characteristics are included but not displayed. Panel B depicts the share of the variance in the *Support for main policies* index that is explained by each belief and perception. We use the LMG method (see Grömping 2007). See Appendix A-1 of "Fighting Climate Change: International Attitudes Toward Climate Policies" for detailed variable definitions.

Figure 10: Share of respondents who hold key beliefs about the main climate policies by socioeconomic characteristics, energy usage, and treatment group



(A) Share who believes [policy] would reduce pollution

(B) Share who believes own household would lose from [policy]



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Share of Respondents

Share of Respondents



(C) Share who believes low-income earners would lose from [policy]

Note: The figure shows the share of respondents who agree (somewhat or strongly) with the statement. Means are shown by socioeconomic characteristics, treatment group, and energy usage. Except for the rows labeled "Treatment," the means are taken over respondents in the control group only (who did not see any pedagogical videos). A 90% confidence interval is displayed. See Appendix A-1 of "Fighting Climate Change: International Attitudes Toward Climate Policies" for detailed variable definitions.



Figure 11: Effects of the treatments on support for climate action

Note: The figure shows the coefficients from a regression of the indicator variables listed on the left, capturing support for various policies and willingness to change behaviors, on indicators for each treatment, controlling for socioeconomic characteristics (not shown). See Appendix A-1 of "Fighting Climate Change: International Attitudes Toward Climate Policies" for variable definitions.



Figure 12: Climate attitudes by treatment group

Note: This figure displays the mean of indicator variables by treatment group. Support for policy is an indicator variable equal to 1 if the respondent supports the policy somewhat or strongly. Fairness of main climate policies is an indicator variable equal 1 if on average the respondent somewhat or strongly agrees that each climate policy is fair. Willing to donate to reforestation cause equals 1 if the respondent is willing to donate more than 20% of the money prize. Willing to adopt climate-friendly behavior is an indicator variable equal 1 if on average the respondent is willing to adopt each climate-friendly behavior a lot or a great deal. Willing to sign petition supporting climate action equals 1 if the respondent is willing to sign a petition supporting climate action.

Figure 13: Effects of the treatments on beliefs



(A) Effects of the treatments on reasoning

(B) Effects of the treatments on beliefs about properties of the main climate policies



Note: The figure shows the coefficients from a regression of indices listed on the left, capturing respondents' beliefs and perceptions, on indicators for each treatment, controlling for socioeconomic characteristics (not shown). Panel A displays the coefficients from the regressions for reasoning, while Panel B displays the coefficients from regressions of beliefs about properties of each of the three policies. See Appendix A-1 of "Fighting Climate Change: International Attitudes Toward Climate Policies" for detailed variable definitions.