

Supplementary Materials

Think Globally, Act Locally: The Determinants of Local Policymakers' Support for Climate Policy

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Pre-Registered Hypotheses

This table includes the pre-registered hypotheses discussed in the main text and indicates whether we found support for those expectations. We exclude from this table the non-pre-registered hypotheses related to differences between plan attributes and some of the more nuanced pre-registered hypotheses about heterogeneous effects not discussed in the main text, which we evaluate later in the appendix. Our full (blinded) pre-registration can be found [here](#), with an [addendum](#) for the general public study.

	Description	Result
H_{1a}	Local policymakers will prefer tax benefits for clean/efficient energy use compared to general tax increases to fund clean/efficient energy projects or penalties for exceeding a certain carbon budget.	Supported
H_{1b}	Local policymakers will prefer tax penalties for exceeding a certain carbon budget compared to general tax increases to fund clean/efficient energy projects.	Partially supported
H_{2a}	Local policymakers will prefer higher energy efficiency standards for newly constructed government buildings compared to higher standards for all new construction, ^{NS} and will prefer higher standards for all new construction compared to higher energy efficiency standards for all new construction <i>and</i> existing buildings. ^{PS}	Not supported and partially supported
H_{2b}	Local policymakers with greater concern about climate change should be more likely to support higher energy efficiency standards for all new construction compared to higher energy efficiency standards for newly constructed government buildings. They may also support higher energy efficiency standards for all new construction and existing buildings compared to higher standards for all new construction	Supported
H_{3a}	Local policymakers will prefer economic relief provided to constituents hurt by the plan ^S and economic relief provided to all constituents ^{PS} compared to no economic relief.	Supported and partially supported
H_{3b}	Local policymakers will prefer economic relief provided to all constituents compared to economic relief provided only to constituents hurt by the plan.	Not supported
H_{4a}	Local policymakers will prefer longer implementation periods compared to quicker implementation periods.	Not supported
H_{4b}	Local policymakers with greater concern about climate change will prefer quicker implementation periods compared to longer implementation periods.	Supported

	Description	Result
H_{5a}	Local policymakers will prefer climate plans with low short-term costs and high long-term benefits compared to plans with low short-term costs and low long-term benefits or plans with high short-term costs and high long-term benefits.	Supported
H_{5b}	Local policymakers will prefer climate plans with low short-term costs and low long-term benefits compared to plans with high short-term costs and high long-term benefits.	Not supported
H_{5c}	Local policymakers with greater concern about climate change will be more likely to prefer climate plans with high short-term costs and high long-term benefits compared to plans with low short-term costs and low long-term benefits.	Supported
H_{6a}	Local policymakers will prefer climate plans where either cities in China or NATO countries participate compared to plans where neither participate.	Partially Supported
H_{6b}	Local policymakers will prefer climate plans where cities in China but not in NATO countries are participating compared to plans where cities in NATO countries but not in China participate.	Not supported
H_{6c}	Local policymakers will prefer climate plans where cities in NATO countries but not in China are participating compared to plans where cities in China but not in NATO countries participate.	Supported
H_{7a}	Local policymakers will prefer climate plans with bipartisan support compared to plans with either only Democratic support or no support.	Supported
H_{7b}	Local policymakers will prefer climate plans with Democratic support compared to plans with no support.	Not supported
H_{7c}	Local policymakers that are Republicans or stronger conservatives will be more likely to prefer climate plans with bipartisan support compared to just Democratic support than local policymakers that are Democrats or stronger liberals.	Partially supported
H_{7d}	Local policymakers that are Republicans or stronger conservatives will prefer climate plans with no party support compared to Democratic support.	Supported

	Description	Result
H_{8a}	Local policymakers are more likely to support expansive policy proposals (broader tax proposals, extensive energy efficiency standards, and/or high short-term policy costs) when the economic costs to constituents are made less salient (economic relief and/or delayed implementation time).	Not supported
H_{8b}	Local policymakers are more likely to support expansive policy proposals (broader tax proposals, extensive energy efficiency standards, and/or high short-term policy costs) when broad policy support is signaled (international participation and/or party endorsements).	Not supported

- a Supported indicates that the results are in the direction specified and statistically significant or marginally significant.
- b Partially supported indicates that the results are in the direction specified but not statistically significant.
- c Not supported indicates that the results are not in the direction specified.

Conjoint Design

Overview

This survey experiment utilizes a between-subjects conjoint design. Respondents are asked a series of pre-treatment questions to gather data on relevant moderators, then presented with a series of 4 paired climate plans, each on a new screen, and containing various levels of the attributes shown in Table 1 in the main text. Attributes on all profiles are randomly assigned, are sampled according to a uniform distribution, and there are no restrictions imposed on the combination of attribute levels that may appear. The order of attributes is randomized across respondents, but is constant within respondents to avoid confusion. The probability of each level of each attribute was drawn uniformly. After each pair of profiles, respondents are asked to rate and to choose between the plans. Respondents are then asked to select the attribute that was most important in making their decisions, as well as an open-ended question in which they are asked to explain how this factor mattered in their decision-making.

Compared to standard experimental designs where researchers are limited to varying a small number of factors, conjoint designs are better able to capture complex phenomena, separating various causes of a single effect. In a choice-based conjoint design, respondents are randomly assigned to observe a subset of levels of a set of features. In other words, the treatment is reconceptualized as a matrix of features and levels from which a sample is drawn. Conjoint designs rely on a series of pooling assumptions that are similar to those of standard within-subjects experimental designs, including stability, no-carryover effects, and no profile-order effects on the potential outcomes, as well as randomization of profiles for pairwise independence (Hainmueller, Hopkins, and Yamamoto 2014). The number of tasks and attributes were chosen to maximize power without reducing response quality (Bansak et al. 2018).

We obtain two outcome measures on the climate plans: the forced-choice task as well as the ratings task. We conduct our main analysis using the forced choice task, as this has been found to most accurately recover actual benchmarks (Hainmueller, Hangartner, and Yamamoto 2015), though we find that the main results are robust to the ratings task as well (see Figures 4-5 and 7-8). Forced-choice tasks also have an advantage in requiring respondents to make trade-offs and neutralizing attitudes about overall climate policy, which allows for focus on the key attributes that come into play in making decisions *between* policy proposals (Hainmueller and Hopkins 2015). This outcome variable is therefore binary if the profile was preferred relative to its alternative choice.

Questionnaire

Policymaker Pre-Test

CivicPulse independently collects additional data used in our analyses.

1. In the future, are you interested in running for any of the following higher levels of elected office?
 - (a) State office
 - (b) National office
 - (c) Both State and National offices
 - (d) Neither
2. Which, if any, of the following industries are important to your community's economy? Select all that apply.
 - (a) Oil, gas, or coal
 - (b) Green industry (e.g., green technology, solar/wind/geothermal energy)
 - (c) Automotive
 - (d) None of the above
3. Based on the evidence you have read and heard, what can you reasonably conclude about climate change?
 - (a) The climate is changing, and human activity plays a significant role
 - (b) The climate is changing, and human activity may play a significant role
 - (c) The climate is changing, and human activity does not play a significant role
 - (d) The climate is not changing
 - (e) Don't know / Unsure
4. In the recent past, has your local community been impacted by any of the following weather events? Select all that apply.
 - (a) Floods
 - (b) Hurricanes
 - (c) Wildfires
 - (d) Droughts
 - (e) Heatwaves
 - (f) None of the above
5. In your local area, does publicly supporting climate change policies help or hurt the chances of winning elections?
 - (a) Hurt a lot
 - (b) Hurt a little
 - (c) Neither help nor hurt
 - (d) Help a little
 - (e) Help a lot

Public Pre-Test

Some Demographic Information Collected by [Lucid](#).

1. Generally speaking, I think of myself as a:
 - (a) Democrat
 - (b) Republican
 - (c) Independent
2. *If Democrat selected:* Would you call yourself a strong Democrat, or a not very strong Democrat?
 - (a) Strong Democrat
 - (b) Not very strong Democrat
3. *If Republican selected:* Would you call yourself a strong Republican, or a not very strong Republican?
 - (a) Strong Republican
 - (b) Not very strong Republican
4. *If Independent selected:* Do you think of yourself as closer to the Democratic Party or the Republican Party?
 - (a) Closer to the Democratic Party
 - (b) Closer to the Republican Party
 - (c) Neither
5. In general, I think of myself as:
 - (a) Extremely liberal
 - (b) Liberal
 - (c) Slightly liberal
 - (d) Moderate, middle of the road
 - (e) Slightly conservative
 - (f) Conservative
 - (g) Extremely conservative
6. How often do you attend religious services?
 - (a) More than once a week
 - (b) Once a week
 - (c) A few times a month
 - (d) A few times a year
 - (e) Once a year or less
 - (f) Never
7. Which of these options best describes your situation (in the last seven days)?
 - (a) Employed full time
 - (b) Employed part time
 - (c) Unemployed
 - (d) Student
 - (e) Retired
 - (f) Homemaker

- (g) Self-employed
- 8. How much of the time do you think you can trust the government in Washington to do what is right?
 - (a) Just about always
 - (b) Most of the time
 - (c) Only some of the time
 - (d) Never
- 9. Would you say you follow what's going on in government and public affairs:
 - (a) Most of the time
 - (b) Some of the time
 - (c) Only now and then
 - (d) Hardly at all
- 10. Based on the evidence you have read and heard, what can you reasonably conclude about climate change?
 - (a) The climate is changing, and human activity plays a significant role
 - (b) The climate is changing, and human activity may play a significant role
 - (c) The climate is changing, and human activity does not play a significant role
 - (d) The climate is not changing
 - (e) Don't know / Unsure
- 11. In the recent past, has your local community been impacted by any of the following weather events? Select all that apply.
 - (a) Floods
 - (b) Hurricanes
 - (c) Wildfires
 - (d) Droughts
 - (e) Heatwaves
 - (f) None of the above
- 12. Which, if any, of the following industries are important to your community's economy? Select all that apply.
 - (a) Oil, gas, or coal
 - (b) Green industry (e.g., green technology, solar/wind/geothermal energy)
 - (c) Automotive
 - (d) None of the above
- 13. Do you believe that climate change policies would help or hurt your personal economic situation?
 - (a) Hurt a lot
 - (b) Hurt a little
 - (c) Neither help nor hurt
 - (d) Help a little
 - (e) Help a lot

14. (*Screener*) We would like to get a sense of your general preferences.

Most modern theories of decision making recognize that decisions do not take place in a vacuum. Individual preferences and knowledge, along with situational variables, can greatly impact the decision process. To demonstrate that you've read this much, just go ahead and select both red and green among the alternatives below, no matter what your favorite color is. Yes, ignore the question below and select both of these options.

What is your favorite color?

- (a) White
- (b) Black
- (c) Red
- (d) Pink
- (e) Green
- (f) Blue

Task Instructions

Local governments have been adopting a variety of plans relating to climate change. Next, we'll show you a sequence of such plans and ask for your opinion about them in your capacity as a local policymaker.¹

Specifically, we will show you four pairs of plans proposed by a non-partisan international organization. Each plan will contain several attributes, some of which may be important to you, while others may not (see below). There are no right or wrong answers.

Attributes
Type of Property Tax
Higher Energy Efficiency Standards For
Economic Relief
Plan Begins In
Cost-benefit Projection
International Participants
Party Endorsement

¹In the public study, "local policymaker" is replaced with "member of the local community."

Outcome Measures

1. Do you support or oppose adopting Plan A for your community? (*Asked after each of the four conjoint tasks*)
 - (a) Strongly support
 - (b) Somewhat support
 - (c) Neither support nor oppose
 - (d) Somewhat oppose
 - (e) Strongly oppose
2. Do you support or oppose adopting Plan B for your community? (*Asked after each of the four conjoint tasks*)
 - (a) Strongly support
 - (b) Somewhat support
 - (c) Neither support nor oppose
 - (d) Somewhat oppose
 - (e) Strongly oppose
3. If you had to choose, which of these plans would you prefer adopting in your community? (*Asked after each of the four conjoint tasks*)
 - (a) Plan A
 - (b) Plan B
4. Which attribute was the most important in making your choice of plans?
 - (a) Type of Property Tax
 - (b) Higher Energy Efficiency Standards For
 - (c) Economic Relief
 - (d) Policy Begins In
 - (e) Cost-benefit Projection
 - (f) International Participants
 - (g) Party Endorsement
5. In just a few words, please explain your response to the previous question (Which attribute was the most important in making your choice of plans?)

Summary Statistics

Policymakers

In the main text, we illustrate weighted results. To compute weighted estimates, we employ probability weights provided by Civic Pulse to increase representativeness of the policymaker sample. Probability weights are created with a post-stratification raking procedure using the Census and presidential vote share variables. This procedure follows the methodology outlined in DeBell and Krosnick (2009) for the American National Elections Study (ANES). In addition to the probability weights provided by Civic Pulse, we also calculate weights based on Census data for both the public and policymakers sample (Census weighted policymaker results do not alter the main findings, and are available upon request). Even adjusting for population weights, public and policymaker preference differences are consistent with unweighted results, which we include in the subsequent sections.

Table 2: Summary Statistics: Policymakers

Variable	Min.	Max.	Mean (Weighted)	Mean (Unweighted)
Govt. type ^a	1.00	3.00	2.03	2.08
Ideology ^b	1.00	6.00	2.98	3.14
Election Ambition ^c	0.00	3.00	0.60	0.50
Election Ambition (National) ^d	0.00	1.00	0.13	0.11
Age ^e	1.00	15.00	8.74	7.31
Partisanship ^f	1.00	5.00	3.21	3.28
Education ^g	1.00	7.00	4.25	5.45
Gender ^h	1.00	2.00	1.51	1.33
Dist. College Prop. ⁱ	1.00	3.00	2.09	2.32
Dist. Urban Prop. ^j	1.00	3.00	2.11	2.26
Dist. 2020 Pres. Vote Share (D) ^k	1.00	3.00	2.65	2.63
Local FF Ind. ^l	1.00	2.00	1.28	1.25
Local FF or Auto Ind. ^m	1.00	2.00	1.39	1.37
Local Green Ind. ⁿ	1.00	2.00	1.30	1.33
CC Belief ^o	1.00	4.00	3.45	3.50
Local CC Effects ^p	0.00	5.00	1.48	1.42
Reelect Belief ^q	1.00	5.00	3.03	3.02

a Government type is a categorical variable where 1 corresponds to county government, 2 to municipality, and 3 to township.

b Ideology is a 5 point scale where 1 corresponds to very conservative and 5 corresponds to very liberal, and 6 corresponds to “Don’t know.”

c Election ambition is a categorical variable where 1 corresponds to interest in running for state office, 2 for national office, 3 for both, and 0 for neither.

d Election ambition (national) rescales the previous variable such that 1 corresponds to interest in national or both, while 0 corresponds to state or neither.

e Age is a factor variable with 15 levels of 4 year age buckets.

f Partisanship is a 5 point scale where 1 corresponds to Republican, 2 corresponds to lean Republican, 3 corresponds to Independent, 4 corresponds to lean Democrat, and 5 corresponds to Democrat. (Respondents who select “Other” are removed.)

- g Education is a factor variable where 1 corresponds to less than high school, 2 corresponds to high school graduate, 3 corresponds to technical/trade school, 4 corresponds to some college, 5 corresponds to college graduate, 6 corresponds to some graduate school, and 7 corresponds to graduate degree.
- h Gender is a factor variable where 1 corresponds to male and 2 corresponds to female.
- i District college proportion shows the percentage of 25-years-or-older residents in the given geographic unit who have completed a 4-year, post-secondary degree. This data is from the 2015-2019 Five Year Data from the US Census American Community Survey, as compiled by IPUMS National Historical Geographic Information System (NHGIS). 1 corresponds to the first tercile (0% to 17%), 2 corresponds to the second tercile (17% to 27%), and 3 corresponds to the third tercile (27% to 100%).
- j District urban population reflects the proportion of residents in the given geographic unit who reside in an urban area. This data is taken from the 2010 Census, as compiled by IPUMS NHGIS. 1 corresponds to the first tercile (0% to 10%), 2 corresponds to the second tercile (10% to 96%), and 3 corresponds to the third tercile (96% to 100%).
- k District 2020 presidential vote share (D) reflects the proportion of the votes, by county, for Joe Biden in the 2020 Presidential election. Each sub-county government is matched to the relevant county in which it is contained. 1 corresponds to the first tercile (0% to 24%), 2 corresponds to the second tercile (24% to 37%), and 3 corresponds to the third tercile (37% to 100%).
- l Local fossil fuel industry is a categorical variable that corresponds to 2 if the respondent identifies “oil, coal, or gas” as an important local industry, and 1 otherwise.
- m Local fossil fuel or auto industry is a categorical variable that corresponds to 2 if the respondent identifies “oil, coal, or gas” or “automotive” as an important local industry, and 1 otherwise.
- n Local green industry is a categorical variable that corresponds to 2 if the respondent identifies “green industry (e.g., green technology, solar/wind/geothermal energy)” as an important local industry, and 1 otherwise.
- o Climate change belief is a factor variable where 4 corresponds to a response that “the climate is changing, and human activity plays a significant role,” 3 corresponds to “the climate is changing, and human activity may play a significant role,” 2 corresponds to “the climate is changing, but human activity does not play a significant role”, and 1 corresponds to “the climate is not changing” (Respondents who selected "don't know / Unsure" are dropped in this specification, but included in the binary belief / no belief specification).
- p Local climate change effects is count of natural disasters that the respondent selects in response to the question, “In the recent past, has your local community been impacted by any of the following weather events,” selecting all that apply from floods, hurricanes, wildfires, droughts, and heatwaves. The variable thus ranges from 0 to 5.
- q Reelection belief is a 5 point scale where 1 corresponds to a belief that supporting climate change policies would hurt the respondent’s reelection chances a lot, and 5 corresponds to a belief that supporting climate change policies would help the respondent’s reelection chances a lot.

Table 3: Sample Composition: Policymakers

Variable	Level	N	Pct
Govt. type	1: County	85	14.8
	2: Municipality	354	61.8
	3: Township	134	23.4
Ideology	1: Very conservative	40	7.0
	2: Somewhat conservative	117	20.4
	3: Moderate, middle of the road	154	26.9
	4: Somewhat liberal	112	19.5
	5: Very liberal	61	10.6
	6: Don't know	5	0.9
	Missing	84	14.7
Election Ambition	0: Neither	411	71.7
	1: Interest in state office	93	16.2
	2: Interest in national office	5	0.9
	3: Interest in both	58	10.1
	Missing	6	1.0
Election Ambition (National)	0: Interest in state or neither	504	88.0
	1: Interest in national or both	63	11.0
	Missing	6	1.0
Age	1	1	0.2
	2	1	0.2
	3	11	1.9
	4	33	5.8
	5	72	12.6
	6	95	16.6
	7	89	15.5
	8	55	9.6
	9	50	8.7
	10	39	6.8
	11	25	4.4
	12	16	2.8
	13	7	1.2
	14	3	0.5
	15	1	0.2
Partisanship	Missing	75	13.1
	1: Republican	138	24.1
	2: Lean Republican	53	9.2
	3: Independent	46	8.0
	4: Lean Democrat	56	9.8
	5: Democrat	191	33.3
	Missing	89	15.5
Education	1: Less than high school	1	0.2
	2: High school graduate	25	4.4
	3: Technical/trade school	21	3.7
	4: Some college	92	16.1
	5: College graduate	138	24.1
	6: Some graduate school	42	7.3
	7: Graduate degree	203	35.4
	Missing	51	8.9
Gender	1: Male	384	67.0
	2: Female	184	32.1
	Missing	5	0.9
Dist. College Prop.	1: 0–17%	100	17.5
	2: 17–27%	196	34.2
	3: 27–100%	277	48.3
Dist. Urban Prop.	1: 0–10%	118	20.6
	2: 10–96%	186	32.5
	3: 96–100%	269	46.9
Dist. 2020 Pres. Vote Share (D)	1: 0–24%	43	7.5
	2: 24–37%	134	23.4
	3: 37–100%	393	68.6
	Missing	3	0.5
Local FF Ind.	1: Not	423	73.8
	2: Oil, coal, or gas as important local industry	150	26.2
Local FF or Auto Ind.	1: Not	354	61.8
	2: Oil, coal, gas, or automotive as important local industry	219	38.2
Local Green Ind.	1: Not	391	68.2
	2: Green industry important local industry	182	31.8
CC Belief	1: Belief that the climate is not changing	14	2.4
	2: Belief that the climate is changing, but human activity does not play a significant role	63	11.0
	3: Belief that the climate is changing, and human activity may play a significant role	131	22.9
	4: Belief that the climate is changing, and human activity plays a significant role	349	60.9
	Missing	16	2.8
Local CC Effects	0	186	32.5
	1	147	25.7
	2	114	19.9
	3	97	16.9
	4	21	3.7
	5	8	1.4
Reelect Belief	1: Hurt reelection chances a lot	37	6.5
	2: Hurt reelection chances a little	98	17.1
	3: Neither help nor hurt	299	52.2
	4: Help a little	100	17.5
	5: Help reelection chances a lot	39	6.8

Figure 1: Policymaker Sample Representativeness

Sub-county¹ Officials

	Sample Median	Population Median
Proportion Urban	0.98	0.72
Proportion College-educated	0.27	0.22
Population Size	5,737	3,324
Democratic Vote Share 2020 ²	0.45	0.39

¹ This group includes officials from townships and municipalities

² Presidential vote share estimated at the county level. Each sub-county government is matched to the relevant county in which it is contained.

County Officials

	Sample Median	Population Median
Proportion Urban	0.45	0.40
Proportion College-educated	0.23	0.19
Population Size	34,579	25,758
Democratic Vote Share 2020	0.38	0.30

Representativeness of policymaker sample compared to population levels (prepared by CivicPulse).

Public

Weights for our public sample are calculated using Census variables such as gender, education, age, and race using an entropy balancing technique (Hainmueller and Xu 2013).

Table 4: Summary Statistics: Public

Variable	Min.	Max.	Mean (Weighted)	Mean (Unweighted)
Ideology ^a	1.00	5.00	3.01	3.01
Age ^b	1.00	20.00	7.93	8.01
Partisanship ^c	1.00	5.00	3.22	3.23
Education ^d	1.00	7.00	3.73	4.29
Gender ^e	1.00	2.00	1.51	1.52
Religiosity ^f	1.00	6.00	3.96	3.84
Employment ^g	1.00	21.00	12.20	10.99
Trust in Govt. ^h	1.00	4.00	2.78	2.75
Follow News ⁱ	1.00	4.00	2.00	1.91
Household Income ^a	1.00	24.00	8.77	10.04
Ethnicity ^j	1.00	16.00	3.09	2.64
Hispanic ^k	1.00	16.00	2.36	2.03
Region ^l	1.00	4.00	2.67	2.63
Local FF Ind. ^m	1.00	2.00	1.45	1.45
Local FF or Auto Ind. ⁿ	1.00	2.00	1.57	1.56
Local Green Ind. ^o	1.00	2.00	1.34	1.37
CC Belief ^p	1.00	4.00	3.32	3.34
Local CC Effects ^q	0.00	5.00	1.35	1.42
Policy Help Belief ^r	1.00	5.00	2.70	2.70

a Ideology is a 5 point scale where where 1 corresponds to very conservative and 5 corresponds to very liberal, and 6 corresponds to “Don’t know.”

b Age is a factor variable with 15 levels of 4 year age buckets.

c Partisanship is a 5 point scale where 1 corresponds to Republican, 2 corresponds to lean Republican, 3 corresponds to Independent, 4 corresponds to lean Democrat, and 5 corresponds to Democrat.

d Education is a factor variable where 1 corresponds to less than high school, 2 corresponds to high school graduate, 3 corresponds to technical/trade school, 4 corresponds to some college, 5 corresponds to college graduate, 6 corresponds to some graduate school, and 7 corresponds to graduate degree.

e Gender is a factor variable where 1 corresponds to male and 2 corresponds to female.

f Religiosity is a factor variable where 1 corresponds to attends religious services more than once a week, 2 corresponds to once a week, 3 corresponds to a few times a month, 4 corresponds to a few times a year, 5 corresponds to once a year or less, and 6 corresponds to never.

g Employment is a factor variable

h Trust in government is a factor variable where 1 corresponds to a response that the respondent believes they can trust the government in Washington to do what is right “Just about always,” 2 corresponds to “Most of the time,” 3 corresponds to “Only some of the time”, and 4 corresponds to “Never.”

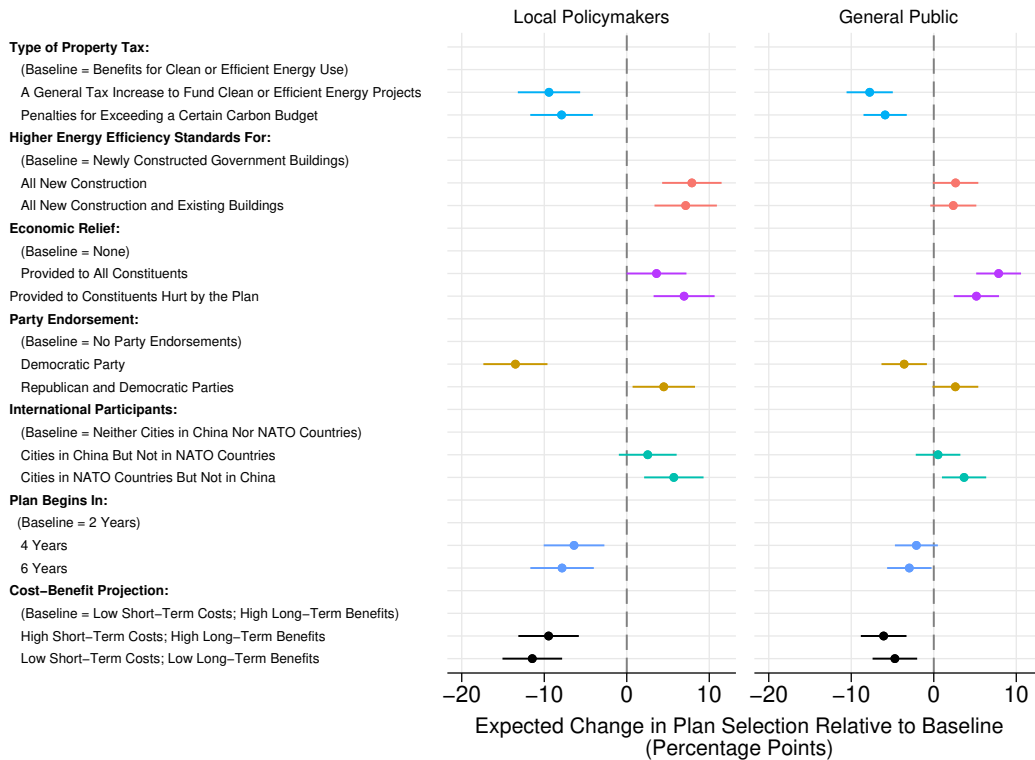
- i Follow news is a factor variable where 1 corresponds to a response that the respondent follows what's going on in government and public affairs "Most of the time," 2 corresponds to "Some of the time," 3 corresponds to "Only now and then", and 4 corresponds to "Hardly at all"
- j Household income is a factor variable with 24 levels, ranging from "Less than \$14,999" to \$250,000. From \$14,999 to \$99,999, buckets are in increments of \$5,000; from \$100,000 to \$199,999 buckets are in increments of \$25,000; and from \$200,000 to \$249,999 in increments of \$50,000 (prefer not to answer is omitted).
- k Ethnicity is a factor variable where 1 corresponds to "White," 2 corresponds to "Black, or African American," 3 corresponds to "American Indian or Alaska Native," 4 corresponds to "Indian," 5 corresponds to "Chinese," 6 corresponds to "Filipino," 7 corresponds to "Japanese," 8 corresponds to "Korean," 9 corresponds to "Vietnamese," 10 corresponds to "Asian - Other," 11 corresponds to "Native Hawaiian," 12 corresponds to "Guamanian," 13 corresponds to "Samoan," 14 corresponds to "Pacific Islander," 15 corresponds to "Some other race," and 16 corresponds to "Prefer not to answer."
- l Hispanic is a factor variables where 1 corresponds to "No, not of Hispanic, Latino, or Spanish origin," 2 corresponds to "Yes, Mexican, Mexican American, Chicano," 3 corresponds to "Yes, Cuban," 4 corresponds to "Argentina," 5 corresponds to "Colombia," 6 corresponds to "Ecuador," 7 corresponds to "El Salvadore," 8 corresponds to "Guatemala," 9 corresponds to "Nicaragua," 10 corresponds to "Panama," 11 corresponds to "Peru," 12 corresponds to "Spain," 13 corresponds to "Venezuela," 14 corresponds to "Other Country," 15 corresponds to "Prefer not to answer," and 16 corresponds to "Yes, Puerto Rican."
- m Region is a factor variable where 1 corresponds to "Northeast," 2 corresponds to "Midwest," 3 corresponds to "South," and 4 corresponds to "West."
- n Local fossil fuel industry is a categorical variable that corresponds to 1 if the respondent identifies "oil, coal, or gas" as an important local industry, and 0 otherwise.
- o Local fossil fuel or auto industry is a categorical variable that corresponds to 1 if the respondent identifies "oil, coal, or gas" or "automotive" as an important local industry, and 0 otherwise.
- p Local green industry is a categorical variable that corresponds to 1 if the respondent identifies "green industry (e.g., green technology, solar/wind/geothermal energy)" as an important local industry, and 0 otherwise.
- q Climate change belief is a factor variable where 3 corresponds to a response that "the climate is changing, and human activity plays a significant role," 2 corresponds to "the climate is changing, and human activity may play a significant role," 1 corresponds to "the climate is changing, but human activity does not play a significant role," and 0 corresponds to "the climate is not changing" (Respondents who selected "don't know / Unsure" are dropped in this specification, but included in the binary belief / no belief specification).
- r Local climate change effects is a count of natural disasters that the respondent selects in response to the question, "In the recent past, has your local community been impacted by any of the following weather events," selecting all that apply from floods, hurricanes, wildfires, droughts, and heatwaves. The variable thus ranges from 0 to 5.
- s Policy help belief is a 5 point scale where 1 corresponds to a belief that supporting climate change policies would hurt the respondent's personal economic situation a lot, and 5 corresponds to a belief that supporting climate change policies would help the respondent's personal economic situation a lot.

Average Marginal Component Effects (AMCEs)

We follow the procedure set out by Hainmueller, Hopkins, and Yamamoto (2014) to estimate the average marginal component effect (AMCE). The AMCE, as the increased probability that a climate plan would be chosen compared to the baseline to this level, averaged over all of the possible levels of the other attributes, allows us to understand the importance of each attribute in individual-level migration attitudes. This is done by averaging the effects of the different attributes over the distribution of the other attributes, which are conditionally independent, and obtaining a weighted average of possible attribute combinations. The AMCE is a nonparametric estimator with full randomization and orthogonality of attributes. This implies that while most combinations of attribute levels are never shown, the relative importance of attributes can be estimated, as their distributions relative to other attributes are identical. Unlike traditional model based approaches to studying behavior, this approach does not rely on the specific mechanisms by which individuals reach a particular decision. AMCEs are estimated using a regression of the binary forced-choice outcome on the full set of attribute levels, which are operationalized as indicator variables. For each indicator variable, one reference category is omitted, which is considered as the baseline level of that attribute. The baseline level of each attribute is noted in italics in Table 1 of the main text. Standard errors are clustered at the respondent level, as each respondent completed multiple choice tasks.

In the main text, we show results using marginal means, as the interpretations of AMCEs can be sensitive to the selected baselines. In this section, we show results using the AMCE estimates.

Figure 2: AMCE (Unweighted)



Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

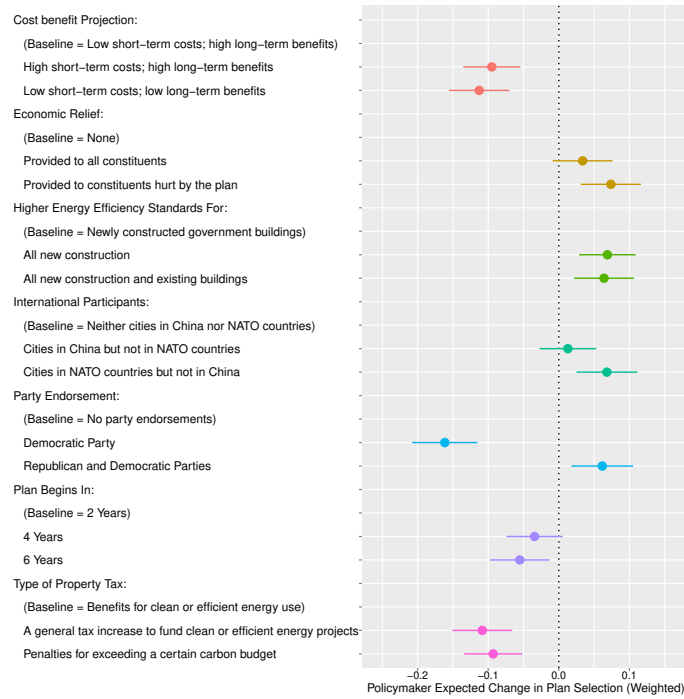
Policymaker AMCEs

Table 5: AMCE (Unweighted; Compared to baseline levels)

Attribute	Level	Estimate	Std. Err	
Cost benefit Projection	High short-term costs; high long-term benefits	-0.095	0.019	***
Cost benefit Projection	Low short-term costs; high long-term benefits	-0.114	0.018	***
Economic Relief	Provided to all constituents	0.036	0.019	
Economic Relief	Provided to constituents hurt by the plan	0.069	0.019	***
Higher Energy Efficiency Standards For	All new construction	0.079	0.018	***
Higher Energy Efficiency Standards For	All new construction and existing buildings	0.071	0.019	***
International Participants	Cities in China but not in NATO countries	0.025	0.018	
International Participants	Cities in NATO countries but not in China	0.057	0.018	**
Party Endorsement	Democratic Party	-0.135	0.020	***
Party Endorsement	Republican and Democratic Parties	0.045	0.019	*
Plan Begins In	4 Years	-0.064	0.019	***
Plan Begins In	6 Years	-0.078	0.020	***
Type of Property Tax	A general tax increase to fund clean or efficient energy projects	-0.094	0.019	***
Type of Property Tax	Penalties for exceeding a certain carbon budget	-0.079	0.019	***

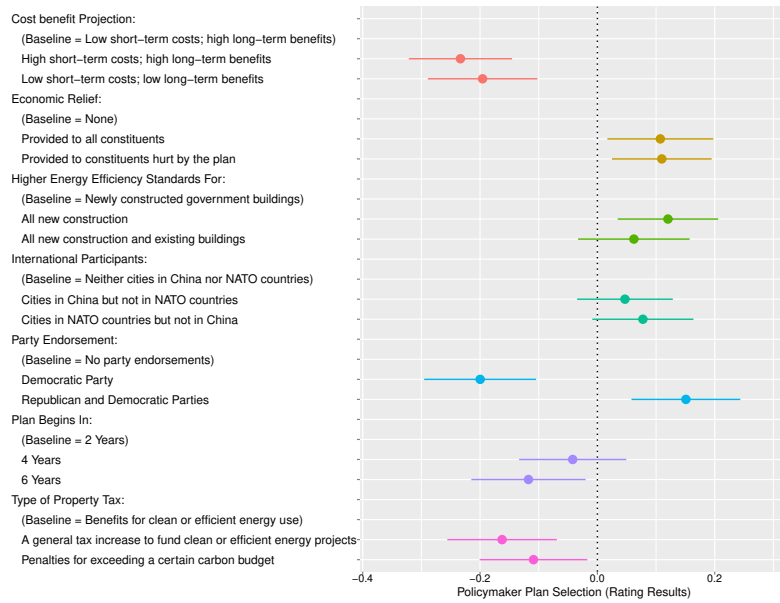
Notes: *** p<0.001, ** p<0.01, * p<0.05. Baselines levels are listed in Table 1. Robust standard errors are clustered by respondent.

Figure 3: AMCE: Policymakers (Weighted)



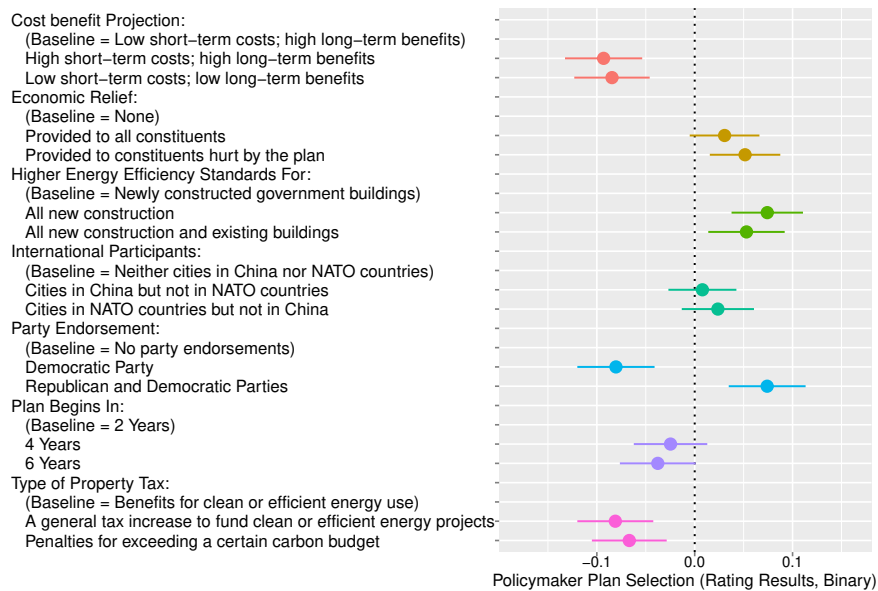
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 4: AMCE, Rating Outcome: Policymakers (Unweighted)



Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 5: AMCE, Binary Rating Outcome: Policymakers (Unweighted)



Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level, coded as 1 if respondents “strongly support” or “somewhat support” a climate plan and 0 otherwise.

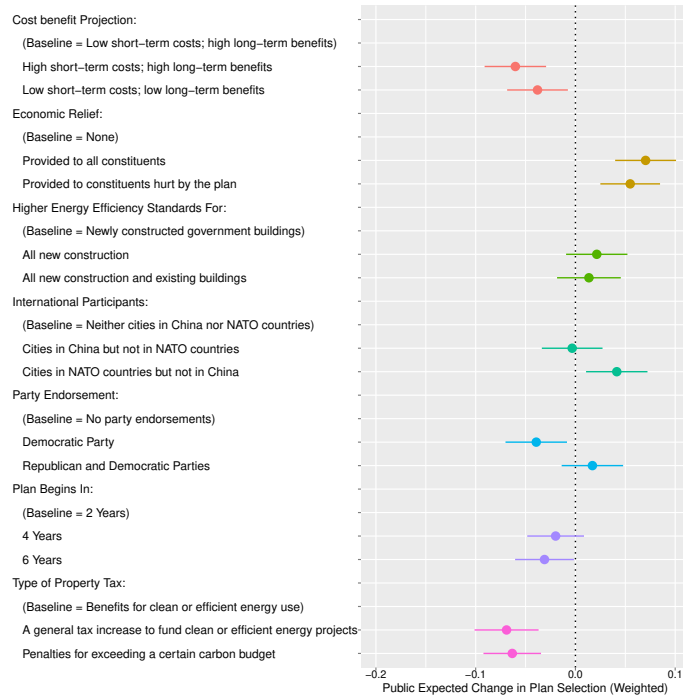
Public AMCEs

Table 6: AMCE (Unweighted; Compared to baseline levels)

Attribute	Level	Estimate	Std. Err	
Cost benefit Projection	High short-term costs; high long-term benefits	-0.061	0.014	***
Cost benefit Projection	Low short-term costs; low long-term benefits	-0.047	0.014	***
Economic Relief	Provided to all constituents	0.079	0.014	***
Economic Relief	Provided to constituents hurt by the plan	0.052	0.014	***
Higher Energy Efficiency Standards For	All new construction	0.026	0.014	
Higher Energy Efficiency Standards For	All new construction and existing buildings	0.024	0.014	
International Participants	Cities in China but not in NATO countries	0.005	0.014	
International Participants	Cities in NATO countries but not in China	0.037	0.014	**
Party Endorsement	Democratic Party	-0.036	0.014	*
Party Endorsement	Republican and Democratic Parties	0.026	0.014	
Plan Begins In	4 Years	-0.021	0.013	
Plan Begins In	6 Years	-0.030	0.014	*
Type of Property Tax	A general tax increase to fund clean or efficient energy projects	-0.078	0.014	***
Type of Property Tax	Penalties for exceeding a certain carbon budget	-0.059	0.013	***

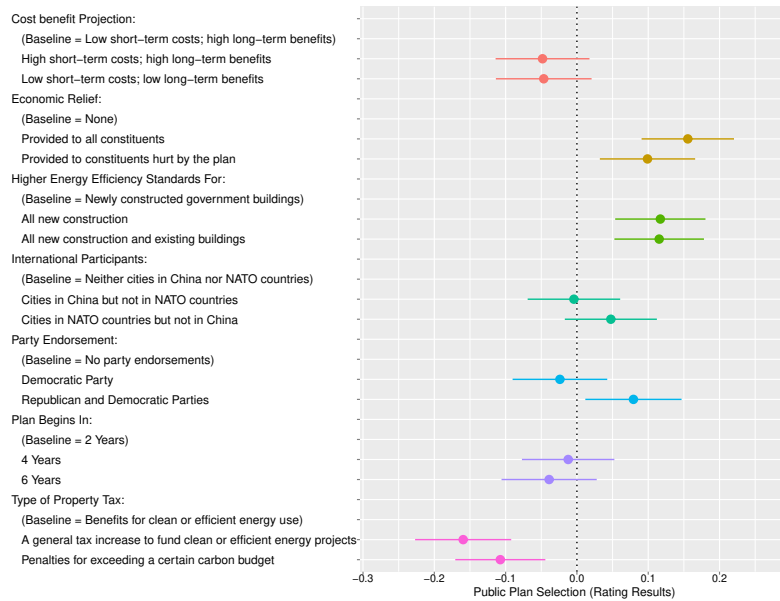
Notes: *** p<0.001, ** p<0.01, * p<0.05. Baselines levels are listed in Table 1. Robust standard errors are clustered by respondent.

Figure 6: AMCE: Public (Weighted)



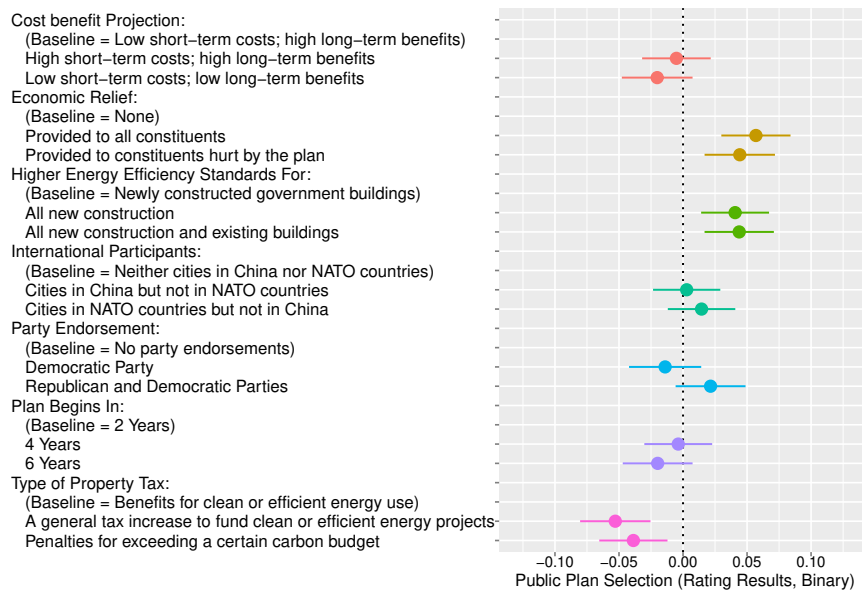
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 7: AMCE, Rating Outcome: Public (Unweighted)



Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 8: AMCE, Binary Rating Outcome: Public (Unweighted)



Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level, coded as 1 if respondents “strongly support” or “somewhat support” a climate plan and 0 otherwise.

Elite-Public Gaps

Expectations

Despite its relevance to debates about the representativeness of American democracy, the presence or lack thereof of elite-public gaps is contested in the literature. Some studies—such as the analysis of international organization legitimacy by [Dellmuth et al. \(2019\)](#)—find large divergences in opinion between government officials and the public. Studies in this tradition point out that contradictory views between policymakers and the public can arise for at least three different reasons ([Kertzer, 2020](#)). First, elites and the public generally differ in their average demographic characteristics, which can impact preferences. For example, a greater percentage of policymakers are male compared to the general public, and previous literature shows that women are more likely to believe in and be concerned about climate change ([Egan and Mullin, 2017](#)). Second, elites and members of the public may have different beliefs about the world that shape their policy preferences. For instance, there is evidence that policymakers are more likely than the public to believe that global temperatures are rising ([Lee et al., 2021](#)). One potential reason for these differences is that politicians spend more time than the public with lobbyists and donors, whose views and demographics are non-representative ([Hertel-Fernandez, Mildenberger and Stokes, 2019](#)). Finally, elites may have more rational and deliberative decision-making processes than average members of the public.

However, despite the many different ways elite-public gaps can arise, we posit several theoretical reasons why preferences between elites and the public should, on average, be similar when it comes to climate policy. First, per our foundational assumption, policymakers have political incentives to be responsive to public opinion. Second, elite cues can impact public opinion, leading to preference convergence ([Broockman and Butler, 2017](#); [Guisinger and Saunders, 2017](#)). Third, climate change is a particularly salient issue, meaning policymakers have relatively high political incentives to be attuned to public views on climate policy compared to other, less salient policy areas. For example, [Stokes \(2016\)](#) finds that climate policy can have a significant impact on subnational elections in Canada. On the other hand, [Hertel-Fernandez, Mildenberger and Stokes \(2019\)](#) show that senior Congressional staffers underestimate their constituents’ support for climate regulations, suggesting that this expectation is an open question. We therefore pre-registered an expectation that policymaker and public preferences on climate plans would be broadly similar. Recent findings buttress the case for our theoretical expectations. For example, [Kertzer \(2020\)](#) conducts a meta-analysis of 162 paired experiments on members of the public and elites, and finds that elites generally respond to treatments in the same ways as members of the public. Of the 162 treatment effects he analyzes, over 98% do not differ in sign (i.e., whether the relationship is positive or negative) between members of the public and elites, and almost 90% do not differ in size. Of course, at least some differences between policymakers and the public are likely to exist for the three reasons outlined above ([Kertzer, 2020](#)). We are not making a maximalist, deterministic argument that all preferences will be compatible, but a more nuanced, probabilistic argument that they will tend towards compatibility. Unfortunately, as discussed by [Kertzer \(2020\)](#), it is difficult to empirically disentangle *precisely* why gaps might arise, and thus we do not have any theoretical expectations related to when some gaps may occur versus when they will not; this is a task for future work. Instead, we have a general expectation that elite and public views will largely be compatible, at least on average.

Data and Methods

The study design for the general public exactly replicates the conjoint design fielded on the sample of policymakers. We field our conjoint experiment on a sample of 1,029 Americans recruited in December 2021 in partnership with Lucid, which is nationally representative based on age, gender, race/ethnicity, and region. Recent work shows experiments fielded on Lucid are high-quality and do well replicating previous findings (Coppock and McClellan, 2019).

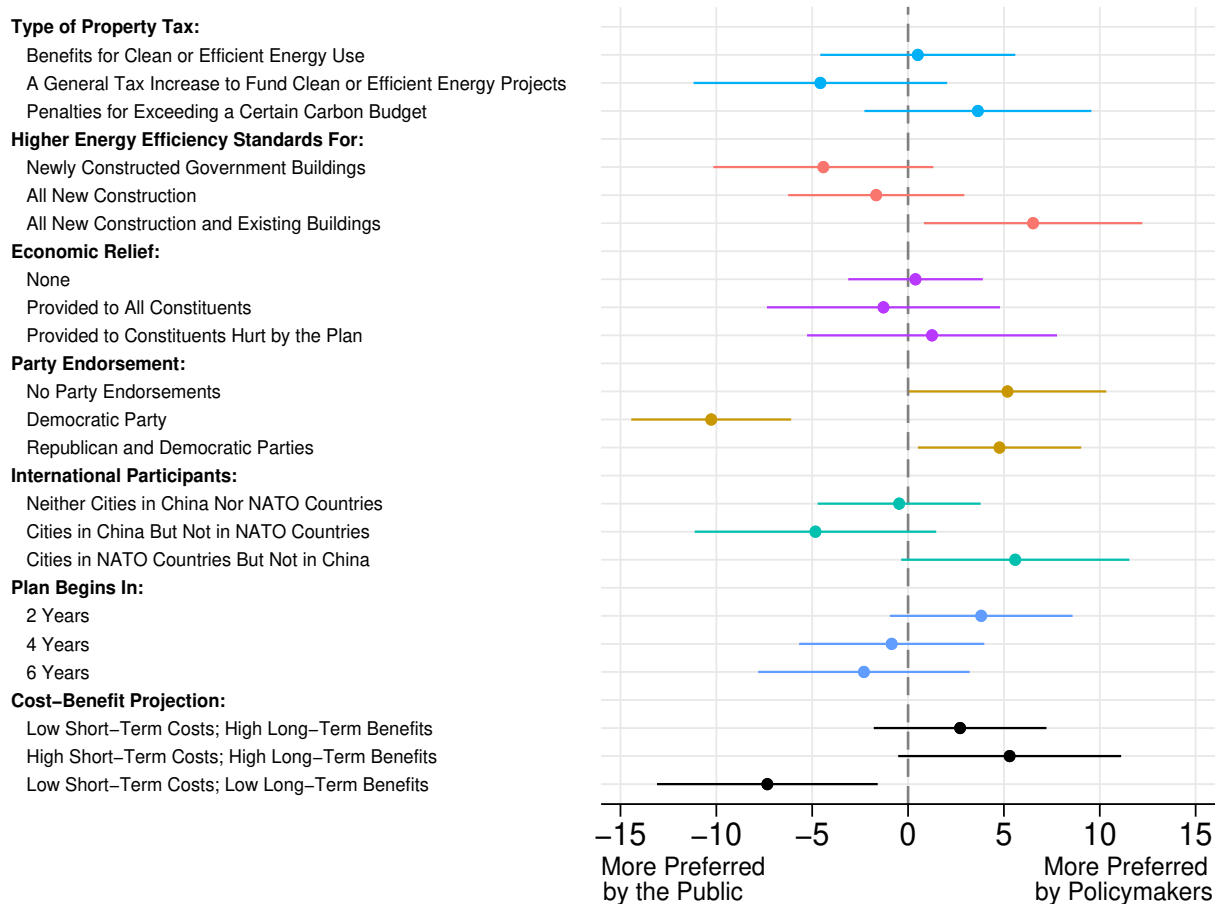
An alternative method to analyze elite-public gaps would involve comparing the views of the public and their specific local policymakers (Lax and Phillips, 2012). After all, significant gaps in opinion on climate policy between, say, local policymakers from Oklahoma City and members of the public from New York City are less relevant for democratic accountability and representativeness than gaps between policymakers and citizens from the same locale. Unfortunately, this type of fine-grained geographical analysis is not ethically possible given the need to maintain the policymakers’ anonymity. CivicPulse does not provide data on which particular locality policymakers represent because, in conjunction with other data points such as age and gender, this information could be used to reveal policymakers’ identity and thus violate the terms under which policymakers agreed to participate in the survey. Nevertheless, since we have both a national sample of policymakers and a national sample of the public, we believe our more macro-level analysis of elite-public gaps can still tell us something useful about whether elites and citizens are generally on the same page or not when it comes to climate policy. Just as national presidential polls are informative even though the electoral college makes presidential elections a state-by-state race, a national analysis of elite-public gaps in this case is still valuable because it reveals the *average difference* in opinion between policymakers and citizens across different contexts. Our analysis therefore assesses elite-public gaps on average rather than at the constituency level. This approach mirrors that of most prominent studies of elite-public preferences, which also do not directly match policymakers with their constituents and instead compare aggregate samples of the public and elites as we do (e.g., Lupton, Myers and Thornton, 2015; Teele, Kalla and Rosenbluth, 2018; Kertzer, 2020; Martin and Raffler, 2021; Lupu and Warner, 2022). Further, as we will discuss in subsequent sections, we take important steps to improve on this state-of-the-art by highlighting large, key states in which we can conduct a more localized comparison of elites and the associated publics.

Results

Figure 9 illustrates the differences between policymakers and members of the public by plotting the difference in MM. In accordance with our expectations on elite-public gaps, the preferences of policymakers and the mass public are largely compatible in both sign and size. Per Kertzer (2020), effects in our context can be said to differ in sign when (1) MM for both elites and members of the public significantly differ from the 50% threshold, and (2) when one effect is negative (below 50%) and the other is positive (above 50%). Following this procedure, *none* of the MM shown in Figure 9 differ in sign between local policymakers and members of the public. That is, none of the attribute levels significantly increase plan favorability for policymakers but decrease it for members of the public, or vice-versa. Figure 9 further shows that a substantial majority—over 75%—of the MM we estimate do *not* significantly differ in size between local policymakers and members of the public—that is, the difference in MM between policymakers and the public is not

significant. To probe these results further, we now proceed to discuss our findings for each attribute in turn.

Figure 9: Probing Elite-Public Gaps



Note: Bars are 95% confidence intervals based on respondent-clustered standard errors for differences in Marginal Means between local policymakers and the public.

Like policymakers, and per our pre-registered expectations, members of the public prefer plans that include subsidies compared to those with taxes or penalties. Furthermore, there are no statistically significant differences between policymakers and the public when it comes to the property tax attributes.

Local policymakers are more supportive of expansive energy efficiency standards (e.g., on all new construction) than narrow ones (e.g., only on newly constructed government buildings). Although a similar pattern of results holds for the public, the size of the effect is much smaller and not statistically significant. In particular, policymakers are significantly more likely than the public to support the most expansive type of energy efficiency standard we measure support for: higher standards on all new construction *and* existing buildings. While the level of public support for energy efficiency standards is lower than that of policymakers, it is still non-negative, indicating that the public would be unlikely to raise substantial opposition to stricter energy efficiency measures.

Per our expectations, both local policymakers and the public are generally supportive of plans with economic compensation to defray the costs of climate policies. There are also no significant differences between local policymakers and the public.

Both local policymakers and the public are significantly less likely to support climate plans endorsed only by the Democratic Party than bipartisan plans or those endorsed by neither national party. While both policymakers and the public are generally more likely to support climate plans with bipartisan support compared to plans with no endorsements, this effect is not statistically significant for the public. In fact, there are some germane elite-public gaps when it comes to political endorsements. Most notably, policymakers are over 10 percentage points less likely to support climate plans with only Democratic Party endorsement and almost 5 percentage points more likely to support plans with bipartisan endorsements relative to the public ($p < 0.03$). These differences suggest that local policymakers are more averse to partisan climate plans than the public, likely due to fear of electoral consequences. This finding contributes to the literature on elite versus public polarization (e.g., [Enders, 2021](#)).

Both the public and policymakers are more supportive of climate plans that involve participation by cities in NATO countries compared to plans with no evidence of international participation. There is no statistical evidence of elite-public gaps on this issue.

Policymaker and public views are also largely compatible with respect to the time to implementation of local climate plans. Both prefer shorter implementation times in general, and there is no significant evidence of differences between policymakers and citizens.

Like policymakers, among the public we do not find any statistically significant differences between plans with high short-term costs and high long-term benefits compared to plans with low short-term costs and low long-term benefits. Given the public's cost sensitivity in particular, this is not a trivial result. However, we do find that the public is more likely than local policymakers to prefer plans with low short-term costs and benefits. This could slightly disincentivize policymakers from taking bold climate action.

As we did for policymakers in the main text, we can also make between-attribute comparisons for the public. Whereas we find that policymakers prefer plans with indirect spending via the tax code rather than plans with direct economic relief provided to all constituents, this dynamic does not hold among the public in our sample. This null finding contrasts with prior work and is a ripe avenue for future research. There is also no difference in support between subsidies and targeted economic relief among either the public or policymakers.

Partisan dynamics for policymakers and the public are also broadly similar. Starting with our property tax attribute, we find no significant differences between Democratic and Republican members of the public, mirroring our findings for policymakers and further demonstrating the political logic of proposing subsidies rather than taxes or penalties. Similarly, no significant differences emerge between Democratic and Republican policymakers or the public for the economic relief attribute. This suggests that economic relief in the context of climate plans has bipartisan support and thus could be a useful tool to increase backing for environmental action.

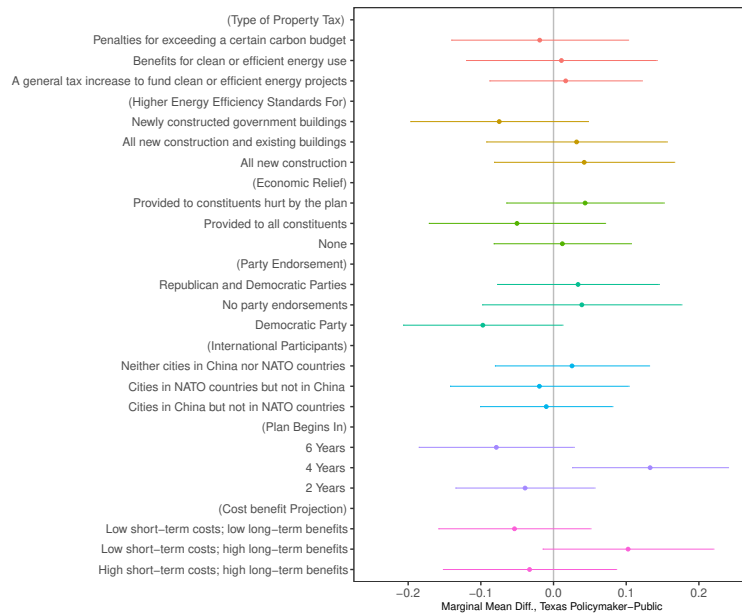
In line with our pre-registered expectations, and like Republican policymakers, Republican members of the public are much less likely than their Democratic counterparts to support climate plans when they are endorsed by only the Democratic Party. This implies that a strategy of no partisan endorsement may yield more aggregate support—especially among Republicans—than plans with only a Democratic Party endorsement. Finally, Democratic members of the public are more likely to support plans that begin

in 2 years than Republican members of the public. This is likely a reflection of the differential priority those on the political left and the political right place on combatting climate change.

In the main text, we show that a plurality of policymakers across parties report that the cost-benefit analysis attribute was the most important factor in making their choice of plans. By contrast, the most important feature for the public is economic relief, which actually received the *fewest* votes for most important feature among policymakers collectively. A qualitative review of the open-ended responses highlights significant support among the public for providing economic relief to defray the plan’s costs specifically or help people in general. For example, one respondent said, “Since converting to green energy will be somewhat expensive, low-income families will need some form of economic relief.” Another noted, “I am very low income and high costs would hurt.” The greater importance placed on economic relief by the public compared to policymakers makes logical sense. Since demographic differences can drive elite-public gaps (Kertzer, 2020), one potential explanation for this difference is that the public is relatively less well off economically than elites, and thus they have greater financial incentives to care about economic relief (Gaikwad, Genovese and Tingley, 2022). Including economic relief in climate plans may therefore be a particularly effective strategy for policymakers to pursue in order to gain public support.

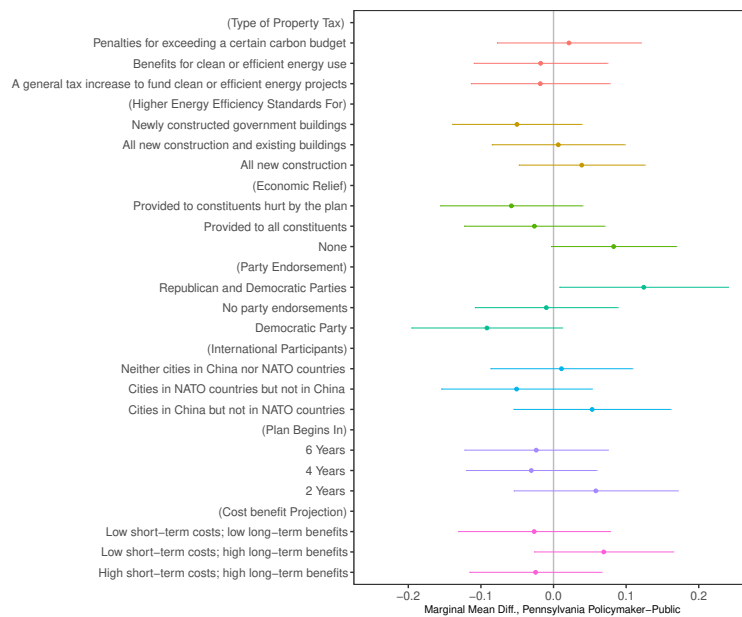
Our main analysis aggregates policymakers and the public across states, showing that there is a high degree of correspondence between the preferences of these groups nationally. However, state-by-state distributions of preferences are likely to be quite different. Because we are committed to maintaining the anonymity of the policymakers in our sample, we cannot geographically match them with their specific constituencies. To further probe these comparisons, we hone in on key comparison sets for a more fine-grained comparison. In particular, we separately compare citizen and policymaker views in three states: Texas, Pennsylvania, and New York. We choose these particular states for two reasons. First, the sample size of citizens and policymakers in our studies from these states was relatively large, maximizing the statistical power with which we can conduct these analyses. With that being said, even these tests were relatively underpowered, and readers should bear in mind that the absence of evidence of a difference between policymakers and the public is not the same thing as compelling evidence that there is indeed no difference. Second, these three states represent a wide spectrum of political opinion, as they include a solidly Republican-leaning state (Texas), a “swing” state (Pennsylvania), and a solidly Democratic-leaning state (New York). We find that 0 out of a total of 63 MM comparisons significantly differ in *sign* between policymakers and members of the public per kertzer2020re test, and only 4 out of a total of 63 MM comparisons differ in *size* between elites and citizens. This illustrates that even when getting as close as feasibly and ethically possible to the level of democratic accountability in our sample, there is an absence of statistical evidence for consistent elite-public gaps. Here, we illustrate the differences between the elite and public samples in Texas (Figure 10), Pennsylvania (Figure 11), and New York (Figure 12). In Pennsylvania, the only significant difference is on bipartisan endorsement, in Texas, on 4 years to implementation, and in New York, on newly constructed government buildings and participation by only NATO cities. In each of these cases, we continue to observe that the preferences of policymakers and the public are largely similar, and are no more dissimilar than we observe in the aggregate.

Figure 10: Marginal Means - Policymaker and Public Difference, Texas



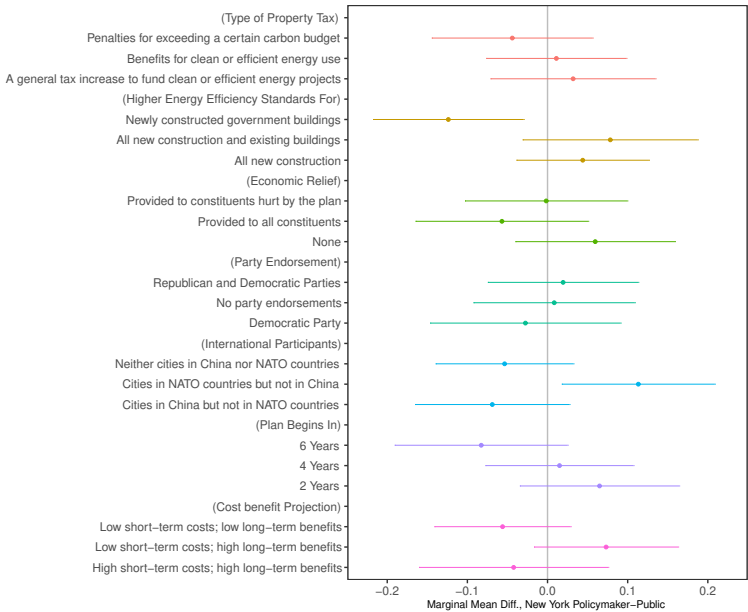
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Figure 11: Marginal Means - Policymaker and Public Difference, Pennsylvania



Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Figure 12: Marginal Means - Policymaker and Public Difference, New York



Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Interaction Effects

In our policymaker study, we examine various interaction effects, per our pre-analysis plan. To probe interaction effects, we follow [Egami and Imai \(2018\)](#) and estimate the non-parametric average marginal interaction effect (AMIE), though we also show exploratory results of marginal mean interactions with economic relief (Figure 27) and timing (Figure 28). We examined interactions between international participants and type of property tax, international participants and higher energy efficiency standards, international participants and cost benefit projections, party endorsement and type of property tax, party endorsement and higher energy efficiency standards, and party endorsement and cost benefit projections (Figures 21-34). The only attribute levels of interaction terms that were significant were economic relief provided to constituents hurt by the plan, higher energy efficiency standards for all new construction and existing buildings, high short term costs/high long term benefits, and plan begins in 6 years. Figure 28 suggests in exploratory analysis that low cost and low benefit plans are slightly less preferred as the time to implementation increases (MM = 0.51 for 2 years, 0.45 for 4 years, and 0.41 for 6 years). These differences are not significant in the intermediate level comparisons ($p = 0.08$ comparing between 2 and 4 years, and $p = 0.13$ comparing between 4 and 6 years), though they are significant when comparing between 2 and 6 years ($p = 0.001$). Bearing this in mind, this analysis is exploratory in nature.

Robustness

Cost-Benefit Analysis

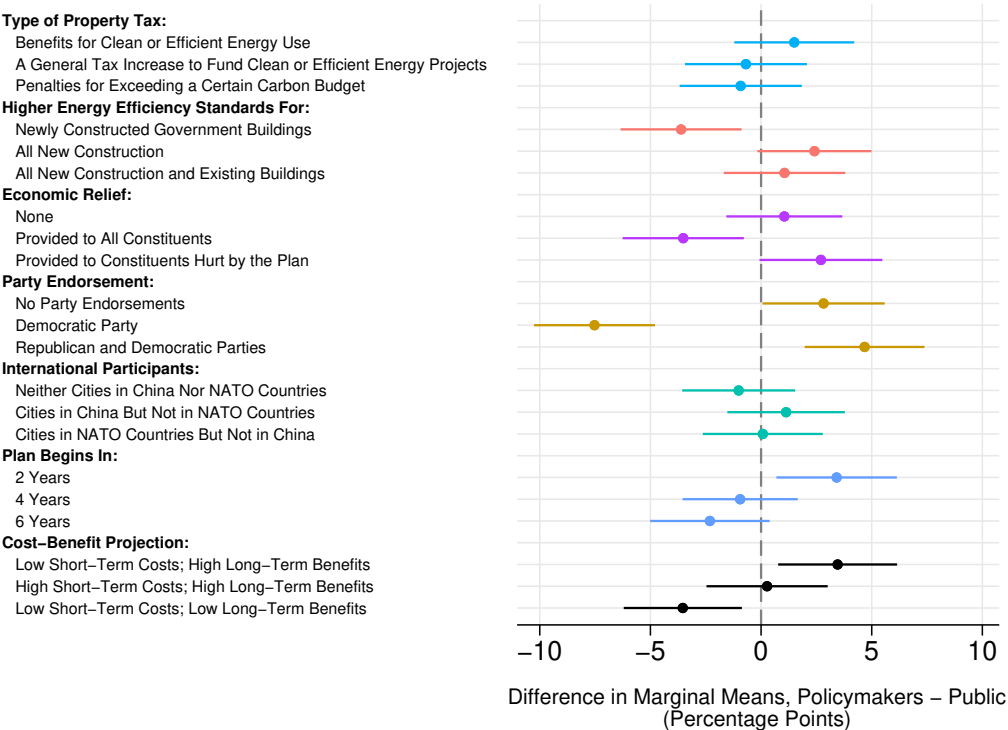
Because we analyze marginal means in the main text, which provide absolute estimates of preferences rather than preferences relative to another attribute, retaining the low cost/high benefit attribute poses no inferential threats in our analysis. We conduct one additional test to validate this claim, in which we remove all choice tasks from the dataset in which the low cost/high benefit attribute was present. This means that we calculate marginal means only based on comparisons where both of the plans were either low cost/low benefit or high cost/high benefit. In our original results including all three levels of the cost-benefit attribute, the marginal mean estimate for high cost/high benefit plans is 0.48 for both the public and for policymakers, and the estimate for low cost/low benefit plans is 0.49 for the public and 0.45 for policymakers. In the sample that does not include the low cost/high benefit choice tasks, the marginal mean estimates are identical.

Elite-Public Gaps

Figure 13 shows that for our unweighted samples a substantial majority—66%—of the marginal means we estimate do not significantly differ in size between local policymakers and members of the public when using the Benjamini-Hochberg procedure to account for the possibility that some of our significant results are “false positives.”²

²Our false discovery rate, which is the expected share of rejected nulls that are “false positives,” is controlled at 5%.

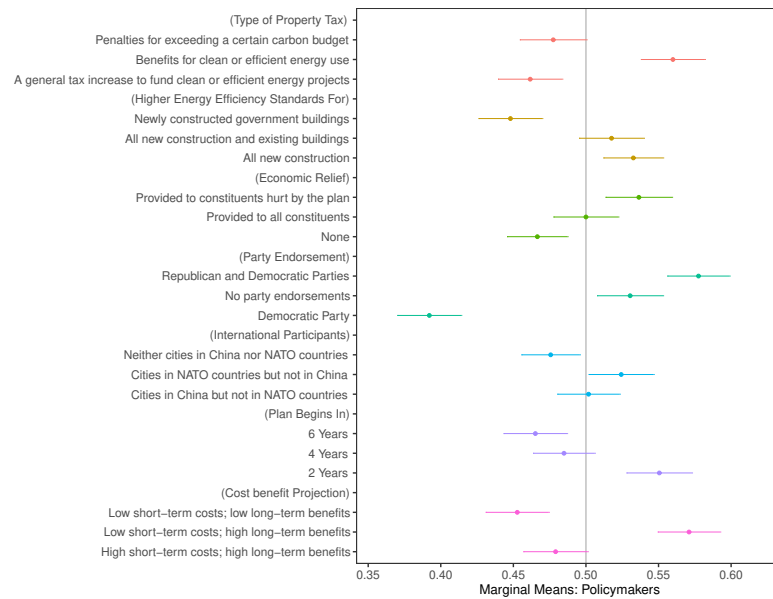
Figure 13: Unweighted Marginal Mean Differences: Policymakers - Public



Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

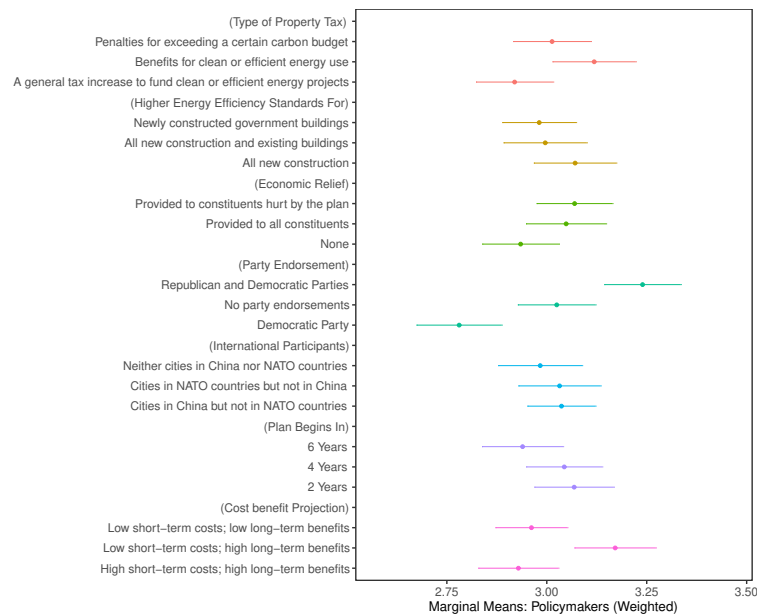
Policymakers

Figure 14: Unweighted Marginal Means: Policymakers



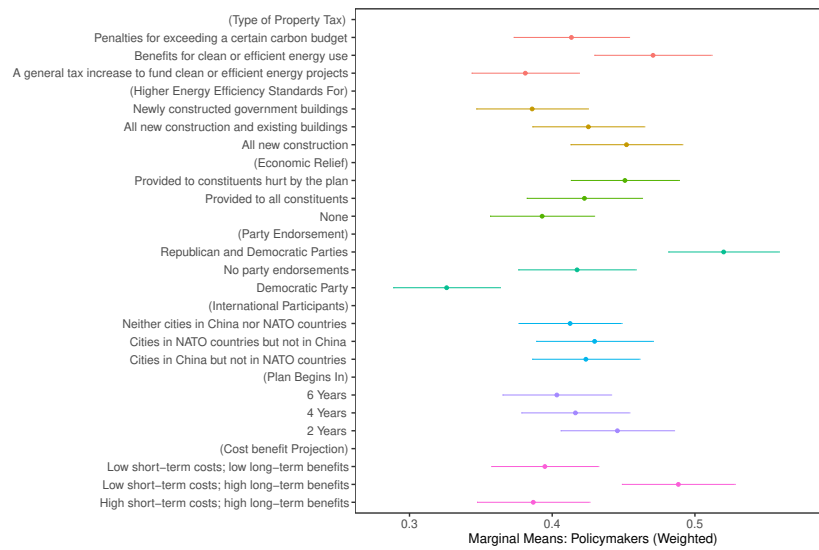
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Figure 15: Weighted Marginal Means, Rating Outcome: Policymakers



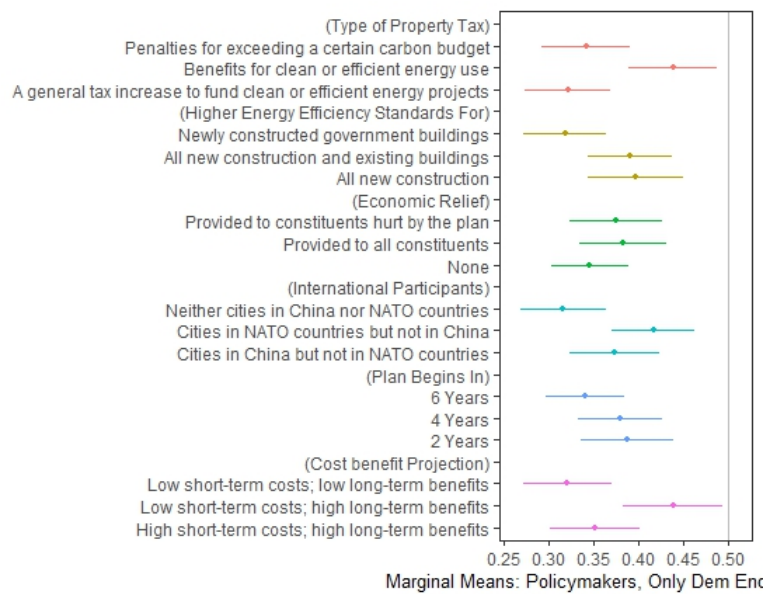
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Figure 16: Weighted Marginal Means, Binary Rating Outcome: Policymakers



Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

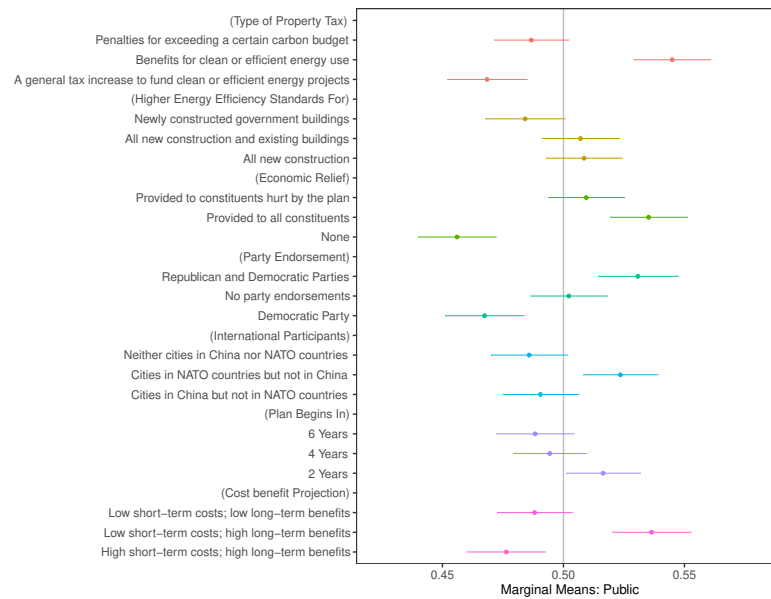
Figure 17: Weighted Marginal Means, Subset to Democrat-Only Endorsed Plans: Policymakers



Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

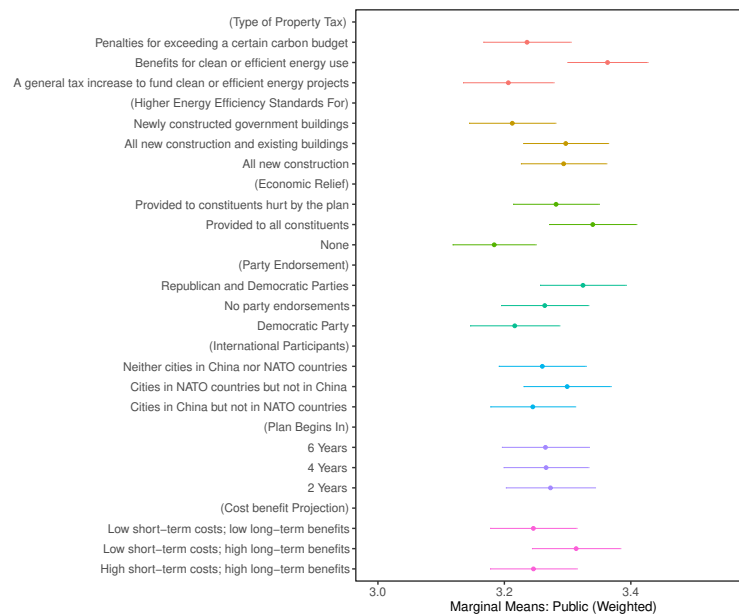
Public

Figure 18: Unweighted Marginal Means: Public



Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

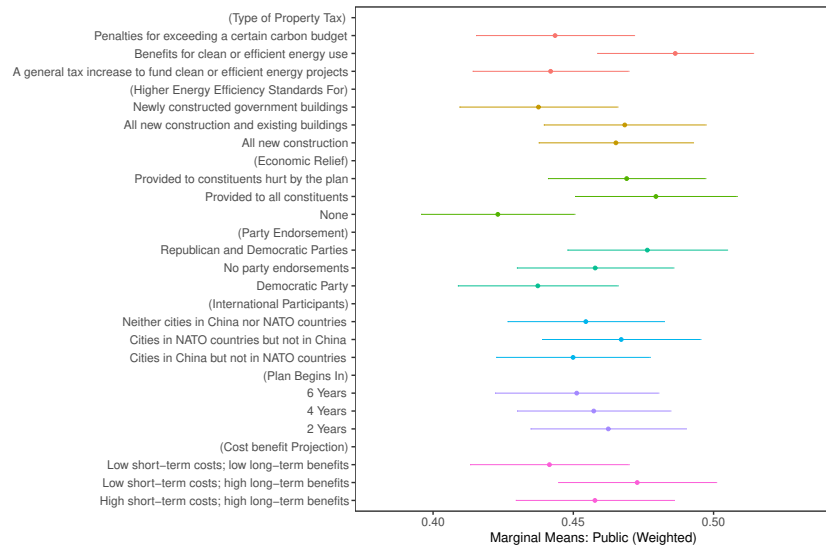
Figure 19: Weighted Marginal Means, Rating Outcome: Public



Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

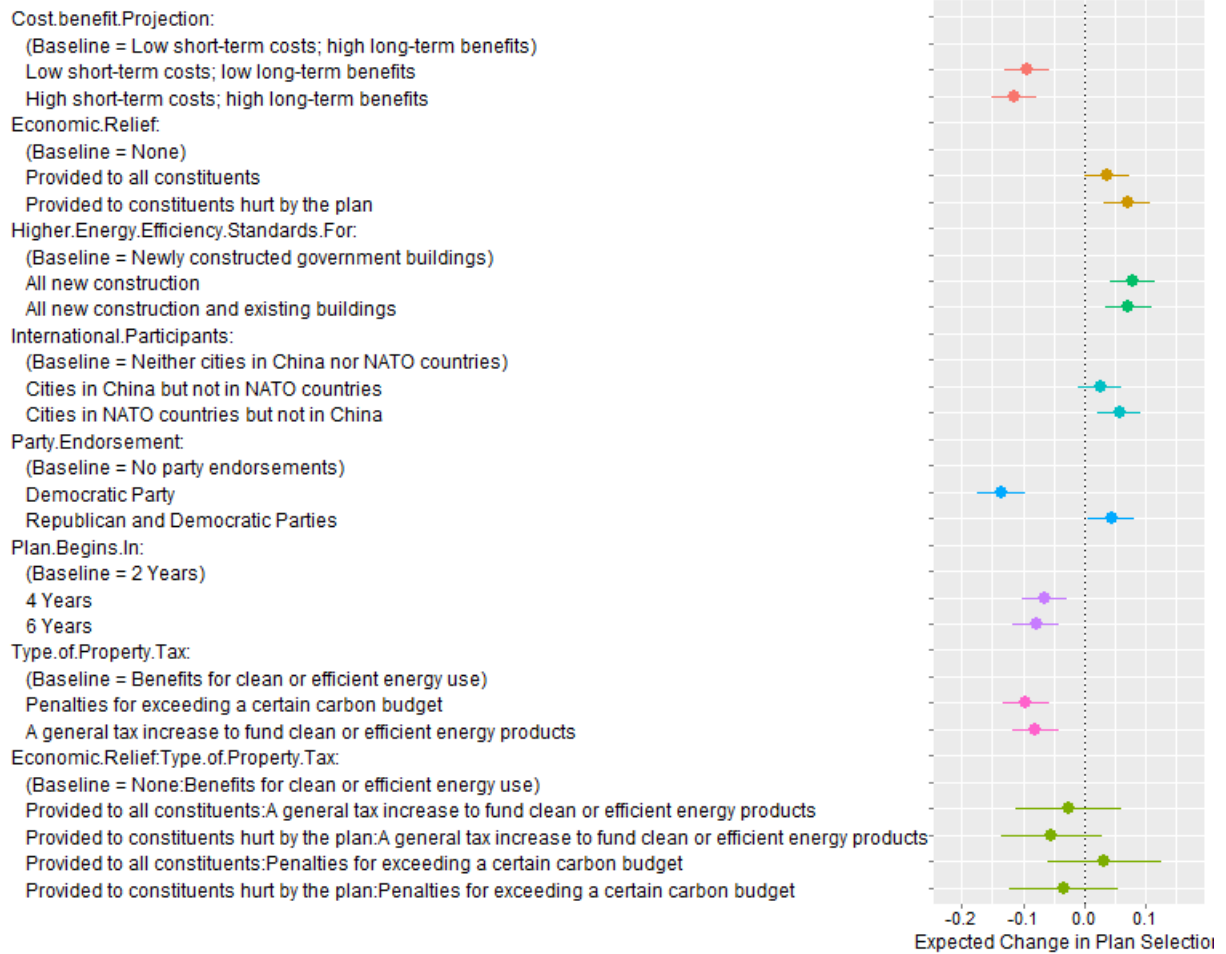
Interaction Effects of Policy Expansiveness and Economic Cost Salience

Figure 20: Weighted Marginal Means, Binary Rating Outcome: Public



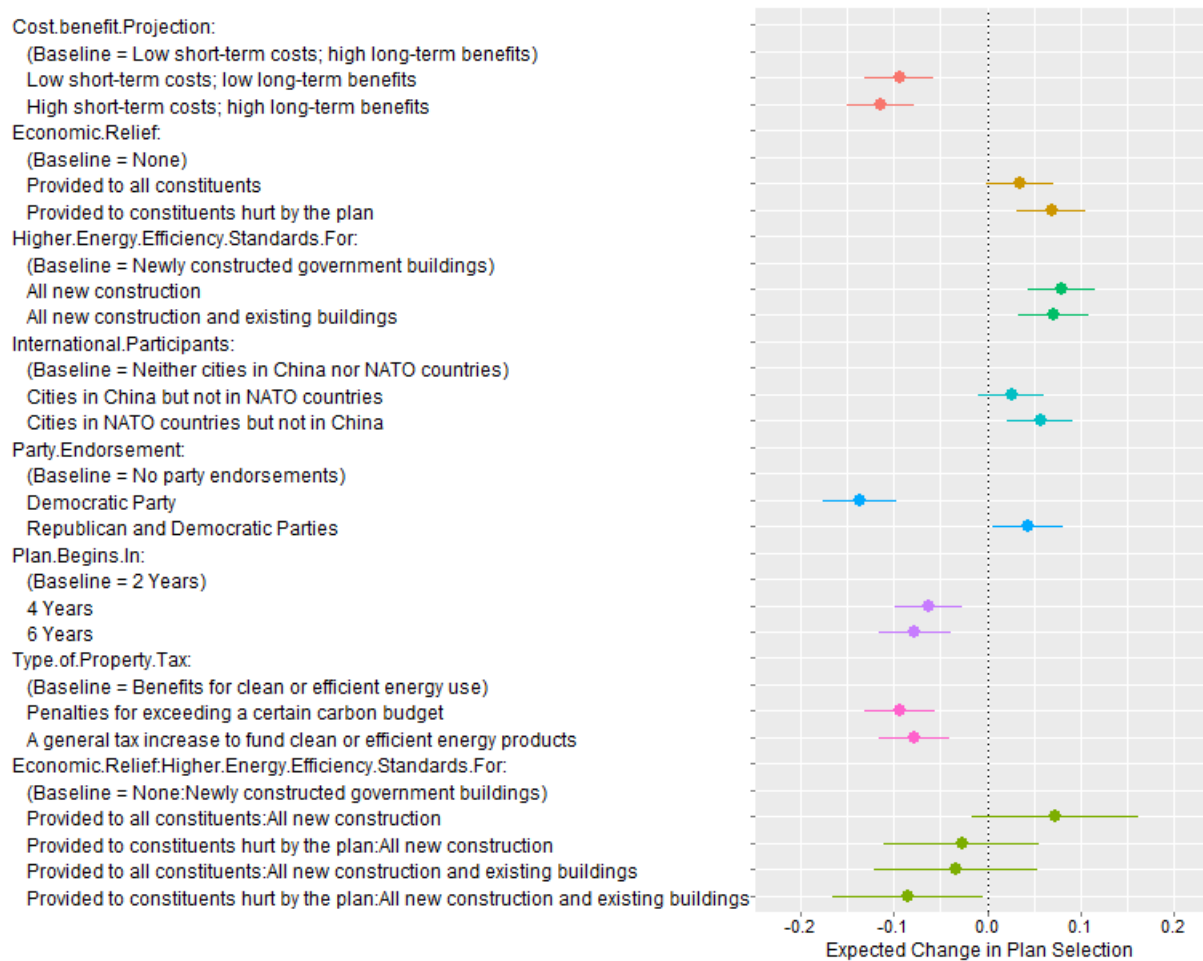
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Figure 21: AMCE, Interaction of Economic Relief and Type of Property Tax



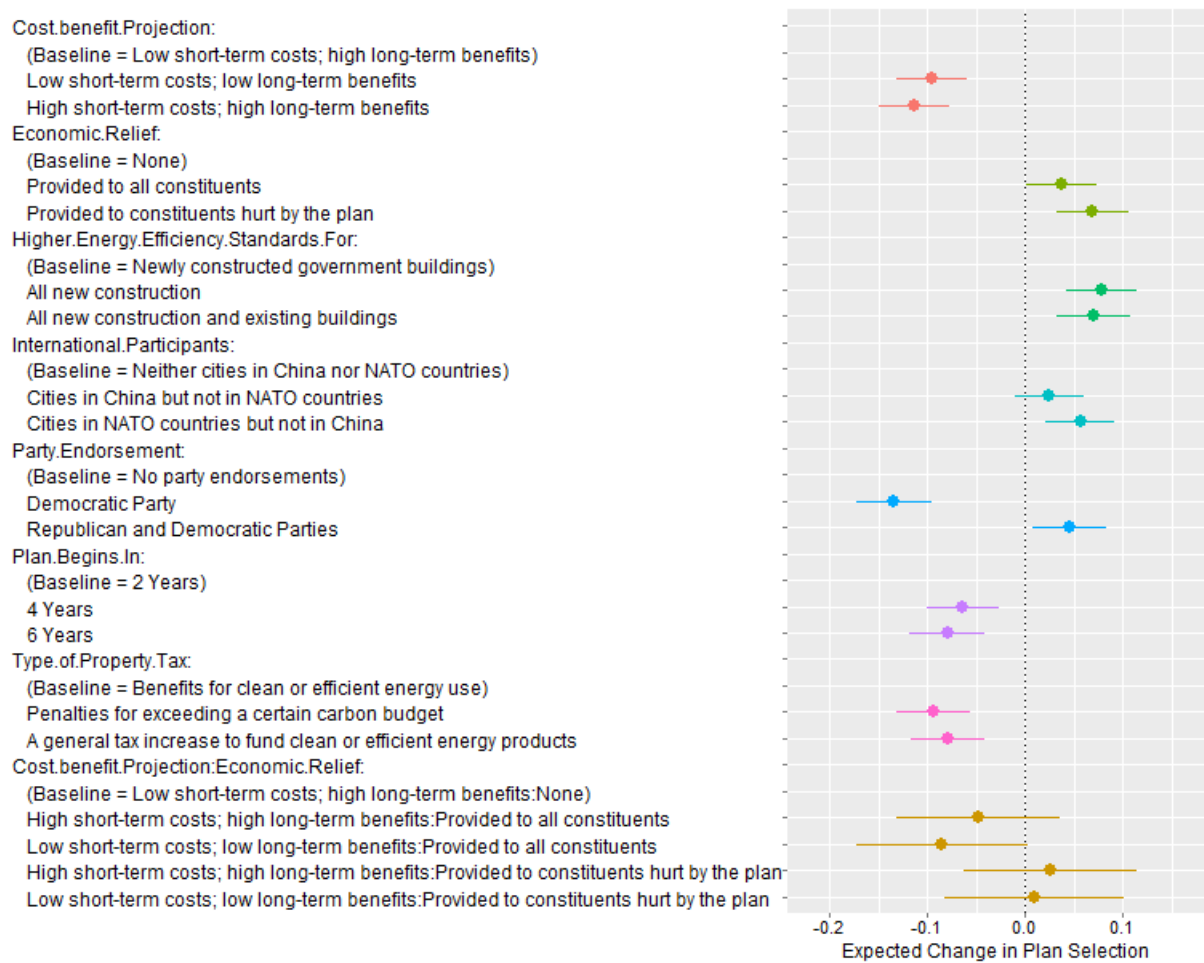
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 22: AMCE, Interaction of Economic Relief and Higher Energy Efficiency Standards For



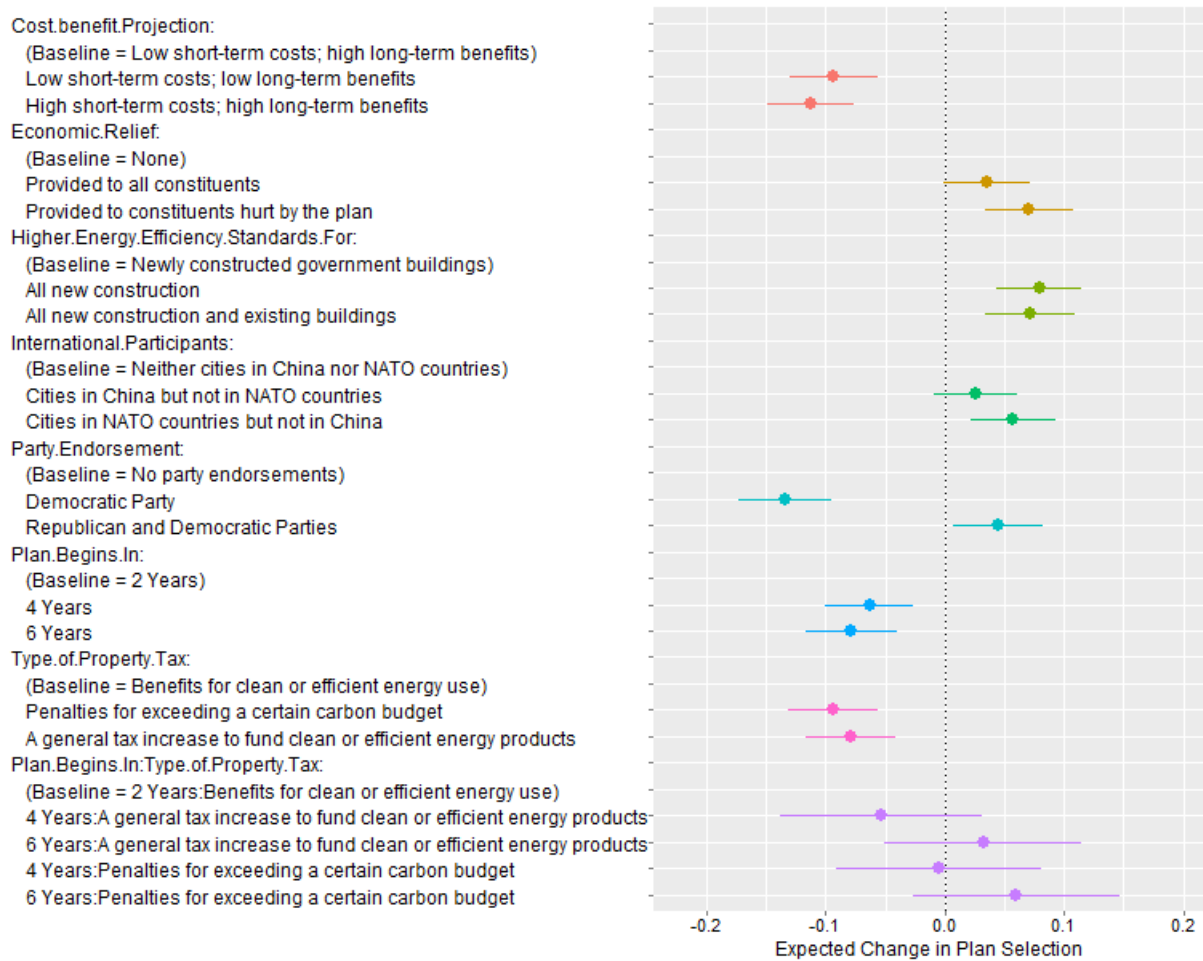
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 23: AMCE, Interaction of Economic Relief and Cost Benefit Projection



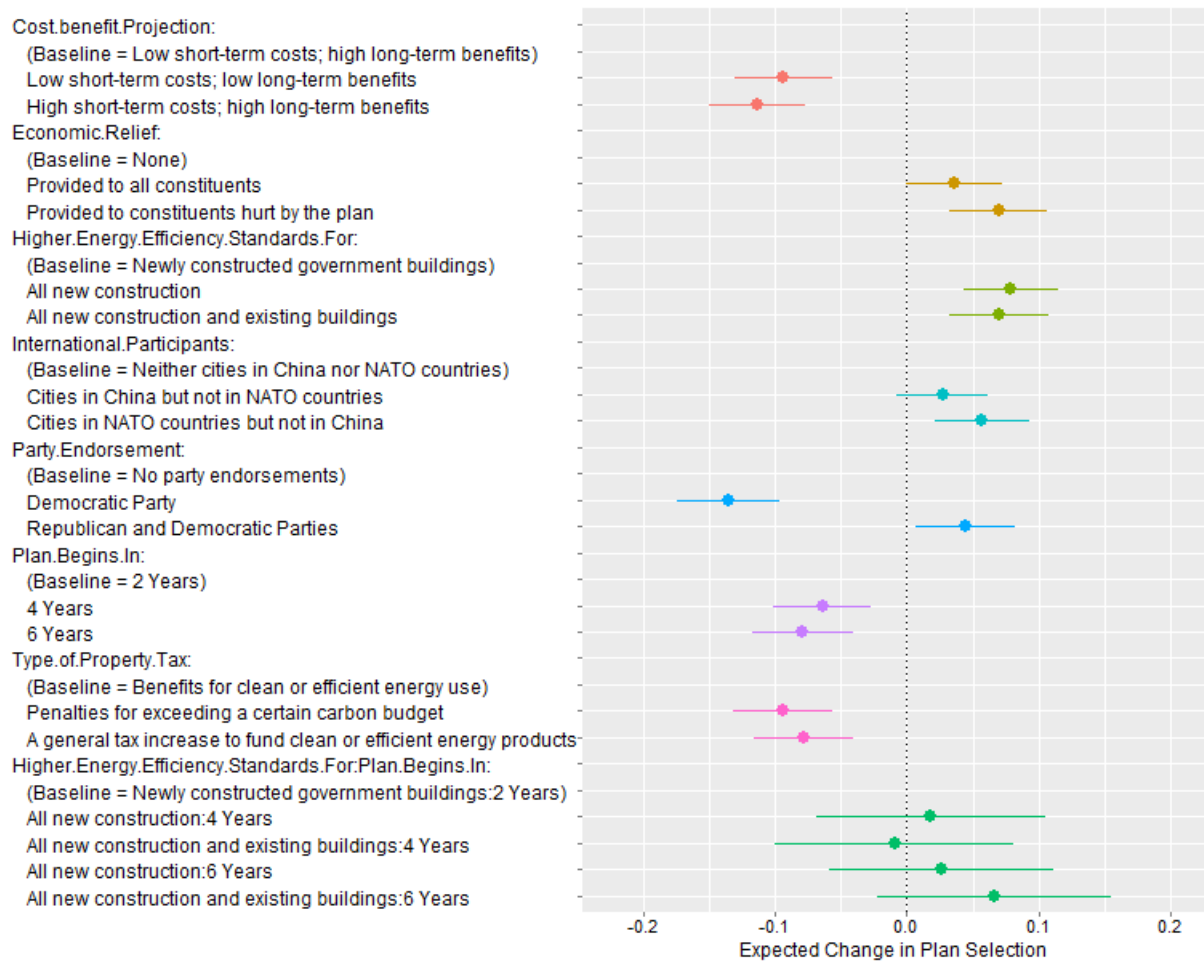
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 24: AMCE, Interaction of Plan Begins In and Type of Property Tax



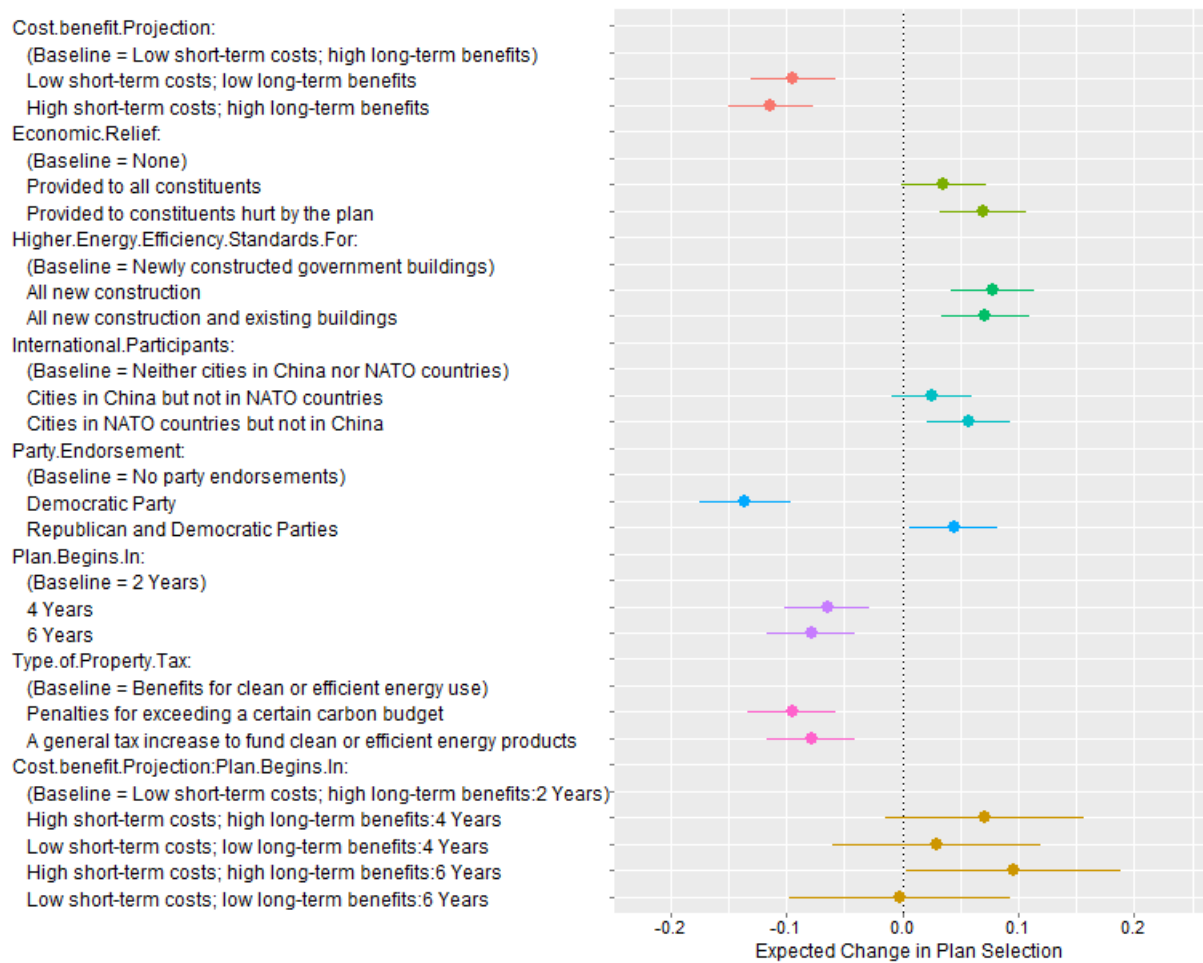
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 25: AMCE, Interaction of Plan Begins in and Higher Energy Efficiency Standards For



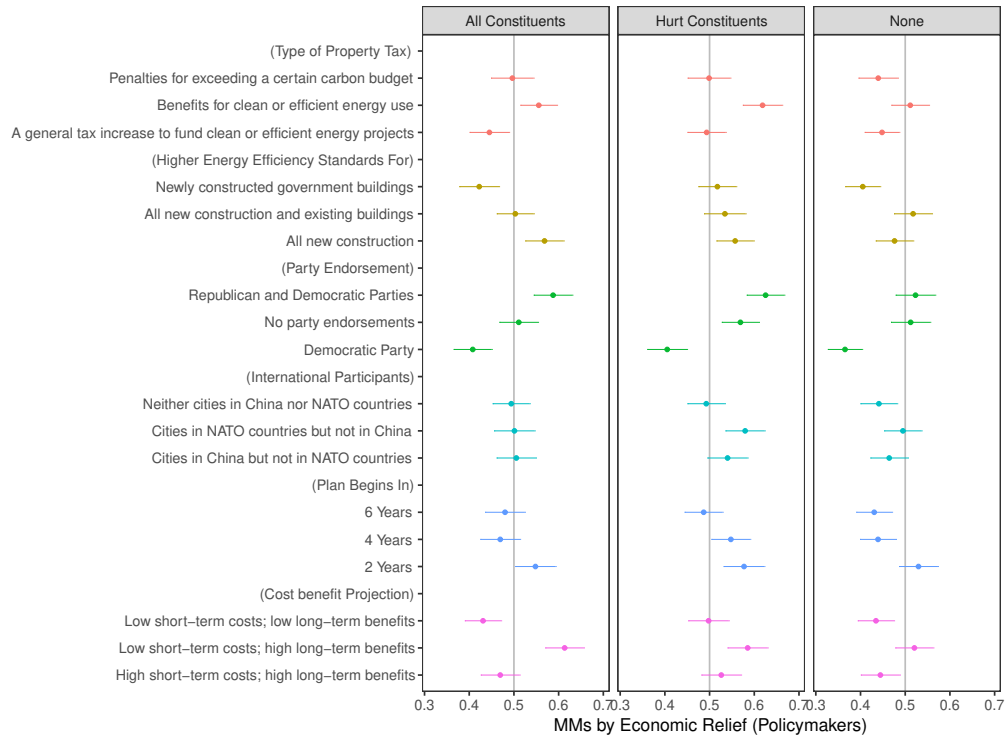
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 26: AMCE, Interaction of Plan Begins In and Cost Benefit Projection



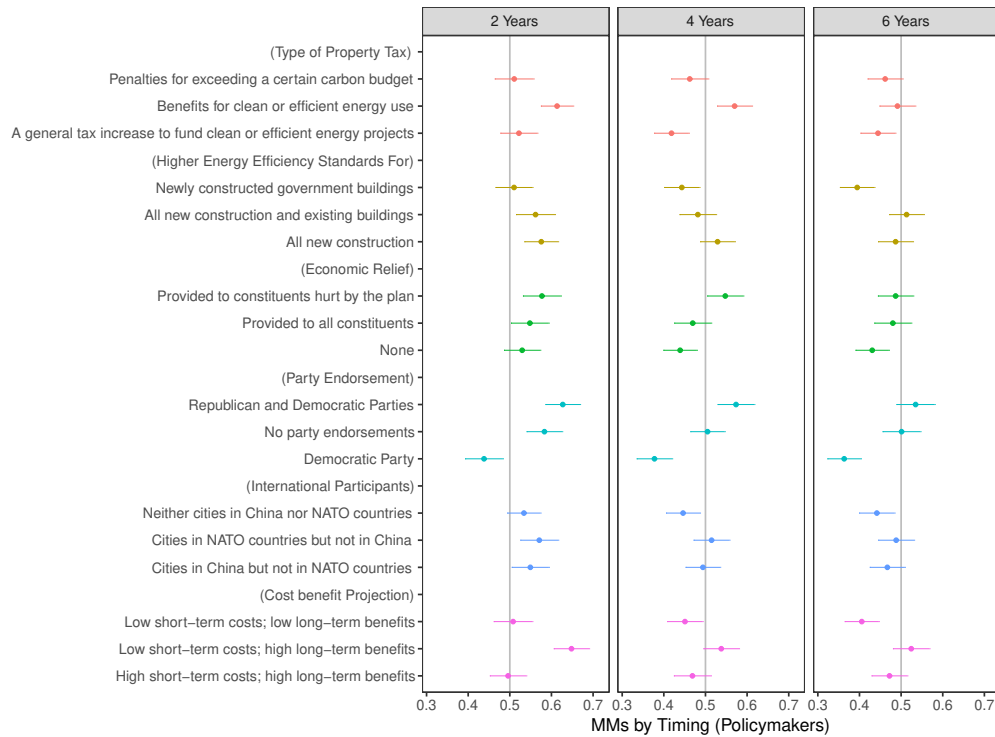
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 27: MMs, Interaction by Economic Relief



Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

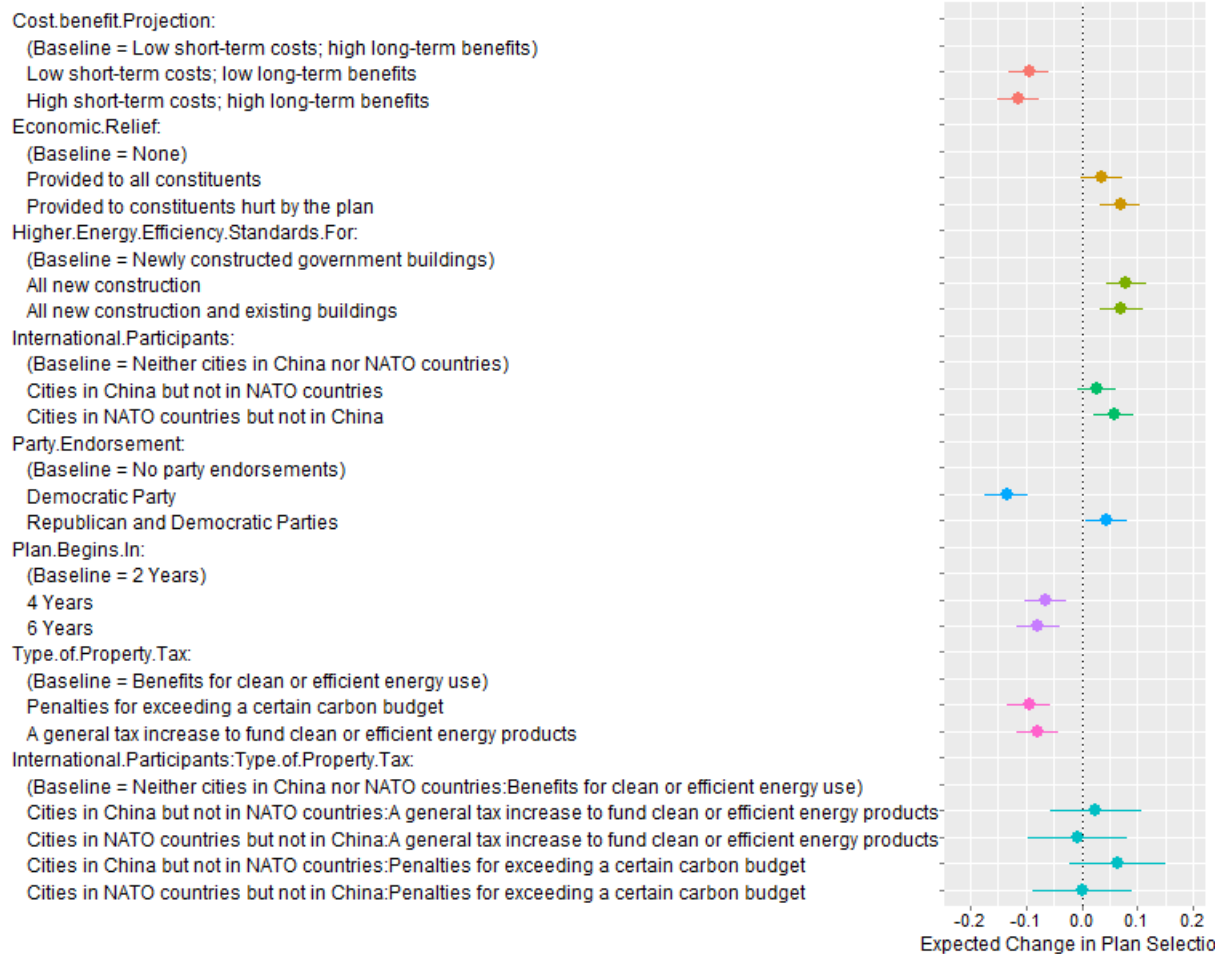
Figure 28: MMs, Interactions by Timing



Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

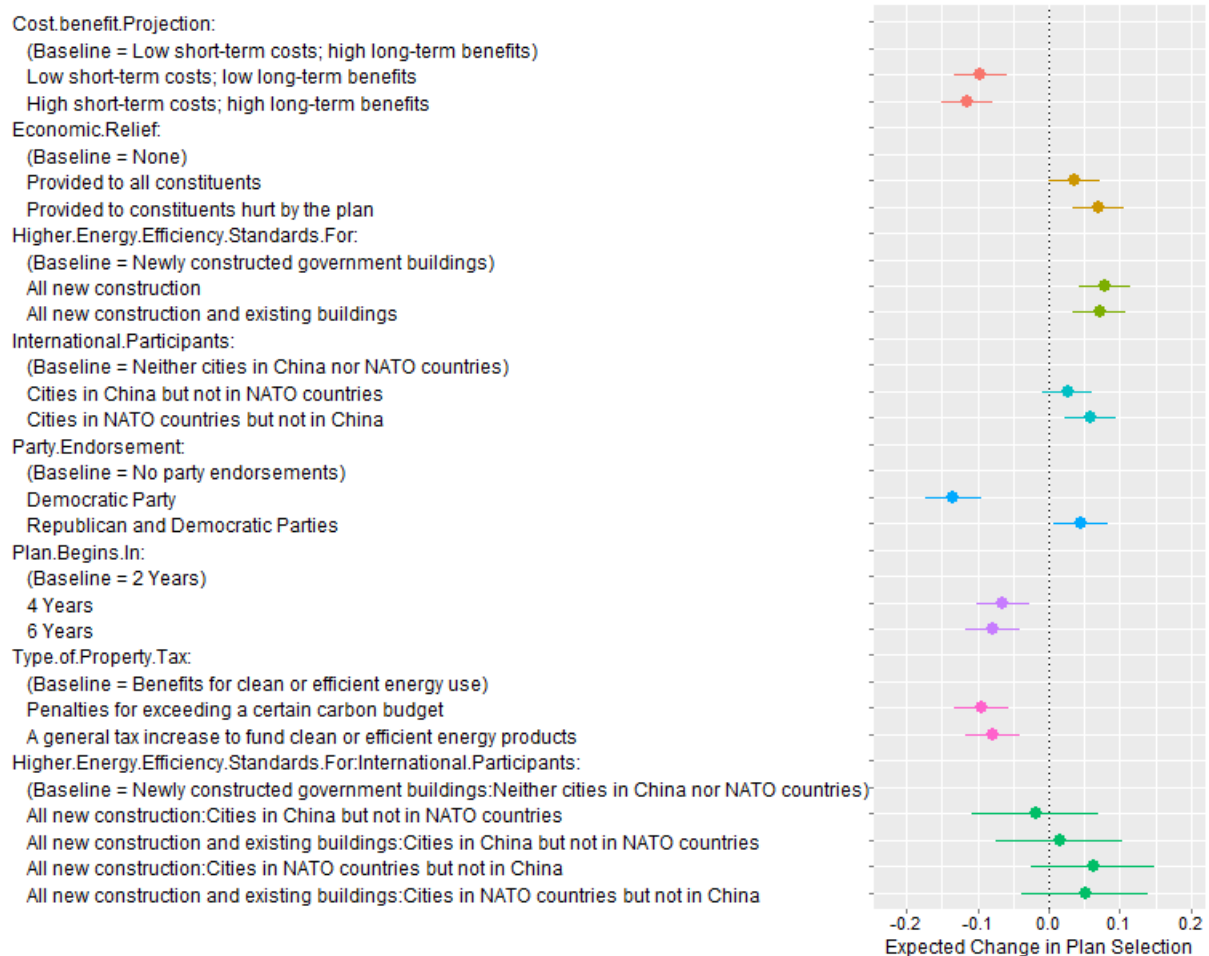
Interaction Effects of Policy Expansiveness and Political Support

Figure 29: AMCE, Interaction of International Participants and Type of Property Tax



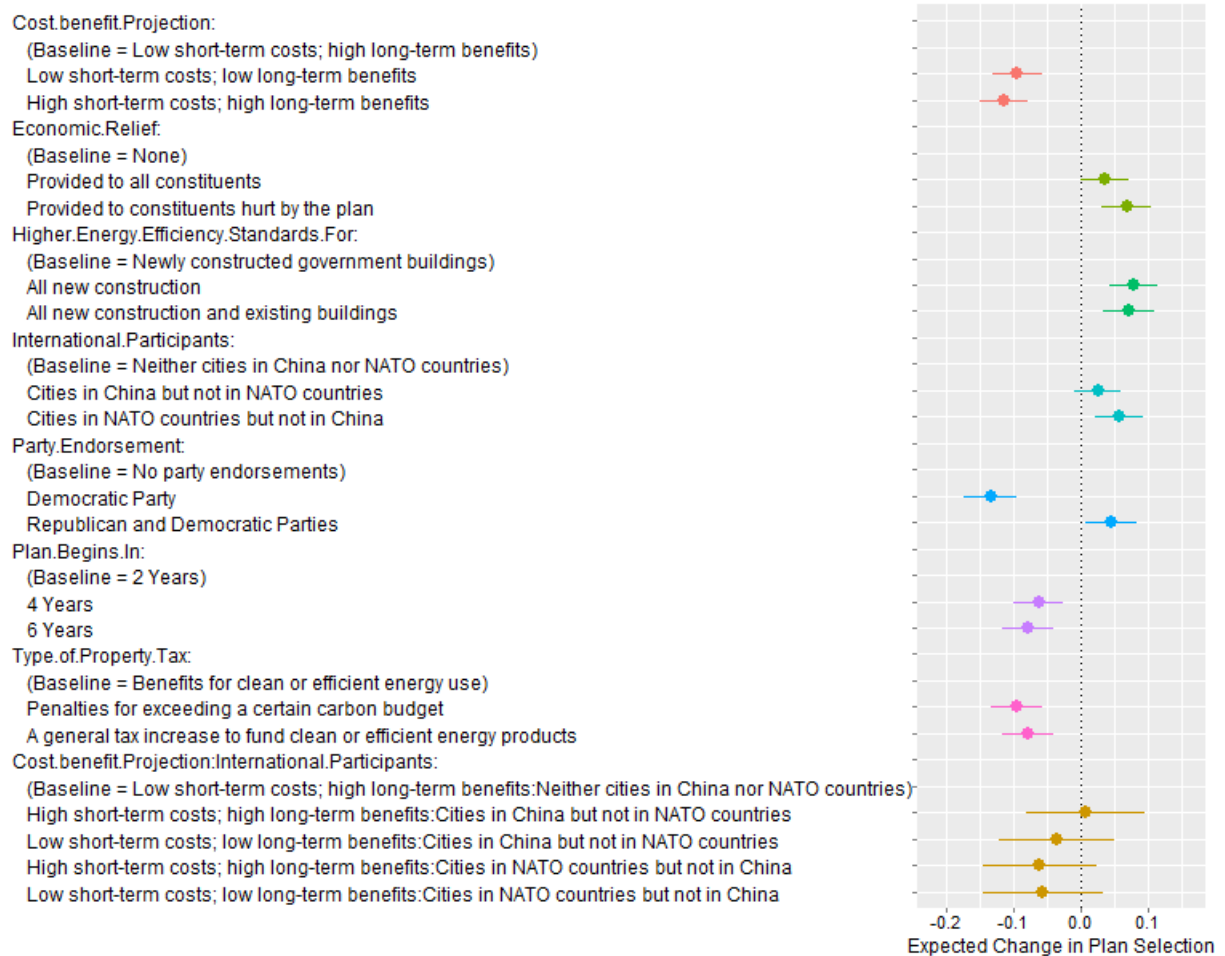
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level..

Figure 30: AMCE, Interaction of International Participants and Higher Energy Efficiency Standards For



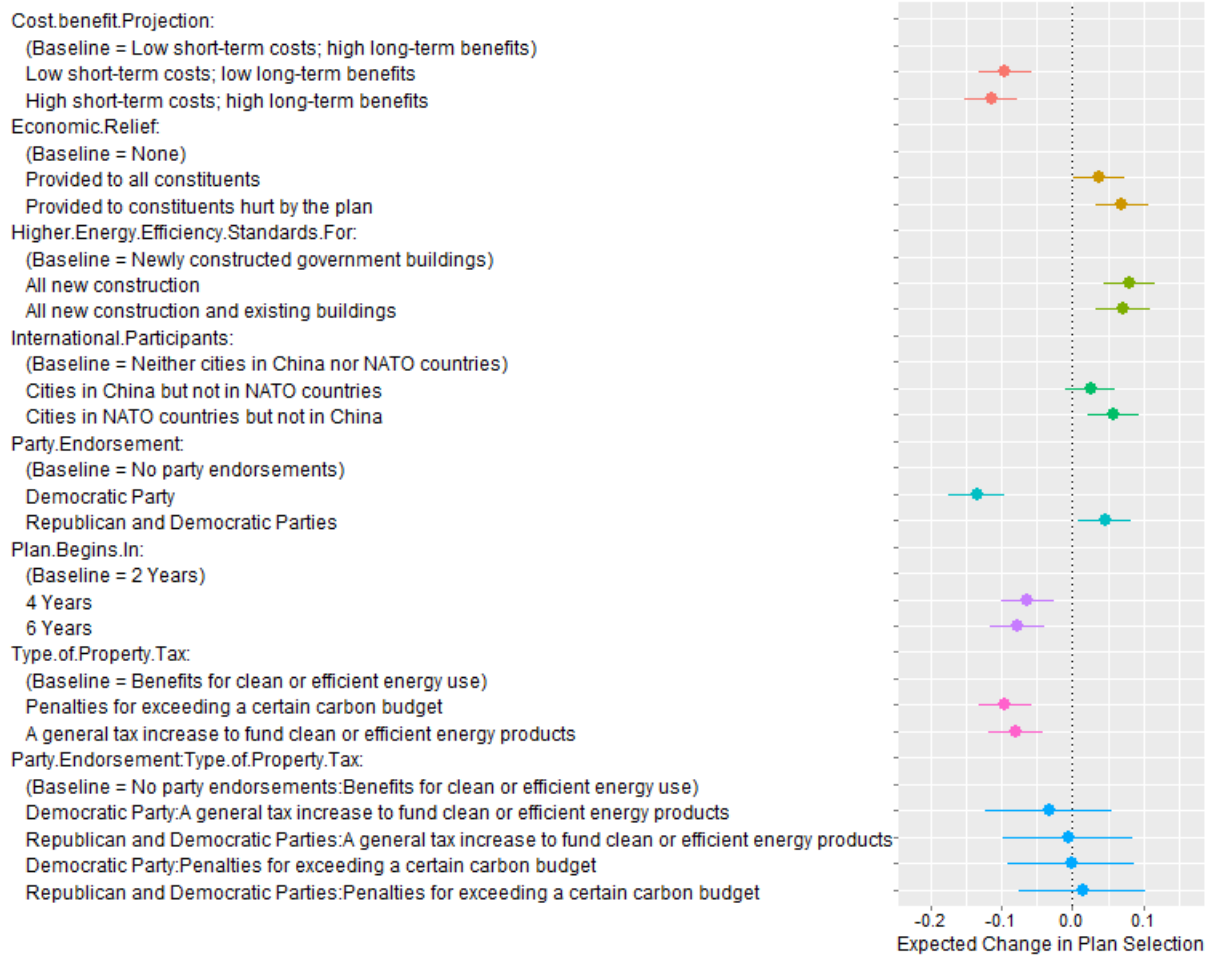
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 31: AMCE, Interaction of International Participants and Cost Benefit Projection



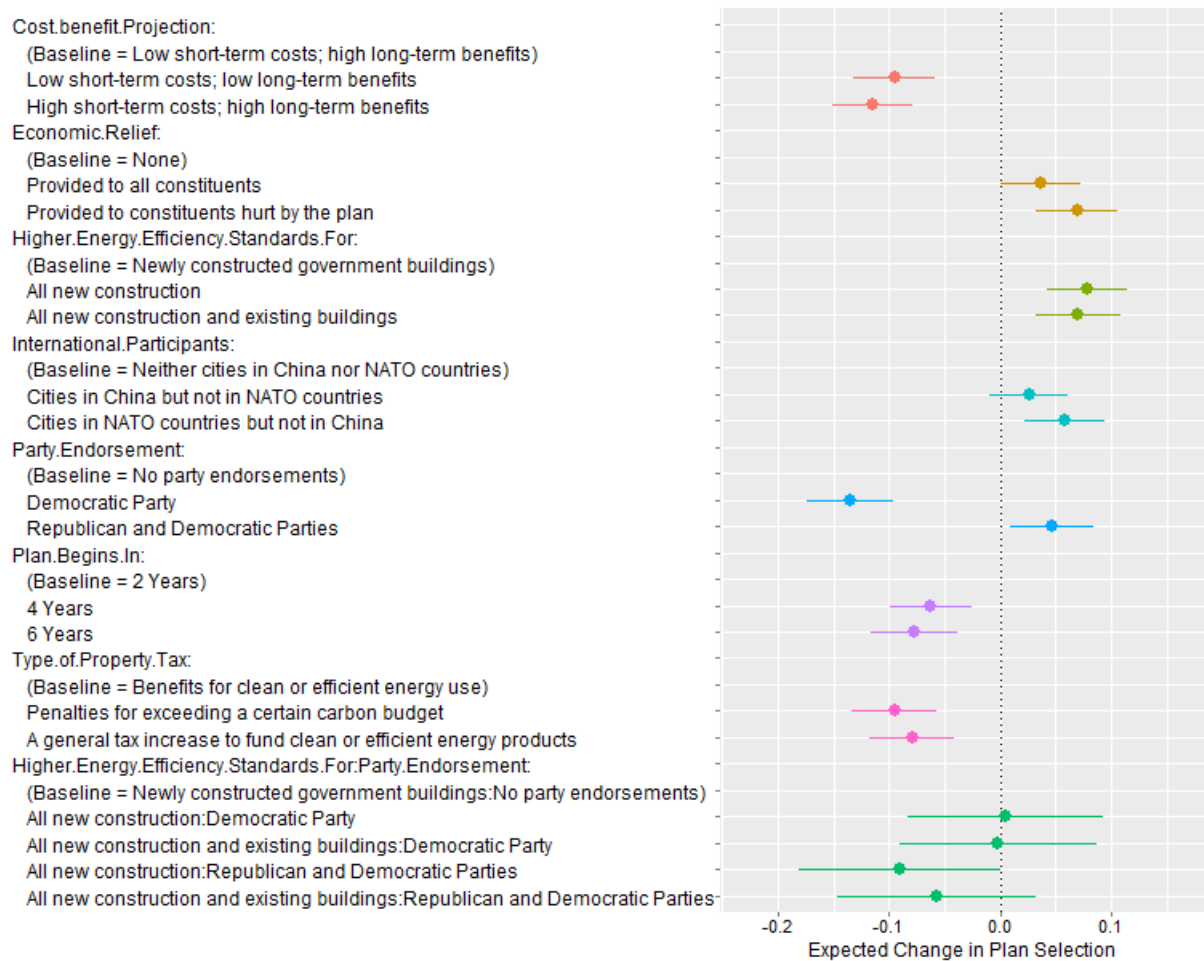
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 32: AMCE, Interaction of Party Endorsement and Type of Property Tax



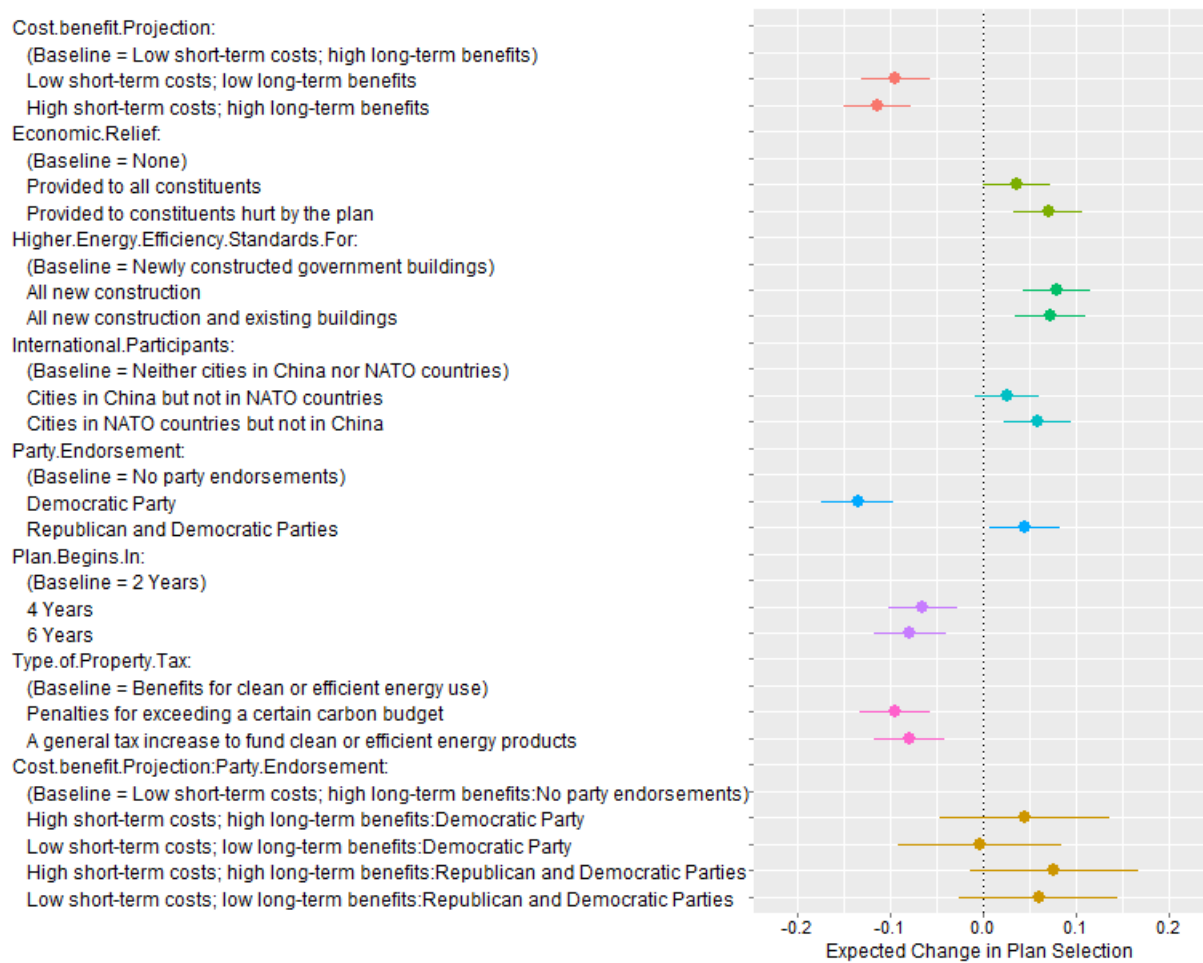
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 33: AMCE, Interaction of Party Endorsement and Higher Energy Efficiency Standards For



Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 34: AMCE, Interaction of Party Endorsement and Cost Benefit Projection



Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Heterogeneous Effects

In the main text, we show the differences in marginal means between partisan groups of policymakers.³ In Figure 35 below, we also show the individual marginal means for Democrats and Republicans that we use to calculate these differences. We explore additional heterogeneous effects here. In order to calculate the significance of the difference between marginal means, we implement the standard formula for calculating p-values in two tailed tests at $\alpha = 0.05$. We first calculate the variance, summing the squares of the standard errors of the two estimates that we wish to compare. We then obtain the standard error of the difference, the square root of the variance. Next, we calculate the z score as the difference between the estimated marginal mean values less the estimate under the null (0) over the standard error of the difference. Finally, we calculate the p value as the cumulative density function of the absolute value of z. This procedure exactly replicates the calculations in the `cregg` package (Leeper et al. 2020) for the analysis of marginal means in the `mm_diffs` function.

Interestingly, we generally observe only minor subgroup differences for these analyses, even for factors (e.g., the importance of carbon industries to a local community) that prior research suggests matter. This is likely the case for two primary reasons. Most importantly, these analyses are underpowered, as indicated by the large confidence intervals. Second, given that these factors were not randomly assigned, our analysis of heterogeneous effects is significantly more prone to confounding than our analysis of main effects among the full sample. For example, it may not be the importance of carbon industries to a local community per se driving the findings (or lack of significant findings), but some other variable correlated with this factor. Given these two limitations of heterogeneous effects analysis, the findings should be interpreted with extreme caution.

Nevertheless, we do find some significant differences. First, we discuss these differences for the policymaker sample. Among policymakers with ambition to run for higher office versus those who do not, policymakers with higher office ambitions were less likely to prefer the narrowest energy efficiency standard choice (higher energy efficiency standards for newly constructed government buildings) and plans with no party endorsements (Figure 36). Policymakers with beliefs that supporting climate change policies will help their reelection chances were less likely to prefer the narrowest energy efficiency standard choice, and plans with low costs and low benefits (Figure 37). Those with higher levels of climate change concern were more likely to favor the narrow energy efficiency option, less likely to favor Democrat-only endorsement, more likely to favor slower implementation timelines, and more likely to favor plans with low costs and low benefits (Figure 38).

Policymakers with local carbon industry presence were more likely to favor plans with low costs and low benefits (Figure 39). Those representing areas affected by climate change weather events were less likely to favor plans with no party endorsement, and more likely to favor plans with Democrat-only endorsement (Figure 41). Policymakers representing counties were more likely to favor benefits for energy use and participation by NATO cities only than other government types. Those representing municipal and township governments were less likely to favor narrow energy efficiency standards, bipartisan endorsed plans, narrow economic relief, faster implementation, and low-cost high-benefit plans. Only municipal policymakers were less likely to favor tax increases, while municipal and county policymakers were more likely to favor tax benefits (Figure

³To calculate differences between groups and across attributes, we utilize functions from the `cjoint` and `cregg` packages, and manually calculate p-values based on the point estimates and standard errors.

42).

Liberal policymakers were more likely to favor broader energy efficiency standards, Democrat-only endorsements, and faster implementation time, while conservatives were more likely to prefer plans with low costs and low benefits (Figure 43). Policymakers with green electoral incentives were less likely to prefer narrow energy efficiency policies and slow implementation (Figure 44). Older policymakers were more likely to prefer plans with bipartisan endorsement (Figure 45). More educated policymakers were more likely to prefer fast implementation and plans with low cost/high benefit, and were less likely to prefer no international participation (Figure 47). Finally, policymakers from constituencies with low Democratic vote share were more likely to favor plans with slow implementation, while those from areas with higher Democratic vote shares were more likely to favor plans with low cost and high benefits, faster implementation, bipartisan endorsement, and tax benefits, and were less likely to favor plans with no international city participation, Democrat-only endorsement, narrow energy efficiency standards, and taxes (Figure 48). There were no significant subgroup differences by the presence of local green industry (Figure 40) or by gender (Figure 46).

Finally, we assess differences in the ratings outcome between policymakers in localities with high rates of urbanity and high 2020 Biden vote share versus others. Because fine-grained locality data is masked by CivicPulse to protect respondent anonymity, we only have this data at the categorical level; we thus compare the highest categorical level (96% or higher urban; 37% or higher 2020 Biden vote share) to the other two levels. In urban and more Democratically-leaning areas, overall support for climate policy is higher. Out of 1,965 total plans viewed by urban policymakers, 967 plans (49%) were rated as favorable, whereas for plans viewed by non-urban policymakers (2,221), 934 were rated as favorable (42%). Moreover, as illustrated in Figure 50, there are many attribute levels for which there is lower support among policymakers in non-urban areas than policymakers in urban areas. This reflects the fact that climate plans are generally less supported in the former than the latter, which manifests in plans with many attribute levels receiving less support among more rural policymakers. Given that urban areas tend to be more liberal, this difference makes logical sense.

Similarly, Figure 52 illustrates the differences in plan support between urban and non-urban policymaker. Out of 2,889 total plans viewed by policymakers in high-Biden vote share areas, 1,420 plans (49%) were rated as favorable, whereas for plans viewed by policymakers in non-high-Biden areas (1,273), just 464 were rated as favorable (36%). Taken together, these findings suggest that there are differences between policymakers in more strongly pro-climate areas compared to others, as one would expect. At the same time, and in line with our broader findings, these differences are relatively modest in terms of substantive effect size.

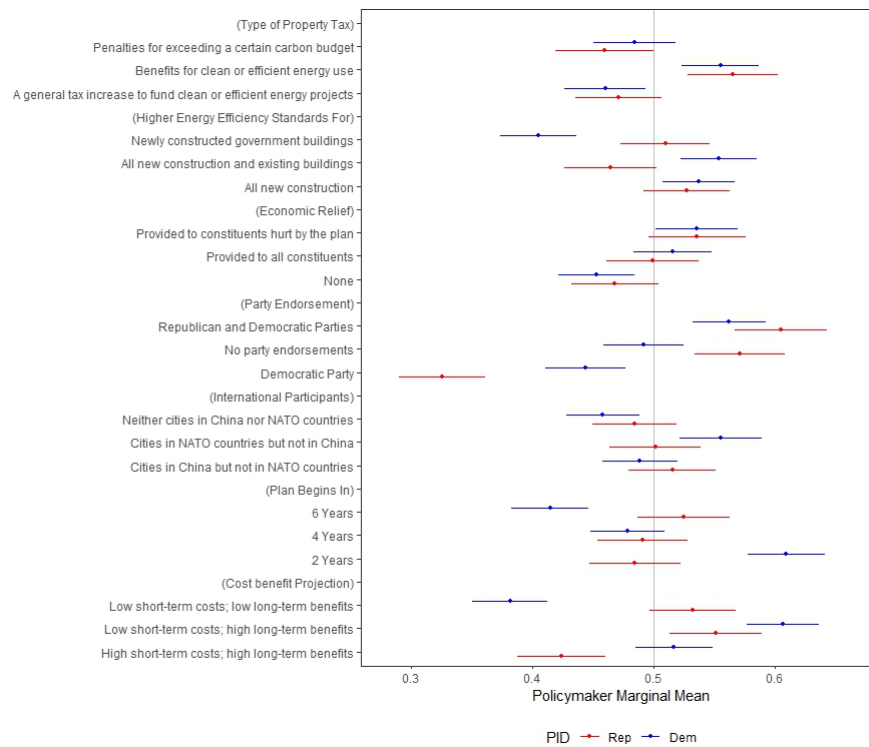
Second, we show heterogeneous effects for the public sample and highlight key differences. In the main text we showed results by party. Here we also show that individuals with high climate belief were more likely to prefer Democrat-only endorsed plans and less likely to favor plans with no party endorsements, or with no economic relief. (Figure 53). Individuals in communities with important carbon industries were less likely to favor expansive energy efficiency standards or economic relief (Figure 54), while individuals in communities with important green industries were more likely to favor plans endorsed by Democrats only and less likely to favor plans with low costs and high benefits (Figure 55). Individuals in communities affected by climate change weather events were less likely to favor plans with no party endorsements (Figure 56).

More religious individuals were more likely to favor plans with shorter implementation times (Figure 57). Liberals were more likely to favor plans with stronger energy efficiency standards and Democrat-only endorsements, and were less likely to favor plans with tax benefits, bipartisan or no endorsements (Figure 58). People with high trust in government were more likely to favor plans with Democrat-only endorsements and high cost/high benefit, and were less likely to favor plans with tax benefits, bipartisan endorsement, or low cost/high benefit. Older respondents were less likely to favor expansive energy efficiency standards (Figure 59).

Male respondents were less likely to support economic compensation (Figure 60). Wealthier respondents were more likely to favor tax increases (Figure 61). Highly educated individuals were more likely to favor tax penalties (Figure 62). Finally, individuals who believed climate policies would help their economic situation were more likely to support broad economic relief and Democrat-only endorsed plans, and less likely to support plans with no party endorsement (Figure 63). Results for heterogeneous effects by attention to the news, employment, and trust in government are omitted for space concerns, but available upon request. In this analysis of heterogeneous effects, we highlight the results using our unweighted data. Weighted results are substantively unchanged and omitted for space considerations, and available upon request.

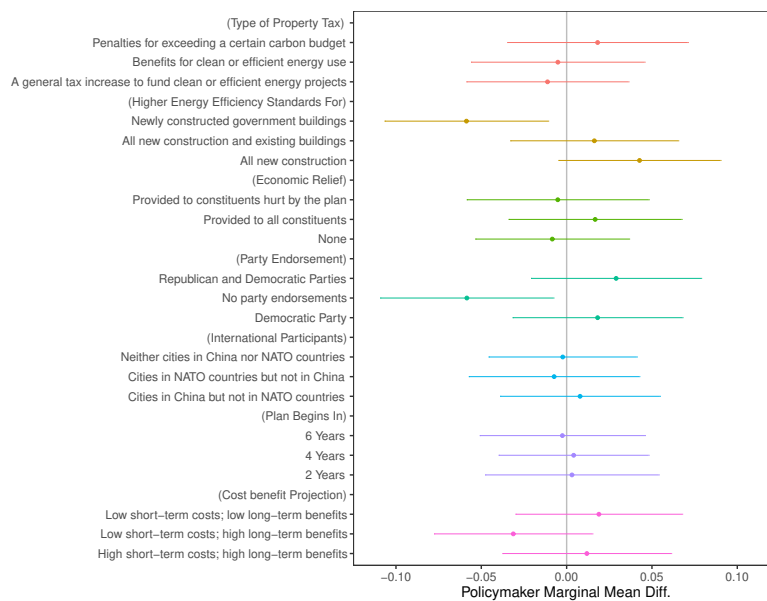
Policymakers

Figure 35: Policymaker Marginal Means - By Party ID



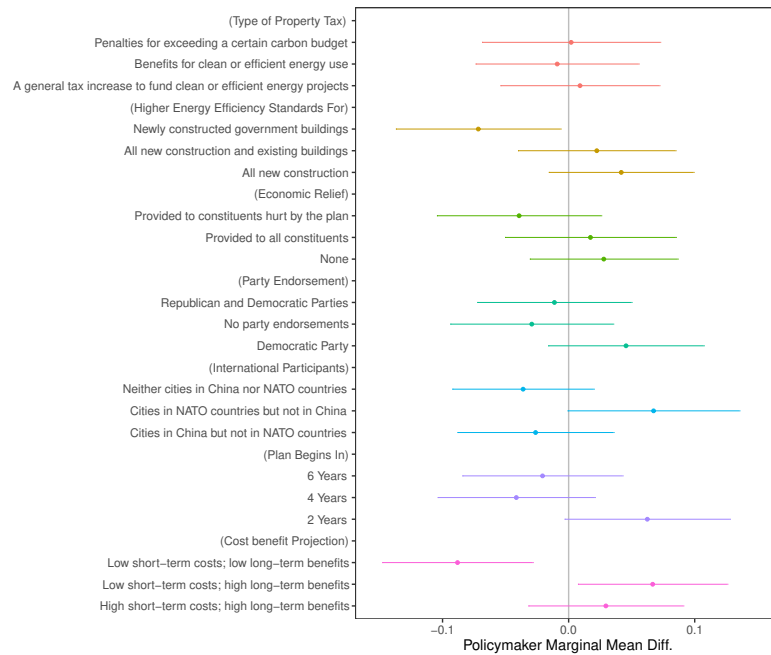
Bars are 95% confidence intervals based on respondent-clustered standard errors for differences in marginal means between Democratic and Republican local policymakers.

Figure 36: Policymaker Marginal Mean Difference - By Ambition



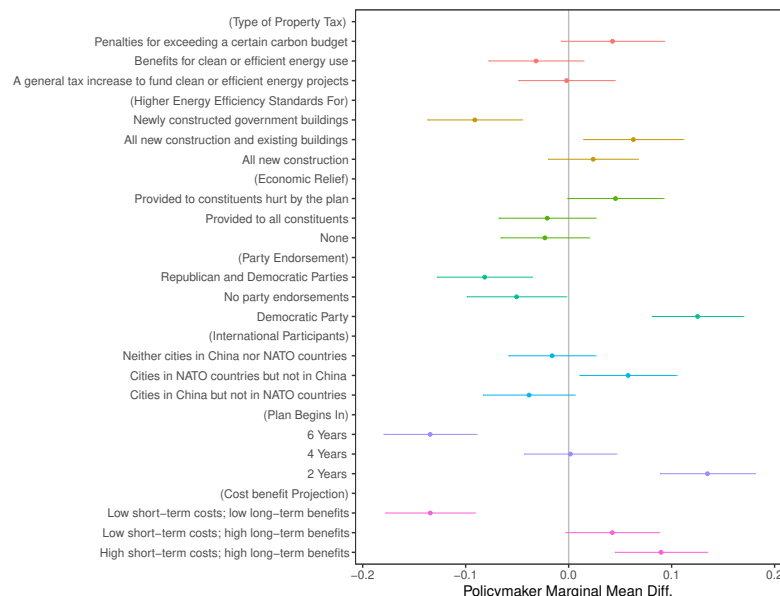
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 1 includes respondents with state level or national level plans to run for office.

Figure 37: Policymaker Marginal Mean Difference - By Perceived Effect of CC on Election



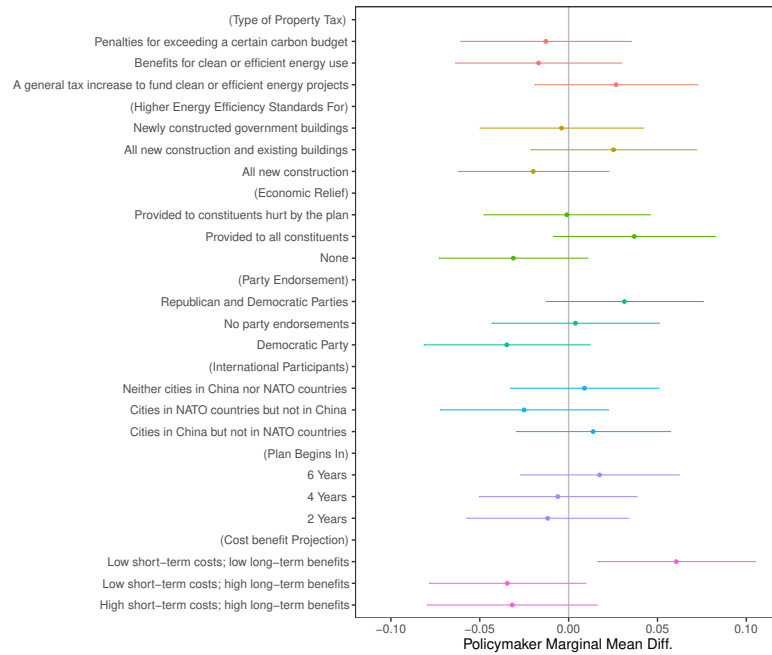
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 1 includes respondents who report that supporting CC policies will help their election chances a little or help their election chances a lot. 0 includes respondents who report that supporting CC policies will hurt their election chances a little or hurt their election chances a lot.

Figure 38: Policymaker Marginal Mean Difference - By CC Belief



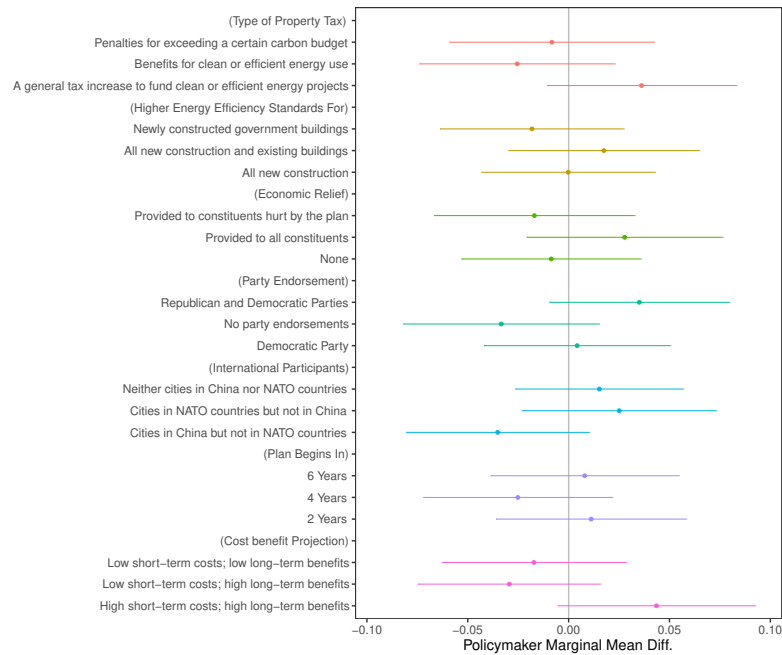
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 1 includes respondents who report that the climate is changing, and human activity plays or may play a significant role. 0 includes respondents who report that the climate is changing, but human activity does not play a significant role, the climate is not changing, or don't know / unsure.

Figure 39: Policymaker Marginal Mean Difference - By Carbon Industry



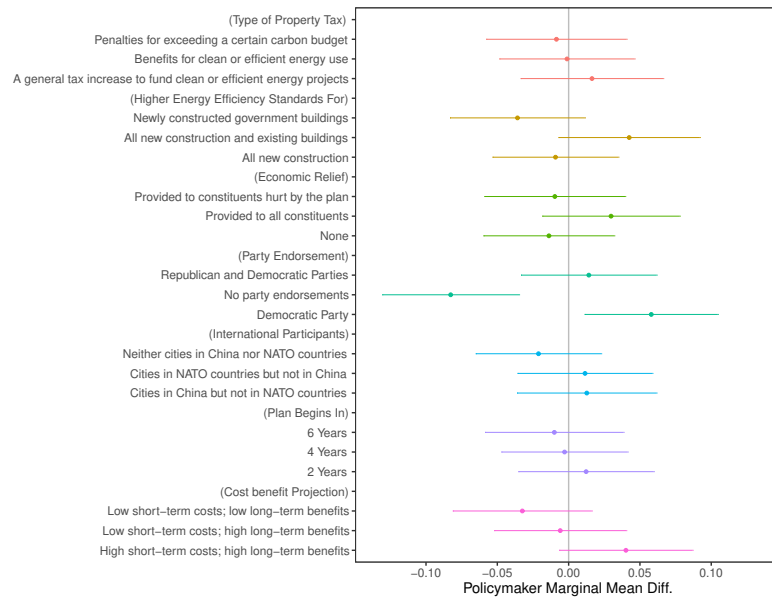
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 1 includes respondents who report that oil, gas, coal, or automotive industries are important to their community's economy.

Figure 40: Policymaker Marginal Mean Difference - By Green Industry



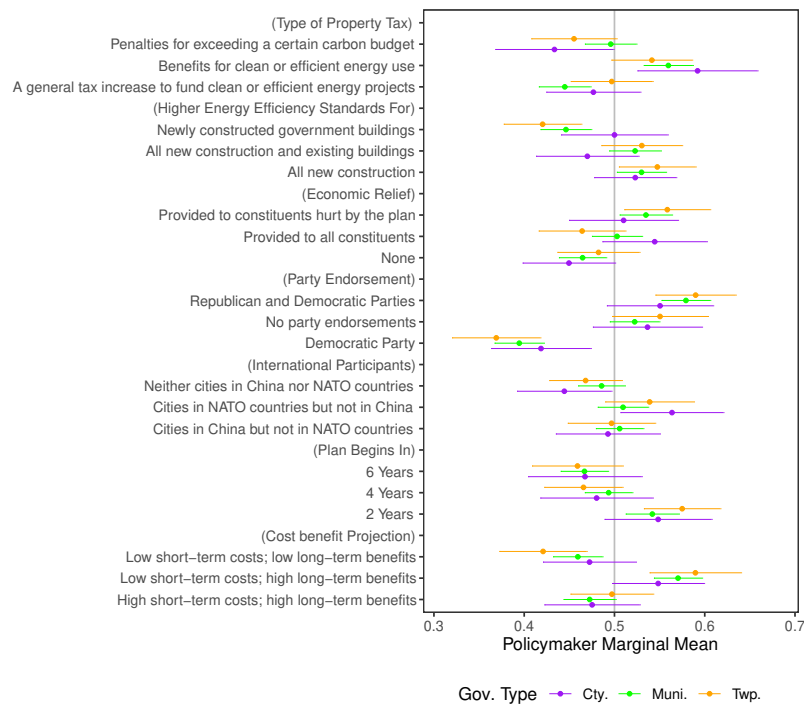
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 1 includes respondents who report that green industries are important to their community's economy.

Figure 41: Policymaker Marginal Mean Difference - By Community CC Impact



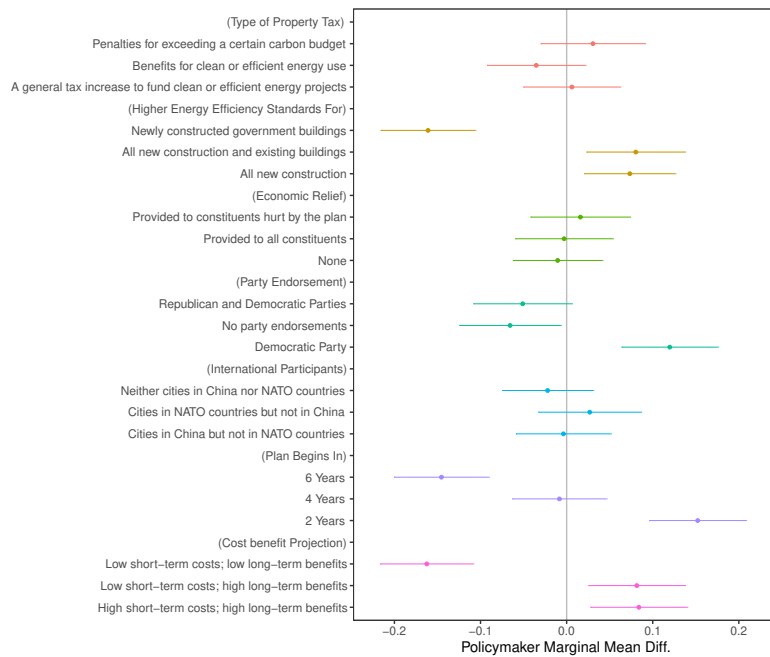
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 1 includes respondents who report that their local community has been impacted by at least one weather event in the recent past (includes floods, hurricanes, wildfires, droughts, and heatwaves).

Figure 42: Policymaker Marginal Means - By Government Type



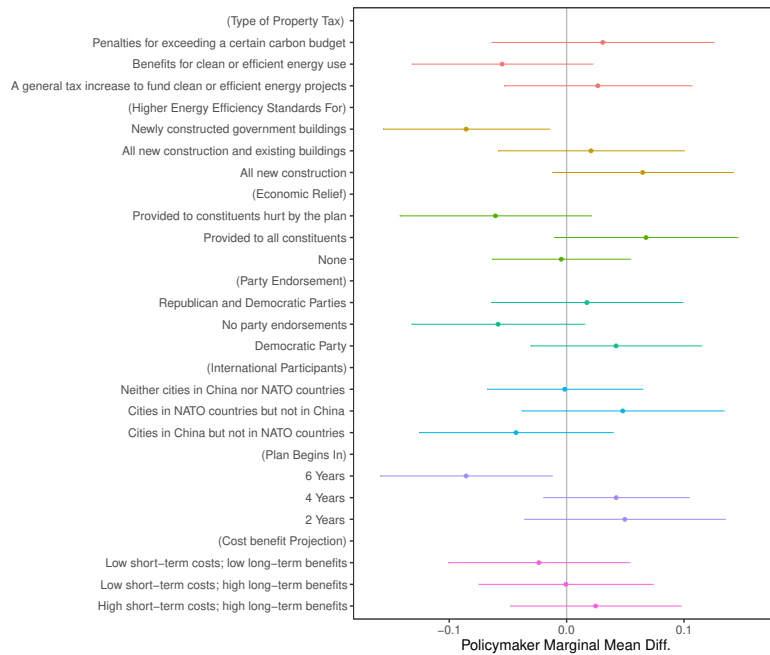
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Figure 43: Policymaker Marginal Mean Difference - By Ideology



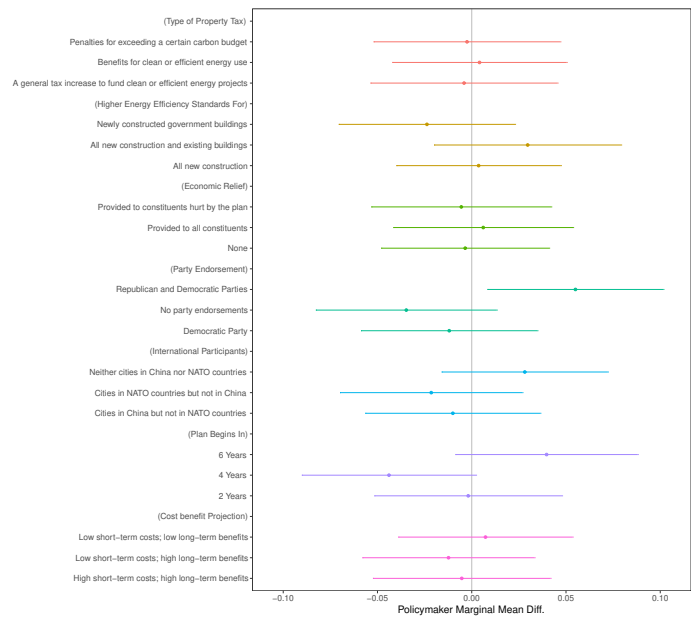
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 'Liberal' includes respondents who identify as very or somewhat liberal; 'Conservative' includes respondents who identify as very or somewhat conservative (respondents who identify in neither group are excluded).

Figure 44: Policymaker Marginal Mean Difference - By Green Electoral Incentives



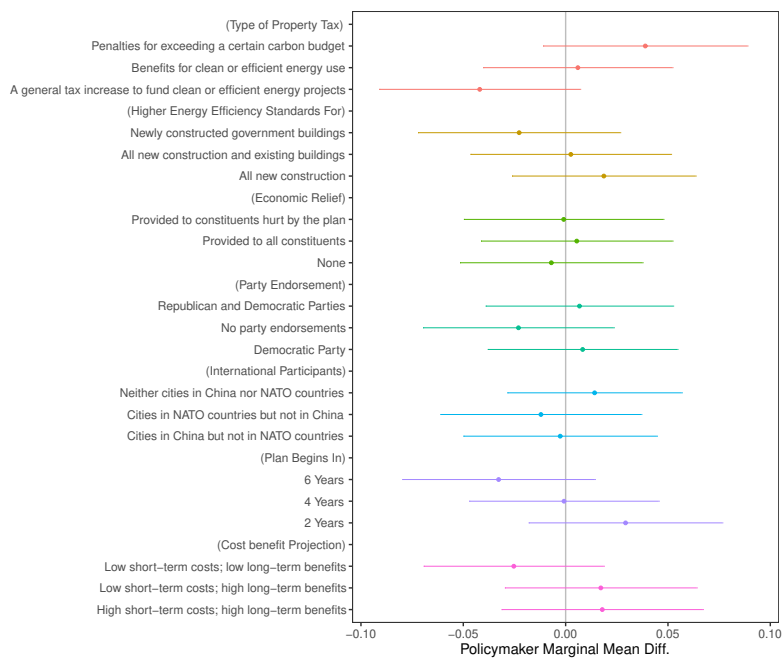
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 1 includes respondents who report ambition to run for office again (same or higher) and belief that adopting climate policy will greatly or somewhat help their reelection attempt.

Figure 45: Policymaker Marginal Mean Difference - By Age



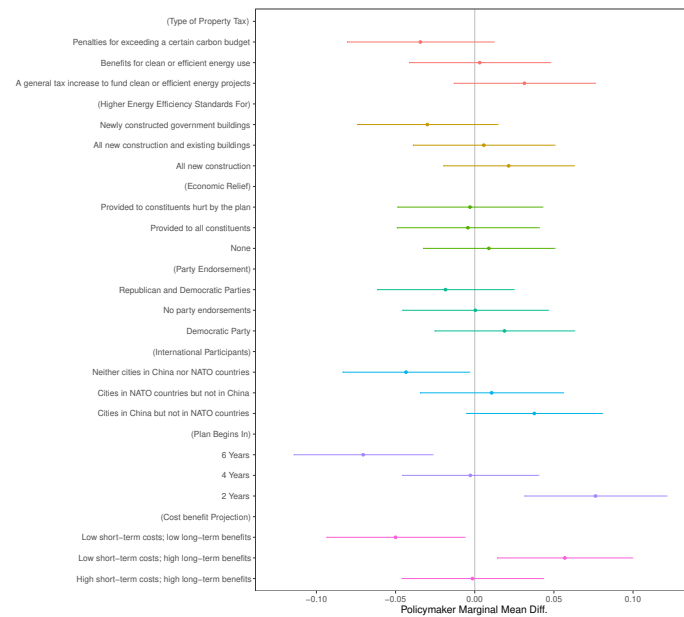
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. ‘High’ includes respondents in age categories above the average; ‘Low’ includes those in age categories below the average.

Figure 46: Policymaker Marginal Mean Difference - By Gender



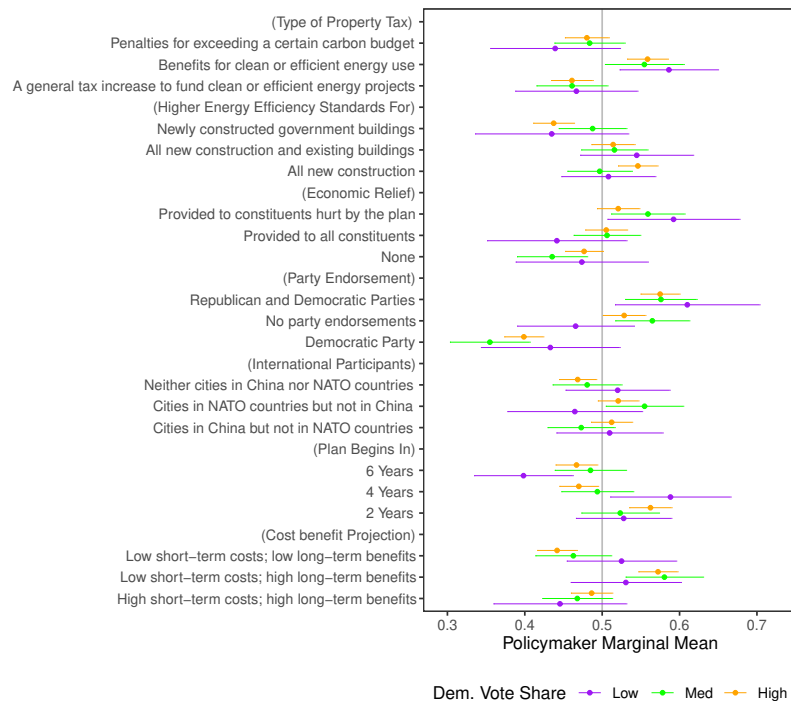
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Figure 47: Policymaker Marginal Mean Difference - By Education



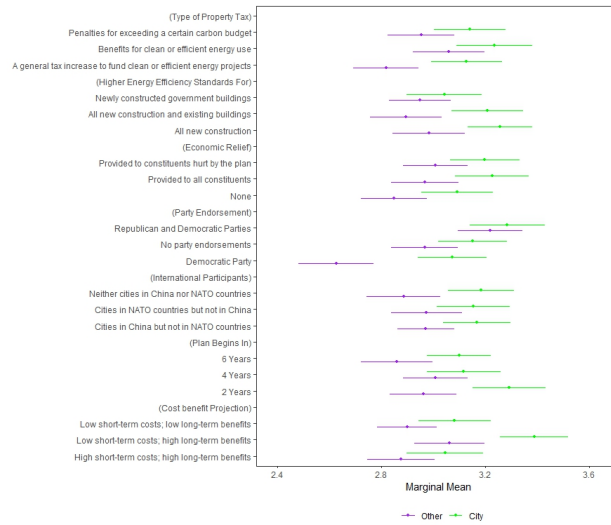
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. ‘High’ includes respondents with more than a bachelor’s degree; ‘Low’ includes those with a bachelor’s degree or less.

Figure 48: Policymaker Marginal Means - By Local Democratic Vote Share



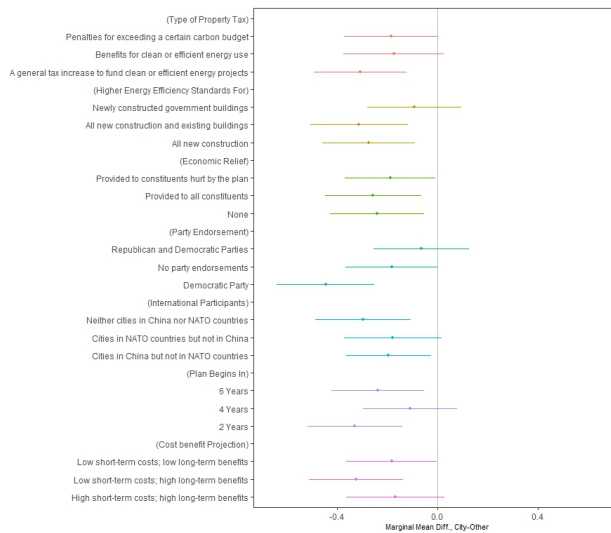
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Figure 49: Policymaker Marginal Means - By Urban vs. Non-Urban Areas



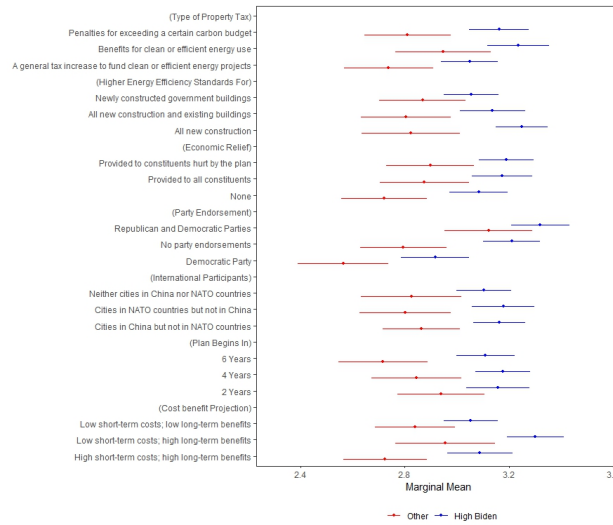
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level based on the rating outcome variable. Urban is the highest categorical level of urbanity (96% or higher), non-urban are the other categorical levels.

Figure 50: Policymaker Marginal Mean Difference - By Urban vs. Non-Urban Areas



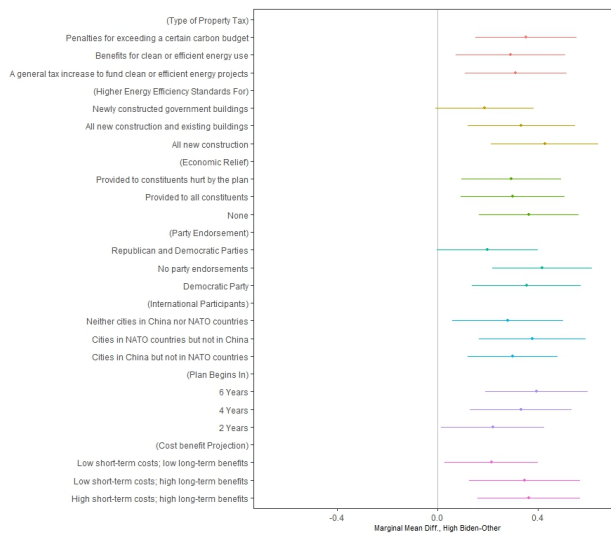
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level based on the rating outcome variable. Urban is the highest categorical level of urbanity (96% or higher), non-urban are the other categorical levels.

Figure 51: Policymaker Marginal Means - By High vs. Low Biden Vote Share Areas



Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level based on the rating outcome variable. High-Biden is the highest categorical level of 2020 Biden vote share (37% or higher), low-Biden vote share are the other categorical levels.

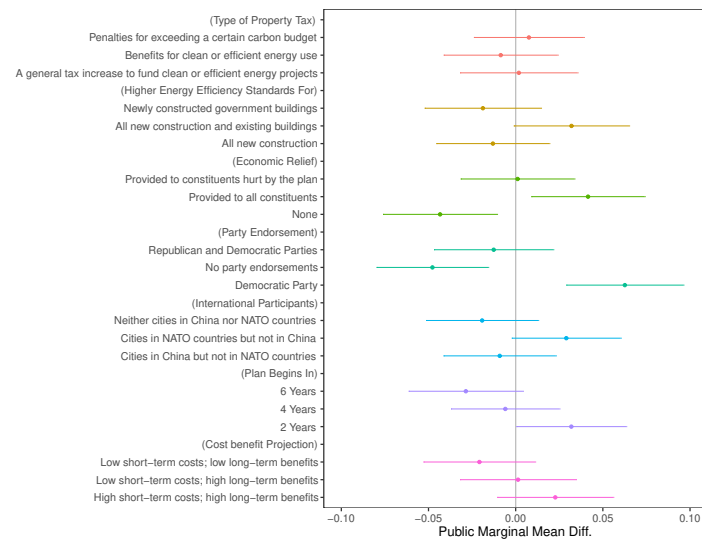
Figure 52: Policymaker Marginal Mean Difference - By High vs. Low Biden Vote Share Areas



Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level based on the rating outcome variable. High-Biden is the highest categorical level of 2020 Biden vote share (37% or higher), low-Biden vote share are the other categorical levels.

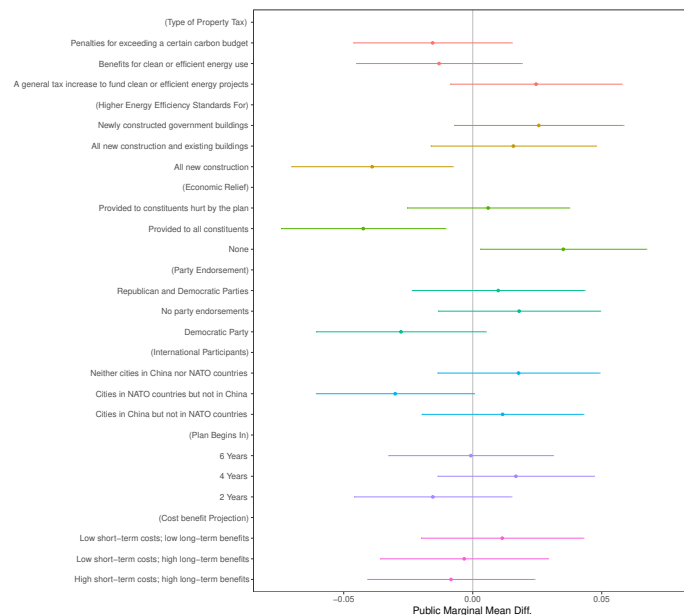
Public

Figure 53: Public Marginal Mean Difference - By CC Belief



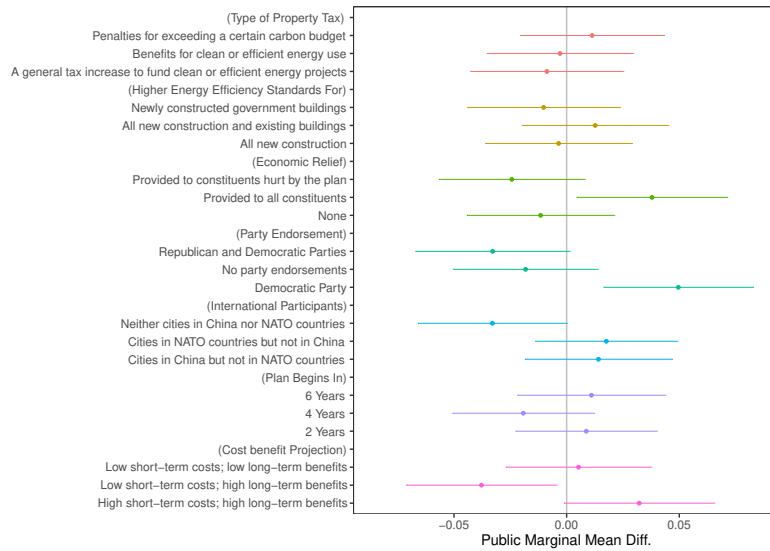
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 1 includes respondents who report that the climate is changing, and human activity plays or may play a significant role. 0 includes respondents who report that the climate is changing, but human activity does not play a significant role, the climate is not changing, or don't know / unsure.

Figure 54: Public Marginal Mean Difference - By Carbon Industry



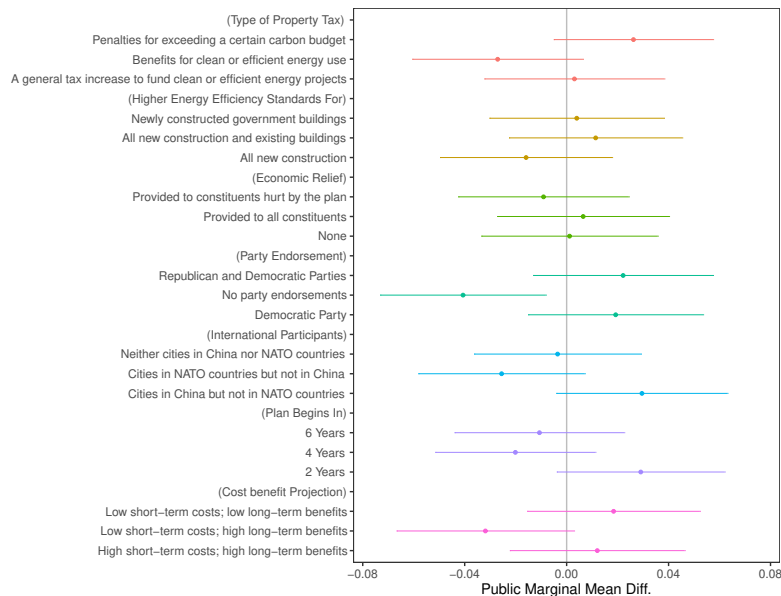
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 1 includes respondents who report that oil, gas, coal, or automotive industries are important to their community's economy.

Figure 55: Public Marginal Mean Difference - By Green Industry



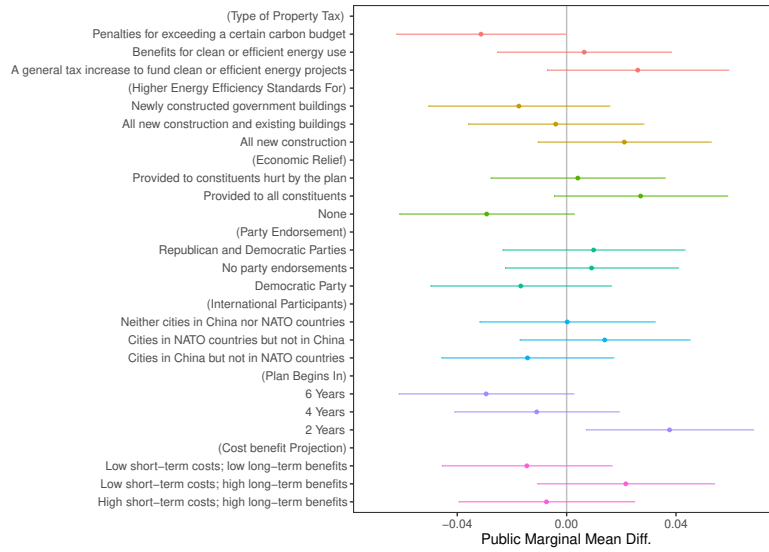
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 1 includes respondents who report that green industries are important to their community's economy.

Figure 56: Public Marginal Mean Difference - By Community CC Impact



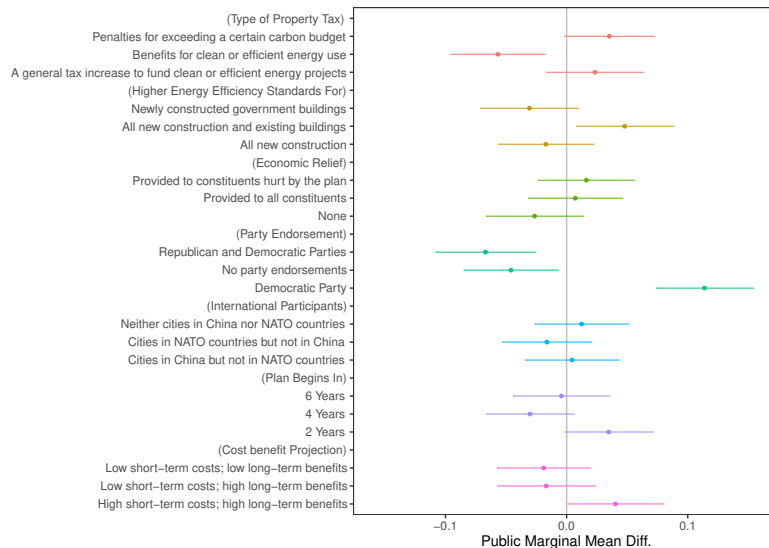
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 1 includes respondents who report that their local community has been impacted by at least one weather event in the recent past (includes floods, hurricanes, wildfires, droughts, and heatwaves).

Figure 57: Public Marginal Mean Difference - By Religiosity



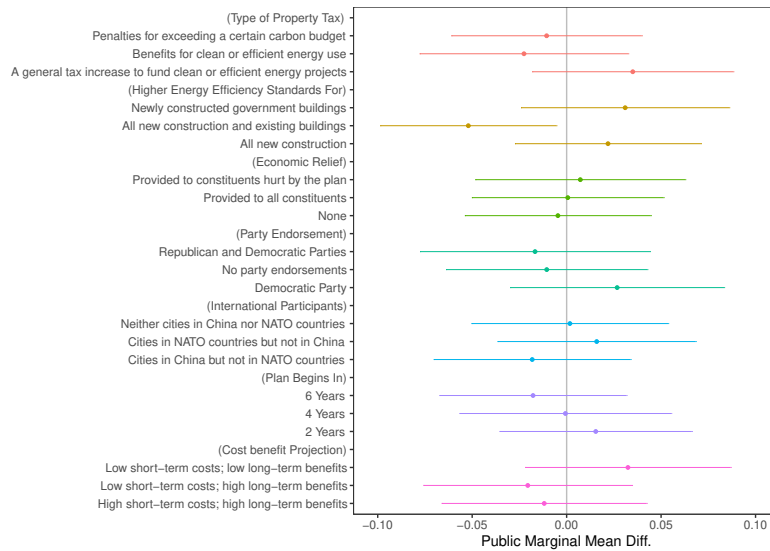
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. ‘High’ includes respondents in with religiosity above the sample average; ‘Low’ includes those below the average.

Figure 58: Public Marginal Mean Difference - By Ideology



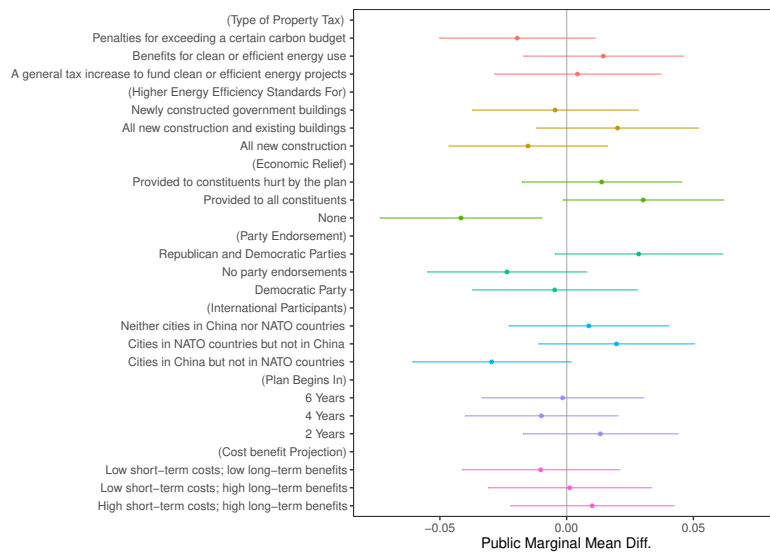
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. ‘Liberal’ includes respondents who identify as very or somewhat liberal; ‘Conservative’ includes respondents who identify as very or somewhat conservative (respondents who identify in neither group are excluded).

Figure 59: Public Marginal Mean Difference - By Age



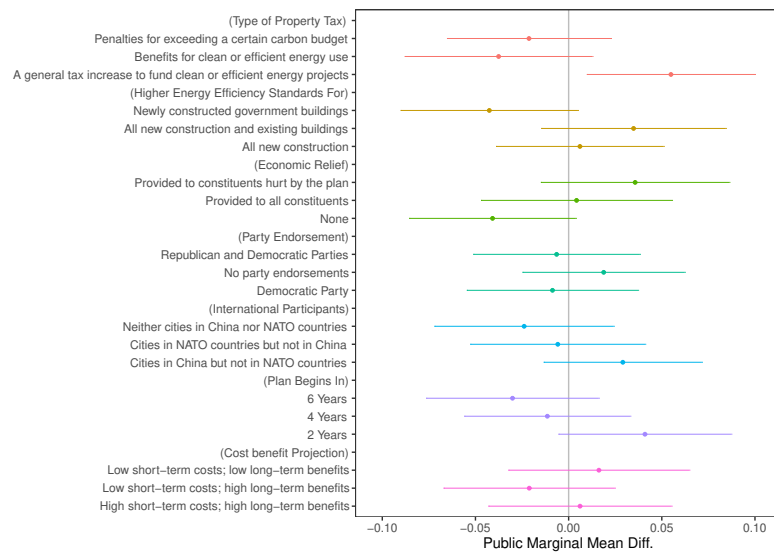
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 'High' includes respondents in age categories above the average; 'Low' includes those in age categories below the average.

Figure 60: Public Marginal Mean Difference - By Gender



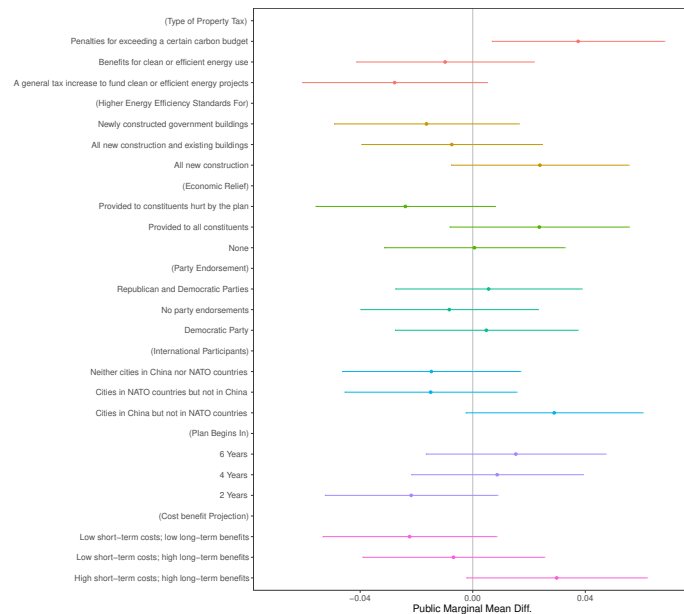
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Figure 61: Public Marginal Mean Difference - By Household Income



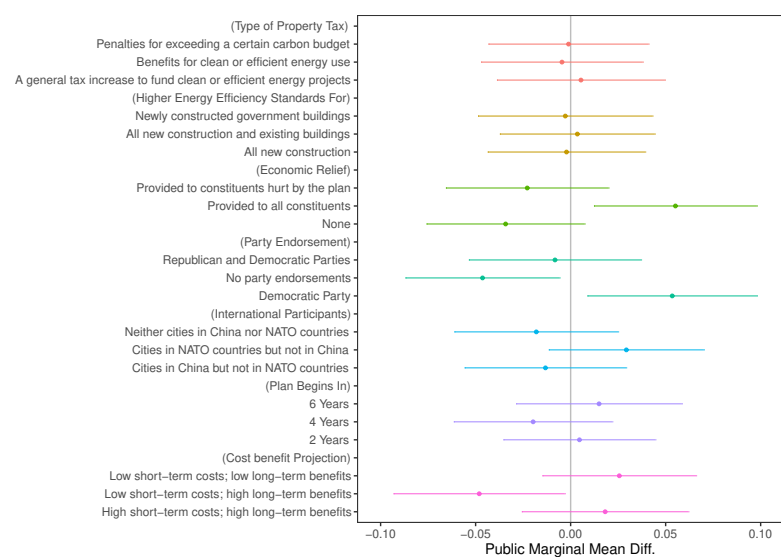
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. ‘High’ includes respondents household income categories above the average; ‘Low’ includes those in household income categories below the average.

Figure 62: Public Marginal Mean Difference - By Education



Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. ‘High’ includes respondents with a bachelor’s degree or higher, ‘Low’ includes respondents with less than a bachelor’s degree.

Figure 63: Public Marginal Mean Difference - By belief the policy will help



Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. ‘High’ includes respondents who believe that the effect of climate change policies on their personal economic situation would ‘Help a little’ or ‘Help a lot’; ‘Low’ includes respondents who believe that the effect of climate change policies on their personal economic situation would ‘Hurt a little’ or ‘Hurt a lot’.

Most Important Feature and Open-Ended Responses

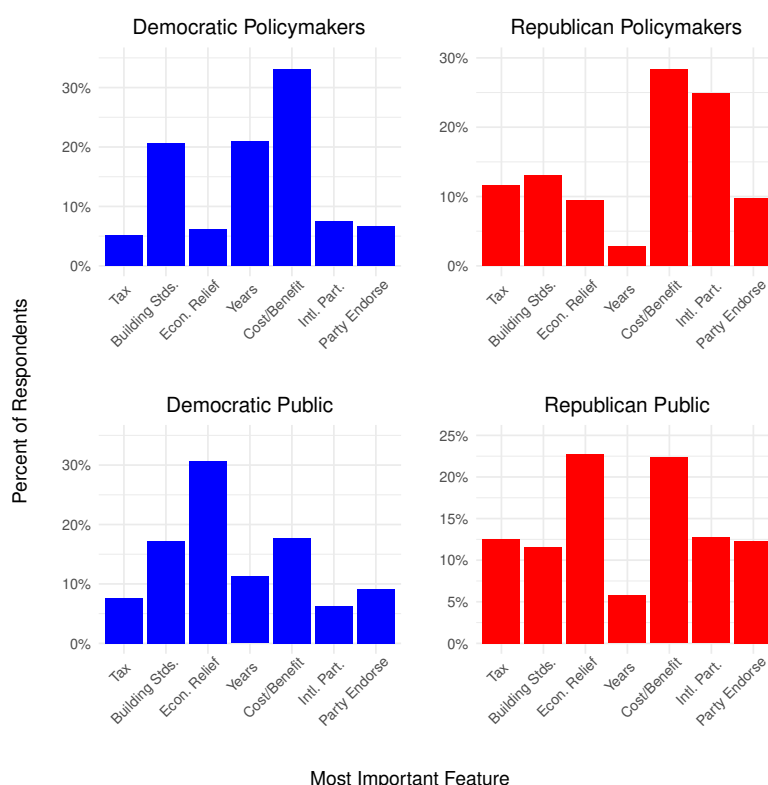
To better understand the relative preference intensity across the different attributes, we also ask respondents to select the most important feature in their decision-making. For the few areas where local policymakers and the public differ, the probability of climate action may be increased by prioritizing the preferences of whichever group indicates that specific policy attribute is more important to them. For example, when climate interest groups lobby policymakers to adopt specific policies, they are implicitly or explicitly choosing from a menu of options and may have to consider whether to lean towards public or policymaker views. The same dynamic holds for a policymaker considering what policies to propose to their colleagues, as the individual policymaker must balance the preferences of their colleagues with those of their constituents and the public at-large. Nevertheless, given that policymakers play a different and more proximate role in the agenda-setting and policy adoption process than the public, preference intensity is not the only factor to consider.

In Figure 64, we show that a plurality of local policymakers—about 30%—report that the cost-benefit analysis attribute was the most important factor in making their choice of plans, and that this feature was the most critical factor for both Democrats and Republicans. This suggests that the overall cost-benefit analysis of a climate plan may have a bigger impact on policymaker support than more detailed elements of a plan’s design (e.g., exactly how higher energy efficiency standards are structured). However, given that our construction of the cost-benefit attribute was particularly abstract and in the real-world the scale of costs and benefits would likely be more contested, this result should be interpreted with caution.

By contrast, the most important feature for the public is economic relief, which actually received the *fewest* votes for most important feature among policymakers collectively. A qualitative review of the open-ended responses highlights significant support among the public for providing economic relief to defray the plan’s costs specifically or help people in general. For example, one respondent said, “Since converting to green energy will be somewhat expensive, low-income families will need some form of economic relief.” Another noted, “I am very low income and high costs would hurt.” The greater importance placed on economic relief by the public compared to policymakers makes logical sense. Since demographic differences can drive elite-public gaps (Kertzer, 2020), one potential explanation for this difference is that the public is relatively less well off economically than elites, and thus they have greater financial incentives to care about economic relief (Gaikwad, Genovese and Tingley, 2022). Including economic relief in climate plans may therefore be a particularly effective strategy for policymakers to pursue in order to gain public support.

We also uncover heterogeneity between Democratic and Republican policymakers and members of the public. About 20% of Democratic local policymakers said the time to implementation attribute was the most important factor in making their choice of plans, compared to under 3% of Republicans. A similar split also exists for the US public. A review of the open-ended responses suggests policymakers that believe this is the most important attribute perceive climate change as a time-sensitive challenge that requires urgent action. For instance, one policymaker said, “The clock is ticking,” another argued, “Timing is critical!! Action must be taken quickly,” and a third insisted, “Really important to move quickly to avoid cataclysmic [destruction].” The disparity we observe between Democrats and Republicans on this question likely reflects a fundamental difference in belief about how urgent the climate crisis is.

Figure 64: Most Important Feature By Party ID



Note: Results are weighted by Civic Pulse (policymaker sample) and Census weights (public sample). Unweighted results are substantively similar.

We also find that a significantly larger percentage of Republican policymakers than Democratic policymakers view the international participants attribute as the most important. The open-ended responses provide anecdotal evidence that some respondents chose this attribute due to an understanding that climate change is a global problem and action by only the US will be insufficient. For example, one policymaker said, "...[A]ll contributors to climate change must be at the table. A global problem needs a global solution." A qualitative review of the open-ended responses also suggests that while many policymakers used hostile language when discussing China, few discussed NATO countries at all. For instance, one policymaker said, "Let's face it. China is the problem. There. I've said it...." Among some members of the public, animosity towards China is so high that many expressed the view that China should be excluded from climate initiatives altogether: "Anything with China I oppose." Future research should unpack the linkage between hostility towards China and climate attitudes (Mutz, 2018).

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