Supplementary Materials

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

August 21, 2023

Contents

Pre-Registered Hypotheses

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.

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.

H_{2a}: Local policymakers will prefer higher energy efficiency standards for newly constructed government buildings compared to higher standards for all new construction, and will prefer higher standards for all new construction compared to higher energy efficiency standards for all new construction *and* existing buildings.

H_{3a}: Local policymakers will prefer economic relief provided to constituents hurt by the plan and economic relief provided to all constituents compared to no economic relief.

H_{3b}: Local policymakers will prefer economic relief provided to all constituents compared to economic relief provided only to constituents hurt by the plan.

H_{4a}: Local policymakers will prefer longer implementation periods compared to quicker implementation periods.

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.

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.

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.

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.

H_{7a}: Local policymakers will prefer climate plans with bipartisan support compared to plans with either only Democratic support or no support.

H_{7b}: Local policymakers will prefer climate plans with Democratic support compared to plans with no support.

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).

H_{8b}: The impact of making economic costs to constituents less salient (economic relief and/or delayed implementation time) on support for expansive policy proposals (broader tax proposals, extensive energy efficiency standards, and/or high short-term policy costs) is likely to be greater among local policymakers with lower levels of concern about climate change than policymakers with greater levels of concern.

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

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[1]In 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 wieghted 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 1: 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 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 1 if the respondent identifies "oil, coal, or gas" as an important local industry, and 0 otherwise.

m 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.

n 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.

o 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).

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 Reelect 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 hurt the respondent's reelection chances a lot.

Figure 1: Policymaker Sample Representativeness

Sub-county[1] 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 2: 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)
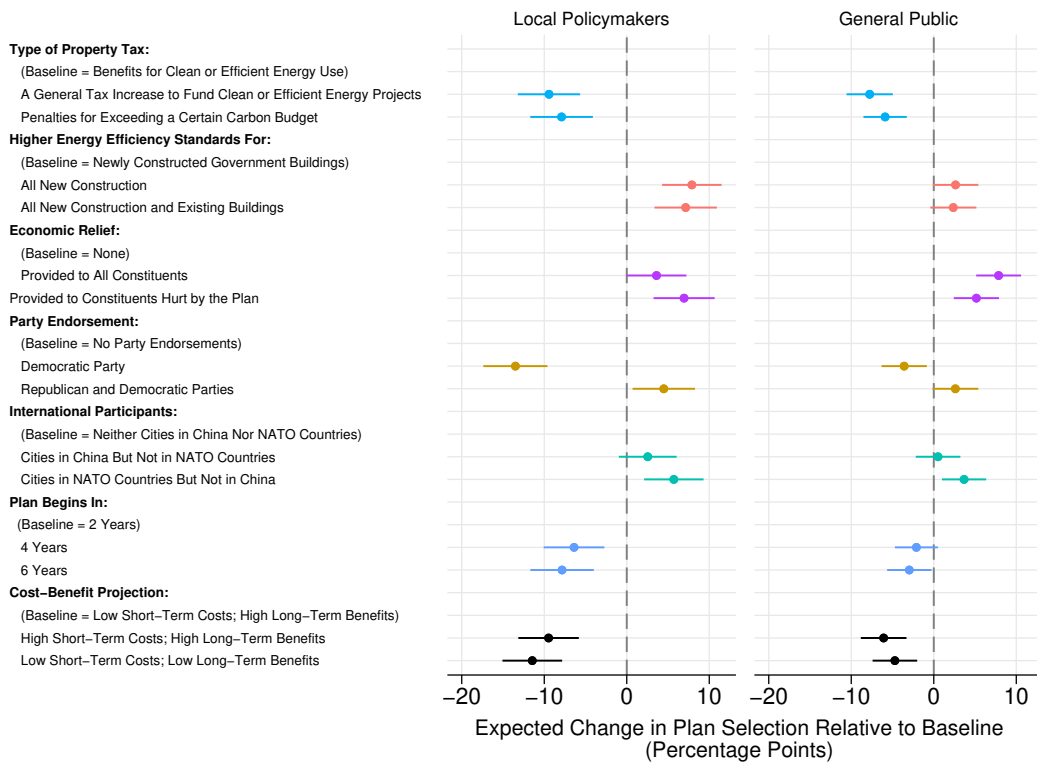
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

# Policymaker AMCEs

Table 3: 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; low 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)
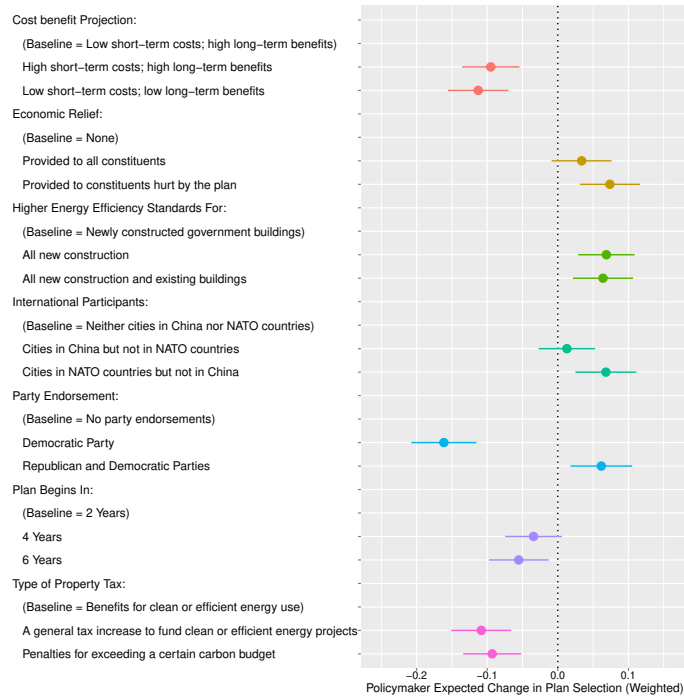
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 4: AMCE, Rating Outcome: Policymakers (Unweighted)
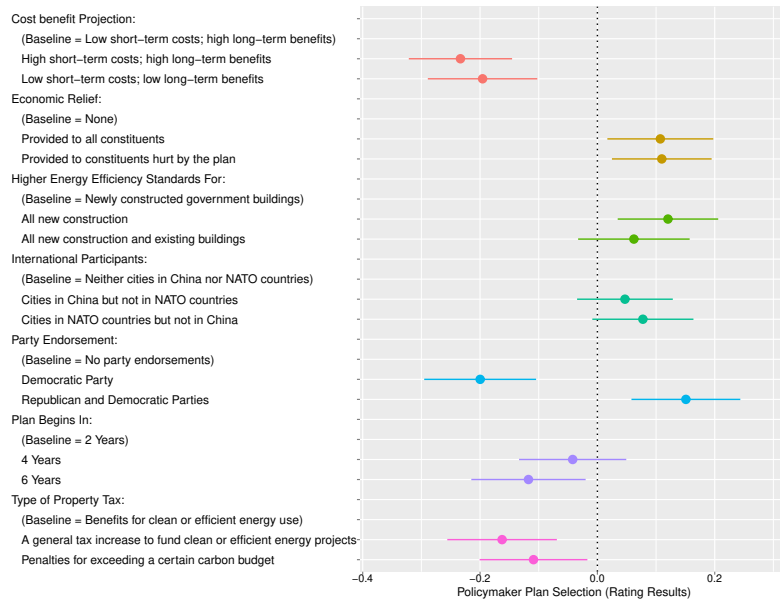
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 5: AMCE, Binary Rating Outcome: Policymakers (Unweighted)
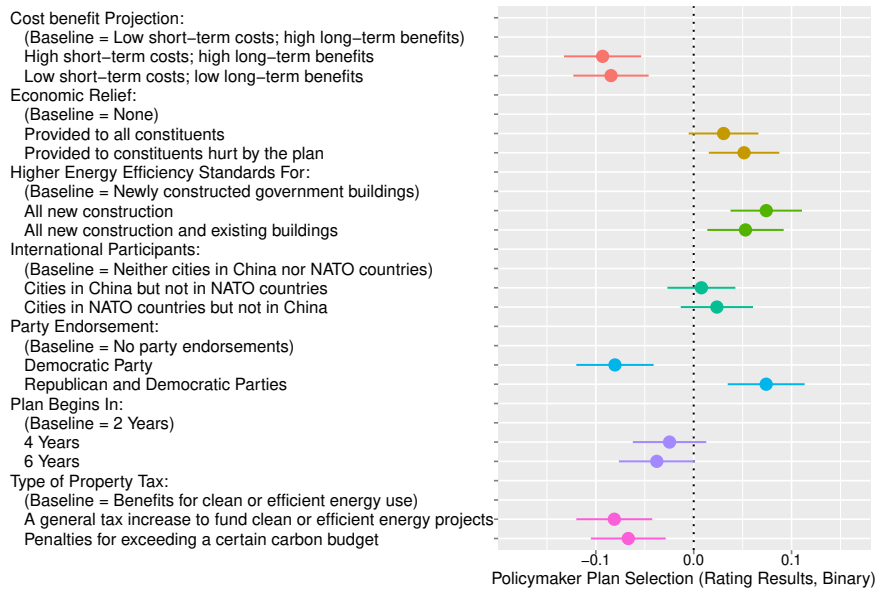
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level, coded as 1 if respondents "strongly suppport" or "somewhat support" a climate plan and 0 otherwise.

Public AMCEs

Table 4: 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)
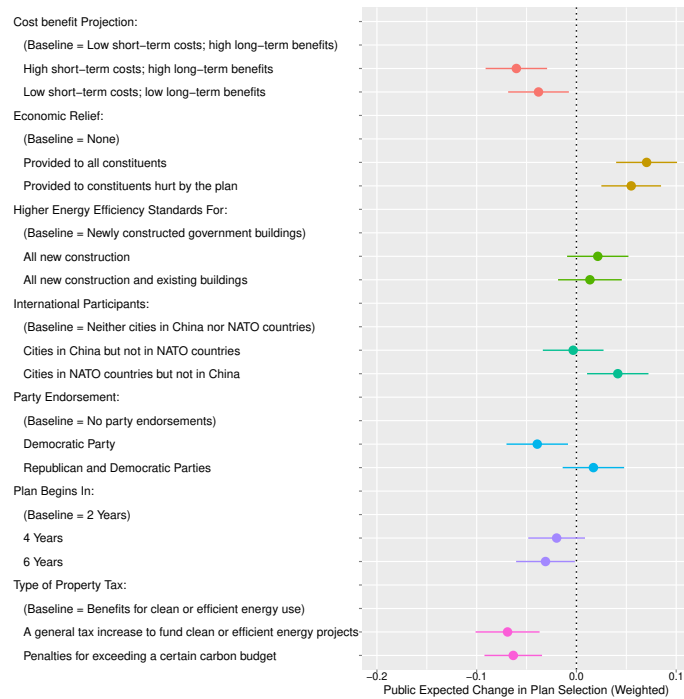
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 7: AMCE, Rating Outcome: Public (Unweighted)
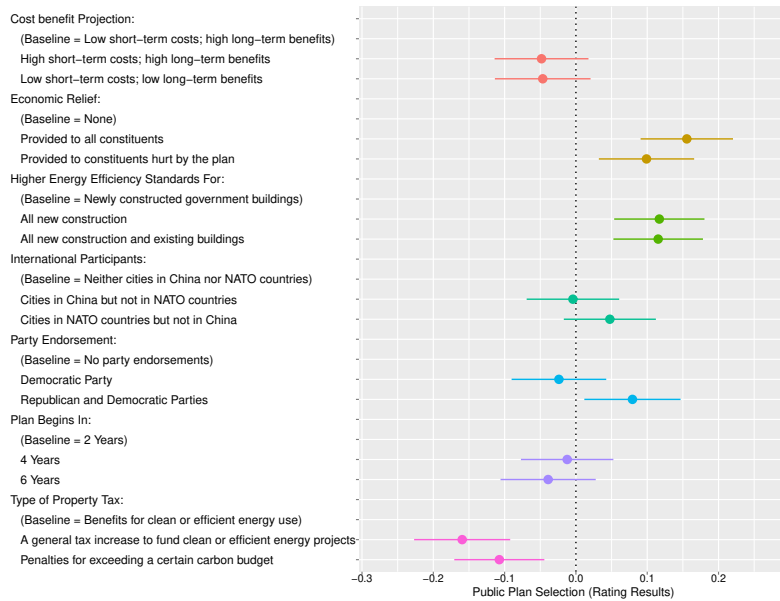
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 8: AMCE, Binary Rating Outcome: Public (Unweighted)
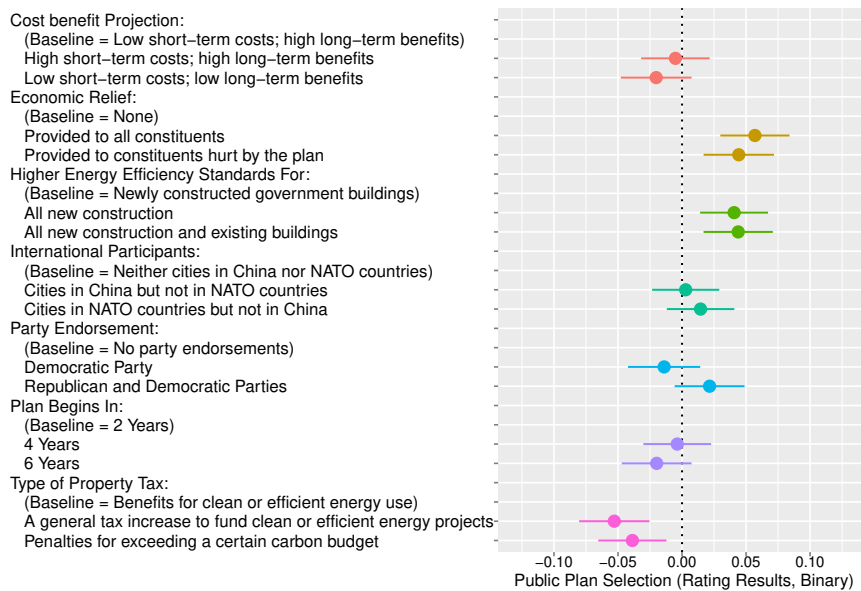
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level, coded as 1 if respondents "strongly suppport" or "somewhat support" a climate plan and 0 otherwise.

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 9 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]

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

Figure 9: Unweighted Marginal Mean Differences: Policymakers - Public
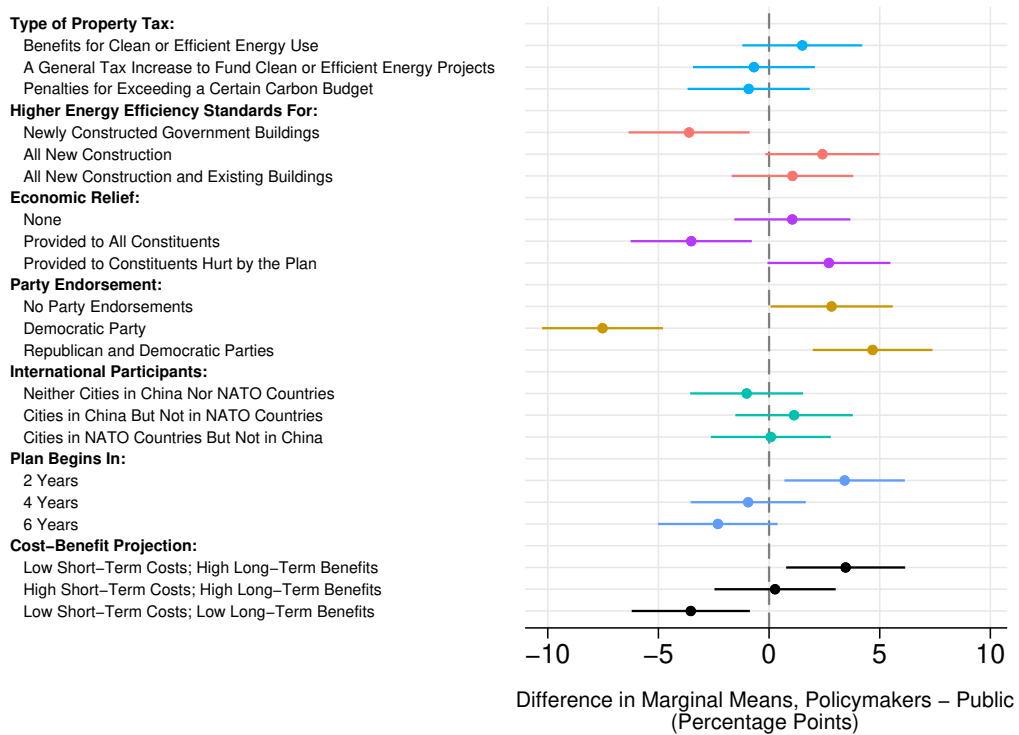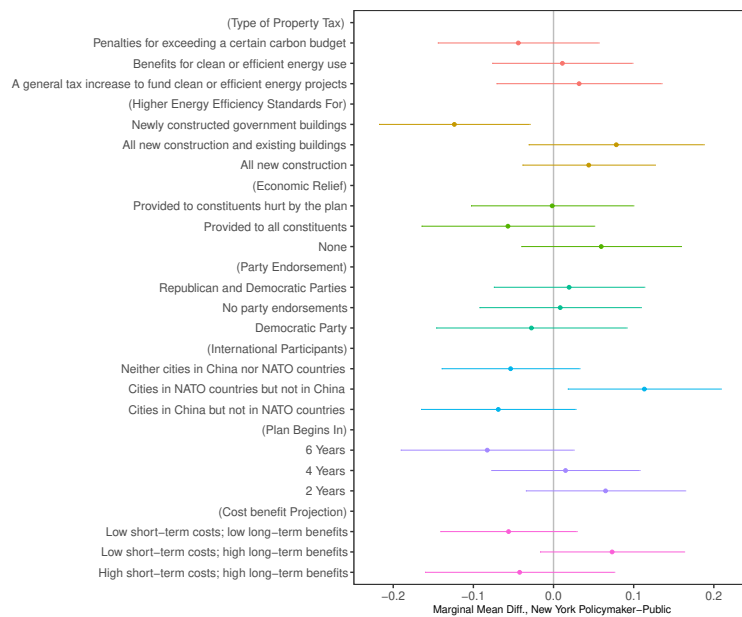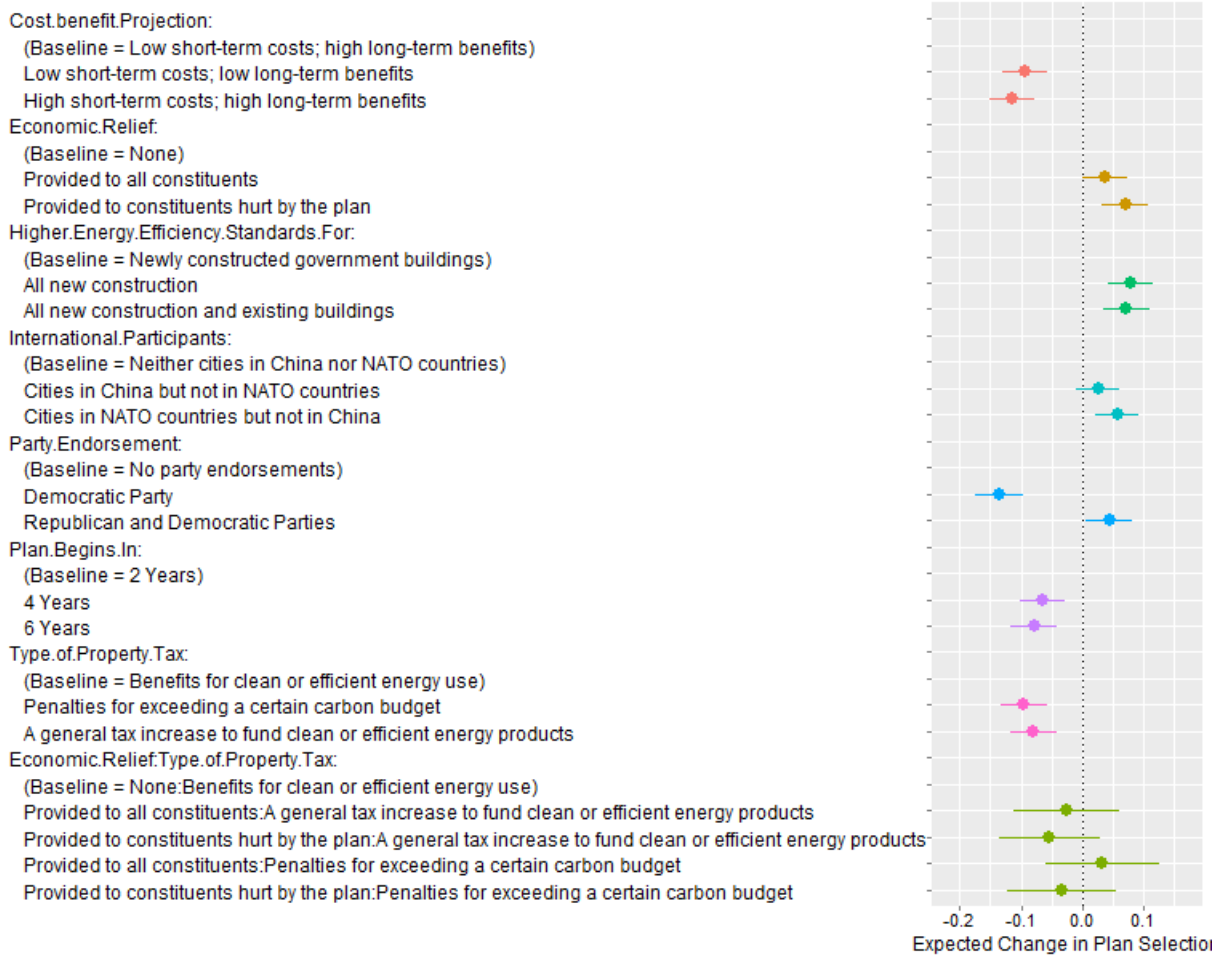

Difference in Marginal Means, Policymakers – Public
(Percentage Points)

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

Policymakers

Figure 10: Unweighted Marginal Means: Policymakers
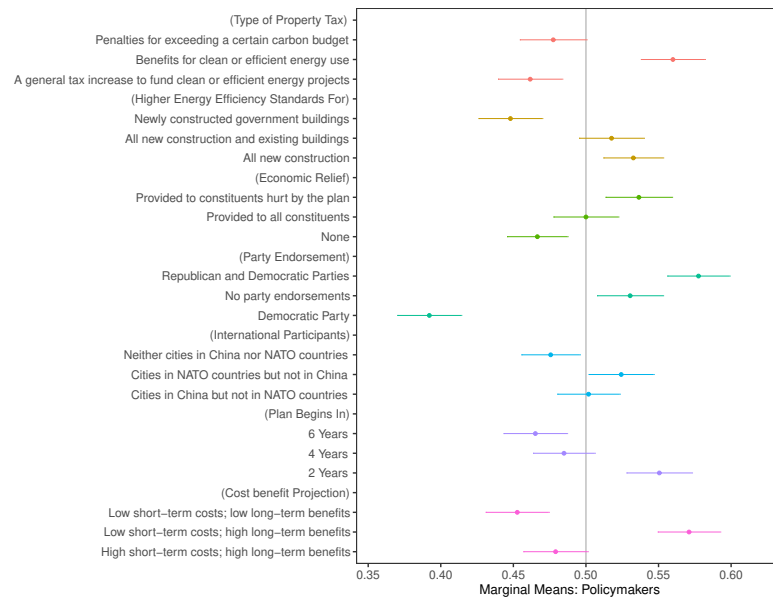
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Figure 11: Weighted Marginal Means, Rating Outcome: Policymakers
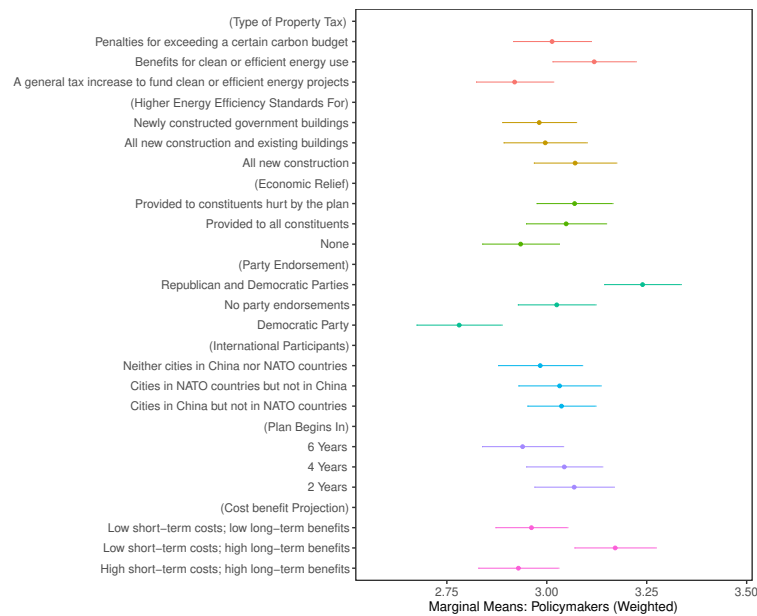
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Figure 12: Weighted Marginal Means, Binary Rating Outcome: Policymakers
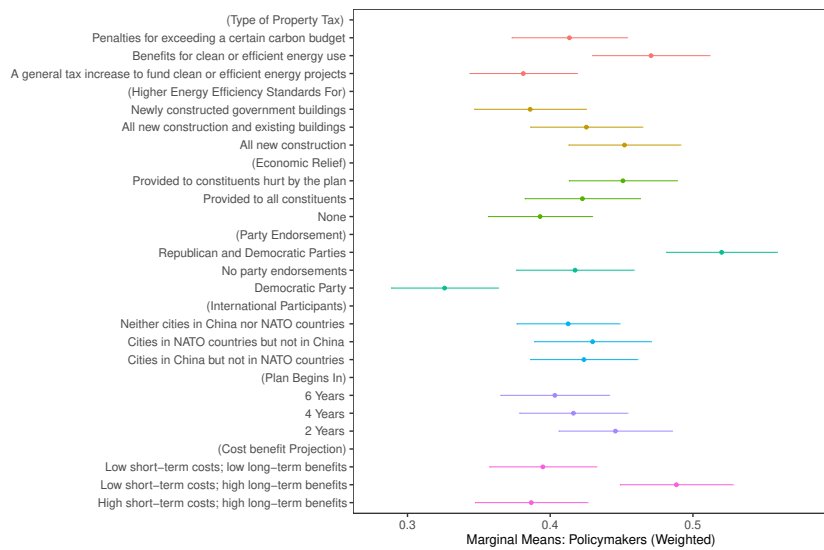
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Public

Figure 13: Unweighted Marginal Means: Public
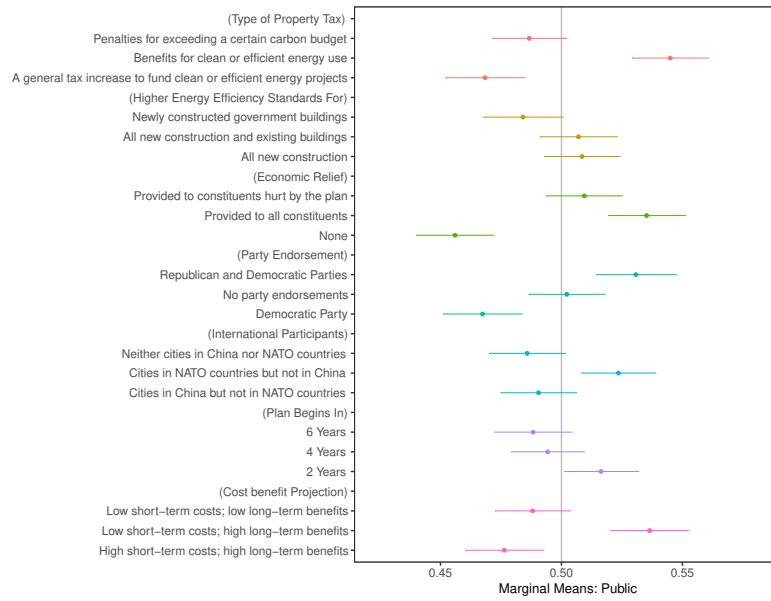
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Figure 14: Weighted Marginal Means, Rating Outcome: Public
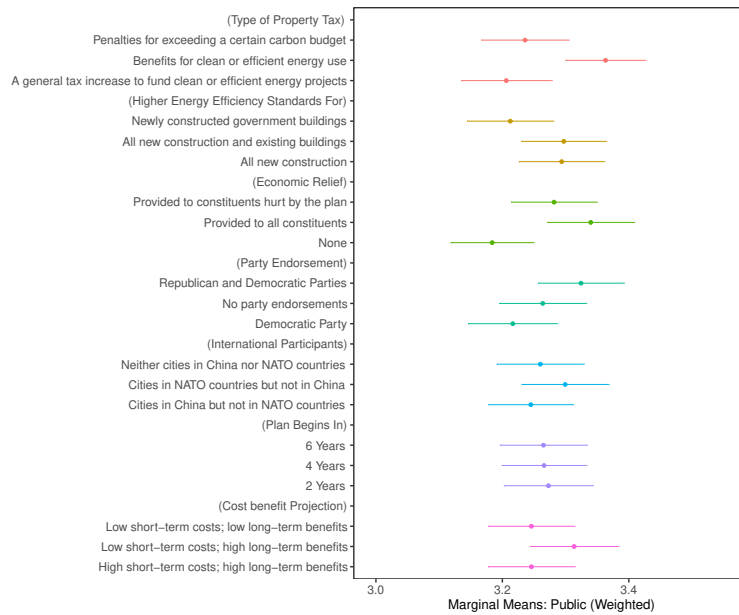
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Figure 15: Weighted Marginal Means, Binary Rating Outcome: Public
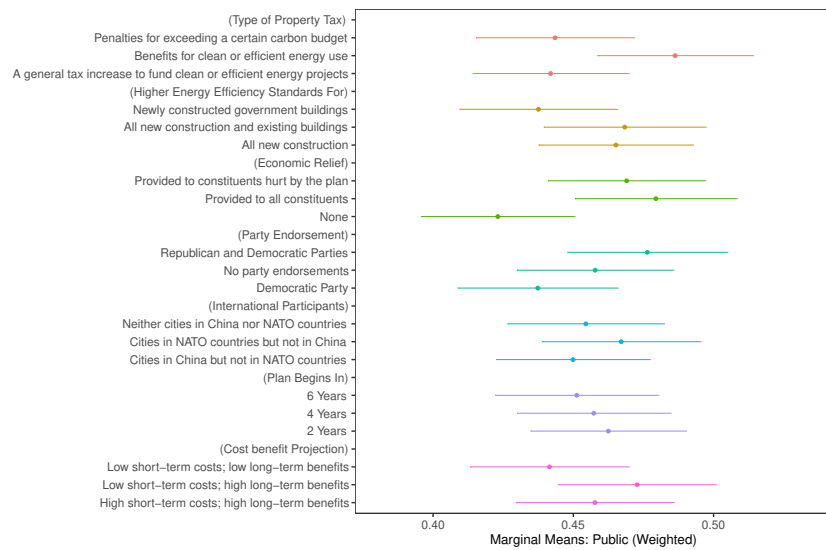
Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Selected State Breakouts

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. However, for several key populous states, we can match policymakers and the public at the state level to show correspondence. Here, we illustrate the differences between the elite and public samples in Texas (Figure 16), Pennsylvania (Figure 17), and New York (Figure 18). 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 16: Marginal Means - Policymaker and Public Difference, Texas
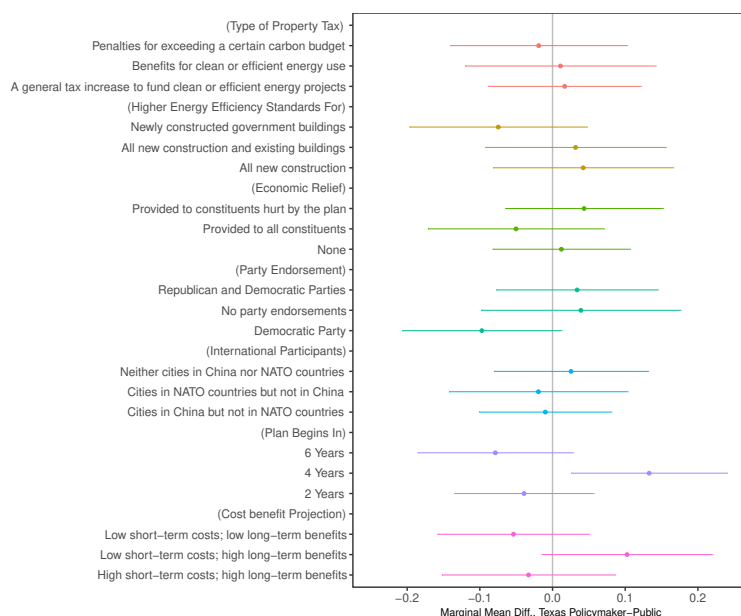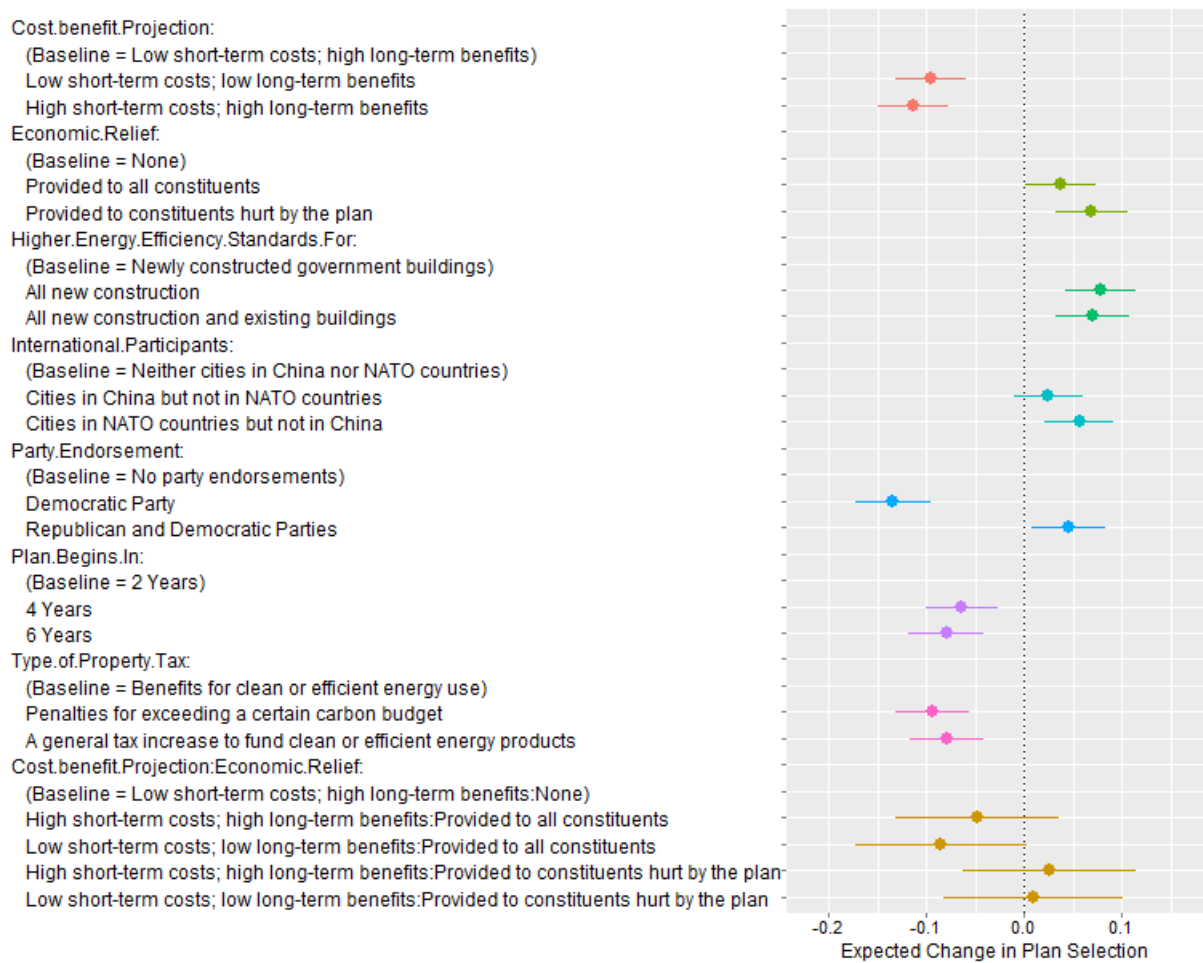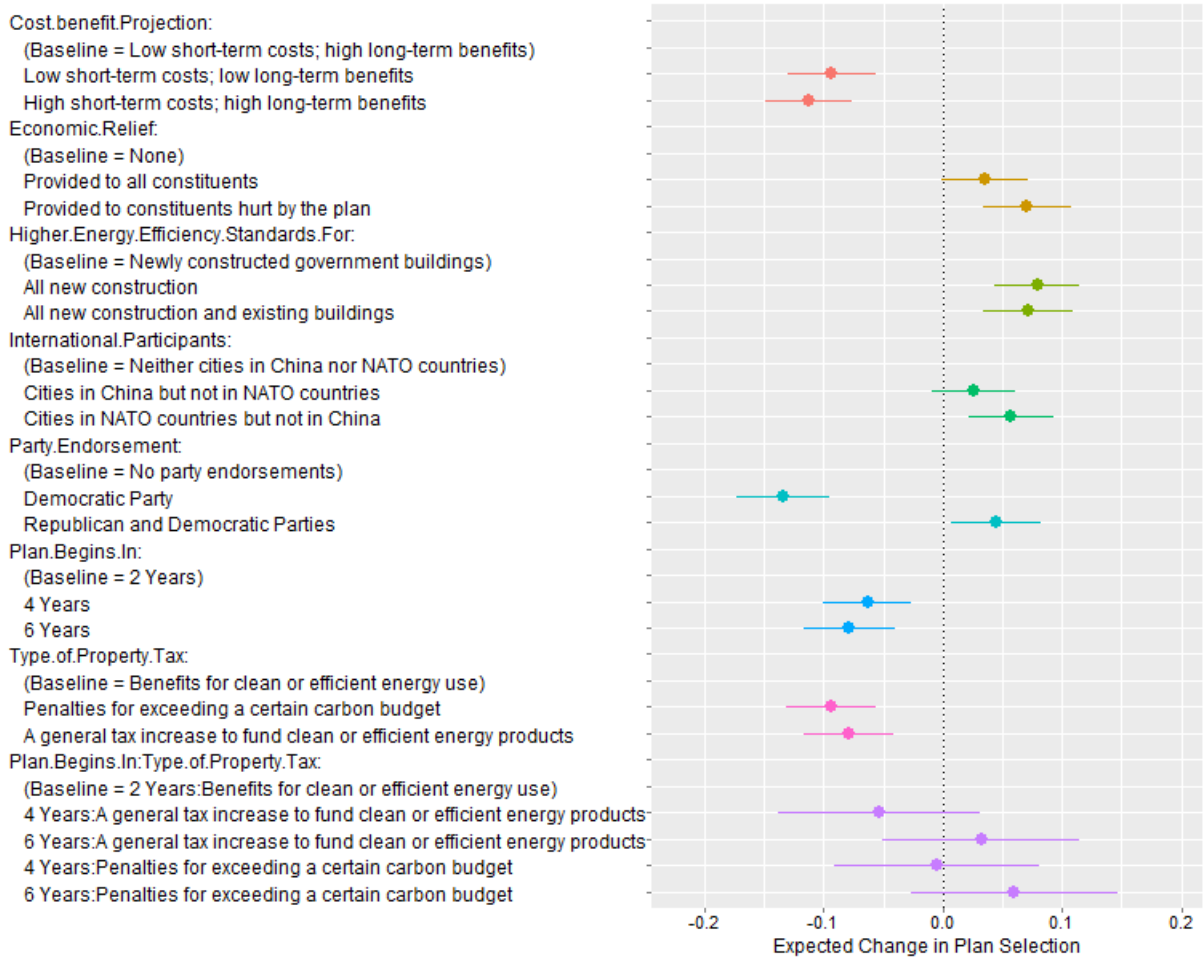

Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Figure 17: Marginal Means - Policymaker and Public Difference, Pennsylvania
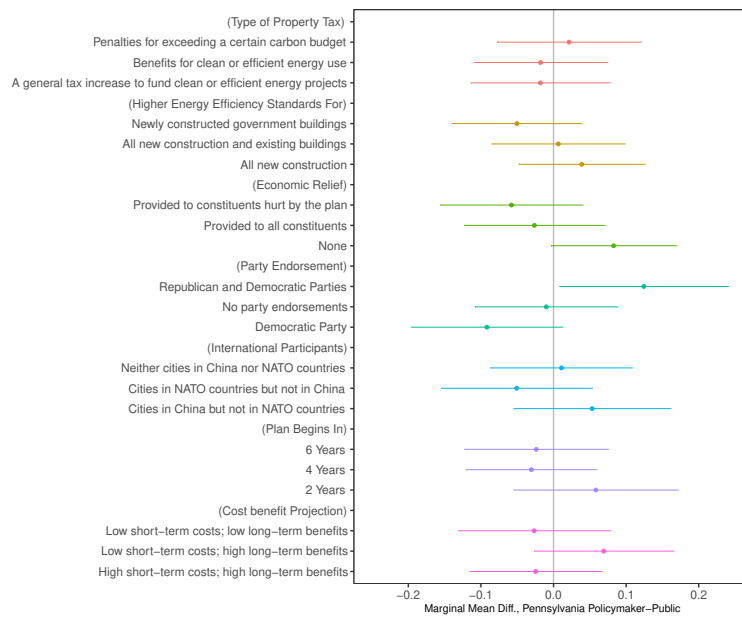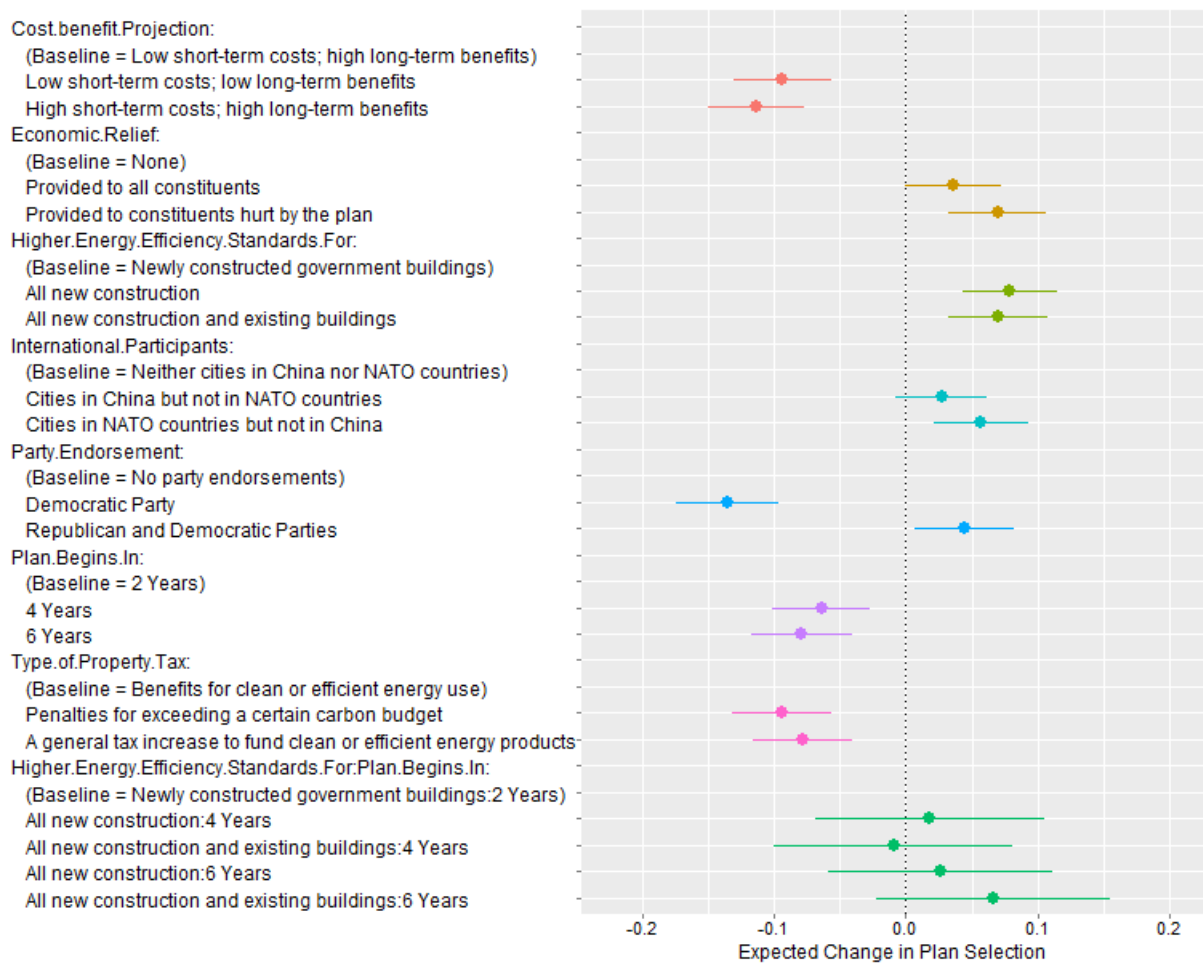

Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Figure 18: Marginal Means - Policymaker and Public Difference, New York

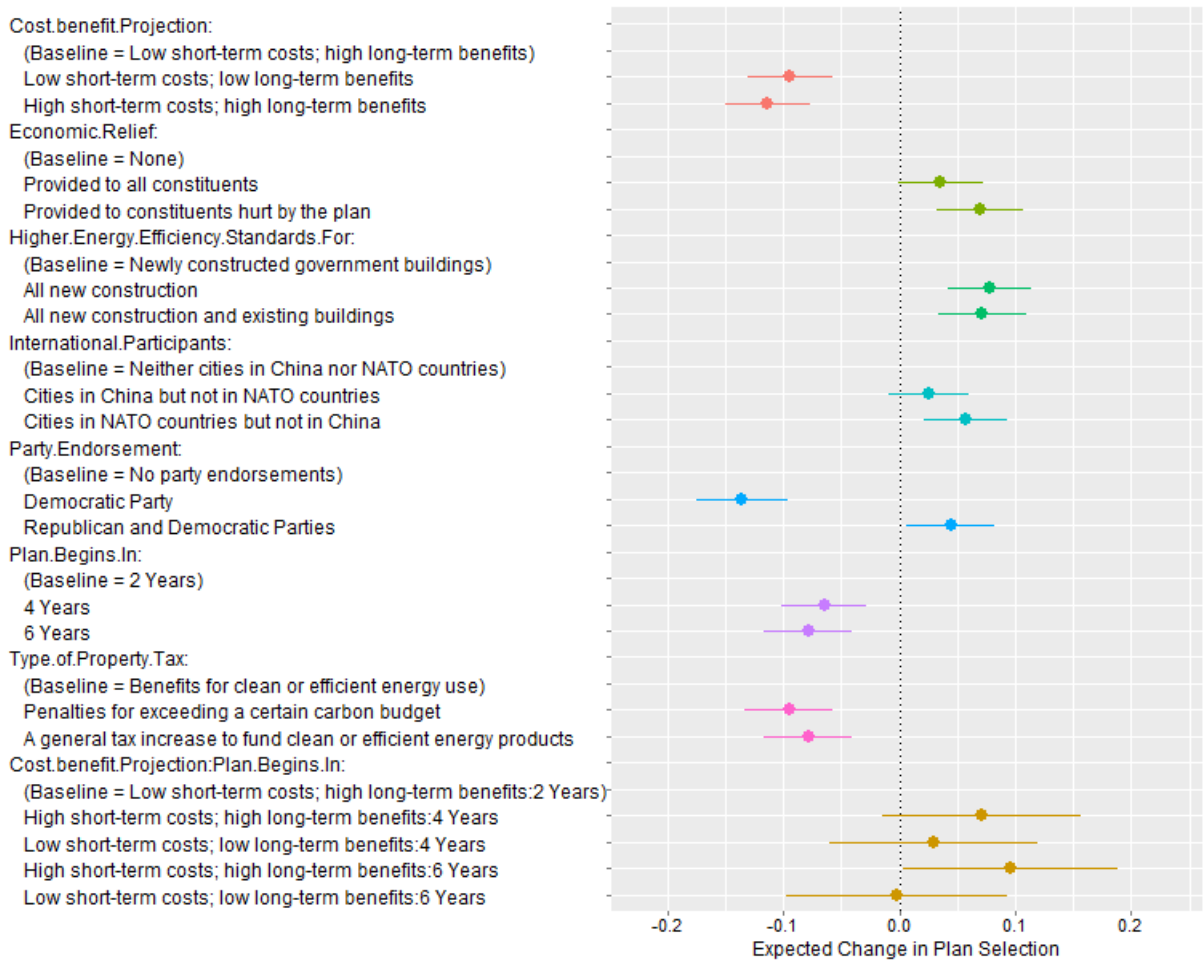Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level.

Interaction Effects

In our policymaker study, we examine various interaction effects, per our pre-analysis plan. To probe interaction effects, we follow **?** and estimate the non-parametric average marginal interaction effect (AMIE), though we also show exploratory results of marginal mean interactions with economic relief (Figure 25) and timing (Figure 26). 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 19-32). 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, and high short term costs/high long term benefits*plan begins in 6 years. Figure 26 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.

Interaction Effects of Policy Expansiveness and Economic Cost Salience

Figure 19: AMCE, Interaction of Economic Relief and Type of Property Tax
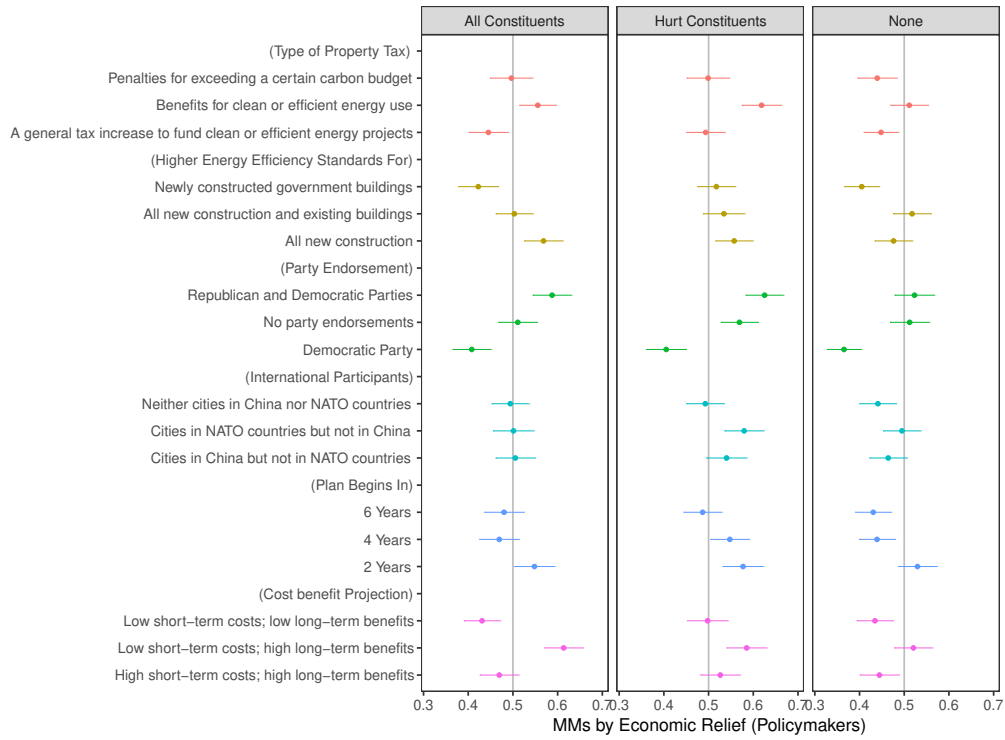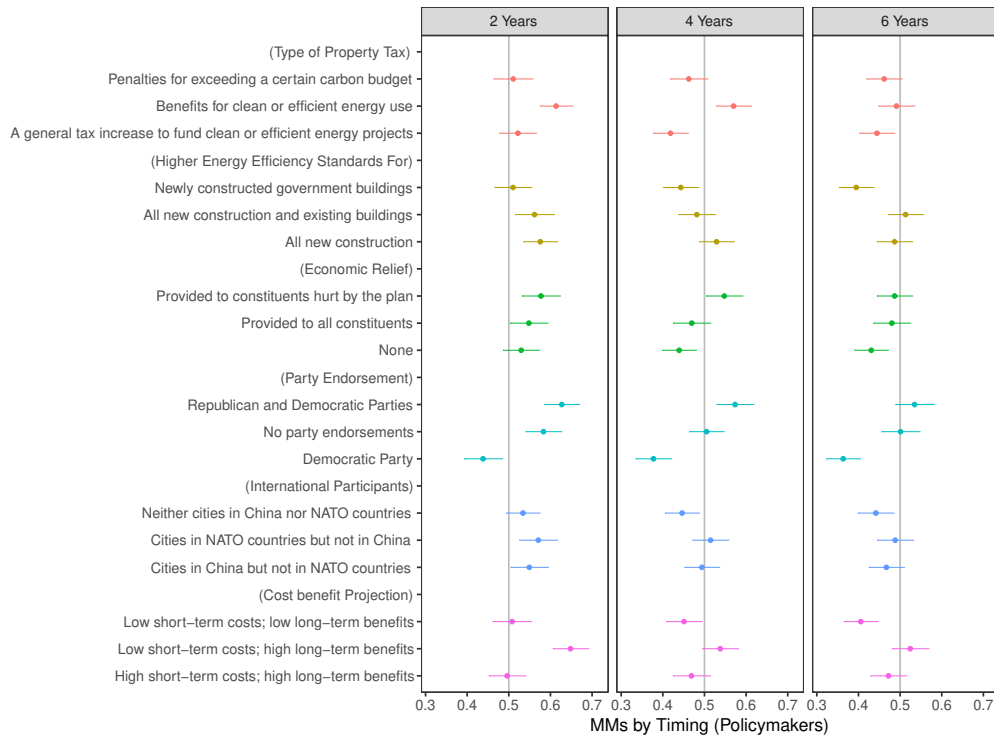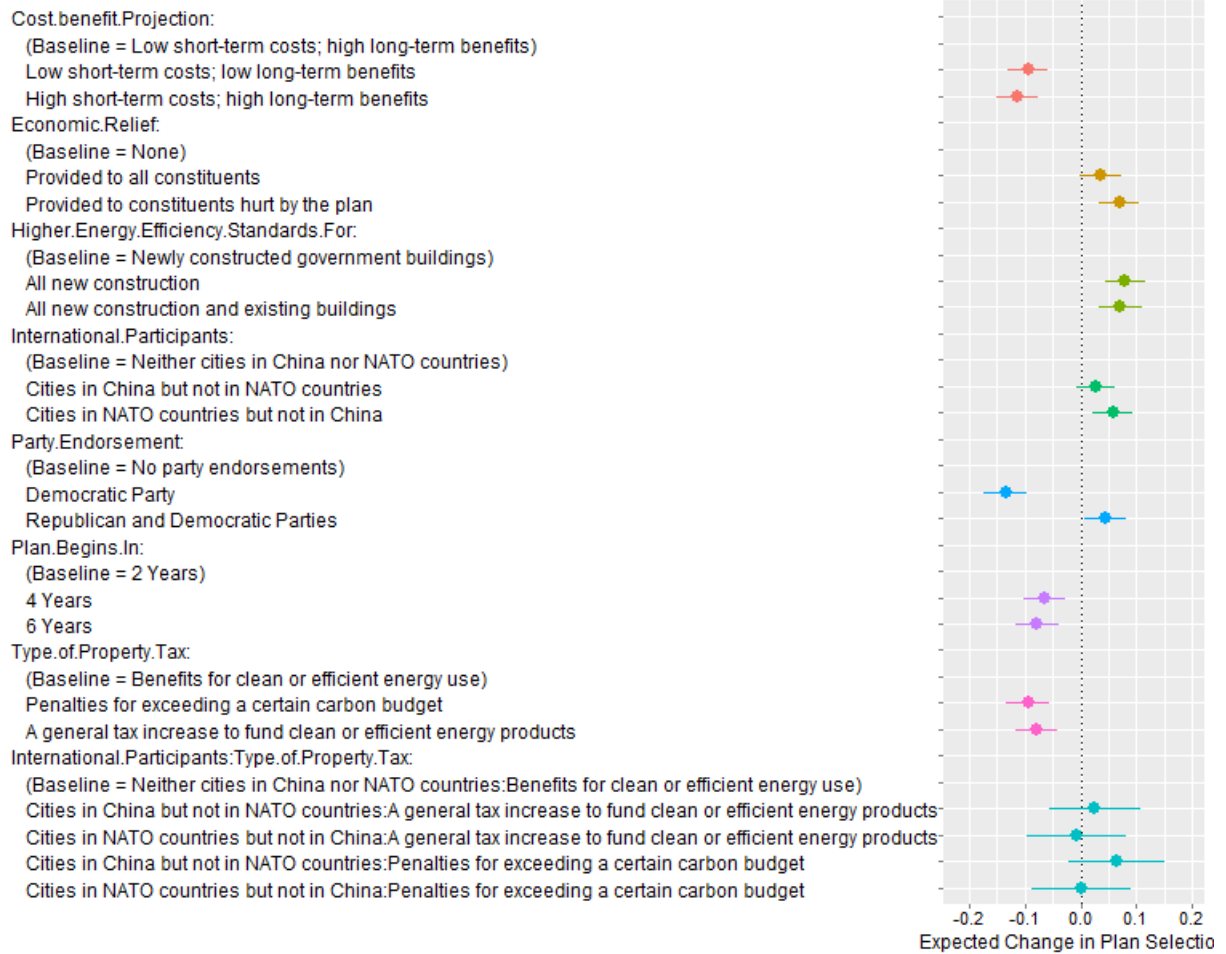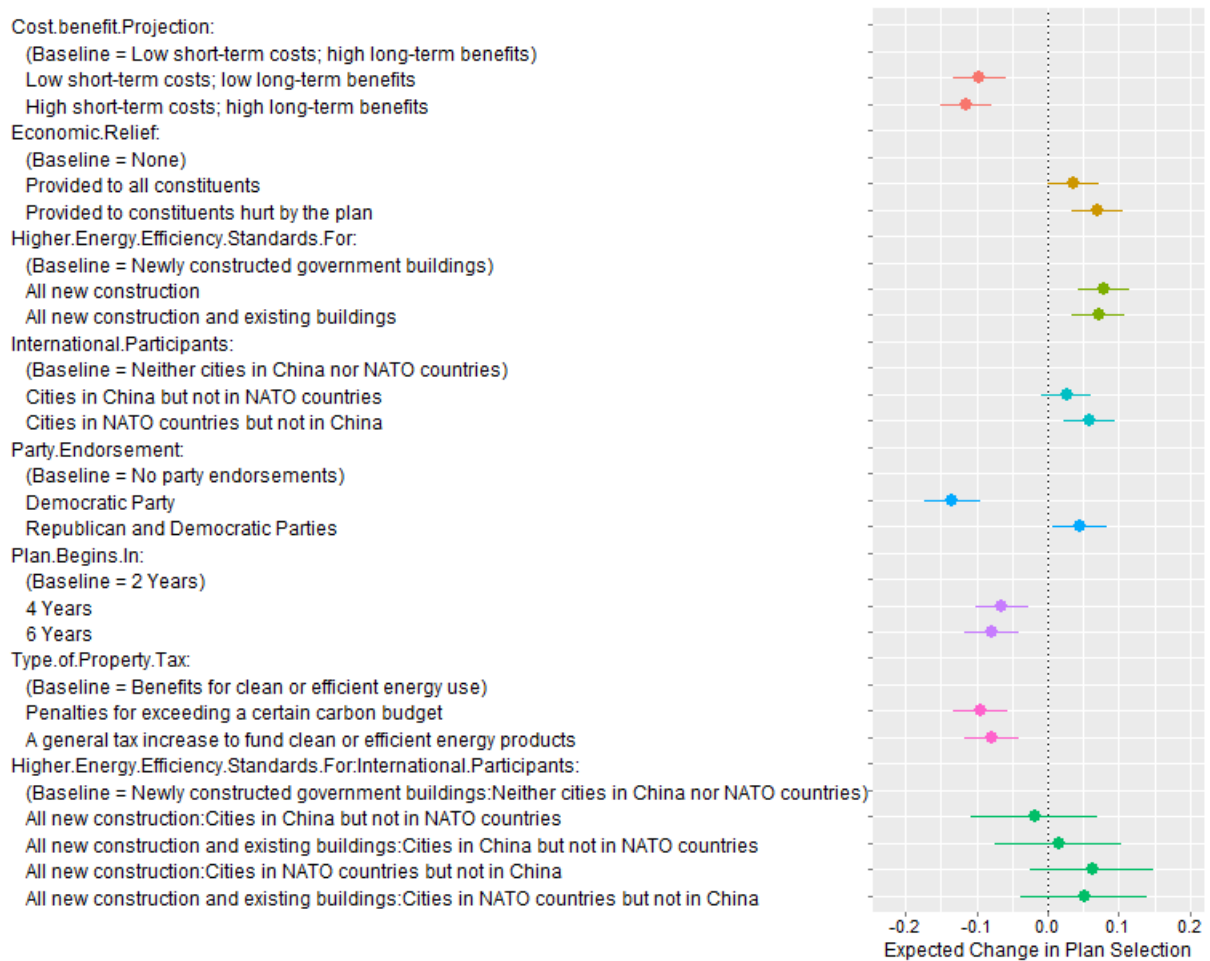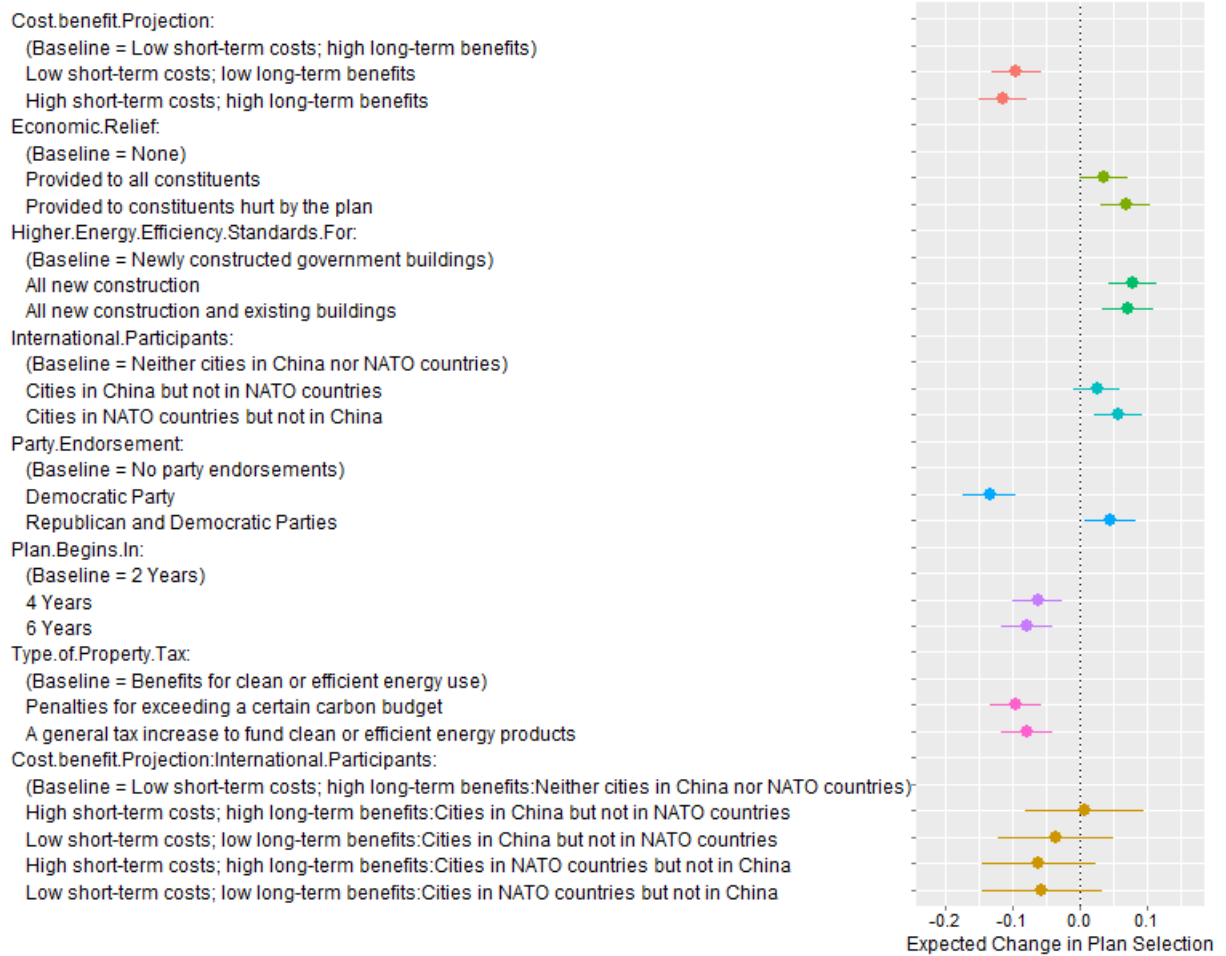

Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

Figure 20: AMCE, Interaction of Economic Relief and Higher Energy Efficiency Standards For
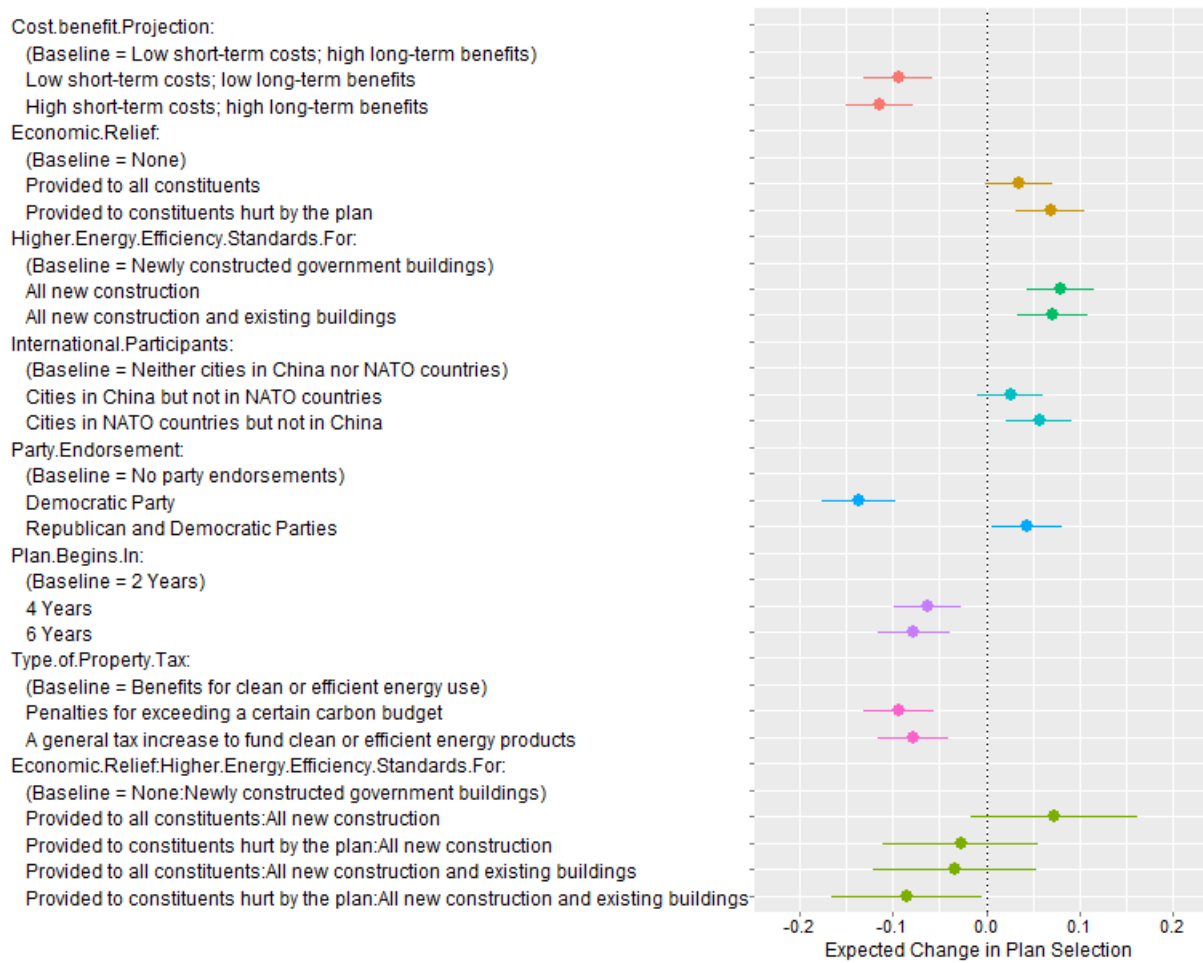
Bars are 95% confidence intervals based on respondent-clustered standard errors for the Average Marginal Component Effect (AMCE) of each attribute level.

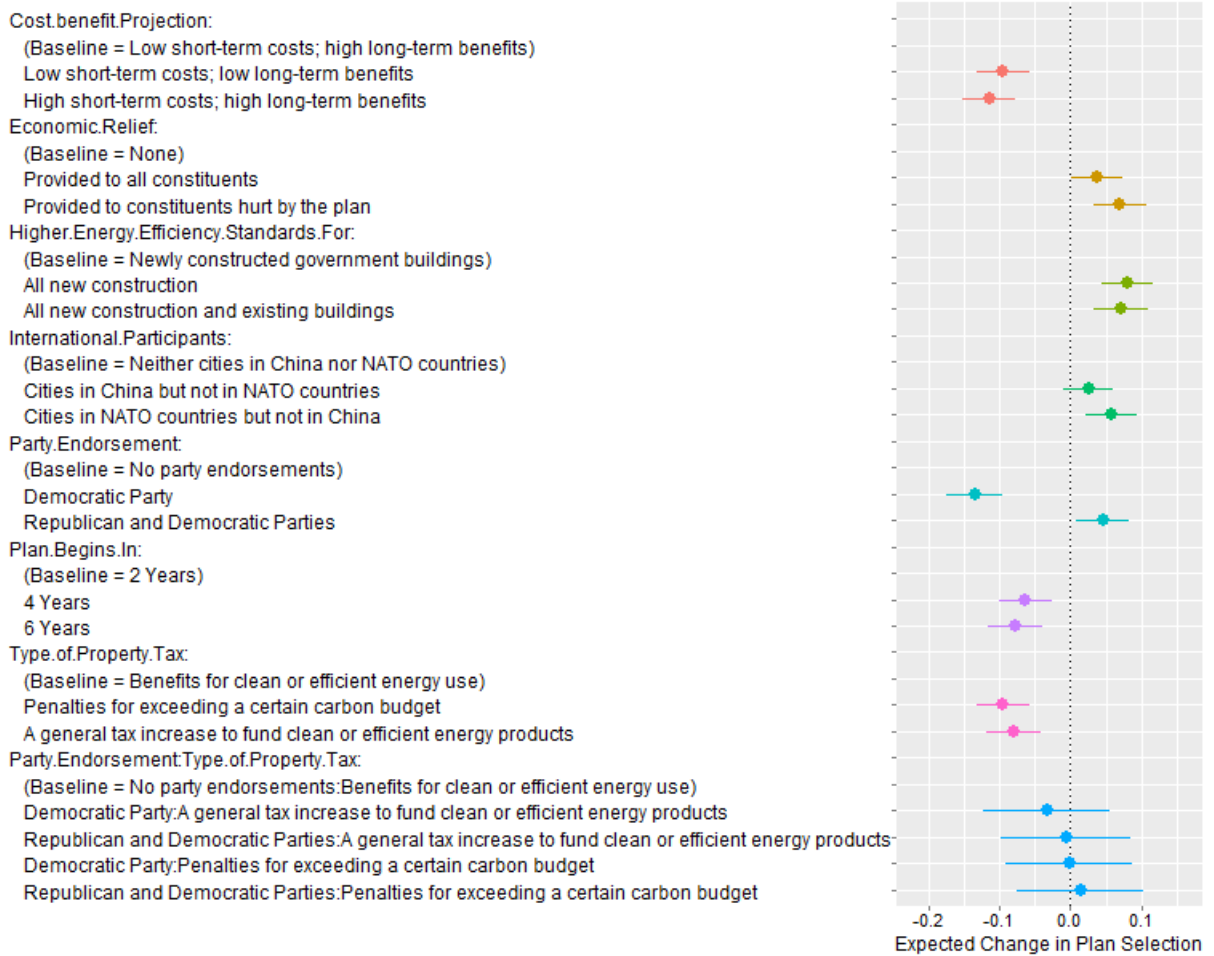**Figure 21:** AMCE, Interaction of Economic Relief and Cost Benefit Projection

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

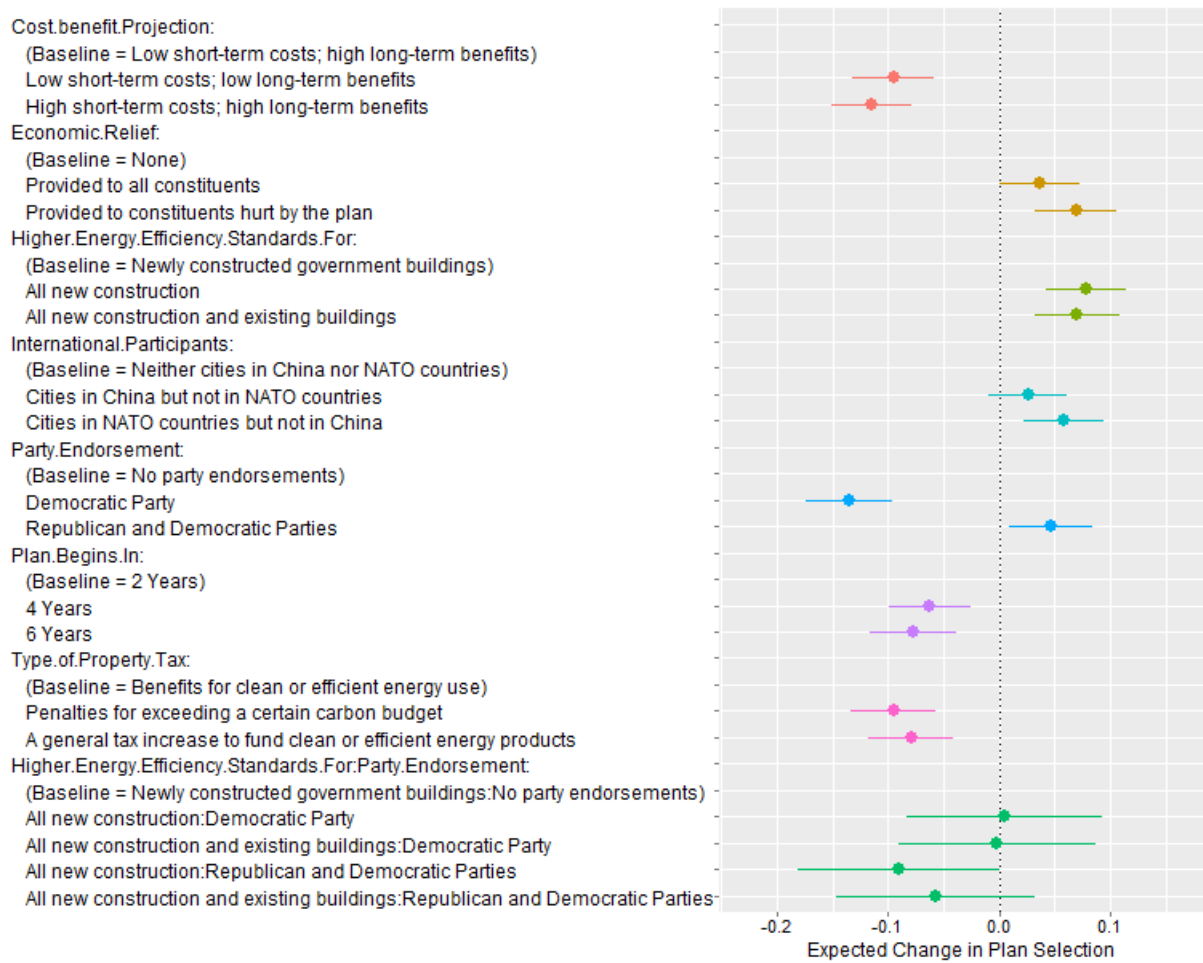**Figure 22:** AMCE, Interaction of Plan Begins In and Type of Property Tax

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

Figure 23: 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.

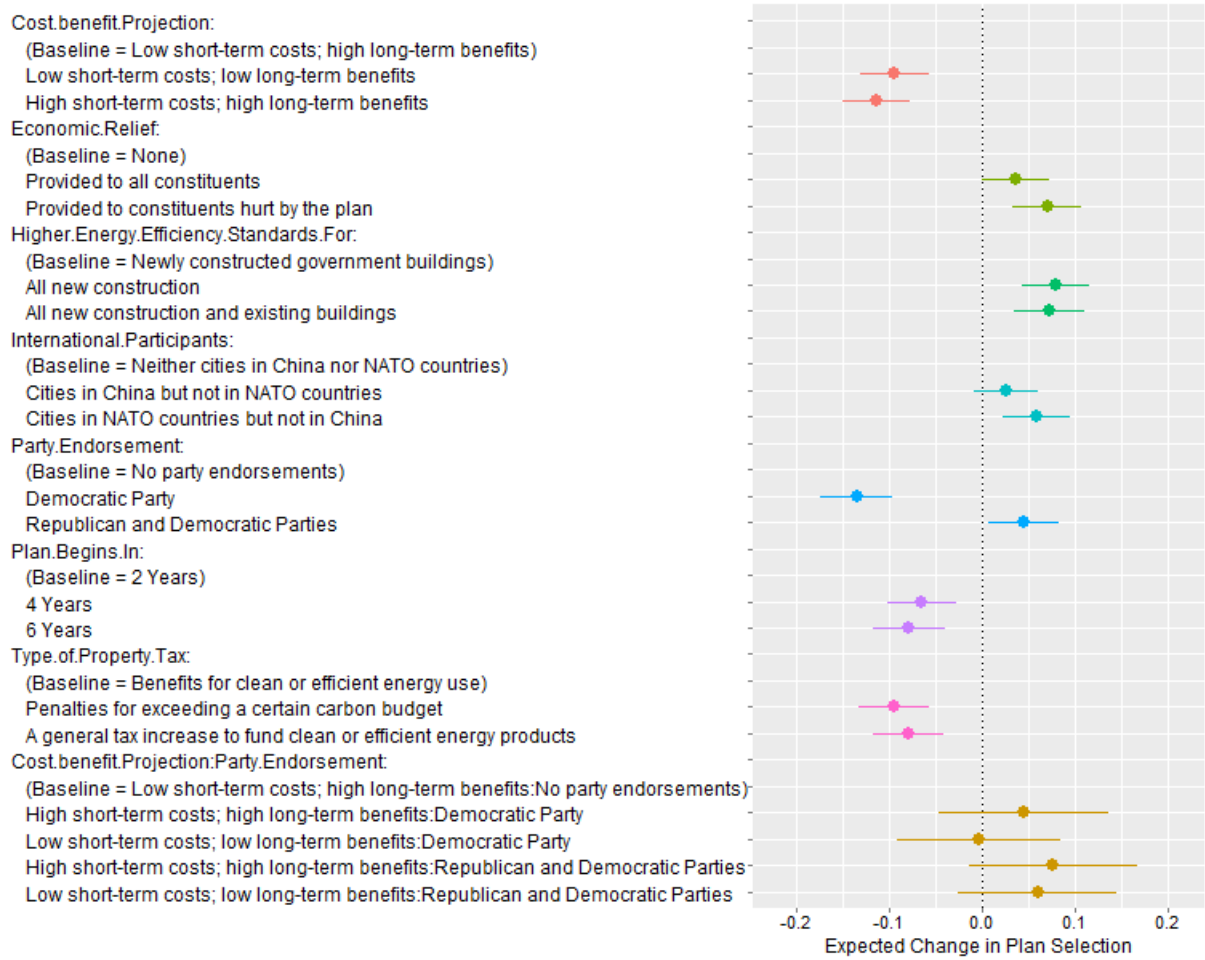**Figure 24:** AMCE, Interaction of Plan Begins In and Cost Benefit Projection

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

Figure 25: 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 26: 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 27: 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 28: 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 29: 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 30: 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 31: 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 32: 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 the public and policymakers. To 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. 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 33). 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 34). 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 35).

Policymakers with local carbon industry presence were more likely to favor plans with low costs and low benefits (Figure 36). 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 38). Policymakers representing cities 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 city policymakers were more likely to favor tax benefits (Figure 39).

Liberal policymakers were more likely to favor broader energy efficiency standards, Democrat-only endorsements, and faster implementation time, while conservatives were

more likely to to prefer plans with low costs and low benefits (Figure 40). Policymakers with green electoral incentives were less likely to prefer narrow energy efficiency policies and slow implementation (Figure 41). Older policymakers were more likely to prefer plans with bipartisan endorsement (Figure 42). 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 44). 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 45) There were no significant subgroup differences by the presence of local green industry (Figure 37) or by gender (Figure 43).

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 46). Individuals in communities with important carbon industries were less likely to favor expansive energy efficiency standards or economic relief (Figure 47), 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 48). Individuals in communities affected by climate change weather events were less likely to favor plans with no party endorsements (Figure 49).

More religious individuals were more likely to favor plans with shorter implementation times (Figure 50). 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 51). 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 52).

Male respondents were less likely to support economic compensation (Figure 53). Wealthier respondents were more likely to favor tax increases (Figure 54). Highly educated individuals were more likely to favor tax penalties (Figure 55). 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 56). 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.
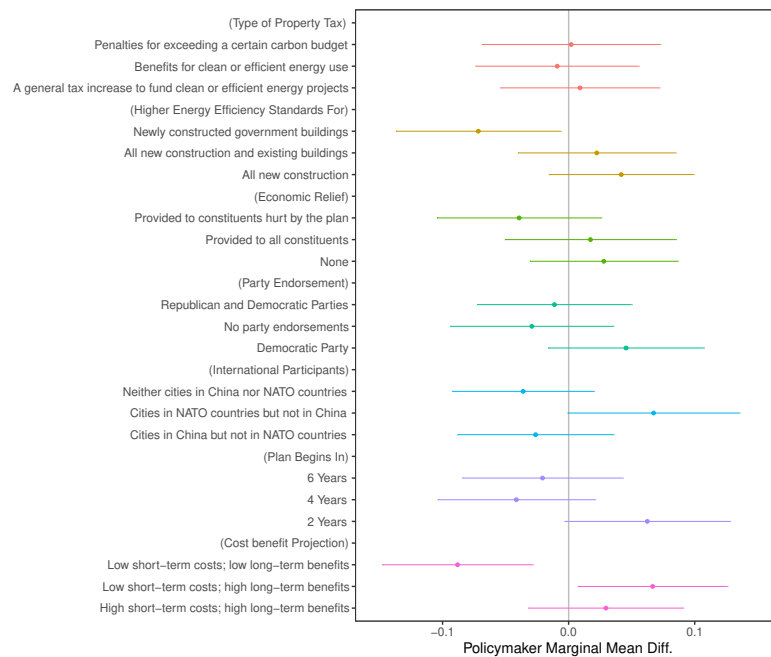
Policymakers

Figure 33: Policymaker Marginal Mean Difference - By Ambition
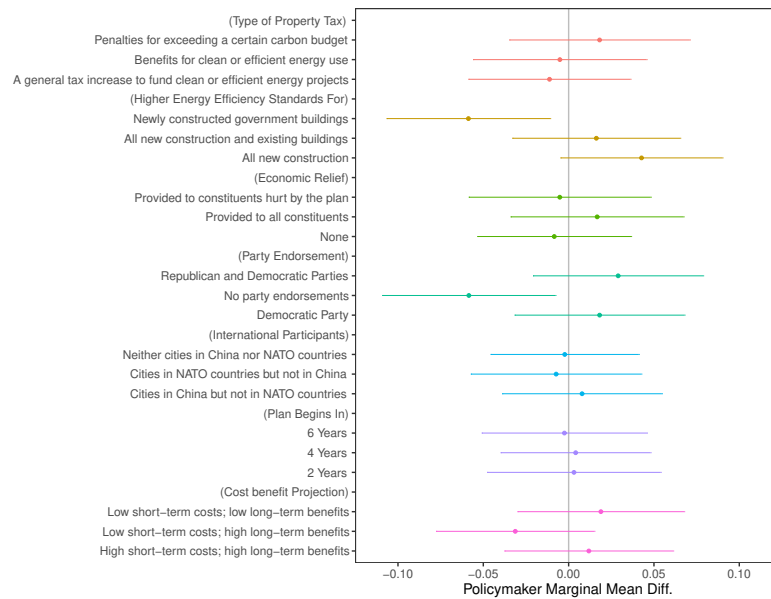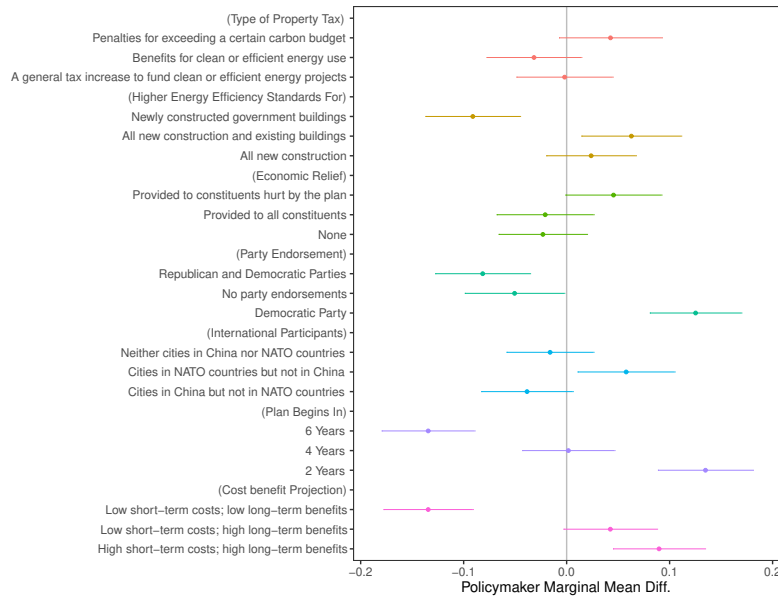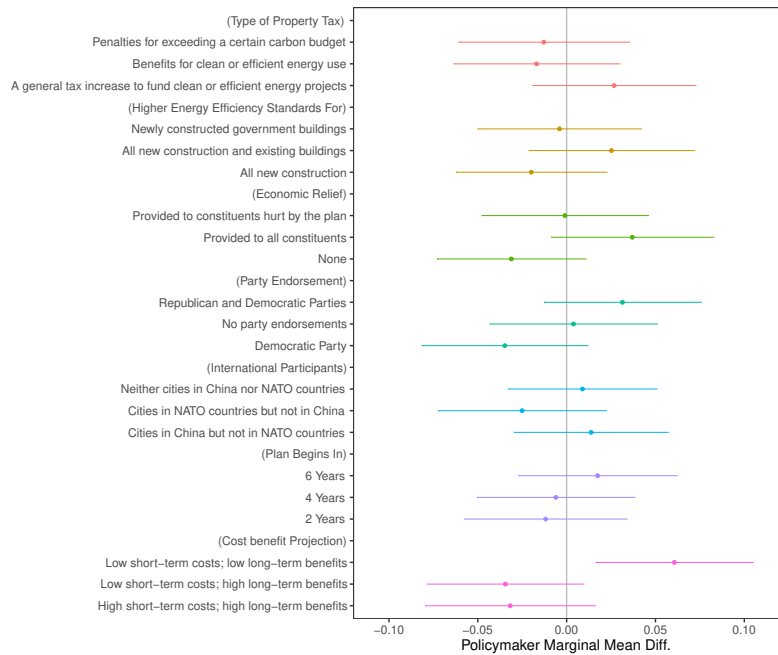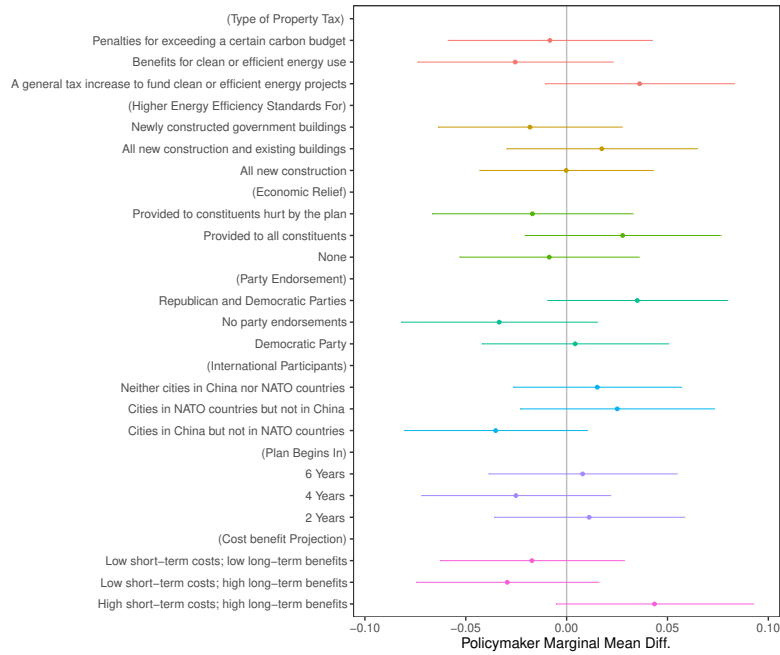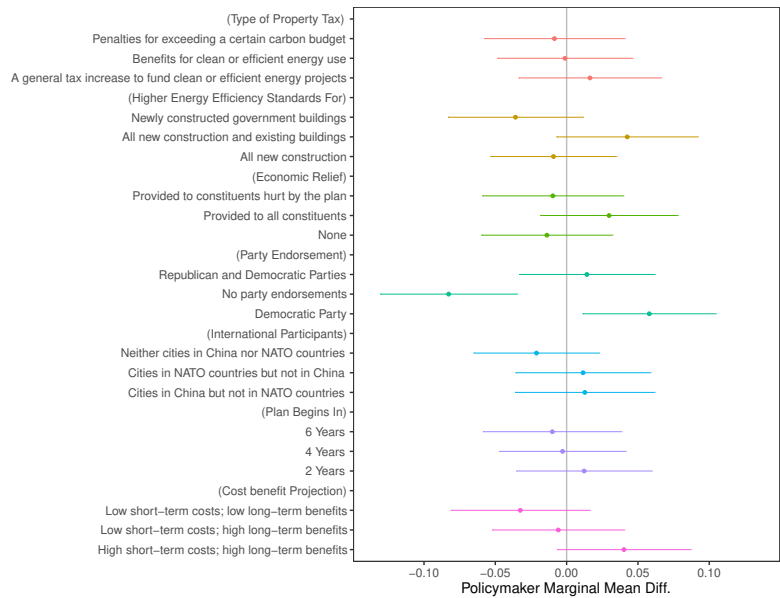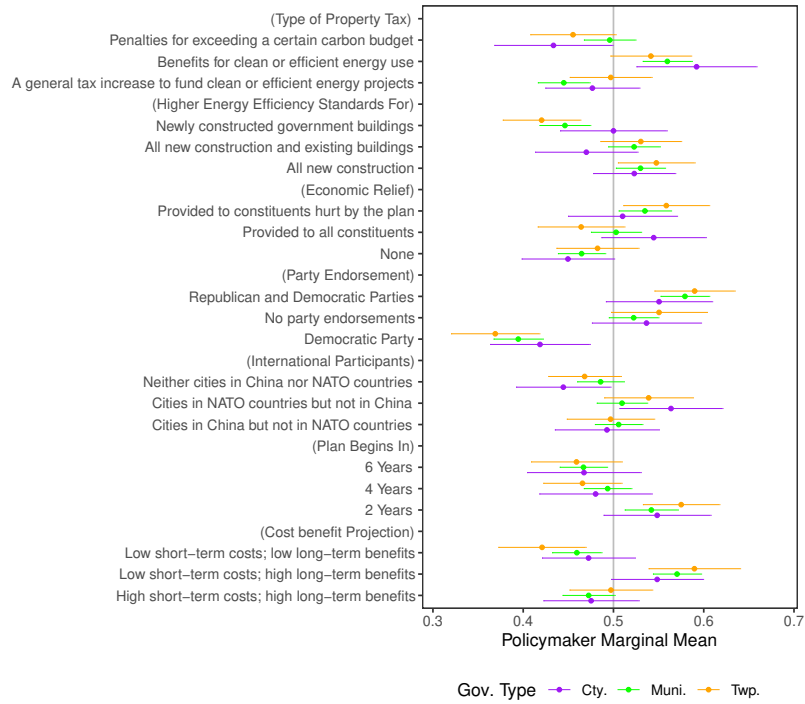

Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 1 includes respondents with state level or national level plans to run for office.

Figure 34: Policymaker Marginal Mean Difference - By Perceived Effect of CC on Election
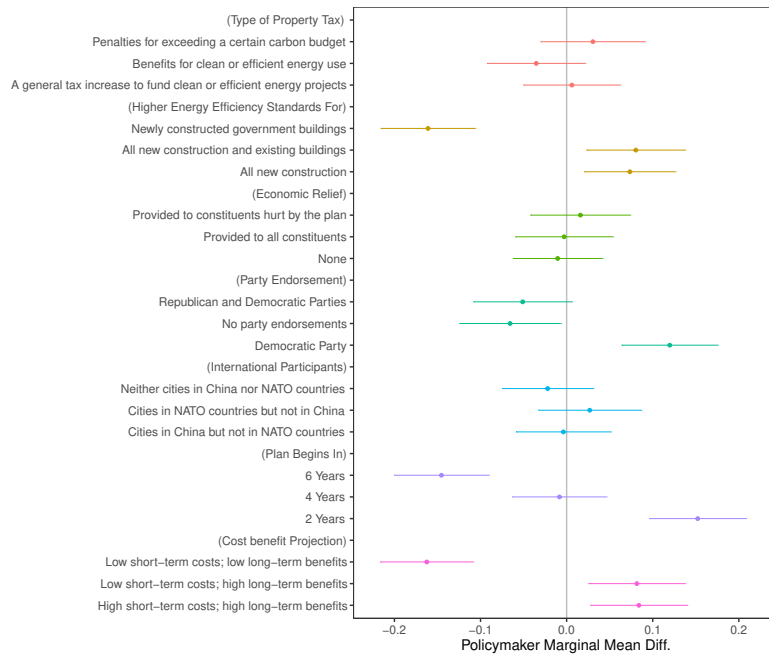

Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 1 includes respondents who report that supporting CC policies will help their election chances a little or help their election chances a lot. 0 includes respondents who report that supporting CC policies will hurt their election chances a little or hurt their election changes a lot.
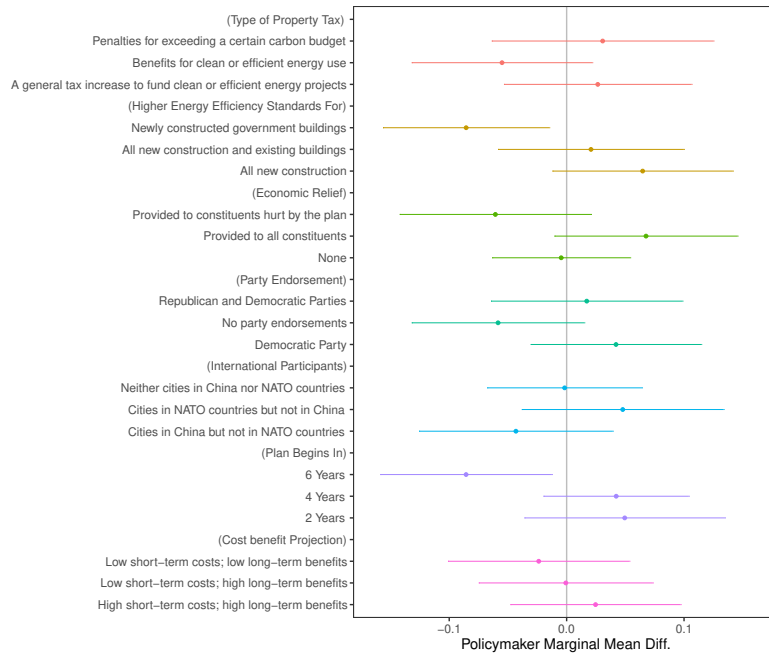
Figure 35: Policymaker Marginal Mean Difference - By CC Belief

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 36: Policymaker Marginal Mean Difference - By Carbon Industry
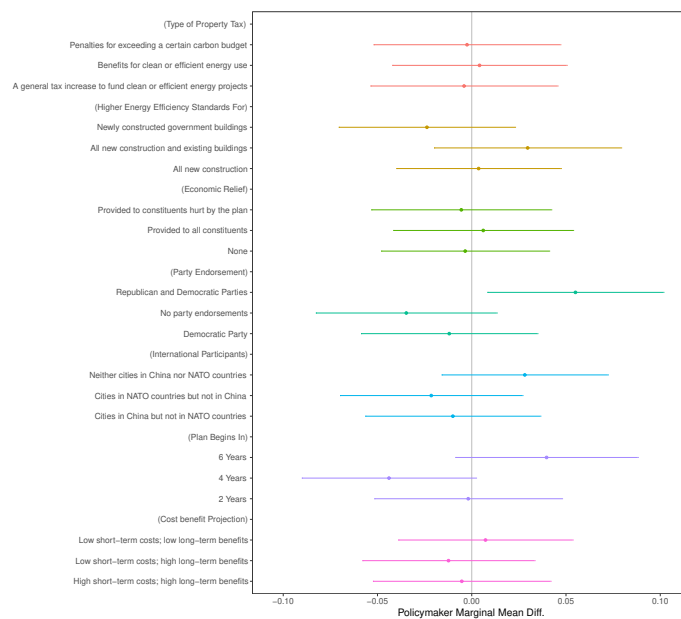

Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 1 includes respondents who report that oil, gas, coal, or automotive industries are important to their community's economy.

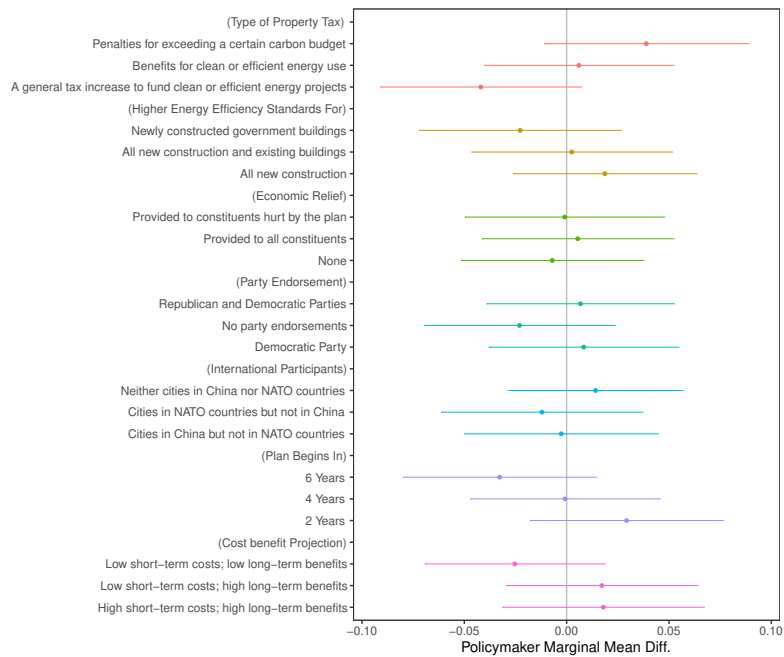**Figure 37:** Policymaker Marginal Mean Difference - By Green Industry

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 38: Policymaker Marginal Mean Difference - By Community CC Impact

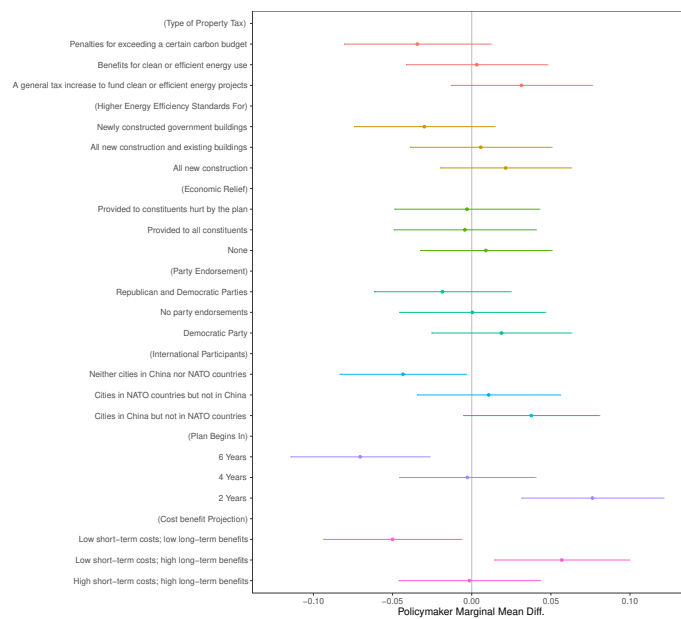

Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 1 includes respondents who report that their local community has been impacted by at least one weather event in the recent past (includes floods, hurricanes, wildfires, droughts,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

Figure 39: 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 40: Policymaker Marginal Mean Difference - By Ideology

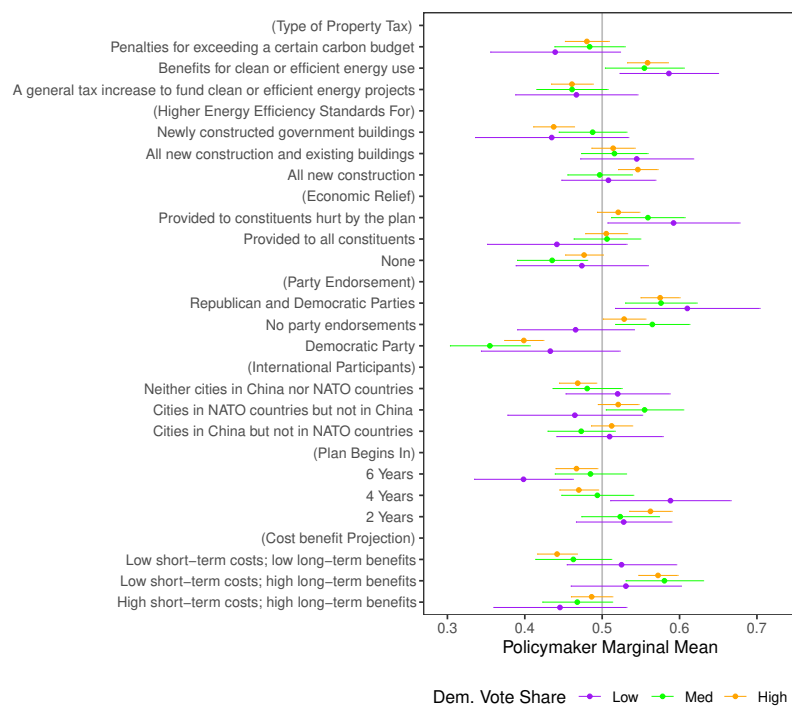

Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 'Liberal' includes respondents who identify as very or somewhat liberal; 'Conservative' includes respondents who identify as very or somewhat conservative (respondents who identify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

Figure 41: 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.

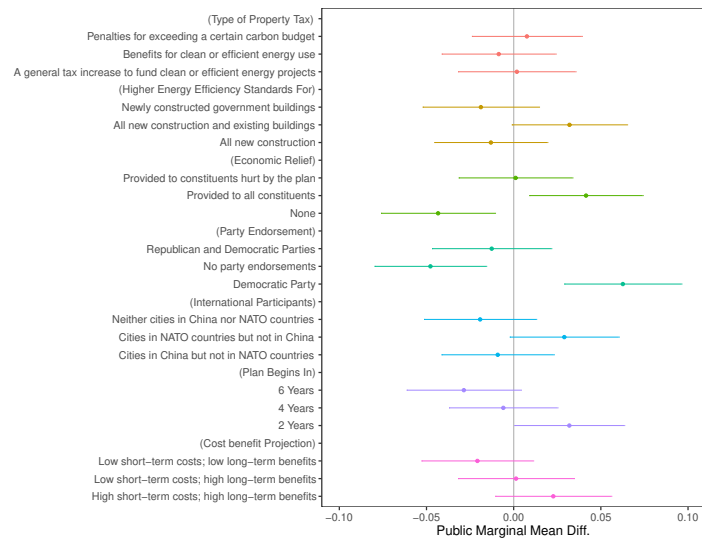**Figure 42:** Policymaker Marginal Mean Difference - By Age

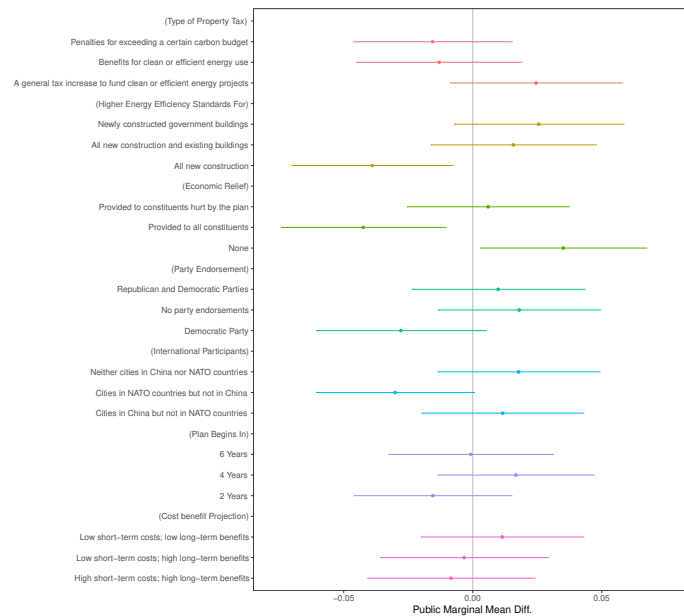Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 'High' includes respondents in age categories above the average; 'Low' includes those in age categories below the average.

Figure 43: 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 44: 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 45: 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.

Public

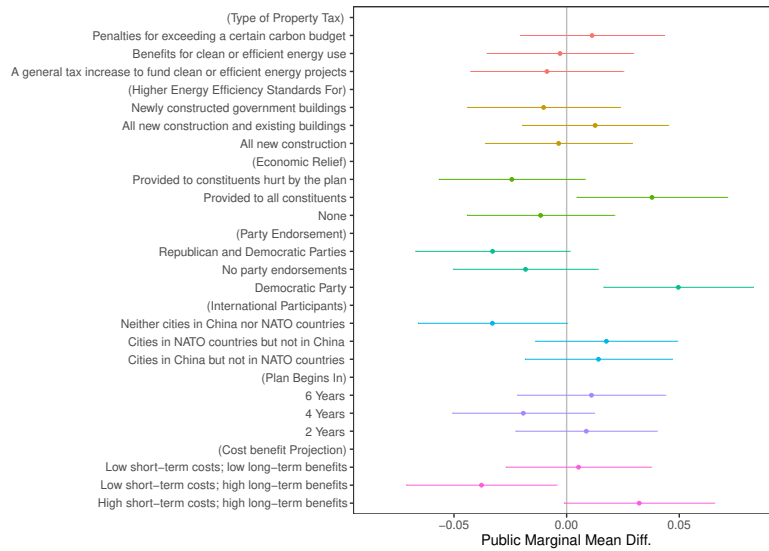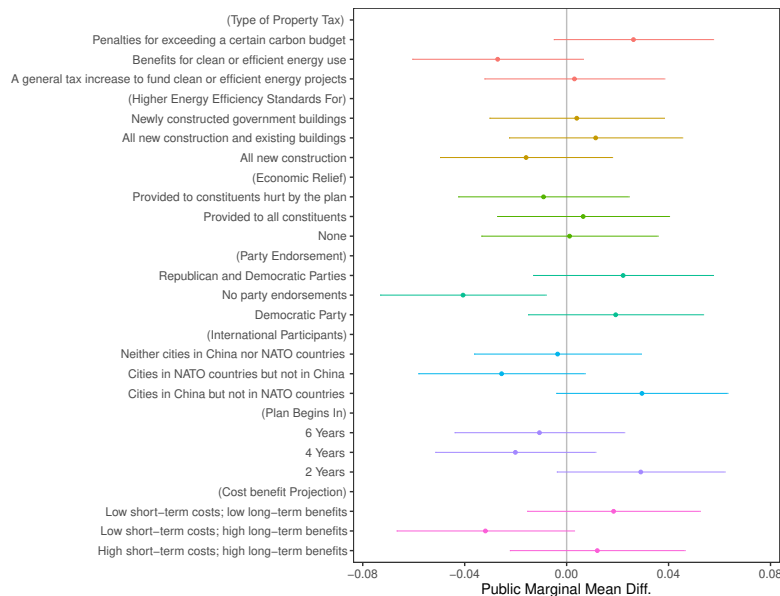**Figure 46:** Public Marginal Mean Difference - By CC Belief

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 47: Public Marginal Mean Difference - By Carbon Industry
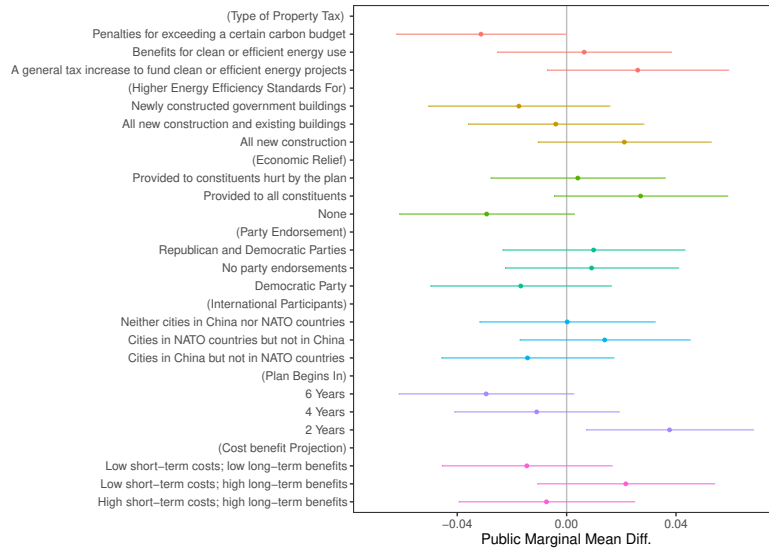

Bars are 95% confidence intervals based on respondent-clustered standard errors for the marginal mean of each attribute level. 1 includes respondents who report that oil, gas, coal, or automotive industries are important to their community's economy.

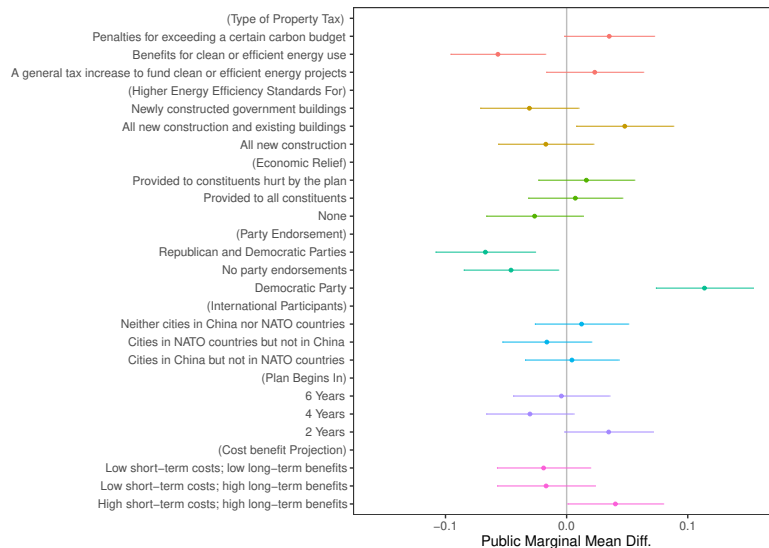**Figure 48:** Public Marginal Mean Difference - By Green Industry

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.

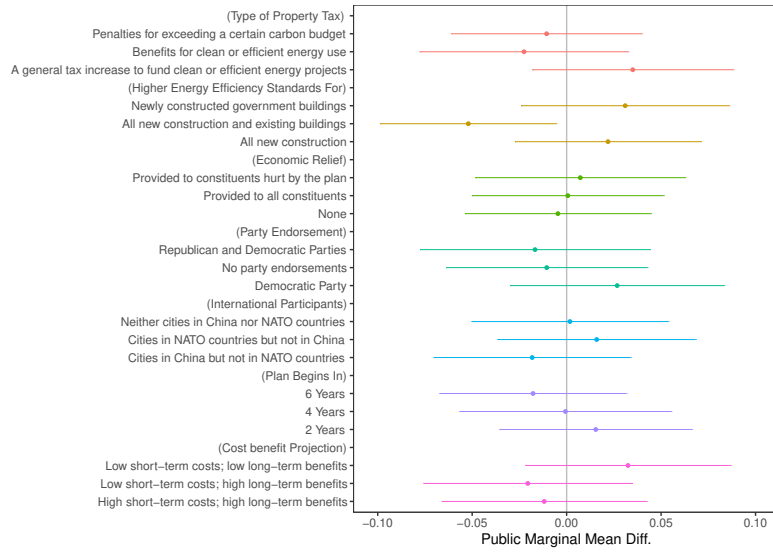**Figure 49:** Public Marginal Mean Difference - By Community CC Impact

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 50: 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.

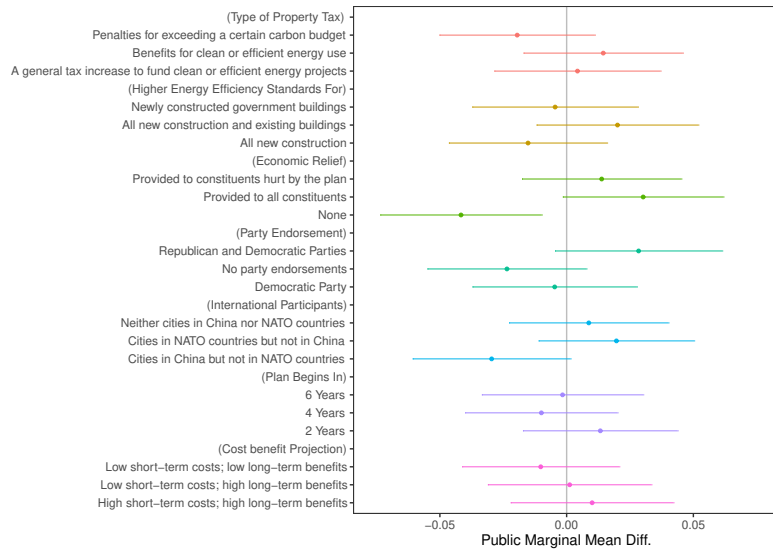**Figure 51:** Public Marginal Mean Difference - By Ideology

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).

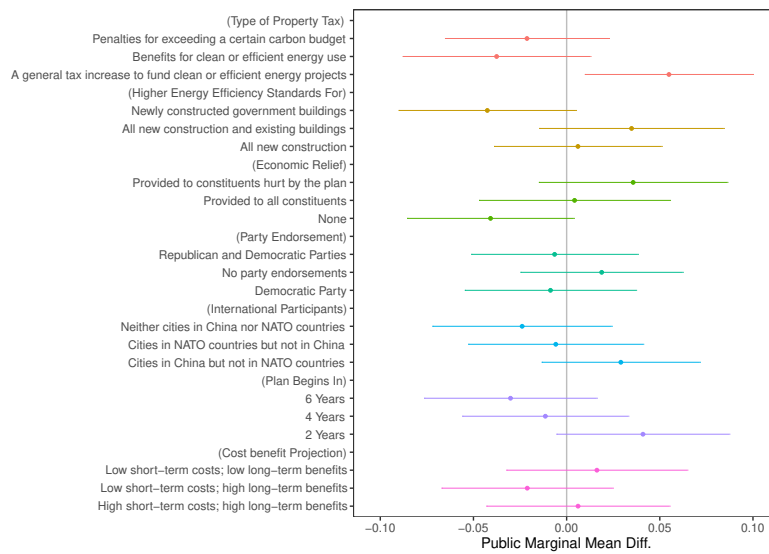**Figure 52:** Public Marginal Mean Difference - By Age

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.

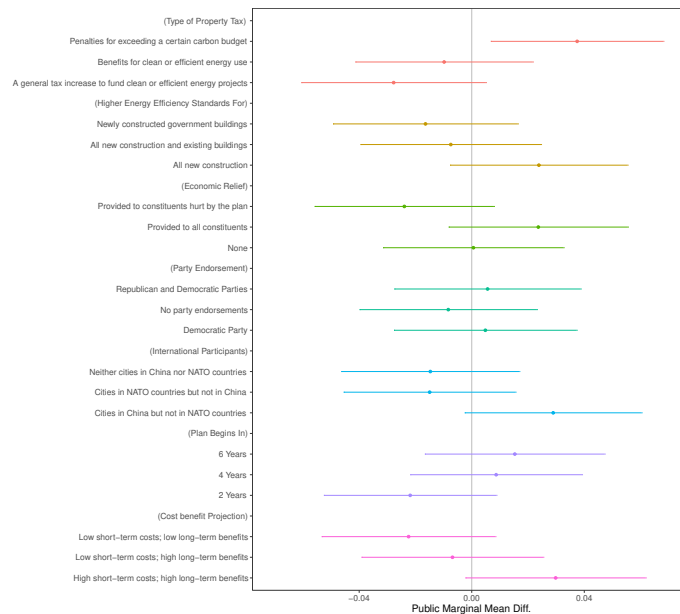**Figure 53:** Public Marginal Mean Difference - By Gender

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

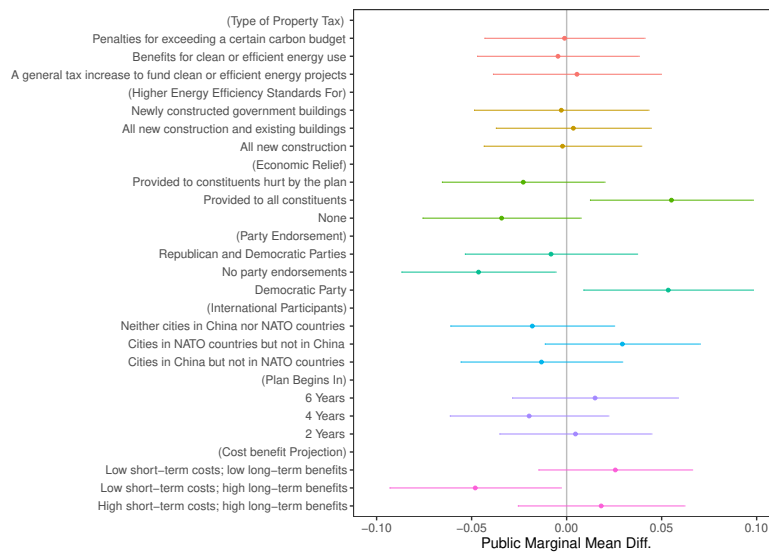**Figure 54:** Public Marginal Mean Difference - By Household Income

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 55: 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 56: 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 includes respondents who believe that the effect of climate change policies on their personal economic situation would 'Hurt a little' or 'Hurt a lot'.

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