Climate Crisis and Policy Inaction in Indonesia

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September 9, 2024

Abstract

We surveyed voters and politicians in advance of the 2024 Indonesian election to measure preferences for environmental policy. We find that politicians underestimate voter concerns. We conducted an informational experiment with politicians to correct these misperceptions, and we document evidence of learning but no greater support for policy action. We explore three explanations for why voter preferences do not translate into policy. First, politicians only consider acting when their initial misperceptions are particularly large. Second, elite capture prevents politicians from implementing environmental protection. Third, voters prioritize progress in other domains. Our results underscore the multiplicity of challenges facing climate action.

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This research was supported by the National University of Singapore Presidential Young Professor Whitespace Fund (WBS-A-8000553-01-00) and the Singaporean Ministry of Education through the ARC MOE Tier 2 Grant (MOE-T2EP40123-0001). The data collection protocols were approved by the National University of Singapore Institutional Review Board (NUS-IRB-2023-458 & NUS-IRB-2023-798). Putri Hening Graha and Wenqing Yu provided excellent research assistance. For implementation assistance, we thank the staff at SMRC, especially Saiful Mujani, Deni Irvani, and Hendro Prasetyo. For generous comments on earlier versions of this paper, we thank Johnny Guy and seminar participants at the Australian National University, City University of Hong Kong, and the Coase Project Conference. An anonymized version of the pre-analysis plan associated with this research can be found here: link.

1 Introduction

Lower-income countries are disproportionately affected by the impacts of climate change (Hallegatte 2016). Rising sea levels will lead to major flood damages in coastal cities (Nicholls et al. 2021; Pörtner et al. 2019; Hsiao 2023); slash-and-burn farming sparks wildfire in times of drought (Jayachandran 2009); and rapid industrialization enables the unchecked pollution of groundwater (Ebenstein 2012). These issues bring climate concerns to the forefront of voters' minds, but politicians are often reticent to take policy action (Pereira et al. 2024).

We study this climate deadlock with a simple framework of policy preferences and action. In canonical models of political representation, voters express preferences and politicians respond with action (Mansbridge 2003; Pitkin 1967; Przeworski, Stokes and Manin 1999). We enumerate the frictions that complicate this narrative. For voters, it may be costly to express policy preferences. It is challenging to gather information and articulate preferences. And even with strong preferences, lobbying on one issue may draw resources from other issues of more pressing concern. For politicians, it may be costly to deliver policy action. Information on voter preferences is elusive and subject to distortions (Broockman and Skovron 2018; Pereira 2021). And especially for environmental issues, policy action may meet resistance from organized interests.

We study these frictions for environmental policy in Indonesia. Indonesia's democratic institutions should enable voters to press for policy action, and yet policymakers have not introduced compelling climate legislation. Voters have also not sanctioned politicians for this failure to deliver. We characterize these frictions with original survey data collected in advance of the 2024 legislative and presidential elections. We measured voters' preferences ("first-order beliefs") and politicians' perceptions of these preferences ("second-order beliefs") for a suite of policy issues that include environmental concerns. We then conducted an informational experiment in which we communicated voter preferences to politicians.

We find that Indonesian voters believe environmental issues to be important—approximately as pressing as the provision of traditional public goods, such as education and health care. We provide two further pieces of evidence that this concern is genuine. First, voters report a high level of concern about concrete manifestations of climate change in their own communities, such as flooding, drought, and wildfire. Second, an overwhelming majority of voters indicate a willingness to forgo economic development in order to mitigate the impacts of climate change. At the same time, we find that politicians considerably

underestimate these preferences.

These findings are consistent with our pre-analysis plan, which hypothesized that policy inaction in Indonesia at least partially reflects politicians' misperceptions of voters' preferences. We probe this hypothesis further by communicating voters' preferences to politicians in a randomized informational intervention several weeks before the election. For a treatment group of politicians, we provided a report containing information about voter preferences, and we measured their first- and second-order beliefs in a follow-up survey. We find evidence of learning. Relative to a control group, which received the report after the follow-up survey, treatment politicians updated their second-order beliefs on the importance that voters attach to environmental issues. The intervention also increased politicians' own stated importance of these issues, especially for those that most underestimated voter support at baseline. However, information on voter preferences did not affect politicians' willingness to support action on environmental policy.

Why did our informational intervention fail to generate support for policy action? In the remainder of the paper, we turn to mechanisms. First, we consider perceptions. Information about voter preferences does increase support for some environmental policies, but only among politicians who were most heavily misinformed at baseline. Second, we consider costs. In Indonesia, elite capture—perhaps through campaign finance and bribery—creates political headwinds for environmental protection, which challenges agribusiness that profits from deforestation (Cramb and McCarthy 2016). Our informational intervention induced policy support, but only in regions where elite capture is relatively limited. Third, we consider preferences. We document voter concern in an *absolute* sense by asking whether respondents view environmental issues as important. But politicians may sense that talk is cheap and see policy action as zero-sum. Such politicians focus instead on voter preferences *relative* to other policies, and we show that voters and politicians align in their rank ordering of policy issues. We thus highlight the role of preferences in sustaining climate inaction in Indonesia.

Our main contribution is to show that politician misperceptions are not sufficient for explaining policy inaction. Standard theories of political representation hold that politicians are inclined to move their preferences and behaviors into alignment with voters in a bid to shore up votes (Downs 1957). Our experimental intervention offers some evidence in support of this phenomenon, as is partially consistent with recent findings (Butler and Nickerson 2011; Chu and Recchia 2022), although our results only obtain for politicians who were heavily misinformed at baseline. Instead, on average, our results reveal a

disjuncture between politicians' updated stated preferences and their willingness to support policy action consistent with these updated beliefs. Our framework points to the costs incurred by politicians for supporting environmental policy. Our intervention, after all, did not alter the underlying political economy of local elections in Indonesia, in which oligarchic interests can impose costs on politicians who attempt to deviate from the status quo of environmental exploitation.

Our results also speak to a growing scholarly interest in the role of incorrect second-order opinions on the part of politicians in explaining the underproduction of widely-desired policies (Hertel-Fernandez, Mildenberger and Stokes 2019). The findings presented in this paper unearth a surprisingly stark divergence in the accuracy of Indonesian politicians' second-order beliefs: politicians have nearly perfect estimates of the importance voters attach to traditional public goods—healthcare and education—but erroneous estimates of voter preferences for environmental issues. It might be the case that, because environmental concerns have only recently been made salient, politicians have been slow to update their second-order beliefs. An alternative conjecture relates to the nature of campaigning in a patronage democracy. Politicians win support by controlling access to various government-provided goods, cultivating power by offering voters preferential access to schooling or healthcare (Aspinall and Berenschot 2019; Hicken et al. 2022). Politicians may thus develop a keen intuition for voters' demand for the services. But it is difficult to throttle access to environmental public goods—such as clean air—thus disincentivizing politicians from learning about voters' demand for action on these issues.

2 Framework

We develop a simple framework that identifies frictions for policy action. For voters and politicians, we discuss perceptions, preferences, and costs.

2.1 Voters

Voters may not demand policy action, even on issues of major importance. First, voter perceptions may be subject to informational frictions. Environmental issues touch upon a range of technical concepts, with a scientific frontier that continues to develop. Not all climate damages are immediately observable, as climate change occurs over relatively long periods with impacts that may not be realized locally (Egan and Mullin 2017). And while voters may have strong opinions on related phenomena like extreme heat and flooding, they may not link these events to more abstract notions of climate change (Mildenberger et al.

2024). Incomplete information undercuts the demand for action.

Second, voter preferences may not align with policy action. Voters can fully understand the impacts of climate change but still view environmental issues as unimportant. Policy action is costly in general, and environmental policy may be seen as particularly detrimental to economic growth. Some governments have pledged to compensate those hurt by environmental policy, including as part of the clean energy transition, but Gazmararian and Tingley (2023) have documented distrust of these promises. Moreover, many governments do not internalize the global impacts of carbon emissions or the resulting damage to foreign populations. Even within Indonesia, which on the whole is highly exposed to climate issues like extreme heat, rising sea levels, and wildfires, there remains considerable heterogeneity across space in the incidence of damages. Policy inaction arises because voters prefer inaction (Stokes 2016).

Third, voter costs may outweigh the desire for policy action. Voters may understand and appreciate the importance of climate change, but nonetheless prioritize other issues. Expressing policy preferences requires time, effort, and political capital. Lobbying for environmental policy may therefore come at the cost of lobbying for other policies. This opportunity cost is significant if voters view other issues as even more important than climate change. For Indonesia, economic growth may take center stage as politicians deliver policies that harm the environment in a bid to shore up electoral support (Sanford 2023). Economic policy displaces climate policy.

2.2 Politicians

Politicians may under-deliver on environmental policy, even if voters demand it. First, politicians may misperceive or lack information on voter preferences (Mildenberger and Tingley 2019). Politicians must aggregate preferences over a large set of political issues, and they may have less experience and weaker priors on environmental topics. Relative to traditional domains like education and health, climate issues have entered into political discourse relatively recently. Distortions similarly arise if politicians have strong but biased priors. Climate change has become politically polarizing, and politicians with extreme stances may have disproportionate influence on how other politicians view the issue. Misperceptions contribute to policy inaction.

Second, policy inaction may arise from politicians' personal preferences (Pereira 2021). Even if politicians have accurate perceptions of voter preferences, they may themselves view climate issues as unimportant. Politicians can deliver campaign promises on a range of issues, and they may prefer to focus

resources on areas that align with their own views of where policy action is needed. With multiple domains of action, failure to deliver on climate may persist in equilibrium if voters also value non-climate action. Similarly, politicians may appreciate the importance of climate change but also seek to build political capital in other domains. Indonesian politicians have built careers as campaigners for education and health, but there is no precedent for climate change. Such preferences result in climate inaction.

Third, politicians face costs in delivering policy. Policy action draws on limited political capital, and environmental policy can be especially costly. Regulating emissions requires consistent monitoring at the national level, and adapting to climate change calls for large-scale investment in infrastructure and social safety programs. Both are difficult in settings with administrative capacity constraints. Finally, politicians may engage in clientelistic relationships with large emitters. In Indonesia, climate action must target palm oil producers and miners, who drive widespread deforestation. But these same groups provide politicians with direct support, both politically and financially. This political capture hinders environmental policy.

3 Empirical Setting and Research Design

We describe the Indonesian setting, original data on voters and politicians, our descriptive analysis, and the informational experiment.

3.1 Environmental Policy in Indonesia

We focus on the case of Indonesia, which faces a range of localized environmental challenges, many of which stem from natural resource extraction. The national government in Indonesia has largely avoided major policy commitments to address the consequences of climate change, instead promoting a form of resource nationalism that encourages the extraction of commodities to spur economic growth (Warburton 2023). Local governments are similarly reticent to commit to environmental action, although owing to political incentives there is considerable variation in the extent to which local governments care about—and act upon—the adverse impacts of climate change. Logging is overseen by officials at the district level, for instance, which creates a local market for bribery in areas where oversight is weak, and thus an incentive for illegal deforestation (Burgess et al. 2012). Palm oil production drives widespread deforestation and the clearing of carbon-rich peatlands (Hsiao 2024). Taxes levied on mining operations qualify as own-source revenue for local governments. These funds are subject to less scrutiny and fewer constraints, encouraging local leaders to court extraction.

Perhaps the most salient environmental issue plaguing Indonesia concerns the use of fire for clearing swaths of land in advance of cultivation, a process that generates tremendous amounts of CO_2 in the form of haze. When the planting season coincides with the El Niño phenomenon that brings drought conditions, much larger wildfires tend to emerge, often blanketing the region in a thick layer of smoke. Despite being nominally illegal, the main advantage of using fire to clear idle land is that it is cheap, and estimated to cost 20-50% less than alternative methods (Purnomo et al. 2019). Recent analyses suggest that industrial-scale and smallholder cultivation makes use of burning to both clear existing vegetation and also to sow the soil with nutrients that derive from the process. Importantly, the frequency and incidence of burning are correlated with local electoral politics, with spikes appearing the year before elections, suggesting that the incumbents tasked with enforcement may be turning a blind eye to otherwise illegal practices in an effort to shore up support on the part of industrial-scale agricultural firms or communities that engage in burning (Balboni et al. 2021).

Motivated by the role of local governments in managing and mitigating the impacts of climate change, we focus our attention on the actions of politicians at the district level (known as *kabupaten* or *kota*). There are 514 districts in Indonesia. In 2010, at the time of the last available census, the median population of districts was 249,835. Since 2001, when Indonesia underwent a so-called "big bang" decentralization reform, district-level governments have possessed considerable policy-making authority over a wide range of issue areas including health, education, agriculture, public works, transport, and, crucially, the environment (Nasution 2017). Reflecting the elevated authority of local governments, nearly 40% of all government spending in Indonesia is carried out at the district level.

Districts are governed by a directly elected executive, known as either *bupati* or *wali-kota*, depending on whether the district is rural or urban, respectively. Beneath the district executive is a local legislature, known as the DPRD-II, which is comprised of somewhere between 25-50 representatives, the number of which is a deterministic function of the district's population size. Members of the DPRD-II are elected to five-year terms from multi-member districts using a system of open-list proportional representation. Indonesia's system of open-list PR incentivizes individual candidates to differentiate themselves from their co-partisans, thus discouraging the development of programmatic platforms (Aspinall 2014). Hence, there is little variation in policy platforms across major political parties in Indonesia (Fossati et al. 2020). A focus on environmental issues confirms this trend. An analysis of individual local legislative candidates' platforms from the 2019 elections reveals that less than 0.3% of candidates mentioned the environment,

and no party had greater than 1% of candidates mentioning environmental concerns.

3.2 Data

We collected original data on Indonesian voters and politicians. For voters, we conducted a "mass public survey" in two waves with a total sample of 6,886 respondents from the online survey panel vendor Cint/Lucid, which maintains a large sample of respondents in Indonesia. Our first wave included 5,286 respondents and the second wave included 1,650. Respondents were restricted to Indonesian nationals, and we introduced quota-based sampling to ensure a sample that approximates the population distribution on (1) age, (2) gender, and (3) region. In the Supplementary Information (SI), we include a breakdown of the demographic composition of our survey (see Table A1). The first wave of the survey was carried out in December 2023, and the second wave in August 2024.

It is well known that online surveys oversample respondents with high levels of education, thus potentially biasing population-level inferences. Our sample exhibits the same educational bias. Importantly, however, there is very little political polarization along educational lines in Indonesia. Thus, the bias in the demographic composition is unlikely to correlate with our outcomes of interest. Nonetheless, to probe the depth and direction of this bias, and in order to benchmark the quality of the survey results, we asked respondents about their intended vote choice in advance of the February 2024 presidential election. In the week before the election, 56.6% of respondents in our sample indicated a vote preference for Prabowo Subianto; the election result of 58.8% was statistically indistinguishable from our estimate.[1] In SI Figure A1, we benchmark our results, broken down in terms of different demographic features, against a face-to-face exit poll conducted with random sampling. This exercise reveals that our online survey strongly captures its population-level analogs.

In a second wave of the voter survey, conducted among 1,650 Indonesian adults in August 2024, we asked a more detailed set of questions on environmental policy preferences. To measure voters' relative preferences for policy action, we elicit how voters rank environmental issues relative to other issues and what they view as the single most important issue facing Indonesia today. We also conducted a conjoint experiment in which we randomly assigned policy platforms to two hypothetical legislative candidates asking respondents to indicate a vote preference. Finally, we asked how voters weigh environmental progress

1 Our online surveys thus performed *better* than traditional face-to-face surveys based on stratified random sampling techniques. In three such public opinion surveys released the week before the election, pollsters estimated Prabowo's national vote share at 50.8%, 51.8%, and 51.9%.

against economic growth, gauging the extent to which they would be willing to trade off one against the other. To probe whether voters harbor preferences over environmental policy action in light of concrete issues, we also ask how they view the severity of issues affecting their personal communities: (1) air and water pollution, (2) extreme temperatures and drought, (3) natural disasters, (4) river and coastal flooding, and (5) carbon emissions.

For politicians, we conducted a panel "candidate survey" with a representative sample of 800 candidates for local legislative office in Indonesia (DPRD-II). Candidates were randomly sampled with stratification: we randomly sampled 80 districts (kabupaten/kota), then randomly sampled 10 candidates from each district. We did not stratify legislative constituencies within districts. To ensure we surveyed only competitive candidates, we restricted the population of candidates to those in top-three list positions and those from the ten parties that polled above 1% nationally on October 1, 2023.[2] We did not survey legislative candidates in Maluku and Papua, owing to challenges in recruitment. The first wave of the survey was launched on November 1, 2023. The second wave of the survey was launched on January 1, 2024.

Most originally sampled candidates were contactable and amenable to the survey protocol. However, enumerators faced challenges in locating sampled respondents whose candidacy was considered less serious, oftentimes those who were in lower list positions (i.e., 2 or 3). Thus, in resampling, the final sample is skewed towards respondents in the top list position in wave 1 (N=317) versus those in list positions 2 or 3 (N=270 & N=213). However, we obtained a re-contact rate of 92.6%. In the event that enumerators were unable to locate the initially surveyed respondent, replacements were sampled from the same district with the restriction that the new respondent is from the same political party. To manage concerns over attrition, respondents who completed Wave 1 were informed that they would receive a report on voters' preferences in Wave 2.

We collected responses on a series of survey measures designed to measure both the preferences of citizens and politicians, as well as their beliefs about the other group's preferences. To measure first-order beliefs, we asked respondents to rate the degree to which they believed a suite of policy issues was important. The issues included climate change, pollution, civil rights, economic development, health, and education. We measured these outcomes on a 4-point Likert scale. Nearly all respondents indicated each issue was either "important" or "very important." We thus focus our attention on the share of voters and politicians who indicate an issue is "very important." We measure second-order beliefs in the same

2 These parties were PKB, Gerindra, PDI-P, Golkar, NasDem, PKS, PAN, Demokrat, Perindo, and PPP.

manner, with the difference that voters and politicians are asked how they believe the other groups rate the importance of the different issues.

In the second wave of the politician survey, we asked a series of additional questions designed to measure respondents' willingness to engage in costly policy action. We offered respondents the same battery of issues and probed the extent to which they believed each area demanded immediate policy action. We then probed whether politicians were likely to support two specific policy proposals designed to combat climate change. Specifically, we asked whether they would support (1) an initiative to develop a carbon tax and (2) a commitment to end deforestation in their district.

3.3 Analysis and Intervention

We analyzed our measures of voter and politician support for environmental action, and we communicated our findings to politicians as an informational intervention. For our analysis, we compare the first-order beliefs of politicians and voters. Our expectation is that both politicians and voters hold a belief that environmental issues are important. Next, we compare politicians' second-order beliefs to the first-order beliefs of voters. Our expectation is that politicians underestimate the importance that voters attach to environmental issues. We calculate standard errors for our point estimates of average first- and second-order beliefs among voters and politicians and conduct simple difference-in-means tests of our estimates to evaluate our hypotheses. We use data from the second wave of the voter survey to compare how voter responses change across measures, with the goal of distinguishing information, preferences, and constraints.

We conducted our informational intervention during the second wave of the candidate survey. This randomized intervention took place in January 2024, several weeks in advance of the Indonesian 2024 legislative election. To minimize potential attrition across waves, we offered respondents an incentive in the form of a report that tabulated data from both the first wave of the candidate survey conducted in November 2023, as well as the results of a regionally-representative online survey. At the beginning of the second survey, we provided a random subset of politicians (N=400) with a report on voters' first-order beliefs, as computed from the first wave of our voter survey. We also provided these politicians with information on politicians' first- and second-order beliefs, as computed from the first wave of our politician survey. We did not communicate information from the second wave of our voter survey, which we conducted after this informational intervention. Enumerators delivered an oral presentation and a

paper copy of the report to treatment-group politicians at the beginning of the survey. Control-group politicians received the same oral presentation and paper copy of the report at the end of the survey.

Enumerators reported two implementation challenges. First, because both treated and control politicians received a paper copy of the report, there was some contamination across units, as candidates who received the report earlier shared the document via WhatsApp with other candidates within their same party. Thus, we asked respondents before beginning the second wave of the survey if they had seen the report before, with 19.5% reporting that they had. Second, despite the oral presentation and the opportunity to ask probing questions, enumerators reported that several respondents had difficulty understanding the figures. We included a question gauging the extent to which respondents were judged to understand the content of the analyses in the report, with 71.5% judged to have understood. This shortcoming reflects both innumeracy on the part of some respondents, but enumerators reported some of the respondents could not speak fluent Bahasa Indonesia and thus could not follow along with the questionnaire. Our main analysis is restricted to those respondents who (1) reported not having seen the report before the survey began and (2) were judged to understand the content by the enumerator. These restrictions yield a sample of 456 respondents: 225 treatment and 231 control. In the SI, we also conduct our analyses on the unrestricted samples (see SI Section B.2). Importantly, in the restricted sample, the distribution of respondents is unbalanced: politicians in the control group are approximately three years older than those in the treatment group. The magnitude of this imbalance is small, but we conduct additional tests in SI Section B.5 to probe the robustness of our results to the inclusion of inverse propensity weights.

We evaluate the impact of our informational intervention on three groups of outcomes. First, we measure politicians' first- and second-order beliefs over the same suite of issues again. Second, we probed politicians' support for immediate policy action on the issues, as well as the extent to which they support more specific policy proposals designed to manage environmental concerns: restrictions on deforestation and a carbon tax proposal. Third, we examined politicians' vote shares, on the expectation that, upon learning voters' true preferences, politicians might update their campaign strategies to bring them in line with the demands of their constituents, and thus secure greater vote shares.

For the first and second outcomes, we conduct a simple difference-in-means test, implemented using a bivariate OLS model, to estimate the impact of having received the report before the survey (vs. after) on politicians' first- and second-order beliefs, as well as on their willingness to support costly political action. For the third outcome, looking at vote share, we conduct an alternative analysis, using the vote

totals for all candidates. Both treatment and control groups received the report before the election, and all respondents were randomly sampled. We can therefore compare vote shares of our sampled respondents with the vote shares of unsampled candidates. We control for candidate list positions to account for bias from differential attrition.

3.4 Ethical Considerations and Pre-Registration

We took steps to avoid potential harm that may have stemmed from our experimental intervention. To ensure that study participants in the control condition did not suffer undue harm from withholding the treatment, which constituted the form of a report on voter preferences, candidates in the control condition were given access to the report at the conclusion of the second wave of the survey. Importantly, the information contained in the report took the form of summary statistics from public opinion survey questions posed to voters. These questions were adapted from widely-used survey instruments, meaning analogous data are widely reported in the popular presses in Indonesia. Candidates not included in the study were thus not prevented from accessing the substantive content of the treatment on their own accord. Our study was reviewed and approved by the [REDACTED] International Review Board (IRB).

We also pre-registered our study on the Open Science Framework (OSF) registry. We deviate from our pre-registered specifications in three ways. First, we had pre-registered an intent to analyze our outcomes as continuous variables in their original 4-point Likert-scale form. Because our survey responses clustered on the third and fourth points of the scale, we instead analyze our outcomes as a binary variable that captures whether respondents offered the most extreme response ("4," e.g., "very important."). We also conduct our main analyses in the pre-registered specification in the SI (see SI Section B.2). Second, we pre-registered an intent to analyze the full sample of respondents. However, for reasons discussed above, we encountered several implementation challenges that diluted the impact of the treatment: (1) enumerators reported that many respondents did not understand the content of the report and (2) many respondents had already received the report from peers. To manage these concerns, we thus focus our attention on a more restrictive sample of respondents who were judged to understand the report by the enumerator and had not yet encountered the report from elsewhere. Third, we returned to voters after our experiment with another set of questions aimed at measuring preferences for environmental policy. These additional data help in disentangling competing interpretations of our experimental results.

4 Results

We describe our survey findings and the results of the informational intervention. We find that politicians underestimate voter concern, but that they learn from information that corrects these misperceptions. At the same time, this learning does not generate support for policy action.

4.1 Descriptive Results

How do voters and politicians compare in terms of the issues they believe to be most important? We present our first set of descriptive analyses in Figure 1. The report of our informational invention presented this figure as a summary of voters' and politicians' first-order beliefs, alongside summary information on the demographic composition of our results. Voters report higher first-order beliefs about the importance of environmental issues, compared to politicians. Specifically, 45.9% of voters indicate that climate change is a "very important" issue, compared with only 30.5% of politicians. Similarly, 57.5% of voters indicate pollution is a "very important" issue, compared with only 45.4% of politicians. This relationship reverses for more conventional material welfare issues, where politicians report higher first-order beliefs on non-environmental issues, compared to voters. 79.5% and 78.8% of politicians say that health and education, respectively, are very important issues. This compares to only 71.2% and 72.9% of voters who indicate as much for health and education, respectively. In other words, politicians appear to overstate the premium on which voters place on traditional public goods and understate the importance of environmental concerns to voters. Voters and politicians hold statistically indistinguishable evaluations of the importance of civil rights and economic development.

Our chief theoretical interest is in understanding the extent to which politicians correctly evaluate the importance that voters privately attach to different issues. Here, consistent with our pre-registered hypotheses, politicians hold incorrect second-order beliefs about environmental issues, underestimating voters' first-order beliefs about the importance they attach to climate change and pollution. Specifically, politicians estimated that 28.9% and 34.9% of voters would rate climate change and pollution as "very important," respectively; in fact, 45.9% and 57.5% of voters rated these issues as "very important." However, strikingly, politicians hold nearly perfect second-order beliefs about non-environmental issues. Politicians underestimated voters' first-order beliefs about the importance of education by only 1.9 percentage points (72.9% vs. 71%) and overestimated voters' first-order beliefs about health by 2 percentage points (73.2% vs.

Figure 1—Voters and Politicians' First-Order Preferences

Note: Points represent the share of voters (black) and politicians (grey) who say each issue is a "very important" problem facing Indonesia today. First-order beliefs were measured in November 2023 for politicians and in December 2023 for voters. We include 95% confidence intervals of our estimates.

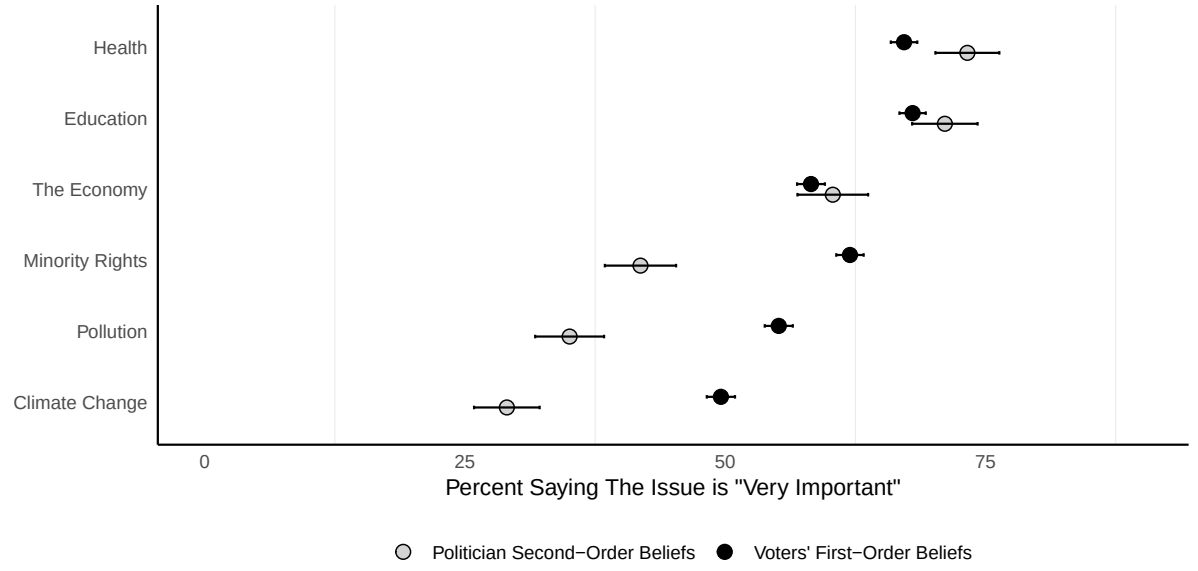
71.2%).

4.2 Experimental Results

A straightforward interpretation of the results presented in Figures 1 and 2 is to infer an explanation for observed policy inaction. Politicians underproduce environmental policy both because they do not believe it to be important and also because they underestimate the extent to which voters believe it to be important. If true, providing correct information to politicians about voters' true preferences ought to increase support for environmental policy action.

We thus turn to evaluating our informational intervention. We present our first set of results in Table 1. Providing politicians with voters' first-order beliefs causes them to upwardly update their own first-order beliefs about environmental issues. To start, we find that our informational intervention led to a 9.8 percentage point increase in the probability of a politician saying that pollution was a very important issue ($p = 0.027$). Compared to those who received the report after the survey, we observe among the treated group a 6.0 percentage point increase in the likelihood of a politician stating that climate change

Figure 2—Voters' First-Order Preferences and Politicians' Second-Order Beliefs



Note: Black points represent the share of voters who say each issue is a "very important" problem facing Indonesia today, while the grey points represent the share of politicians who believe voters would rate each issue as a "very important" problem facing Indonesia today. First-order voter beliefs and second-order politician beliefs were measured in December and November 2023, respectively. We include 95% confidence intervals of our estimates.

is important, although the results are not statistically significant ($p = 0.13$). Intriguingly, we find that treated politicians are more likely to state that "minority rights" are "very important," by a margin of 9.5 percentage points ($p = 0.037$). This is likely a result of politicians updating in light of the large attitudinal gap on "civil rights" observed in the comparison of first-order attitudes between politicians and voters. Finally, indexing the two environmental outcomes together such that we capture only those respondents who indicated both pollution and climate change were very important, we find that the treatment led to a 7.2 percentage point bump ($p = 0.06$).

Next, we turn our attention to politicians' second-order beliefs about how voters perceive pollution, presenting the results of our analysis in Table 2. The informational intervention led to a 9.1 percentage point increase in the share of politicians who said that voters would rate the issue as very important ($p = 0.027$). We observe a similar pattern with the issue of climate change: the informational intervention led to a 10.5 percentage point uptick in the probability of a politician saying that climate change was very important to voters ($p < 0.01$). Again, consistent with politicians' updated first-order beliefs, we see a

large uptick of 13.2 percentage points in treated respondents' probability to say "minority rights" is very important ($p = 0.002$). Our index capturing whether respondents indicate that voters believe both pollution and climate change are very important also shows a large uptick in the treated group, corresponding to a 9.3 percentage point increase in probability ($p = 0.012$).

The results suggest that, at least with respect to the environmental issues about which we are concerned in this paper, politicians are both strong learners and keen to bring their views into accord with the voters they represent—perhaps out of fear of sanctioning at the ballot box. On other issues of common concern—the economy, health, and education—politicians possess slightly higher first-order beliefs, but are accurate in their second-order beliefs about voters' preferences on these issues. We do not find evidence that politicians downward update their first-order beliefs after observing voters' true first-order beliefs.

Are politicians more likely to support costly policy action after having received the informational intervention? To investigate this possibility, look at our outcomes which measure politicians' willingness to support costly policy by asking how urgently they believed action was needed on five environmental issues: (1) extreme heat, (2) flooding, (3) rising sea levels, (4) deforestation, and (5) air and water pollution. Across both treatment and control groups, the belief that these issues were "somewhat important" or "very important" and merited policy attention were high, thus raising the possibility that our intervention runs up against "ceiling effects."[3] Thus, as with our earlier outcomes, we focus our attention on the share of respondents who indicated that the issue was "very important" and merited policy attention, which evinces greater variation. We present the results in Table 3, finding no evidence that our intervention caused politicians to support greater environmental action.

The results presented in Table 3 look at outcomes that capture a general sense of urgency to act on environmental problems. We also asked respondents if they would support two different specific initiatives designed to manage the impacts of climate change: (1) a carbon tax and (2) a ban on deforestation. Again, to manage concerns over ceiling effects, we train our attention to the percentage of politicians who indicated that the two policy proposals were "very important." We estimate the impact of our information intervention on politicians' responses to these questions, presenting the results Table 3. We detect no evidence that politicians who received the informational intervention are any more likely to support these

3 For our outcomes, respectively, 93.8%, 97.1%, 89.5%, 97%, and 96.2% dichotomously agreed that the issue merited policy attention.

Table 1: The Effect of Intervention on Politicians' First-Order Views

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	0.045	0.018	0.049	0.048	0.095**	0.060	0.098**	0.087**
	(0.041)	(0.041)	(0.047)	(0.046)	(0.045)	(0.040)	(0.044)	(0.041)
Constant	0.724***	0.724***	0.435***	0.530***	0.332***	0.216***	0.302***	3.228***
	(0.029)	(0.029)	(0.033)	(0.033)	(0.031)	(0.027)	(0.030)	(0.028)
Observations	457	457	457	457	457	457	457	457

Note: *p<0.1; **p<0.05; ***p<0.01. Coefficients from OLS regression. Robust and unclustered standard errors. Outcomes capturing whether respondents thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

Table 2: The Effect of Intervention on Politicians' Second-Order Views

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	0.026	0.012	0.074	0.044	0.132***	0.105***	0.091**	0.087*
	(0.042)	(0.043)	(0.046)	(0.046)	(0.043)	(0.040)	(0.041)	(0.046)
Constant	0.707***	0.685***	0.379***	0.543***	0.241***	0.185***	0.220***	3.149***
	(0.030)	(0.030)	(0.032)	(0.033)	(0.028)	(0.026)	(0.027)	(0.029)
Observations	457	457	457	457	457	456	457	457

Note: *p<0.1; **p<0.05; ***p<0.01. Coefficients from OLS regression. Robust and unclustered standard errors. Outcomes capturing whether respondents thought voters thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

Table 3: The Effect of Intervention on Policy Support

	Does Issue Merit Policy Attention:					Support For Policy:	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Extreme Heat	Flooding	Sea Level	Deforestation	Pollution	Carbon Tax	Deforestation Ban
Treatment	−0.028	0.017	0.050	−0.052	0.054	−0.021	0.009
	(0.046)	(0.047)	(0.043)	(0.047)	(0.046)	(0.047)	(0.046)
Constant	0.415***	0.489***	0.276***	0.537***	0.377***	0.443***	0.571***
	(0.033)	(0.033)	(0.030)	(0.033)	(0.032)	(0.033)	(0.033)
Observations	454	456	452	456	456	450	455

Note: *p<0.1; **p<0.05; ***p<0.01.Standard errors were calculated using the Huber-White (HC0) correction. The first five outcomes measure perceived urgency of action required on (1) extreme heat, (2) flooding, (3) rising sea levels, (4) deforestation, (5) air pollution. The final two columns measure support for (6) a carbon tax and (7) a deforestation ban. All outcomes are dichotomized to capture the most extreme response on the Likert-scale.

specific policy proposals.

5 Three Mechanisms

The results presented in Table 3 suggest that preferences among voters do not directly translate into policy action by politicians. We probe three potential frictions that make policy action costly for politicians.

5.1 Fixed Costs to Updating

Our first explanation is that misperceptions *do* in fact matter, but only for politicians who were catastrophically wrong in their evaluation of voters' preferences. Updating one's policy position incurs a set of fixed costs on politicians. Appearing hypocritical, for instance, is both psychologically unpleasant and may carry an electoral penalty. Thus, the majority of politicians who hold nearly correct second-order beliefs about voter preferences may be averse to updating their policy positions even in light of new information. Politicians who hold very wrong second-order beliefs, however, may be more willing to incur the fixed costs associated with updating one's policy position on the wager that doing so improves their electoral prospects.

To investigate this possibility further, we draw on politicians' responses on the first wave of the survey to construct a measure of preference misperception that captures the difference in politicians' perceptions of voter preferences. We construct a weighted measure based on our Likert-scale question capturing voters' beliefs about the importance of climate change[4]. We construct a new variable for each politician, which is the true value of voter preferences ($C = 3.39$) described above less the numeric value of their second-order beliefs. When this index is high, individual politicians' scale of misperception is high at baseline, and vice versa.

We present the results of our analysis in Table 4. The results of this analysis indicate that informational intervention was more effective for politicians who *a priori* held inaccurate perceptions of voters' concern over climate change. For ease of interpretation, in the SI (SI Table A16), we dichotomize our misperception index into politicians with high and low levels of misperception, and further dichotomize our outcome variables to capture whether politicians agreed that issues merited policy attention and whether they

4 Specifically, we construct a numeric variable in response to the question, "In your opinion, how important is [climate change] to Indonesian voters?"

$$C_i = \begin{cases} 4 & \text{if "Very important"} \\ 3 & \text{if "Somewhat important"} \\ 2 & \text{if "Somewhat unimportant"} \\ 1 & \text{if "Very unimportant"} \end{cases}$$

Table 4: The Effect of Informational Treatment by Scale of Misperception

	Does Issue Merit Policy Attention:					Support For Policy:	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Extreme Heat	Flooding	Sea Level	Deforestation	Pollution	Carbon Tax	Deforestation Ban
Treatment (T)	0.016	0.009	0.059	−0.084	0.038	−0.051	−0.032
	(0.059)	(0.054)	(0.057)	(0.052)	(0.052)	(0.057)	(0.050)
Misperception (M)	−0.085	−0.095	−0.249***	−0.108*	−0.177***	−0.099	−0.155***
	(0.072)	(0.061)	(0.060)	(0.060)	(0.059)	(0.070)	(0.054)
T X M	0.066	0.143*	0.178*	0.160*	0.158*	−0.005	0.186**
	(0.098)	(0.085)	(0.092)	(0.085)	(0.085)	(0.107)	(0.079)
Constant	3.350***	3.492***	3.229***	3.551***	3.386***	3.447***	3.605***
	(0.044)	(0.039)	(0.040)	(0.036)	(0.038)	(0.041)	(0.034)
Observations	419	420	416	420	420	416	419

Note: *p<0.1; **p<0.05; ***p<0.01.Standard errors were calculated using the Huber-White (HC0) correction. The first five outcomes measure perceived urgency of action required on (1) extreme heat, (2) flooding, (3) rising sea levels, (4) deforestation, (5) air pollution. The final two columns measure support for (6) a carbon tax and (7) a deforestation ban.

supported specific policy action. The most instructive results are presented in columns (4) and (7), which deal with deforestation and provide support for the idea that larger reductions in misperceptions lead to an interest in policy action. Looking at column (4), politicians who scored high on our misperception index at baseline, upon receiving treatment, observed a near-doubling in the probability that they "strongly agree" with the statement that deforestation merits policy attention. Consistent with this, column (7) shows that politicians who scored highest on our misperception index were much more likely to support a ban on deforestation upon learning about voter preferences.

5.2 Elite Capture

Our second mechanism considers the costs that politicians incur from policy action. Construed narrowly, it might be the case that politicians perceive the *financial* costs of environmental policies to be high enough to deter action—even after having updated their preferences in the face of new evidence. In Indonesia, elite interests are often able to capture politicians through outright bribery. But the scale of this "elite capture" varies across districts, depending on the extent to which elite interests perceive the control of local government officials to underpin their wealth. Districts with an abundance of natural resources, for instance, are often those most likely to be captured by elite interests thus making politicians less accountable to voters. Ironically, these are also the places most likely to suffer most acutely from the impacts of climate change, making them the places in which, from a welfare perspective, politicians ought to be most sensitive to voters' preferences.

Table 5: The Effect of Intervention on Policy Support, by Level of Clientelism

	Does Issue Merit Policy Attention:					Support For Policy:	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Extreme Heat	Flooding	Sea Level	Deforestation	Pollution	Carbon Tax	Deforestation Ban
Treatment (T)	0.010	0.028	0.045	−0.042	0.069	−0.033	−0.019
	(0.048)	(0.050)	(0.046)	(0.050)	(0.049)	(0.049)	(0.047)
Asset Index (Z)	−0.390**	0.060	0.187	0.121	0.065	0.348*	0.544***
	(0.162)	(0.195)	(0.186)	(0.194)	(0.188)	(0.181)	(0.147)
T X Z	0.736***	0.201	−0.087	0.210	0.280	−0.232	−0.540**
	(0.273)	(0.296)	(0.260)	(0.305)	(0.294)	(0.266)	(0.238)
Constant	0.394***	0.492***	0.286***	0.543***	0.380***	0.462***	0.600***
	(0.033)	(0.034)	(0.032)	(0.034)	(0.033)	(0.034)	(0.032)
Observations	454	456	452	456	456	450	455

Note: *p<0.1; **p<0.05; ***p<0.01.Standard errors were calculated using the Huber-White (HC0) correction. The first five outcomes measure perceived urgency of action required on (1) extreme heat, (2) flooding, (3) rising sea levels, (4) deforestation, (5) air pollution. The final two columns measure support for (6) a carbon tax and (7) a deforestation ban. All outcomes are dichotomized to capture the most extreme response on the Likert-scale.

We test this possibility by drawing on administrative data collected by the Indonesian Anti-Corruption Commission (KPK) and recently digitized.[5] The dataset draws on documents that are required to be submitted by all top officials in local governments to report their total assets on a yearly basis. We take the average asset value of the top ten most senior officials in each district (which includes the elected executive and nine senior bureaucrats) and construct a standardized measure that captures the scale of wealth possessed by public officials in a given district. There is good reason to trust that this measure captures the extent of elite capture: public officials are remunerated modestly in Indonesia and there are few avenues for enrichment while in office outside of illegal activity.

We present our results in Table 5. We focus our attention on the policy outcomes, gauging whether, first, politicians were inclined to believe a suite of environmental issues merited policy attention and, second, whether they would support specific policies. Here, we estimate a model that examines heterogeneity in our main treatment effect according to the size of assets held by politicians in that district. We highlight two results. First, column (7) shows that politicians in places with high asset indices, upon receiving information about voters' high concern with environmental issues, are less likely to support restrictions on deforestation. Meanwhile, those in districts with low asset scores are more likely to support deforestation restrictions upon receiving the information. In other words, removing the costs of forgone rents associated with elite capture appears to clear the way for politicians to be responsive to voters' concerns in terms of

5 We thank Vincent Tanutama for generously sharing this data with us.

policy action. However, interestingly, column (1) reveals that politicians in places with high asset indices, despite being less inclined to support specific policy proposals in the face of voter preferences, are *more likely* to agree that extreme heat is an issue that merits policy attention.

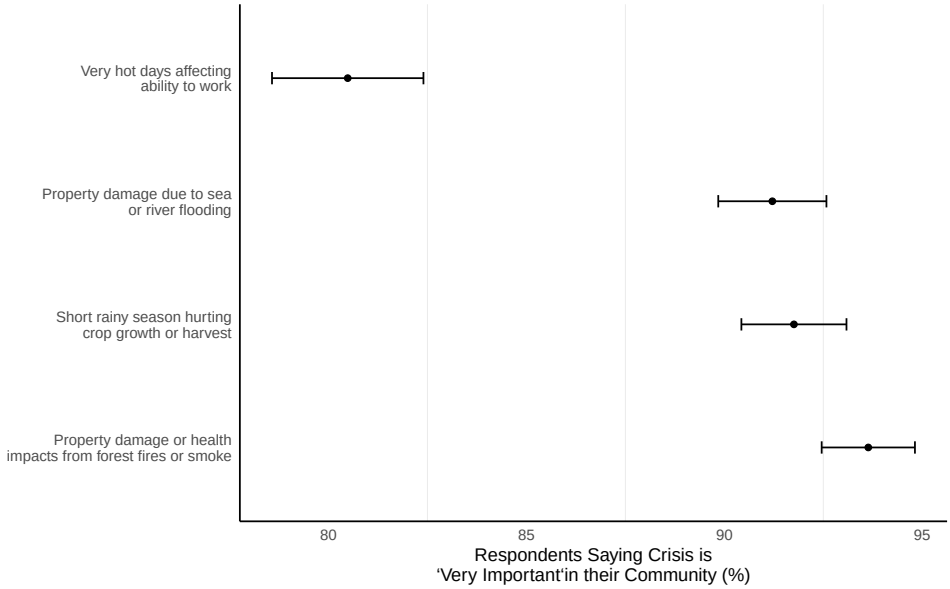
5.3 Voter Priorities

Our third explanation concerns the extent to which voters' preferences are genuine. It is possible, for instance, that politicians under-produce environmental policy on the belief that voters' stated preferences are insincere. Our benchmark analysis asked voters to rate the importance of environmental concerns in both an *abstract sense* and an *absolute sense.* But voters may not care about concrete environmental issues, or they may not be willing to engage in the sort of costly trade-offs associated with pursuing climate action. In turn, politicians may implicitly recognize this and not respond to voters' absolute preferences.

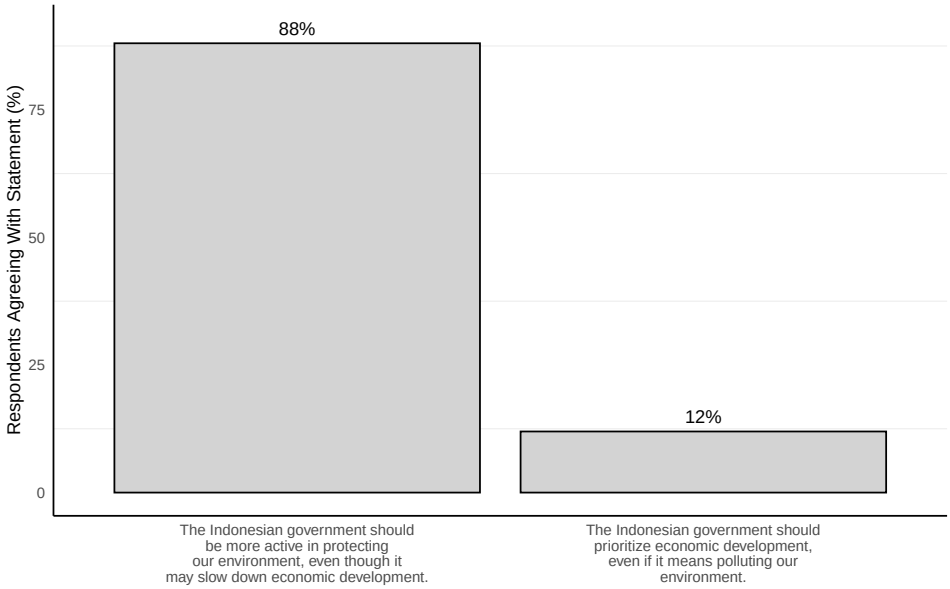
To probe this possibility, we conducted an additional survey and included questions gauging these concerns. We find that voters *do* care about environmental issues in a concrete sense. We asked respondents to rate the importance of various climate-related crises afflicting their own communities. In the top panel of Figure 3, we present the share indicating that a given crisis is either "very" or "somewhat" important in their community, finding that at least 80% of respondents were concerned about four scenarios. For instance, 93.6% of respondents in our sample indicate that they are somewhat or very concerned by "property damage or health impacts from forest fires or smoke" in their community, suggesting that voters are attuned to the concrete manifestation of environmental issues. Another possibility relates to the nature of trade-offs: politicians may under-produce environmental policy on the belief that voters have little appetite for the trade-offs associated with such action. To probe this possibility, we asked voters to identify one of two statements with which they agreed more: whether "the Indonesian government should be more active in protecting our environment, even though it may slow down economic development" or whether "the Indonesian government should prioritize economic development, even if it means polluting our environment." We present the results in the bottom panel of Figure 3, showing that 88.0% of respondents indicate a preference for the former statement, suggesting, again, that Indonesian voters are both cognizant of and willing to undertake, the costly trade-offs associated with environmental policy action.

Our final test of this mechanism investigates whether our results are an artifice of the measurement strategy we adopt. Politicians and voters alike may harbor mental models of policy preference in a *relative* sense, believing that there exists only a finite pool of political capital from which policymakers may draw

Figure 3—Voter Beliefs About Concrete Issues and Trade-Offs of Policy



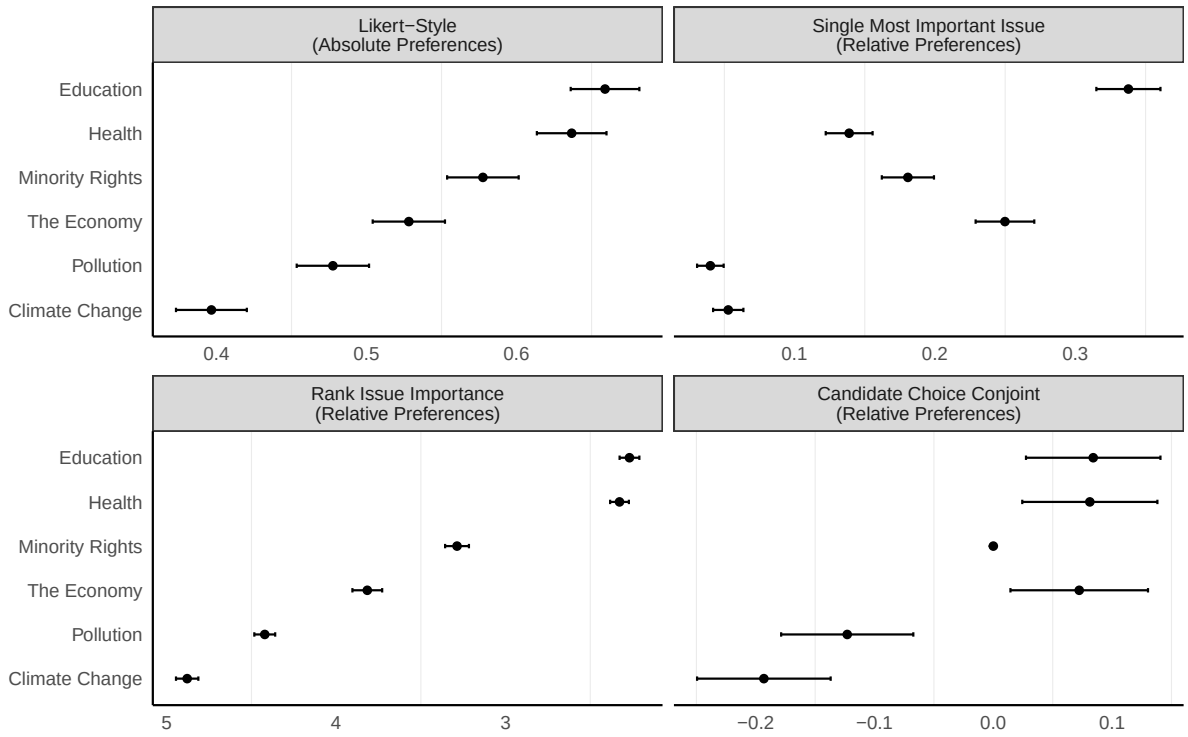
(a) Concrete Issues



(b) Environmental Action Trade-Off

Note: Data from an August 2024 online survey of 1,650 Indonesian adults. Quotas are imposed on region, gender, and age. The left-hand panel captures responses to a question probing respondents whether the listed issues have affected their community in the last five years. The right-hand panel asks respondents to select from the two listed statements and select the one closer to their views.

Figure 4—Comparison of Voters' First-Order Preferences Across Measurement Strategies



Note: Data is drawn from an August 2024 survey of 1,650 Indonesian adults conducted online, using quotas for gender, region, and age. The top-left panel measures the percentage of respondents indicating a given issue is "very important;" the top-right panel measures the percentage of respondents indicating each issue is the "most important" facing Indonesia today; the bottom-left panel captures the average rank of each issue according to voter; the bottom right panel captures the average marginal component effects (AMCE) of a legislative candidate emphasizing each issue on hypothetical vote choice in a conjoint experiment framework. We include 95% confidence intervals of our estimates.

to enact policies. If true, in other words, even if voters genuinely care about environmental issues, and even if politicians mischaracterize the extent of voters' preferences for policy action on environmental issues, politicians may nonetheless accurately capture the relative weight voters attach to such policies vis-a-vis competing alternatives.

To probe this possibility, in our August 2024 follow-up survey, we gauged voters' relative preferences for policy action using a suite of alternative measurement strategies: (1) asking them to identify the single most important issue facing Indonesia today; (2) asking them to rank the relative importance of issues facing Indonesia today; and (3) providing them with conjoint experiment randomly varying the traits and policy platforms of two hypothetical candidates for elected office in which their platforms corresponded to

the issues measured in earlier items. In Figure 4, we present a comparison of these measurements against the benchmark approach in our main analysis that uses a Likert-style question.

For all measurement strategies, voters' preferences for action on climate change and pollution rank as the bottom two options. These results provide circumstantial support for the idea that voters hold relativistic preferences: they want action on environmental issues, yes, but they hold stronger preferences for other issues when pressed. Politicians may recognize this dynamic, thus providing a partial explanation for the underprovision of environmental policy. Moreover, for all measurement strategies other than asking voters to identify the single most important issue, we detect a strikingly consistent rank ordering of preferences across topics. Importantly, politicians' second-order beliefs of voters' preferences accurately correspond to the rank ordering consistently observed across the four measurement strategies. One interpretation of our broader set of results is thus that politicians "underproduce" environmental policy on the basis of their accurate intuition of voters' rank ordering of issues—rather than the extent of their absolute support for any one given issue.

6 Conclusion

We study environmental policy inaction in Indonesia. We find that voters care about environmental issues more than politicians—and that politicians underestimate the extent of voters' concerns. Correcting politicians' misperceptions leads to learning, but, except for those who were *a priori* heavily misinformed, we detect little evidence that our informational corrective generated greater support for environmental policy action. Our preferred interpretation is consistent with a simple model of policy inaction. Politicians face the costs of introducing new policies, and so they underproduce policies consistent with voter demands. Voters anticipate the underproduction of policy and underexpress their demands, as they too face the costs of communicating their preferences, thus fueling the cycle. We discover partial evidence in support of our argument. Our informational corrective was effective in generating greater support for policy action among politicians in constituencies with low levels of clientelism. That is, in places where the extra-legal costs imposed by elites for deviation from the policy status quo are low, politicians are more likely to support policy consistent with voter preferences.

Our results speak to ongoing debates around the drivers of environmental policy inaction—and potential solutions to spur change. The chief contribution of our analysis is to suggest that existing explanations emphasizing *either* attitudes and misperceptions *or* the distributional costs of action are independently in-

sufficient. Instead, we argue that both present frictions for the production of environmental policy, and that their interaction generates a negative feedback loop that results in paralysis. We expect that our results will travel to other patronage democracies in which the costs of policy action are especially high.

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Supplementary Information

A Descriptive Statistics, Balance, and Preliminaries

A.1 Outcomes and Question Text

First-Order Preference Questions (Politicians/Voters):
The following are some problems currently facing Indonesia. How important are these issues to you [as a person who has authority or will have the authority to make public policy][as an Indonesian citizen]?

1. Health
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant
2. Education
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant
3. Civil rights
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant
4. Air or water pollution/pollution
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant
5. Minority rights
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant
6. Climate change
    - Very important
    - Somewhat important
    - Somewhat unimportant

- Very unimportant

7. Economy/Development
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant

Second-Order Preference Questions (Politicians/Voters):
In your opinion, how important are these issues to the [voters you represent or will represent][politicians who represent you]?

1. Health
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant
2. Education
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant
3. Civil rights
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant
4. Air or water pollution/pollution
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant
5. Minority rights
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant

6. Climate change
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant
7. Economy/Development
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant

Policy Attention Questions (Politicians):
A number of people think that Indonesia is facing many problems from changes in global warming. I will show you a list of these problems and I would like you to express your views on how important these problems are.

1. Extreme heat, for example temperatures above 40 degrees Celsius
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant
2. Flood
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant
3. Rising sea levels
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant
4. Deforestation
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant

5. Air/water pollution
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant

Policy Action Questions (Politicians):
In recent years, policymakers around the world have proposed a number of solutions to reduce the amount of CO2 emerging from many countries. I will show you a list of some of these policies, and as a regional politician, please tell me how important you think the following policies are:

1. Implementation of an emissions tax so that companies that produce pollution must pay or be held responsible
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant
2. Protect forests so that companies or farmers do not burn or deforest
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant

Environment Relative Preference (Voters):

1. We are interested in understanding what issues Indonesian voters view as important. Please see the following list of issues. Choose one issue that you consider the most important for Indonesia today.
    - Health
    - Education
    - Civil rights
    - Air or water pollution
    - Climate change
    - Economic development
2. We are interested in understanding what issues Indonesian voters view as important. Please see the following list of issues. Please rank the following issues based on how important they are for Indonesia today.
    - Health
    - Education
    - Civil rights

- Air or water pollution
- Climate change
- Economic development

3. Many Indonesians care about environmental issues. However, there are also those who argue that government regulations to protect the environment can hinder economic development. Which one of the following statements is more in line with your views?

    - The Indonesian government should be more active in protecting our environment from pollution, even if it may slow down economic development.
    - The Indonesian government should prioritize economic development, even if that means polluting our environment.

Concrete Environmental Preferences (Voters):
Below are several issues or problems that Indonesia is currently facing. How important or unimportant do you think each issue has been in your community in the last five years?

1. A short rainy season inhibiting crop growth or harvest

    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant

2. Very hot days affecting ability to work

    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant

3. Damage to property due to sea or river flooding

    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant

4. Property damage or health impacts due to forest fire smoke

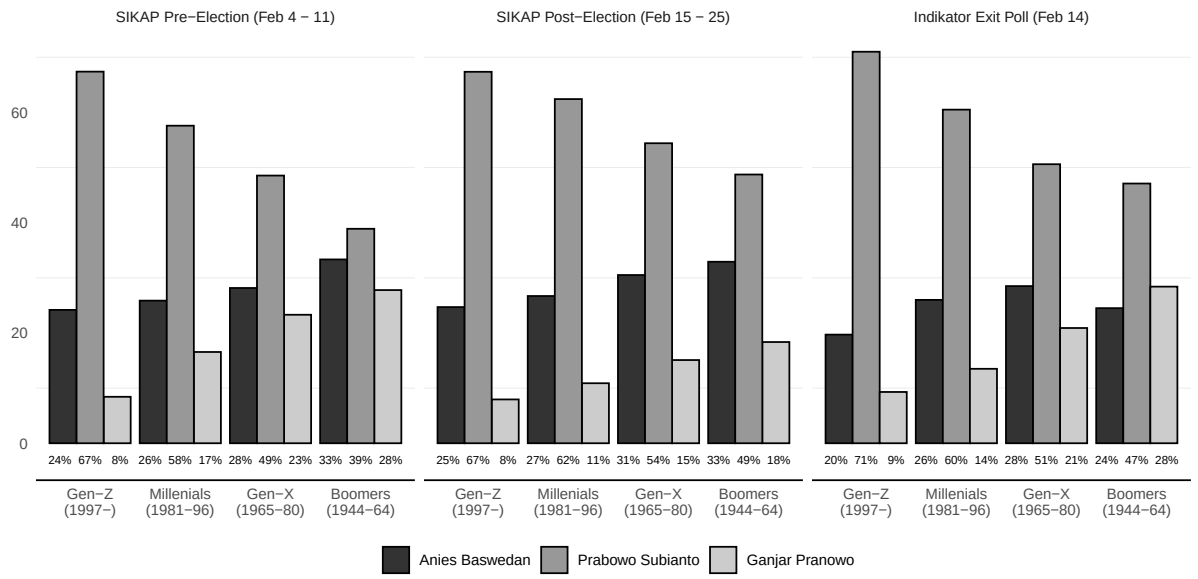
    - Very important
    - Somewhat important
    - Somewhat unimportant
    - Very unimportant

A.2 SIKAP Sample

Table A1: Sample Characteristics

Categories	SIKAP W1-W13	Population
Gender (Quota)		
Male	50.4%	49.8%
Female	49.6%	50.2%
Age (Quota)		
18-24	18.50%	17.9%
25-34	25.86%	26.3%
35-44	23.82%	22.4%
45-54	18.92%	16.4%
55+	12.90%	17%
Region (Quota)		
Sumatera	19.96%	20.4%
Java and Bali	60.17%	61.1%
Central and Eastern Provinces	19.86%	18.5%
Religion		
Islam	82.22%	87.4%
Christian	14.14%	9.3%
Others	3.64%	2.8%
Education		
Less than High School	3.61%	67.4%
High School	36.52%	25.3%
Higher than High School	59.87%	7.2%

Figure A1—Vote Preference Benchmark Comparison, by Age Group



Note: Data drawn from week 11 (February 4 - 11, 2024) and weeks 12 and 13 (February 15 - 25, 2024) of the SIKAP project. Vote share estimates exclude respondents who indicated that they "did not know" or "did not vote", scaling percentages accordingly. The Indikator exit poll draws on a stratified random sample of 2,975 voters drawn from as many polling stations and was conducted on election day (February 14, 2024).

A.3 Balance Tests

Characteristic	**0**, N = 232[1]	**1**, N = 225[1]	**p-value**[2]
Gender	0.78 (0.42)	0.76 (0.43)	0.7
Age	47.24 (10.42)	43.84 (10.70)	<0.001
College diploma	0.69 (0.47)	0.70 (0.46)	0.8
Political experience	0.65 (0.48)	0.59 (0.49)	0.2

[1]Mean (SD)
[2]Welch Two Sample t-test

B Additional Analyses

B.1 Descriptive Analysis

Voters First-Order and Politicians' Second-Order Beliefs, by Amount of Time Meeting With Voters

		Politicians' Second-Order Beliefs					
		Time Meeting Voters			Difference in Beliefs		
	Voters' Beliefs (V)	<1 hr (1)	1-5 hrs (2)	5 hrs (3)	V - (1)	V - (2)	V - (3)
Climate Change	49.5%	20.8%	31.4%	36.8%	28.6%	18.1%	12.7%
Pollution	55.3%	24.5%	37.5%	46.4%	30.8%	17.8%	8.9%
Civil Rights	62.0%	37.5%	49.0%	68.0%	24.5%	13.0%	−6.0%
Economic Development	58.5%	52.6%	59.4%	74.4%	5.9%	−0.9%	−15.9%
Health	67.3%	67.2%	72.3%	83.2%	0.2%	−4.9%	−15.9%
Education	68.1%	64.6%	69.5%	79.2%	3.5%	−1.4%	−11.1%

Voters First-Order and Politicians' Second-Order Beliefs, by Amount of Money Spent

		Politicians' Second-Order Beliefs					
		Money Spent			Difference in Beliefs		
	Voters' Beliefs (V)	<10m (1)	10-50m (2)	50m (3)	V - (1)	V - (2)	V - (3)
Climate Change	49.5%	30.6%	26.8%	29.6%	18.9%	22.6%	19.8%
Pollution	55.3%	30.2%	36.1%	37.1%	25.2%	19.2%	18.2%
Civil Rights	62.0%	48.8%	45.4%	52.1%	13.2%	16.6%	9.9%
Economic Development	58.5%	59.9%	61.5%	60.9%	−1.5%	−3.0%	−2.5%
Health	67.3%	70.2%	73.7%	75.2%	−2.9%	−6.3%	−7.9%
Education	68.1%	71.5%	70.7%	70.0%	−3.4%	−2.6%	−1.9%

Voters First-Order and Politicians' Second-Order Beliefs, by List Position

		Politicians' Second-Order Beliefs					
		List Position			Difference in Beliefs		
	Voters' Beliefs (V)	(1)	(2)	(3)	V - (1)	V - (2)	V - (3)
Climate Change	49.5%	30.0%	30.4%	25.0%	19.5%	19.1%	24.5%
Pollution	55.3%	34.4%	36.3%	33.5%	20.9%	19.0%	21.8%
Civil Rights	62.0%	50.8%	49.6%	45.3%	11.2%	12.4%	16.7%
Economic Development	58.5%	60.9%	62.2%	56.6%	−2.4%	−3.8%	1.9%
Health	67.3%	77.3%	72.6%	67.9%	−9.9%	−5.2%	−0.6%
Education	68.1%	72.9%	71.1%	67.9%	−4.8%	−3.0%	0.2%

B.2 Unrestricted samples

B.2.1 First-order Beliefs Outcomes

Full restriction sample:

Table A6: The Effect of Intervention on Politicians' First-Order Views

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	0.045	0.018	0.049	0.048	0.095**	0.060	0.098**	0.087**
	(0.041)	(0.041)	(0.047)	(0.046)	(0.045)	(0.040)	(0.044)	(0.041)
Constant	0.724***	0.724***	0.435***	0.530***	0.332***	0.216***	0.302***	3.228***
	(0.029)	(0.029)	(0.033)	(0.033)	(0.031)	(0.027)	(0.030)	(0.028)
Observations	457	457	457	457	457	457	457	457

Note: *p<0.1; **p<0.05; ***p<0.01. Coefficients from OLS regression. Robust and unclustered standard errors. Outcomes capturing whether respondents thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

No report sample:

Table A7: The Effect of Intervention on Politicians' First-Order Views

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	0.007	−0.020	0.007	0.004	0.054	0.047	0.056	0.054
	(0.035)	(0.036)	(0.040)	(0.041)	(0.039)	(0.034)	(0.039)	(0.036)
Constant	0.742***	0.745***	0.443***	0.525***	0.338***	0.197***	0.322***	3.226***
	(0.025)	(0.025)	(0.028)	(0.028)	(0.027)	(0.022)	(0.026)	(0.024)
Observations	605	605	605	605	605	605	605	605

Note: *p<0.1; **p<0.05; ***p<0.01. Coefficients from OLS regression. Robust and unclustered standard errors. Outcomes capturing whether respondents thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

No restriction sample:

Table A8: The Effect of Intervention on Politicians' First-Order Views

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	−0.009	−0.014	−0.014	0.003	0.018	0.016	0.023	0.026
	(0.031)	(0.032)	(0.035)	(0.035)	(0.034)	(0.029)	(0.033)	(0.031)
Constant	0.739***	0.717***	0.429***	0.524***	0.340***	0.208***	0.325***	3.226***
	(0.022)	(0.022)	(0.025)	(0.025)	(0.024)	(0.020)	(0.023)	(0.022)
Observations	800	800	800	800	800	800	800	800

Note: *p<0.1; **p<0.05; ***p<0.01. Coefficients from OLS regression. Robust and unclustered standard errors. Outcomes capturing whether respondents thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

B.2.2 Second-order Beliefs Outcomes

Full restriction sample:

Table A9: The Effect of Intervention on Politicians' Second-Order Views

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	0.026	0.012	0.074	0.044	0.132***	0.105***	0.091**	0.087*
	(0.042)	(0.043)	(0.046)	(0.046)	(0.043)	(0.040)	(0.041)	(0.046)
Constant	0.707***	0.685***	0.379***	0.543***	0.241***	0.185***	0.220***	3.149***
	(0.030)	(0.030)	(0.032)	(0.033)	(0.028)	(0.026)	(0.027)	(0.029)
Observations	457	457	457	457	457	456	457	457

Note: *p<0.1; **p<0.05; ***p<0.01. Coefficients from OLS regression. Robust and unclustered standard errors. Outcomes capturing whether respondents thought voters thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

No report sample:

Table A10: The Effect of Intervention on Politicians' Second-Order Views

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	−0.029	−0.031	0.044	0.021	0.109***	0.077**	0.023	0.033
	(0.037)	(0.038)	(0.040)	(0.041)	(0.037)	(0.033)	(0.036)	(0.039)
Constant	0.717***	0.694***	0.379***	0.525***	0.252***	0.178***	0.245***	3.159***
	(0.025)	(0.026)	(0.027)	(0.028)	(0.024)	(0.022)	(0.024)	(0.025)
Observations	605	605	605	605	605	604	605	605

Note: *p<0.1; **p<0.05; ***p<0.01. Coefficients from OLS regression. Robust and unclustered standard errors. Outcomes capturing whether respondents thought voters thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

No restriction sample:

Table A11: The Effect of Intervention on Politicians' Second-Order Views

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	−0.017	−0.020	0.003	−0.009	0.054*	0.041	−0.004	0.016
	(0.033)	(0.034)	(0.034)	(0.035)	(0.032)	(0.028)	(0.030)	(0.035)
Constant	0.695***	0.667***	0.362***	0.510***	0.261***	0.179***	0.246***	3.141***
	(0.023)	(0.023)	(0.024)	(0.025)	(0.022)	(0.019)	(0.021)	(0.024)
Observations	800	800	800	799	800	798	799	800

Note: *p<0.1; **p<0.05; ***p<0.01. Coefficients from OLS regression. Robust and unclustered standard errors. Outcomes capturing whether respondents thought voters thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

B.2.3 Policy Outcomes

Full restriction sample:

Table A12: The Effect of Intervention on Policy Outcomes

	Does Issue Merit Policy Attention:					Support For Policy:	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Extreme Heat	Flooding	Rising Sea Levels	Deforestation	Air Pollution	Carbon Tax	Deforestation Ban
Treatment	−0.028	0.017	0.050	−0.052	0.054	−0.021	0.009
	(0.046)	(0.047)	(0.043)	(0.047)	(0.046)	(0.047)	(0.046)
Constant	0.415***	0.489***	0.276***	0.537***	0.377***	0.443***	0.571***
	(0.033)	(0.033)	(0.030)	(0.033)	(0.032)	(0.033)	(0.033)
Observations	454	456	452	456	456	450	455

Note: *p<0.1; **p<0.05; ***p<0.01.Standard errors were calculated using the Huber-White (HC0) correction. The first five outcomes measure perceived urgency of action required on (1) extreme heat, (2) flooding, (3) rising sea levels, (4) deforestation, (5) air pollution. The final two columns measure support for (6) a carbon tax and (7) a deforestation ban.

No report sample:

Table A13: The Effect of Intervention on Policy Outcomes

	Does Issue Merit Policy Attention:					Support For Policy:	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Extreme Heat	Flooding	Rising Sea Levels	Deforestation	Air Pollution	Carbon Tax	Deforestation Ban
Treatment	−0.016	−0.009	0.025	−0.020	0.025	−0.022	0.001
	(0.040)	(0.041)	(0.037)	(0.041)	(0.040)	(0.041)	(0.040)
Constant	0.392***	0.497***	0.278***	0.513***	0.378***	0.434***	0.559***
	(0.028)	(0.028)	(0.025)	(0.028)	(0.027)	(0.028)	(0.028)
Observations	599	603	596	602	602	595	602

Note: *p<0.1; **p<0.05; ***p<0.01.Standard errors were calculated using the Huber-White (HC0) correction. The first five outcomes measure perceived urgency of action required on (1) extreme heat, (2) flooding, (3) rising sea levels, (4) deforestation, (5) air pollution. The final two columns measure support for (6) a carbon tax and (7) a deforestation ban.

No restriction sample:

Table A14: The Effect of Intervention on Policy Outcomes

	Does Issue Merit Policy Attention:					Support For Policy:	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Extreme Heat	Flooding	Rising Sea Levels	Deforestation	Air Pollution	Carbon Tax	Deforestation Ban
Treatment	−0.056	−0.017	−0.014	−0.035	−0.002	−0.049	−0.018
	(0.034)	(0.035)	(0.032)	(0.035)	(0.034)	(0.035)	(0.035)
Constant	0.385***	0.486***	0.275***	0.490***	0.363***	0.437***	0.540***
	(0.024)	(0.025)	(0.022)	(0.025)	(0.024)	(0.025)	(0.025)
Observations	790	795	789	796	795	780	795

Note: *p<0.1; **p<0.05; ***p<0.01.Standard errors were calculated using the Huber-White (HC0) correction. The first five outcomes measure perceived urgency of action required on (1) extreme heat, (2) flooding, (3) rising sea levels, (4) deforestation, (5) air pollution. The final two columns measure support for (6) a carbon tax and (7) a deforestation ban.

B.3 Electoral Outcomes

Table A15: The Effect of Intervention on Electoral Outcomes

	Vote Share (%):		Ranking	
	(1)	(2)	(3)	(4)
Treatment	0.005	0.006	−0.031	−0.031
	(0.007)	(0.007)	(0.023)	(0.023)
List Position: 2	−0.222***	−0.222***	0.686***	0.686***
	(0.005)	(0.004)	(0.014)	(0.014)
List Position: 3	−0.326***	−0.326***	1.383***	1.383***
	(0.004)	(0.004)	(0.013)	(0.013)
Constant	0.397***		1.310***	
	(0.004)		(0.009)	
Observations	11007	11007	11355	11355
Fixed Effects	N	Y	N	Y

Note: *p<0.1; **p<0.05; ***p<0.01.Standard errors were calculated using the Huber-White (HC0) correction. The first two columns examine individual candidates' within-party vote shares. The second two columns look at candidates' party list ranking as a function of their vote share.

B.4 Heterogeneous Treatment Effects

B.4.1 Baseline Misperceptions—Dichotomous

Table A16: The Effect of Informational Treatment by Scale of Misperception

	Does Issue Merit Policy Attention:					Support For Policy:	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Extreme Heat	Flooding	Sea Level	Deforestation	Pollution	Carbon Tax	Deforestation Ban
Treatment (T)	−0.031	−0.008	0.030	−0.090*	0.028	−0.055	−0.030
	(0.050)	(0.051)	(0.047)	(0.050)	(0.050)	(0.051)	(0.050)
High Misperception ($H - M$)	−0.032	−0.133	−0.234***	−0.116	−0.140	−0.032	−0.090
	(0.126)	(0.126)	(0.069)	(0.129)	(0.114)	(0.129)	(0.130)
T X $H - M$	0.256	0.366**	0.308**	0.519***	0.322*	0.218	0.463***
	(0.182)	(0.174)	(0.148)	(0.160)	(0.174)	(0.184)	(0.149)
Constant	0.407***	0.508***	0.297***	0.554***	0.390***	0.469***	0.590***
	(0.035)	(0.036)	(0.033)	(0.036)	(0.035)	(0.036)	(0.035)
Observations	419	420	416	420	420	416	419

Note: *p<0.1; **p<0.05; ***p<0.01.Standard errors were calculated using the Huber-White (HC0) correction. The first five outcomes measure perceived urgency of action required on (1) extreme heat, (2) flooding, (3) rising sea levels, (4) deforestation, (5) air pollution. The final two columns measure support for (6) a carbon tax and (7) a deforestation ban.

B.4.2 Education

Table A17: The Effect of Informational Treatment by Education (First-order Beliefs)

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	0.066	−0.015	−0.016	0.011	0.015	0.027	0.046	0.069
	(0.106)	(0.107)	(0.113)	(0.108)	(0.114)	(0.100)	(0.116)	(0.099)
Education (Z)	0.058**	0.043*	0.055*	0.039	0.002	0.023	0.024	0.046*
	(0.026)	(0.026)	(0.029)	(0.028)	(0.029)	(0.026)	(0.030)	(0.026)
Treatment X Z	−0.010	0.012	0.025	0.034	0.032	0.013	0.0002	0.006
	(0.037)	(0.038)	(0.042)	(0.041)	(0.043)	(0.038)	(0.043)	(0.037)
Constant	0.583***	0.618***	0.301***	0.208***	0.328***	0.160**	0.473***	3.118***
	(0.074)	(0.073)	(0.078)	(0.074)	(0.078)	(0.068)	(0.080)	(0.070)
Observations	457	457	457	457	457	457	457	457

Note: *p<0.1; **p<0.05; ***p<0.01. Standard errors were calculated using the Huber-White (HC0) correction. Outcomes capturing whether respondents thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

Table A18: The Effect of Informational Treatment by Education (Second-order Beliefs)

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	−0.011	−0.112	−0.122	0.025	−0.003	−0.034	−0.111	0.053
	(0.106)	(0.108)	(0.113)	(0.102)	(0.107)	(0.101)	(0.115)	(0.107)
Education (Z)	0.013	−0.019	−0.001	0.018	−0.001	−0.010	−0.007	0.005
	(0.027)	(0.028)	(0.029)	(0.026)	(0.026)	(0.025)	(0.030)	(0.027)
Treatment X Z	0.015	0.051	0.079*	0.026	0.054	0.056	0.063	0.014
	(0.039)	(0.040)	(0.042)	(0.039)	(0.040)	(0.038)	(0.042)	(0.042)
Constant	0.675***	0.732***	0.382***	0.177***	0.245***	0.210***	0.560***	3.136***
	(0.073)	(0.073)	(0.079)	(0.067)	(0.070)	(0.066)	(0.080)	(0.072)
Observations	457	457	457	457	457	456	457	457

Note: *p<0.1; **p<0.05; ***p<0.01. Standard errors were calculated using the Huber-White (HC0) correction. Outcomes capturing whether respondents thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

Table A19: The Effect of Informational Treatment by Education (Policy Outcomes)

	Does Issue Merit Policy Attention:					Support For Policy:	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Extreme Heat	Flooding	Sea Level	Deforestation	Pollution	Carbon Tax	Deforestation Ban
Treatment	0.050	0.067	0.143	0.014	0.067	0.011	0.217*
	(0.112)	(0.116)	(0.108)	(0.116)	(0.112)	(0.116)	(0.114)
Education (Z)	0.076***	0.052*	0.038	0.053*	0.042	0.037	0.095***
	(0.029)	(0.030)	(0.027)	(0.030)	(0.029)	(0.030)	(0.029)
Treatment X Z	−0.033	−0.021	−0.038	−0.028	−0.006	−0.014	−0.086**
	(0.042)	(0.043)	(0.041)	(0.043)	(0.042)	(0.044)	(0.042)
Constant	0.230***	0.364***	0.185***	0.409***	0.275***	0.353***	0.341***
	(0.076)	(0.079)	(0.068)	(0.080)	(0.075)	(0.079)	(0.078)
Observations	454	456	452	456	456	450	455

Note: *p<0.1; **p<0.05; ***p<0.01.Standard errors were calculated using the Huber-White (HC0) correction. The first five outcomes measure perceived urgency of action required on (1) extreme heat, (2) flooding, (3) rising sea levels, (4) deforestation, (5) air pollution. The final two columns measure support for (6) a carbon tax and (7) a deforestation ban.

B.4.3 Political Experience

Table A20: The Effect of Informational Treatment by Political Experience (First-order Beliefs)

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	0.055	−0.013	0.042	0.122*	0.052	0.041	−0.064	0.102
	(0.068)	(0.069)	(0.075)	(0.071)	(0.072)	(0.065)	(0.075)	(0.067)
Political Experience (Z)	0.045	0.007	0.032	0.033	0.023	−0.006	−0.085	0.033
	(0.062)	(0.062)	(0.068)	(0.062)	(0.064)	(0.057)	(0.068)	(0.059)
Treatment X Z	−0.013	0.053	0.015	−0.037	0.074	0.031	0.180*	−0.023
	(0.085)	(0.086)	(0.096)	(0.091)	(0.092)	(0.083)	(0.095)	(0.085)
Constant	0.695***	0.720***	0.415***	0.280***	0.317***	0.220***	0.585***	3.207***
	(0.051)	(0.050)	(0.054)	(0.050)	(0.051)	(0.046)	(0.054)	(0.048)
Observations	457	457	457	457	457	457	457	457

Note: *p<0.1; **p<0.05; ***p<0.01. Standard errors were calculated using the Huber-White (HC0) correction. Outcomes capturing whether respondents thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

Table A21: The Effect of Informational Treatment by Political Experience (Second-order Beliefs)

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	0.059	0.017	0.034	0.107	0.069	0.109*	−0.007	0.130*
	(0.070)	(0.072)	(0.075)	(0.067)	(0.069)	(0.065)	(0.075)	(0.069)
Political Experience (Z)	0.075	0.060	−0.017	0.0005	−0.042	−0.015	−0.028	−0.006
	(0.064)	(0.065)	(0.067)	(0.057)	(0.060)	(0.054)	(0.068)	(0.061)
Treatment X Z	−0.048	−0.002	0.067	−0.026	0.103	−0.009	0.082	−0.074
	(0.088)	(0.090)	(0.095)	(0.085)	(0.088)	(0.082)	(0.096)	(0.092)
Constant	0.659***	0.646***	0.390***	0.220***	0.268***	0.195***	0.561***	3.152***
	(0.052)	(0.053)	(0.054)	(0.046)	(0.049)	(0.044)	(0.055)	(0.049)
Observations	457	457	457	457	457	456	457	457

Note: *p<0.1; **p<0.05; ***p<0.01. Standard errors were calculated using the Huber-White (HC0) correction. Outcomes capturing whether respondents thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

Table A22: The Effect of Informational Treatment by Political Experience (Policy Outcomes)

	Does Issue Merit Policy Attention:					Support For Policy:	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Extreme Heat	Flooding	Sea Level	Deforestation	Pollution	Carbon Tax	Deforestation Ban
Treatment	−0.072	−0.019	0.072	−0.022	0.034	−0.079	−0.051
	(0.074)	(0.076)	(0.068)	(0.076)	(0.075)	(0.075)	(0.075)
Political Experience (Z)	−0.008	0.021	0.046	0.057	−0.021	−0.031	−0.003
	(0.068)	(0.069)	(0.061)	(0.069)	(0.067)	(0.068)	(0.068)
Treatment X Z	0.073	0.064	−0.033	−0.047	0.033	0.096	0.102
	(0.095)	(0.096)	(0.088)	(0.096)	(0.095)	(0.096)	(0.096)
Constant	0.420***	0.476***	0.247***	0.500***	0.390***	0.463***	0.573***
	(0.055)	(0.055)	(0.048)	(0.055)	(0.054)	(0.055)	(0.055)
Observations	454	456	452	456	456	450	455

Note: *p<0.1; **p<0.05; ***p<0.01.Standard errors were calculated using the Huber-White (HC0) correction. The first five outcomes measure perceived urgency of action required on (1) extreme heat, (2) flooding, (3) rising sea levels, (4) deforestation, (5) air pollution. The final two columns measure support for (6) a carbon tax and (7) a deforestation ban.

B.4.4 Pro-sociality Index

Table A23: The Effect of Informational Treatment by Pro-sociality (First-order Beliefs)

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	−0.021	−0.282	−0.004	−0.140	−0.481	−0.225	0.366	−0.360
	(0.312)	(0.314)	(0.368)	(0.356)	(0.355)	(0.320)	(0.351)	(0.323)
Pro-sociality Index (Z)	0.230***	0.190**	0.199**	0.097	0.096	0.071	0.303***	0.045
	(0.075)	(0.075)	(0.094)	(0.088)	(0.093)	(0.077)	(0.088)	(0.078)
Treatment X Z	0.022	0.100	0.018	0.079	0.191	0.094	−0.105	0.148
	(0.099)	(0.100)	(0.121)	(0.117)	(0.117)	(0.106)	(0.114)	(0.107)
Constant	0.028	0.150	−0.166	0.007	0.041	0.0003	−0.388	3.092***
	(0.236)	(0.234)	(0.288)	(0.266)	(0.284)	(0.233)	(0.270)	(0.234)
Observations	457	457	457	457	457	457	457	457

Note: *p<0.1; **p<0.05; ***p<0.01. Standard errors were calculated using the Huber-White (HC0) correction. Outcomes capturing whether respondents thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

Table A24: The Effect of Informational Treatment by Pro-sociality (Second-order Beliefs)

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	−0.151	−0.279	−0.089	0.144	−0.260	−0.391	0.290	−0.018
	(0.328)	(0.322)	(0.370)	(0.330)	(0.349)	(0.328)	(0.369)	(0.376)
Pro-sociality Index (Z)	0.165**	0.227***	0.200**	0.196**	0.117	0.095	0.254***	0.195**
	(0.075)	(0.076)	(0.096)	(0.081)	(0.087)	(0.080)	(0.091)	(0.085)
Treatment X Z	0.059	0.097	0.054	−0.017	0.130	0.164	−0.081	0.035
	(0.105)	(0.102)	(0.122)	(0.110)	(0.116)	(0.110)	(0.120)	(0.124)
Constant	0.207	−0.003	−0.226	−0.375	−0.112	−0.103	−0.227	2.557***
	(0.235)	(0.238)	(0.291)	(0.241)	(0.264)	(0.242)	(0.281)	(0.260)
Observations	457	457	457	457	457	456	457	457

Note: *p<0.1; **p<0.05; ***p<0.01. Standard errors were calculated using the Huber-White (HC0) correction. Outcomes capturing whether respondents thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

Table A25: The Effect of Informational Treatment by Pro-sociality (Policy Outcomes)

	Does Issue Merit Policy Attention:					Support For Policy:	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Extreme Heat	Flooding	Sea Level	Deforestation	Pollution	Carbon Tax	Deforestation Ban
Treatment	−0.571	−0.395	−0.242	−0.315	−0.522	−0.217	−0.354
	(0.367)	(0.367)	(0.359)	(0.366)	(0.368)	(0.364)	(0.371)
Pro-sociality Index (Z)	0.027	0.115	0.009	0.144	0.095	0.183**	0.147
	(0.093)	(0.093)	(0.085)	(0.090)	(0.091)	(0.091)	(0.094)
Treatment X Z	0.180	0.137	0.096	0.087	0.191	0.065	0.121
	(0.121)	(0.120)	(0.118)	(0.119)	(0.121)	(0.119)	(0.121)
Constant	0.333	0.142	0.250	0.102	0.088	−0.110	0.126
	(0.283)	(0.283)	(0.258)	(0.275)	(0.278)	(0.277)	(0.286)
Observations	454	456	452	456	456	450	455

Note: *p<0.1; **p<0.05; ***p<0.01.Standard errors were calculated using the Huber-White (HC0) correction. The first five outcomes measure perceived urgency of action required on (1) extreme heat, (2) flooding, (3) rising sea levels, (4) deforestation, (5) air pollution. The final two columns measure support for (6) a carbon tax and (7) a deforestation ban.

B.4.5 Support for Democracy

Table A26: The Effect of Informational Treatment by Support for Democracy (First-order Beliefs)

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	−0.039	0.495	0.286	0.263	−0.253	0.573	0.160	0.375
	(0.332)	(0.327)	(0.432)	(0.388)	(0.410)	(0.360)	(0.422)	(0.384)
Democratic Support Index (Z)	0.290***	0.385***	0.239**	0.222***	0.128	0.184**	0.155*	0.192***
	(0.076)	(0.064)	(0.101)	(0.080)	(0.098)	(0.076)	(0.092)	(0.074)
Treatment X Z	0.035	−0.184	−0.091	−0.063	0.138	−0.200	−0.043	−0.111
	(0.124)	(0.124)	(0.168)	(0.153)	(0.160)	(0.141)	(0.164)	(0.150)
Constant	−0.020	−0.265	−0.178	−0.269	0.003	−0.258	0.133	2.736***
	(0.205)	(0.173)	(0.262)	(0.201)	(0.253)	(0.192)	(0.240)	(0.185)
Observations	457	457	457	457	457	457	457	457

Note: *p<0.1; **p<0.05; ***p<0.01. Standard errors were calculated using the Huber-White (HC0) correction. Outcomes capturing whether respondents thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

Table A27: The Effect of Informational Treatment by Support for Democracy (Second-order Beliefs)

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	0.662**	1.062***	0.323	0.602	0.143	0.745**	0.209	0.713*
	(0.333)	(0.340)	(0.432)	(0.376)	(0.423)	(0.364)	(0.428)	(0.413)
Democratic Support Index (Z)	0.238***	0.337***	0.160	0.192**	0.093	0.120	0.114	0.134
	(0.076)	(0.069)	(0.100)	(0.084)	(0.100)	(0.074)	(0.094)	(0.092)
Treatment X Z	−0.247*	−0.409***	−0.096	−0.199	−0.003	−0.250*	−0.064	−0.245
	(0.128)	(0.131)	(0.168)	(0.147)	(0.165)	(0.142)	(0.167)	(0.162)
Constant	0.096	−0.180	−0.031	−0.274	0.002	−0.122	0.250	2.805***
	(0.203)	(0.183)	(0.260)	(0.214)	(0.257)	(0.189)	(0.244)	(0.233)
Observations	457	457	457	457	457	456	457	457

Note: *p<0.1; **p<0.05; ***p<0.01. Standard errors were calculated using the Huber-White (HC0) correction. Outcomes capturing whether respondents thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

Table A28: The Effect of Informational Treatment by Support for Democracy (Policy Outcomes)

	Does Issue Merit Policy Attention:					Support For Policy:	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Extreme Heat	Flooding	Sea Level	Deforestation	Pollution	Carbon Tax	Deforestation Ban
Treatment	0.269	−0.552	−0.580	−0.032	0.229	−0.451	−0.269
	(0.505)	(0.471)	(0.433)	(0.463)	(0.475)	(0.471)	(0.452)
Democratic Support Index (Z)	0.194	0.034	−0.124	0.100	0.022	−0.064	0.048
	(0.144)	(0.125)	(0.111)	(0.121)	(0.126)	(0.122)	(0.118)
Treatment X Z	−0.114	0.224	0.246	−0.007	−0.068	0.168	0.109
	(0.196)	(0.183)	(0.168)	(0.179)	(0.184)	(0.183)	(0.175)
Constant	−0.084	0.402	0.597**	0.278	0.319	0.609*	0.447
	(0.374)	(0.323)	(0.289)	(0.315)	(0.325)	(0.315)	(0.308)
Observations	454	456	452	456	456	450	455

Note: *p<0.1; **p<0.05; ***p<0.01.Standard errors were calculated using the Huber-White (HC0) correction. The first five outcomes measure perceived urgency of action required on (1) extreme heat, (2) flooding, (3) rising sea levels, (4) deforestation, (5) air pollution. The final two columns measure support for (6) a carbon tax and (7) a deforestation ban.

B.5 Robustness Checks

Table A29: The Effect of Intervention on Politicians' First-Order Views (Inverse Propensity Weighted)

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	0.042	0.012	0.035	0.042	0.090*	0.053	0.087*	0.079*
	(0.042)	(0.042)	(0.047)	(0.047)	(0.046)	(0.041)	(0.045)	(0.042)
Constant	0.721***	0.727***	0.442***	0.536***	0.334***	0.221***	0.305***	3.232***
	(0.030)	(0.030)	(0.033)	(0.033)	(0.031)	(0.028)	(0.031)	(0.029)
Observations	457	457	457	457	457	457	457	457

Note: *p<0.1; **p<0.05; ***p<0.01. Coefficients from OLS regression with inverse propensity weights. Robust and unclustered standard errors. Outcomes capturing whether respondents thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

Table A30: The Effect of Intervention on Politicians' Second-Order Views (Inverse Propensity Weighted)

	Non-Environmental Issues:					Environmental Issues:		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Health	Education	Civ. Rights	Economy	Min. Rights	Clim. Change	Pollution	Env. Index
Treatment	0.036	0.013	0.072	0.043	0.131***	0.105***	0.082**	0.080*
	(0.043)	(0.044)	(0.047)	(0.047)	(0.043)	(0.040)	(0.041)	(0.046)
Constant	0.702***	0.683***	0.383***	0.546***	0.242***	0.184***	0.221***	3.148***
	(0.031)	(0.031)	(0.032)	(0.033)	(0.029)	(0.026)	(0.028)	(0.030)
Observations	457	457	457	457	457	456	457	457

Note: *p<0.1; **p<0.05; ***p<0.01. Coefficients from OLS regression with inverse propensity weights. Robust and unclustered standard errors. Outcomes capturing whether respondents thought voters thought the following issues were very important: (1) health, (2) education, (3) civil rights, (4) economy, (5) minority rights, (6) climate change, (7) pollution (8) environment (index).

Table A31: The Effect of Intervention on Policy Outcomes (Inverse Propensity Weighted)

	Does Issue Merit Policy Attention:					Support For Policy:	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Extreme Heat	Flooding	Rising Sea Levels	Deforestation	Air Pollution	Carbon Tax	Deforestation Ban
Treatment	−0.032	0.017	0.053	−0.048	0.054	−0.032	0.010
	(0.047)	(0.047)	(0.044)	(0.047)	(0.047)	(0.047)	(0.047)
Constant	0.426***	0.495***	0.278***	0.538***	0.380***	0.450***	0.577***
	(0.033)	(0.033)	(0.030)	(0.033)	(0.032)	(0.033)	(0.033)
Observations	454	456	452	456	456	450	455

Note: *p<0.1; **p<0.05; ***p<0.01. Coefficients from OLS regression with inverse propensity weights. Standard errors were calculated using the Huber-White (HC0) correction. The first five outcomes measure perceived urgency of action required on (1) extreme heat, (2) flooding, (3) rising sea levels, (4) deforestation, (5) air pollution. The final two columns measure support for (6) a carbon tax and (7) a deforestation ban.