

# Climate Crisis and Policy Inaction in Indonesia

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Indonesia faces environmental crisis







## But policy inaction persists

- National politicians prioritize resource-driven development
  - Raw nickel export ban promotes domestic mining
  - Forest concession moratoria not well enforced
- Local politicians exploit environmental authority under decentralization
  - Local revenues from logging permits and mining concessions
  - Clientelism undercuts frontline regulation

# What explains policy inaction on environmental issues?

- Is it preferences?
  - Voters may not value policy action
- Is it political frictions?
  - Voters value policy actions, but politicians may not deliver

# This paper

- ① Simple model of policy inaction
- ② Measurement of policy preferences
- ③ Informational experiment with politicians

Model

# Voters and politicians

- ① **Voters** make policy demands  $v$
- ② **Politicians** deliver policy action  $p$

$$u^V(v) = -(p(v) - v_0)^2 - cv^2$$
$$u^P(p) = -(p - v)^2 - dp^2$$

# Frictions

- ① For voters, cost  $c$  of policy demands
  - Opportunity cost of lobbying
  - Difficulty collecting information and assigning blame
- ② For politicians, cost  $d$  of policy action
  - Need to spend political capital
  - And resist lobbyists for status quo

## Inaction in equilibrium

$$v^* = \left( \frac{1+d}{1+c(1+d)^2} \right) v_0 < v_0$$

$$p^* = \left( \frac{1}{1+c(1+d)^2} \right) v_0 < v_0$$

- Voters underdemand, and politicians underdeliver
  - $v_0$ : baseline demand could be low
  - $c$ : costly for voters to demand
  - $d$ : costly for politicians to deliver + voters anticipate that politicians underrespond

# Empirical questions

- ① What are voter preferences?
  - First-order beliefs given by  $v_0$
- ② What are politician perceptions of voter preferences?
  - Second-order beliefs affected by  $c$
- ③ Can we align perceptions and preferences?
  - We experimentally reduce  $c$
  - But policy action still faces  $d$

# Measurement

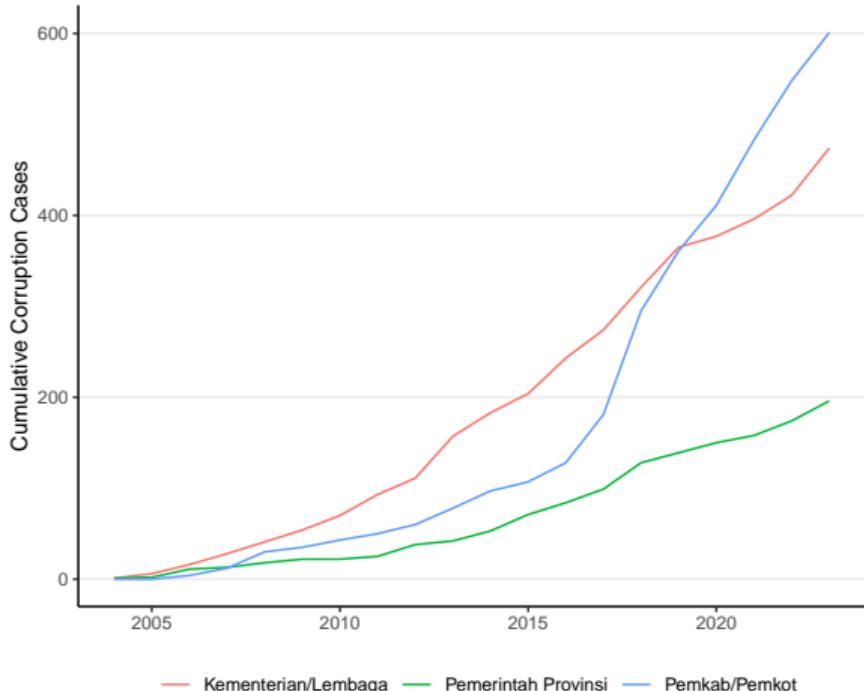
## Policy preferences

- ① **Voter survey** in Dec 2023 (N = 5,236)
- ② **Candidate surveys** in Nov 2023, Jan 2024, and Apr 2024 (N = 800)
- Leading up to Indonesian general election in Feb 2024

# Clientelism

**Local politics:** decentralization laws  
No. 22/1999 and No. 32/2004  
devolved environmental management  
to districts

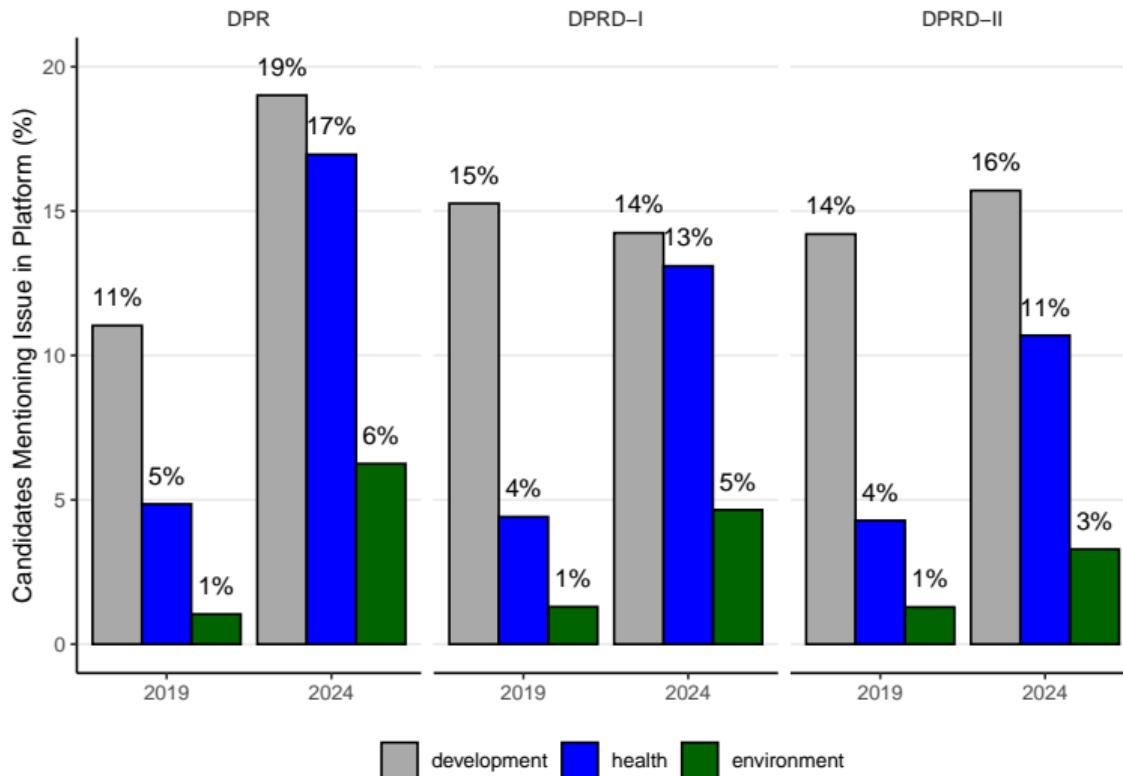
**Challenge:** local clientelism in the  
form of corruption and elite capture



# Elections

- **Voters** receive cash in advance of elections
- **Parties** expect candidates to pay for ballot positions
- **Politicians** finance these outlays with
  - Personal finance → incentives for graft
  - Outside donors → influence peddling
  - Political cycles as in Balboni et al. (2021)

# Environmental policy in practice



## Voter survey

- Surveys on Indonesians' Knowledge of and Attitudes on Politics (SIKAP)
- Weekly surveys of 1,650 Indonesian voters
  - November 2023 to January 2025
  - Online surveys conducted by Cint/Lucid
  - Quota sampling ensuring representation on region, age, and gender
- We measure **voters' first- and second-order beliefs**

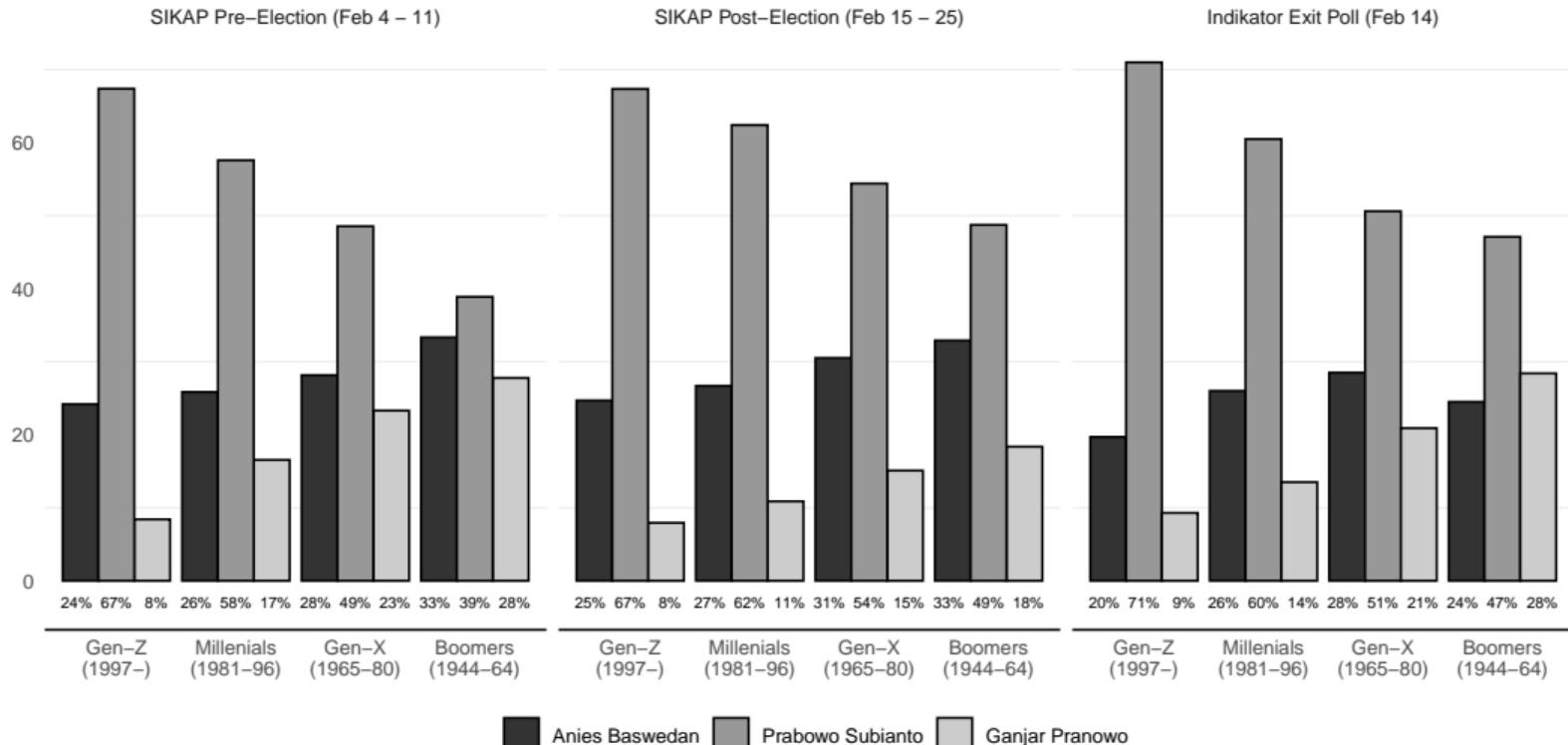
## Survey questions

**[First-order beliefs]** Below are several issues or problems that Indonesia is currently facing. How important or unimportant do you think the following issues are?

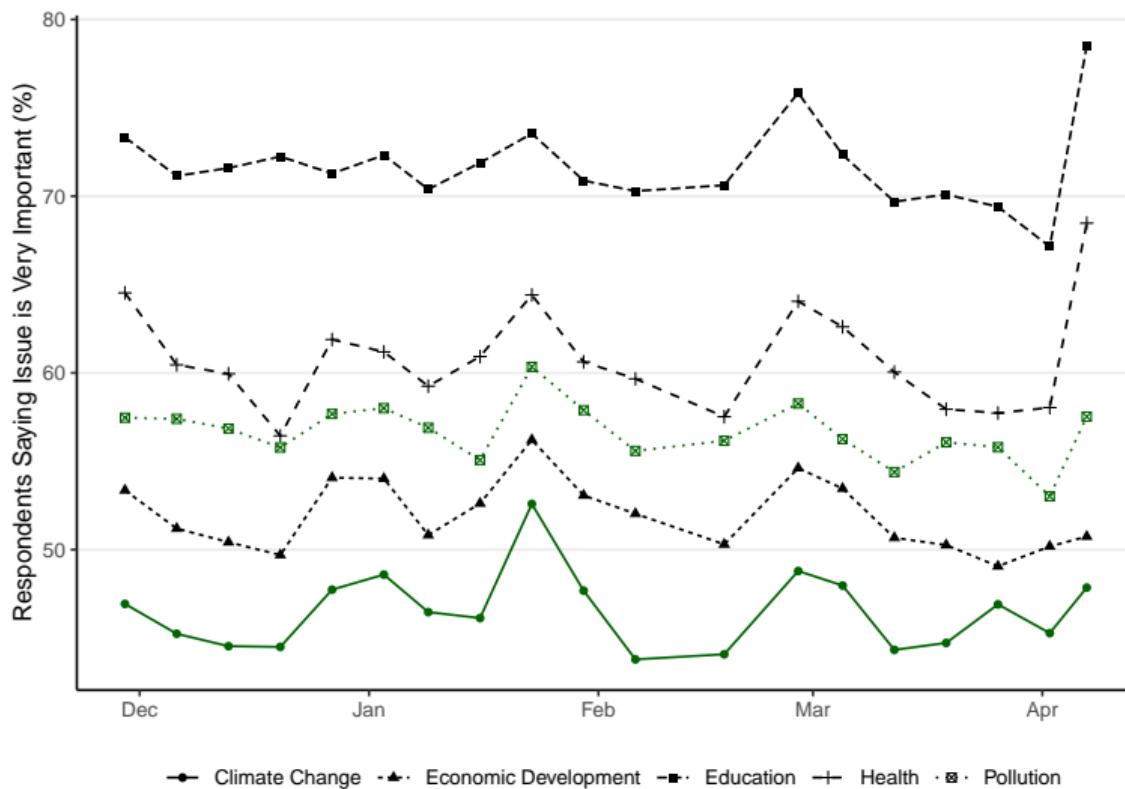
**[Second-order beliefs]** Below are several issues or problems that Indonesia is currently facing. As far as you know, how important or unimportant do politicians view the following issues?

Issues: (1) health, (2) education, (3) civil rights, (4) **pollution**, (5) minority rights, (6) **climate change**, and (7) the economy

# SIKAP measurement aligns well with election outcomes

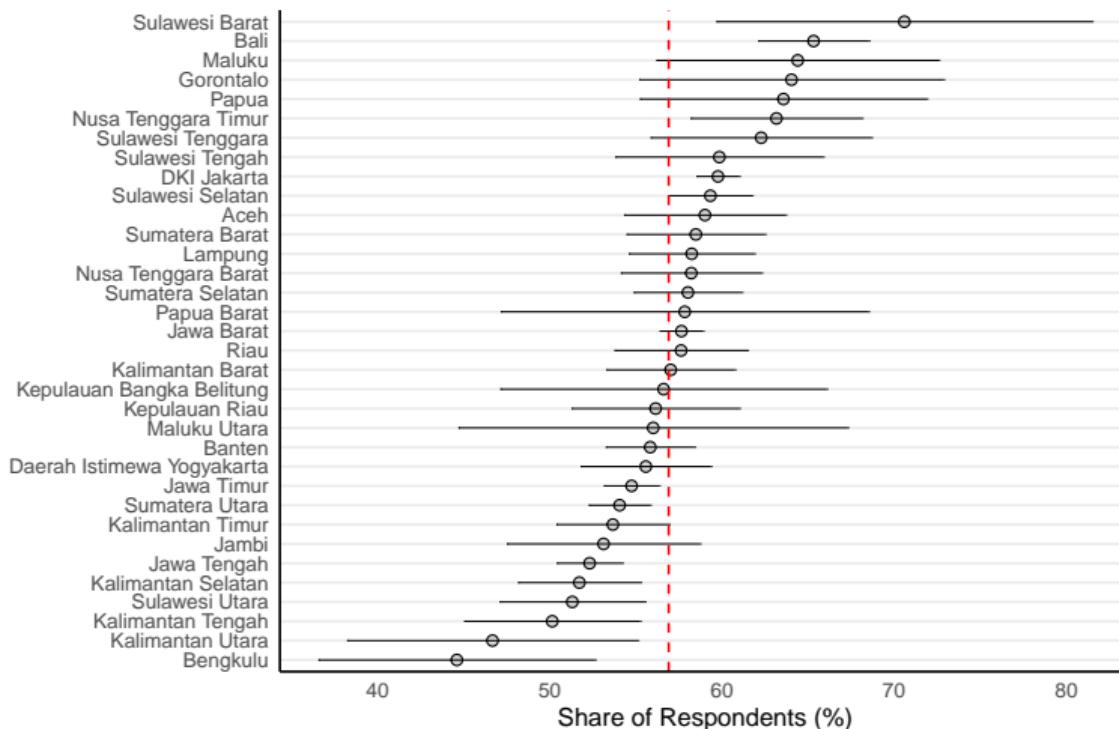


## And can track issues over time



# Voters demand environmental policy

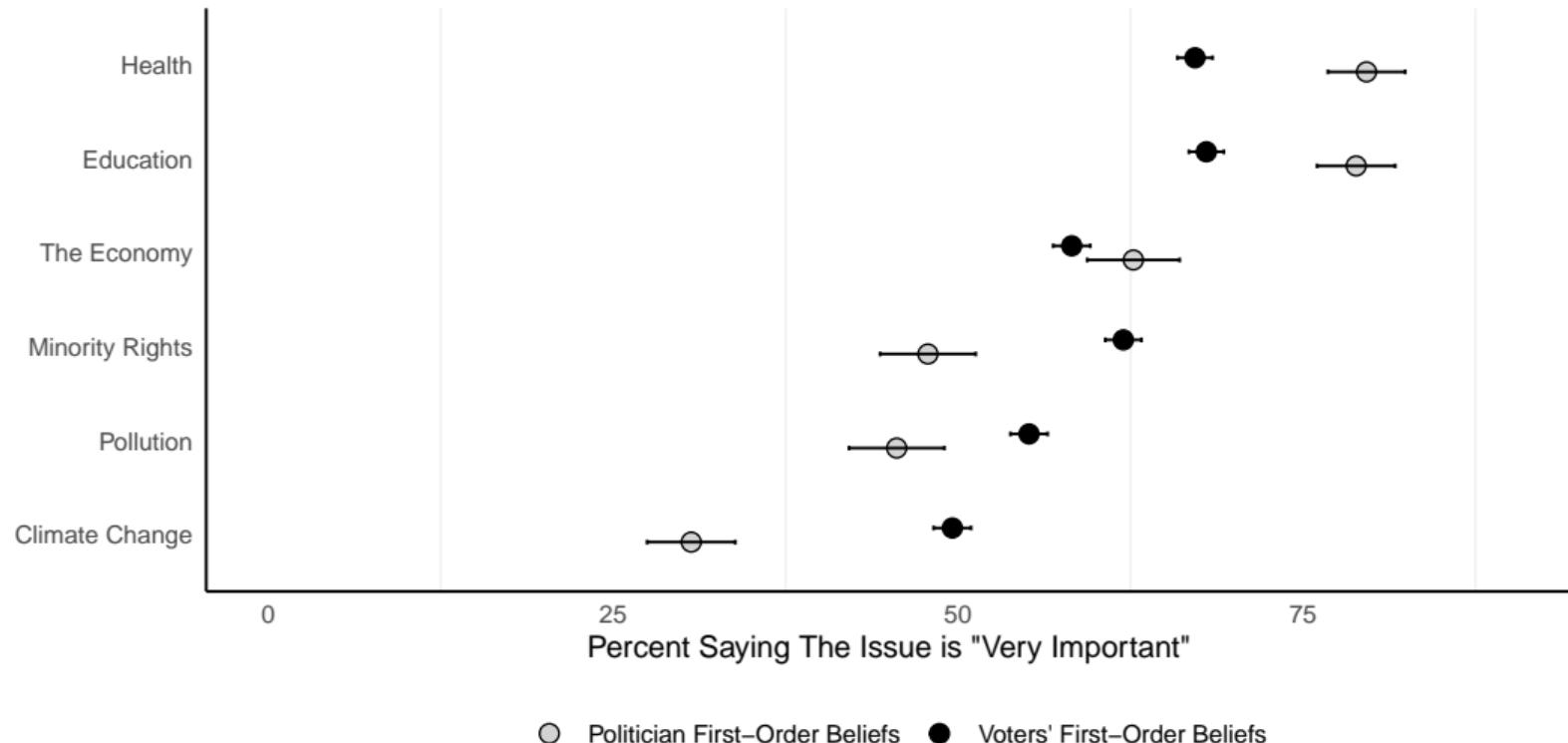
Share of Indonesian voters who say pollution is 'very important' is high although there is significant regional variation



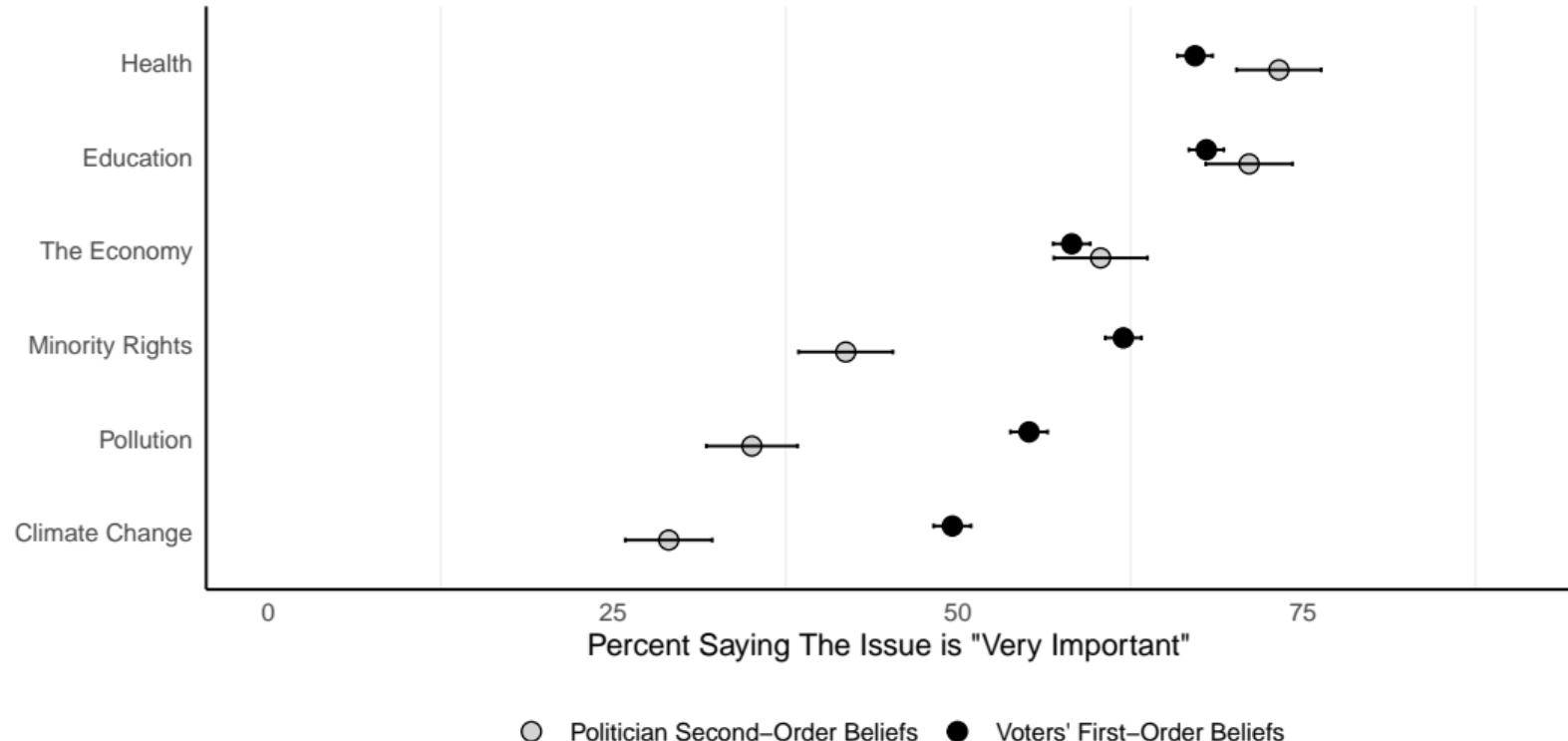
## Local legislative candidate survey

- Three panel surveys of 800 candidates for DPRD-II
  - November 2023, January 2024, and April 2024
  - Broader project on real-time political responses to shifting electoral landscapes
- Randomly sampled 80 districts, then 10 candidates in each
  - Candidates from top three list positions
  - And from top ten parties as given by polling on October 1, 2023
  - Initial contact rate was 80%; re-contact rate was 92%
- We measure **politicians' first- and second-order beliefs**

# Voter preferences vs. politician preferences



# Voter preferences vs. politician perceptions

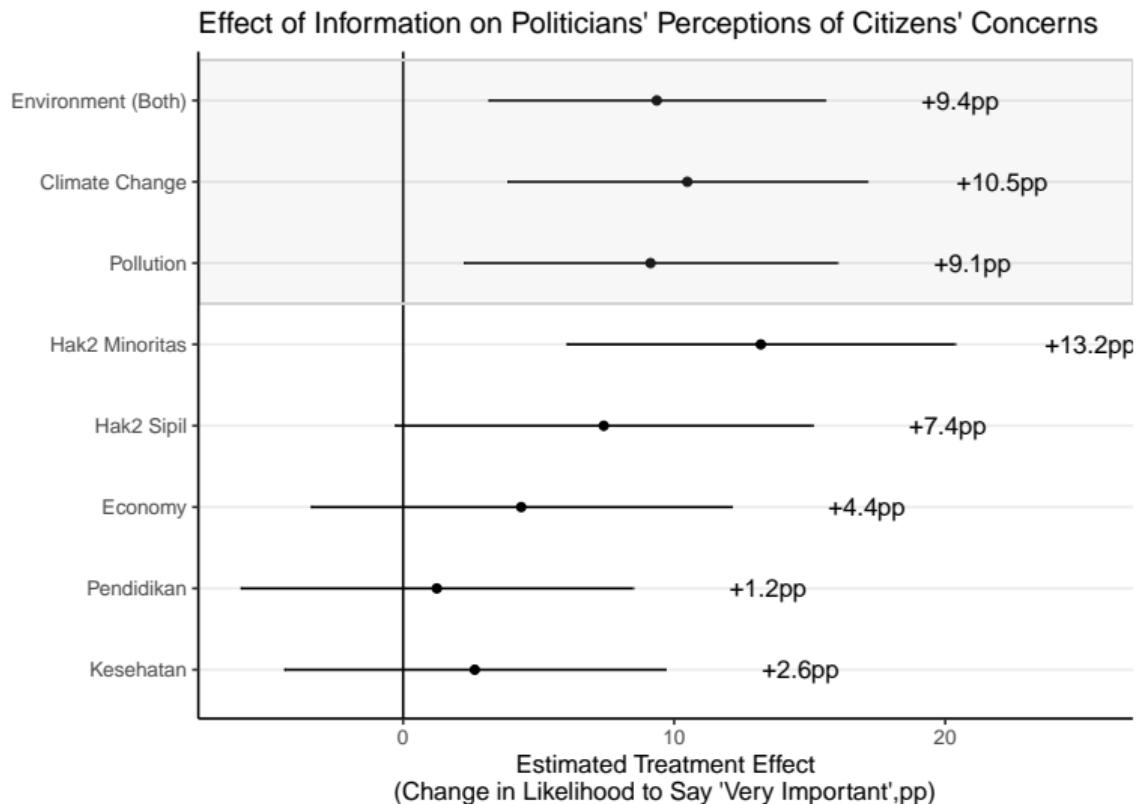


# Experiment

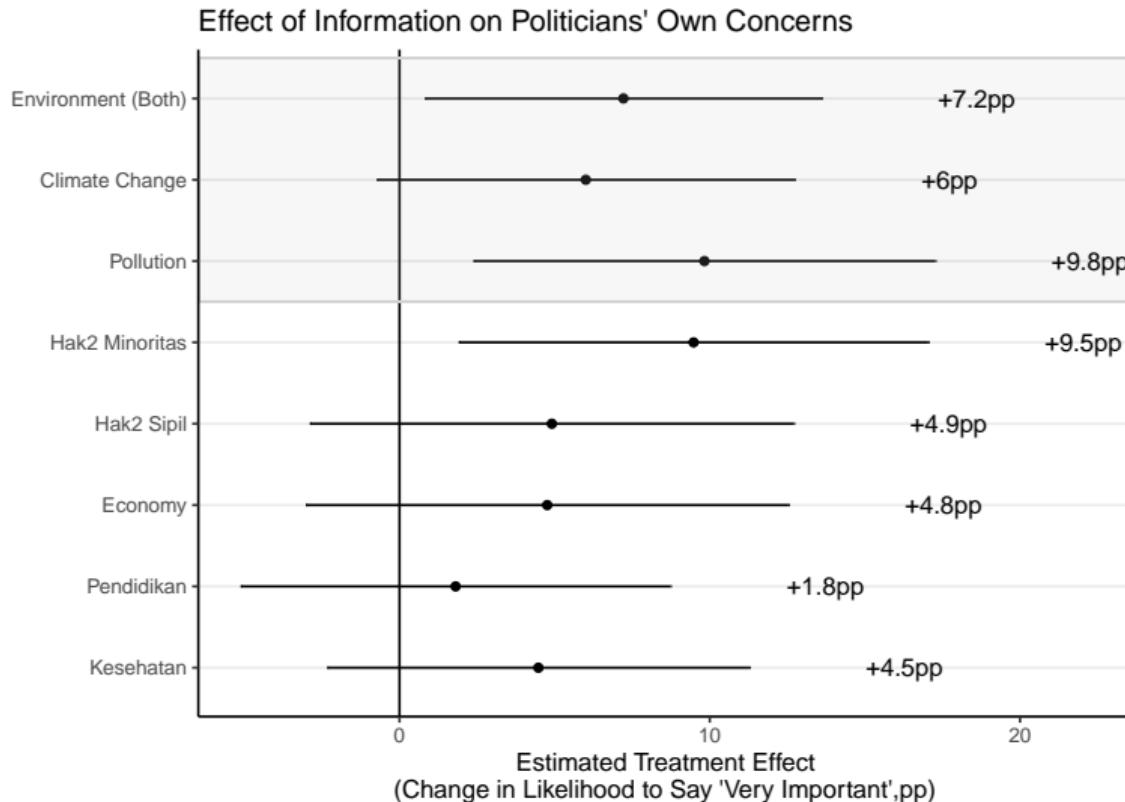
## Informational intervention

- We randomly communicate voter preferences directly to politicians
  - In wave two of the candidate survey
  - Voter survey report on voter preferences and politician perceptions
  - On all issues, not just environmental issues
- We measure impacts on reported
  - Urgency of policy action: extreme heat, flooding, rising sea level, deforestation, pollution
  - Support for specific policies: carbon tax, deforestation ban

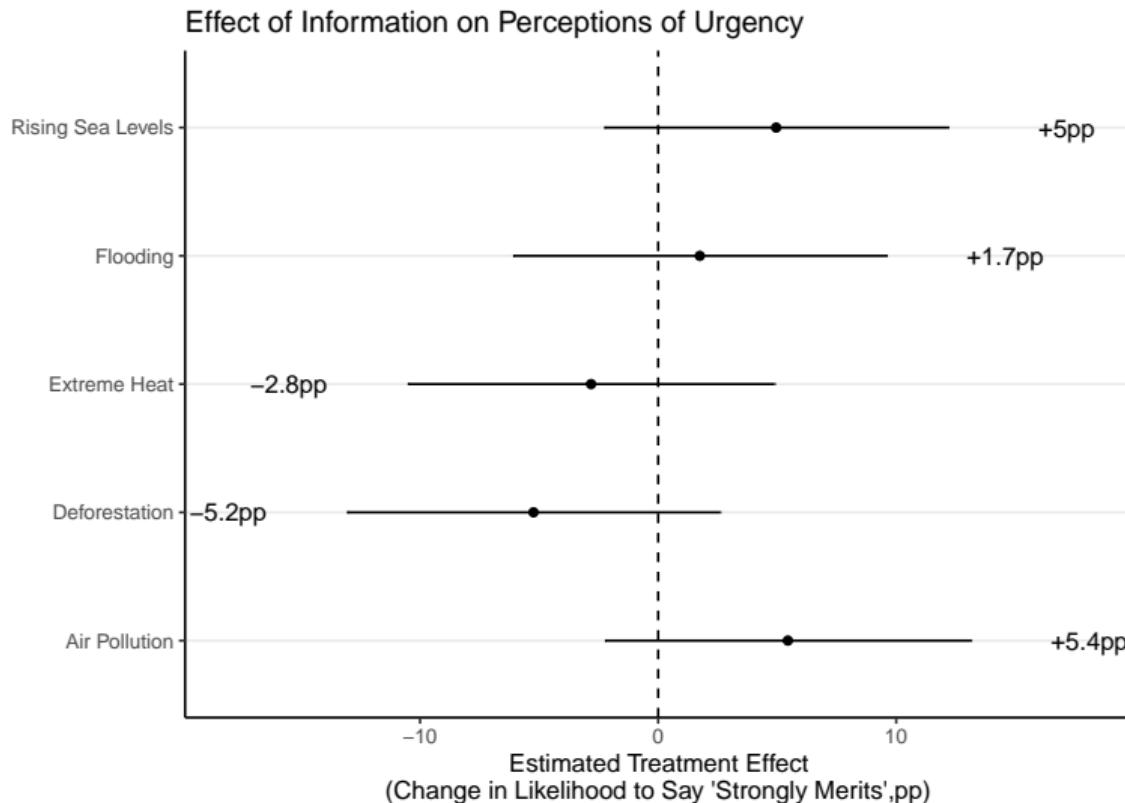
# Politicians learn from new information



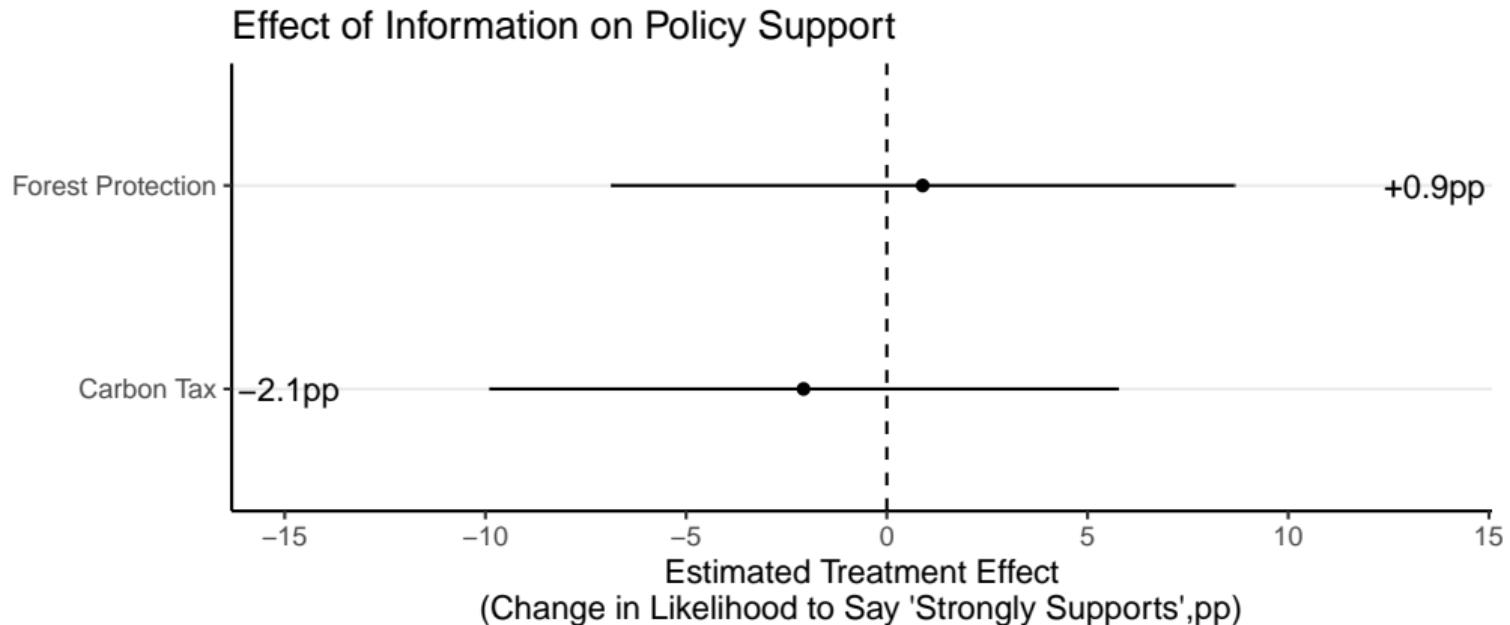
# Even updating their own preferences



## But not perceived urgency of action



## Or willingness to support costly action

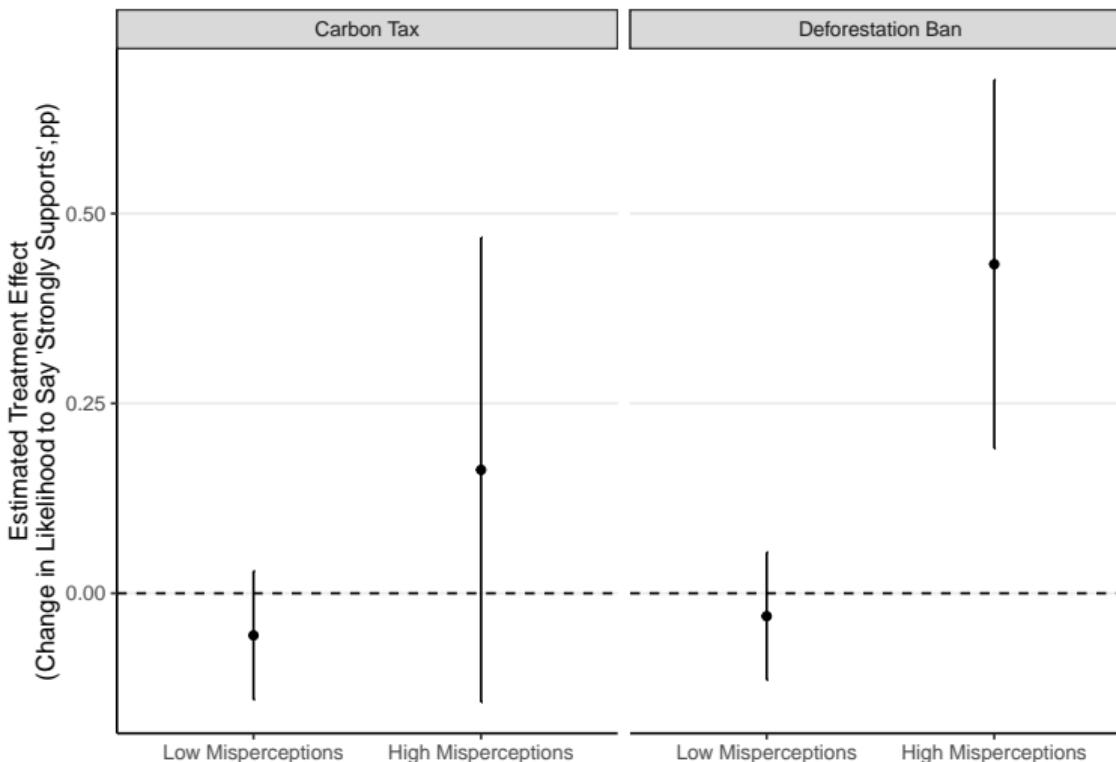


## Heterogeneity by baseline misperception

- Some politicians have accurate perceptions
  - No scope for information to increase support
  - Attenuates total effect
- We construct a measure of baseline misperception
  - Politician says voters believe pollution is somewhat/very unimportant
  - Politician says voters believe pollution is somewhat/very important
  - “Important” is accurate (95% of voters)

# Larger effects with high baseline misperceptions

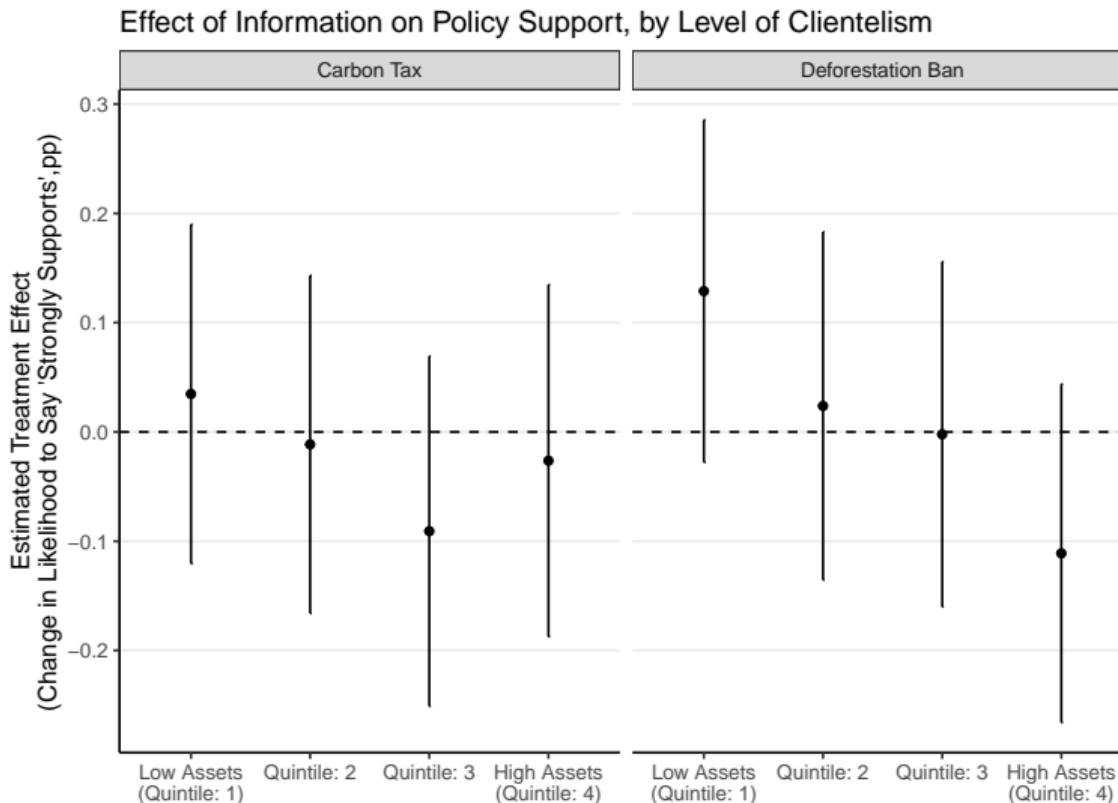
Effect of Information on Policy Support, by Baseline Misperceptions



## Heterogeneity by costs of policy action

- Some politicians have high costs of policy action
  - Local elites benefit from environmental exploitation
  - Local elites may capture politicians through campaign finance or bribes
  - Prevents voter preferences from encouraging action
- We construct a measure of baseline clientelism by district
  - KPK e-LHKPN system requires public officials to report assets each year
  - Standardized index of assets for top 20 officials in each district
  - High assets → high clientelism → high costs of policy action

## Somewhat larger effects with lower baseline costs



# Conclusion

## Summary

- Voters care about environmental issues more than politicians
- Politicians underestimate voter concern
- Informing politicians leads them to updated perceptions and preferences
- But not to support for concrete policies