

Seeing Green: How Firms Respond to the Exposure and Opportunities of Climate Change Policy through Lobbying

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Abstract

How does climate change policy exposure influence firms' lobbying behavior in a polarized political environment? As climate policy pressure increases across regulatory and legislative venues, firms must respond to accompanying risks and opportunities. Firms lobby Congress and federal agencies to minimize costs and maximize opportunities, but we lack sufficient theory explaining how firms behave differently when seeking opportunities versus avoiding costs. I test established models of firm venue selection using quarterly earnings call data from over 2000 publicly traded firms (2008-2020) that indicate exposure to climate change opportunities, regulation, and physical risk. I analyze how firm exposure influences venue selection and lobbying strategy, and whether political partisanship affects these decisions differently for opportunity-seeking versus cost-mitigation. I find that exposure to regulation, opportunity, and physical climate realities increases lobbying propensity across venues, and that Republican control over the Senate and presidency increases the likelihood that firms facing regulatory exposure lobby federal bureaucracies rather than Congress.

Motivation: The Corporate Climate Policy Battleground

Climate change poses an existential challenge requiring unprecedented economic transformation. Meeting Paris Agreement targets demands stranding 80% of coal reserves and over \$1 trillion in oil and gas assets.

Corporate Political Power Meets Climate Crisis:

- ▶ Firms spend **10× more on lobbying** than campaign contributions (\$3.7B annually)
- ▶ Only **10% of firms lobby**, but these are the largest, most influential corporations
- ▶ Climate policy affects **every economic sector** - from utilities to agriculture to finance

The Stakes Are Enormous:

- ▶ **Regulatory exposure:** Firms face potential asset stranding worth trillions
- ▶ **Market opportunities:** Clean energy investment needs \$4 trillion annually by 2030
- ▶ **Physical risks:** Climate damage costs \$23 trillion by 2100 without action

Research Gap: We know fossil fuel companies resist climate policy, but how do *all* firms navigate the risks and opportunities of the energy transition through strategic political engagement?

Data & Methods

Climate Exposure Data:

- ▶ Quarterly earnings calls (2008-2020) from 2000+ publicly traded firms
- ▶ Keyword discovery algorithm identifies climate bigrams in real-time
- ▶ Three exposure types: Regulatory, Physical, Opportunity

Lobbying Data:

- ▶ LobbyView dataset from Lobbying Disclosure Act reports
- ▶ Climate issue areas: Clean Air/Water, Energy, Environment, Natural Resources
- ▶ Novel venue allocation: expenditures distributed across government entities

Empirical Strategy:

- ▶ Logistic regression for lobbying propensity (binary participation)
- ▶ Zero-inflated negative binomial for counts (addresses 67-78% zeros)
- ▶ Quantile regression for expenditure heterogeneity (80th percentile effects)
- ▶ Interaction models test partisan conditioning of venue selection

Exposure leads to Higher Likelihood of Lobbying Across the Board

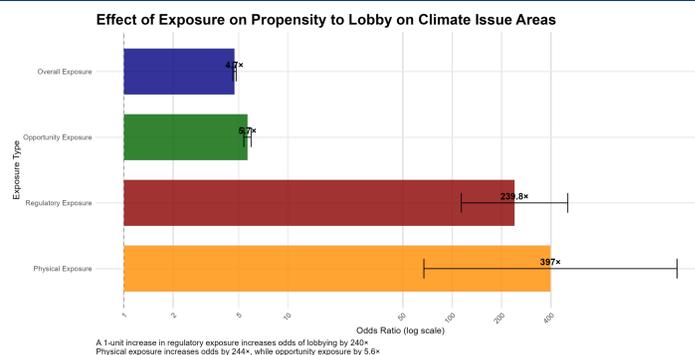


Figure: Climate exposure dramatically increases lobbying propensity, with regulatory and physical exposure showing the largest effects

Key Results

Main Effects

Climate exposure dramatically increases lobbying propensity:

- Regulatory exposure: **240×** higher odds (***)
- Physical exposure: **244×** higher odds (***)
- Opportunity exposure: **5.6×** higher odds (***)

Venue Selection

Strategic targeting varies by exposure type:

- Regulatory/physical → **Agency lobbying**
- Opportunity → **Both venues**
- Strongest effects at **80th percentile**

Partisan Effects

Republican control modifies venue choice:

- Senate control: **+60%** agency (regulatory firms)
- Presidential control: **-36%** agency (regulatory firms)
- Opportunity firms: **More** agency under GOP Senate

Empirical Results

Quantile Regression Analysis of Climate Exposure Effects

Comparing Effects on Lobbying Congress and Federal Agencies

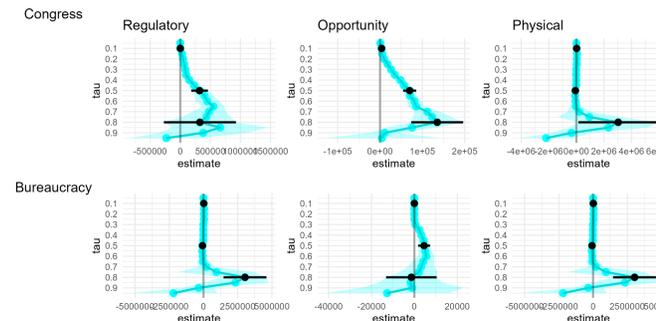


Figure: Effects of climate exposure on lobbying expenditures across quantiles

Republican Control Moderates Climate Lobbying

Key Interaction Effects

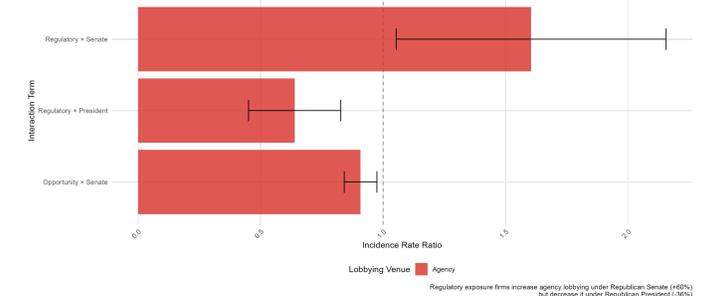


Figure: Republican control moderates agency lobbying

Conclusion & Policy Implications

Key Findings:

- ▶ Firms systematically allocate lobbying resources based on climate exposure type and political environment
- ▶ Evidence supports both information subsidy and strategic accommodation theories
- ▶ Partisan polarization increasingly mediates corporate political engagement

Policy Implications:

- ▶ Climate policy design must account for diverse corporate interests
- ▶ Agency rulemaking becomes critical battleground in polarized environment
- ▶ Risk of regulatory capture when firms target aligned agencies

Democratic Accountability at Risk:

- ▶ Polarized politics creates **venue shopping** opportunities for corporate influence
- ▶ Agency rulemaking occurs in the **"fog of enactment"** with limited public oversight
- ▶ Business interests systematically **outspend** environmental groups 10:1 in lobbying