The Climate Advocacy Gap

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Abstract

Advocacy groups are central to advancing climate mitigation policy, but their presence is unevenly distributed across jurisdictions. We curated a new dataset on pro-climate groups—both environmental groups and clean energy interests—in US states, using lobbying data and a machine learning model. We find a threefold climate advocacy gap. First, the representation of pro-climate groups is low among all energy-related interest groups. In the large majority of US states, less than 20 percent of energy-related interest groups are pro-climate groups. Second, the representation of pro-climate groups is lower in Republican-leaning than in Democratic-leaning states. A few Republican states are outliers: clean energy interests—as opposed to environmental groups—are well-represented in those states. Third, the representation of pro-climate groups is lower in states with high total carbon emissions than in states with low carbon emissions. Overall, the distribution of climate advocacy thus follows a logic of political opportunity. While this is likely rational in the short to medium-term, it raises questions about continued polarization in climate mobilization across US states. Our findings have implications for climate advocacy strategy in emission-intensive, conservative climate laggards. Investment in clean energy manufacturing and deployment in these states offer the most feasible path to strengthening climate advocacy in times of political polarization, as the path of some Republican-leaning outliers shows. This would complement a logic of political opportunity with a logic of economic opportunity in the distribution of climate advocacy.

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1. Introduction

Climate change is a problem of global scope. Despite this, in many countries, subnational actors such as state governments have led the way in adopting policies aimed at reducing greenhouse gas emissions, in particular in the United States (Carlson 2009, Kuramochi, Roelfsema et al. 2020). State policies, in addition to directly driving emissions reductions (Peng, Iyer et al. 2021), can increase momentum for national-level policy—for instance, by increasing the political power of renewable energy interests (Trachtman 2019). Yet, even as some subnational governments have become climate policy leaders, others have stagnated or retrenched (Stokes 2020, Trachtman 2020a). A key factor for climate leadership and emissions reductions is the presence and power of climate advocates (Hadden 2015, Fraser and Temocin 2021) to take on the continuing political clout of fossil fuel interests (Ciplet, Roberts et al. 2015, Brulle 2018, Brulle, Hall et al. 2021, Culhane, Hall et al. 2021).

Given the importance of advocacy for climate policy development, we ask how climate mitigation advocacy is distributed across US states, and why climate advocates are present in some places, but not others. Specifically, we examine whether pro-climate groups—both environmental groups and clean energy interests— go where the politics are most opportune or the emissions are greatest.

While we know about the distribution of public opinion across US states (Howe, Mildenberger et al. 2015), existing work has not explored the distribution of climate advocacy across states. We present data on pro-climate groups lobbying state governments from the year 2017, newly curated using a machine learning model. 2017 was during a period when Republican control of federal government led to a renewed focus on achieving policy gains at the state level. We focus on organized interests that lobby policymakers on climate change, not on climate activism, another important aspect of climate advocacy (Fisher and Nasrin 2021). We find a threefold climate advocacy gap: the representation of pro-climate groups is low (1) as a proportion of energy-related interest groups, (2) in Republican-leaning states, and (3) in states with high total carbon emissions.

2. Methods

We curated our data from state government lobbying registrations collected by the National Institute on Money in State Politics (NIMSP) for the year 2017. The most influential interest groups in state politics are "repeat-players" that lobby each year, and thus are likely to be represented in any single year. We focus on pro-climate interests here since groups opposed to climate policies are more difficult to identify in a systematic way. They are dispersed across a wide range of industries and interest groups, and their anti-climate preference cannot be reliably inferred from the type of organization.

NIMSP, in most cases, does not provide details about the groups lobbying. NIMSP staffers internally coded the industry of interest groups for a portion of the sample—22 percent of the approximately 54,187 organizations that recorded a lobbying registration. NIMSP did not have a systematic process determining which records included industry labels. By matching interest group

names with federal lobbying data from the Center for Responsive Politics (CRP), we were able to increase the percentage of records with industry labels to 26 percent. These data—and, more specifically, the words in interest groups' names—served as the input to a machine learning model. We split our sample into training (80 percent) and test (20 percent) groups and used the *glmnet* package in R to fit a logistic regression model with an L1 penalty and 4-fold cross-validation on the training data. The outcome was a binary indicator for whether a group was classified by NIMSP or CRP as "pro-environmental" or "alternative energy". The AUC in the test data was .83.

The model identified 1045 groups and assigned probabilities for each being "pro-environmental" or "alternative energy" based on the words in the group's name. We then assigned research assistants to verify whether these groups were indeed pro-climate groups, and to determine some additional details. Ultimately, we identified 396 pro-climate groups—168 environmental groups and 228 clean energy interests—lobbying in the states in 2017, with a total of 5,690 lobbying registrations. We use lobbying records versus spending because spending data is only available for a subset of states. Records and spending are highly correlated (ρ=.71). To estimate overall lobbying from energy-related interests, we use data recently curated by Holyoke recording the interest groups lobbying in the sector: "energy and natural resources" (Holyoke 2019).

3. Results

First, across the majority of states, pro-climate groups represent a minority of energy-related interest groups (Fig.1a). In most states, between zero and 10 percent of energy-related interest groups are environmental groups lobbying on climate mitigation. The share of clean energy interests among energy-related groups lies on average between five and 15 percent across US states. While prior work has shown that the balance of power between pro-climate and potential anti-climate interests remains heavily tilted toward the latter at the federal level (Brulle 2018), we demonstrate substantial imbalance also at the state level. Outliers include climate leaders such as Massachusetts, where the share of pro-climate groups among all energy interest groups is over half.

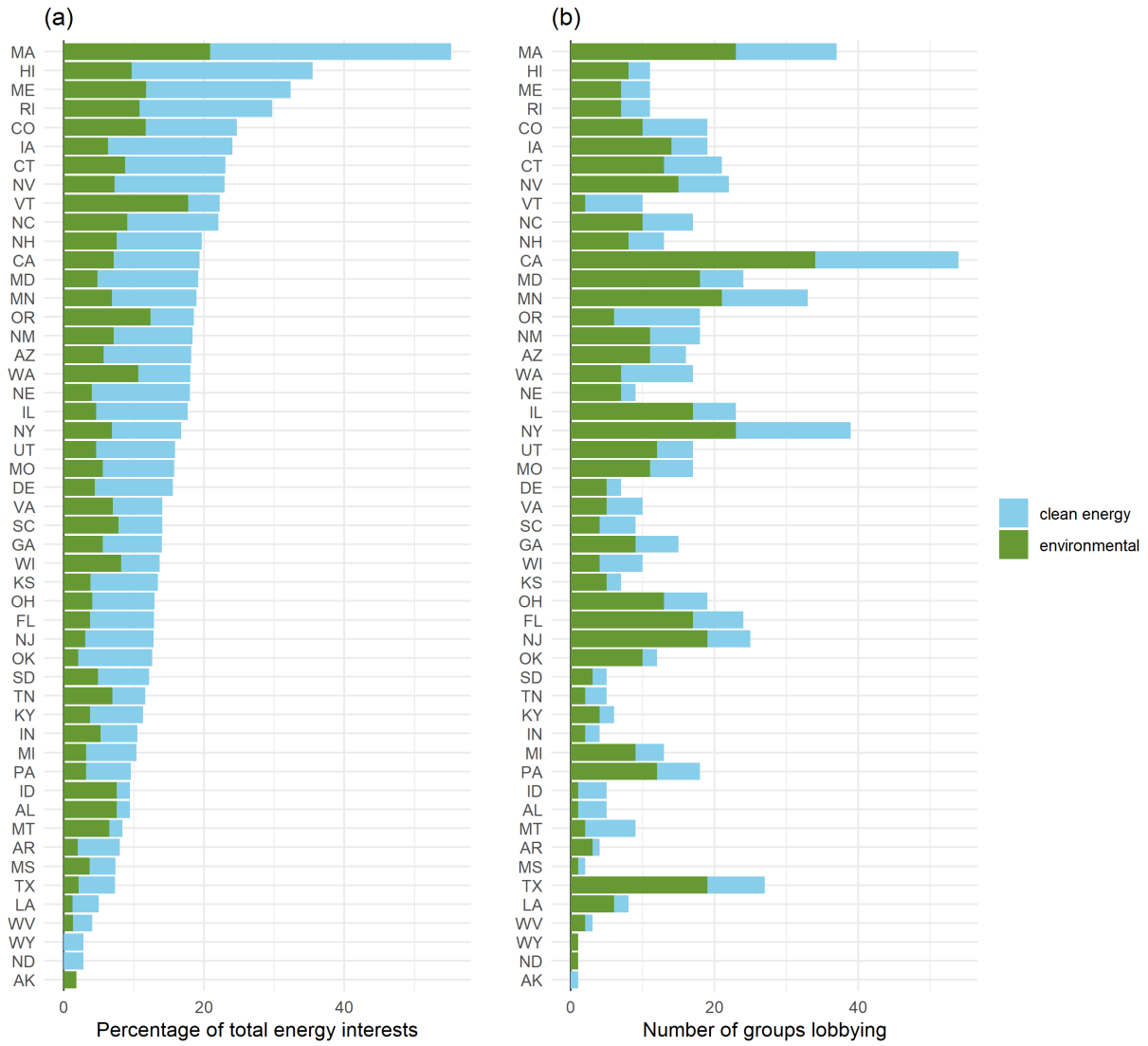

Figure 1 Number of environmental and clean energy groups that lobbied state governments, 2017. (a) presents pro-climate interests as percentage of total number of energy interests lobbying, and **(b)** presents the number of pro-climate interests lobbying.

Second, our data show a very uneven distribution of pro-climate group lobbying across US states and a strong polarization of their distribution along partisan lines. States leaning Democratic—the states that tend to adopt stronger climate policies (Trachtman 2020a)—attract many more pro-climate groups than states leaning Republican. At the extreme end, California (D), New York (D), Massachusetts (D), and Minnesota (D) attracted over 30 pro-climate groups—compared to less than 5 in Indiana (R), West Virginia (R), Mississippi (R), Wyoming (R), North Dakota (R), and Alaska (R) (Fig.1b). Democratic-leaning states also, as demonstrated by Fig. 2, feature greater lobbying from pro-climate groups as a percentage of interests in the energy sector. Pro-climate advocacy across US states thus follows a logic of political opportunity: advocates go where voters and governments in power are more favorable to climate policy.

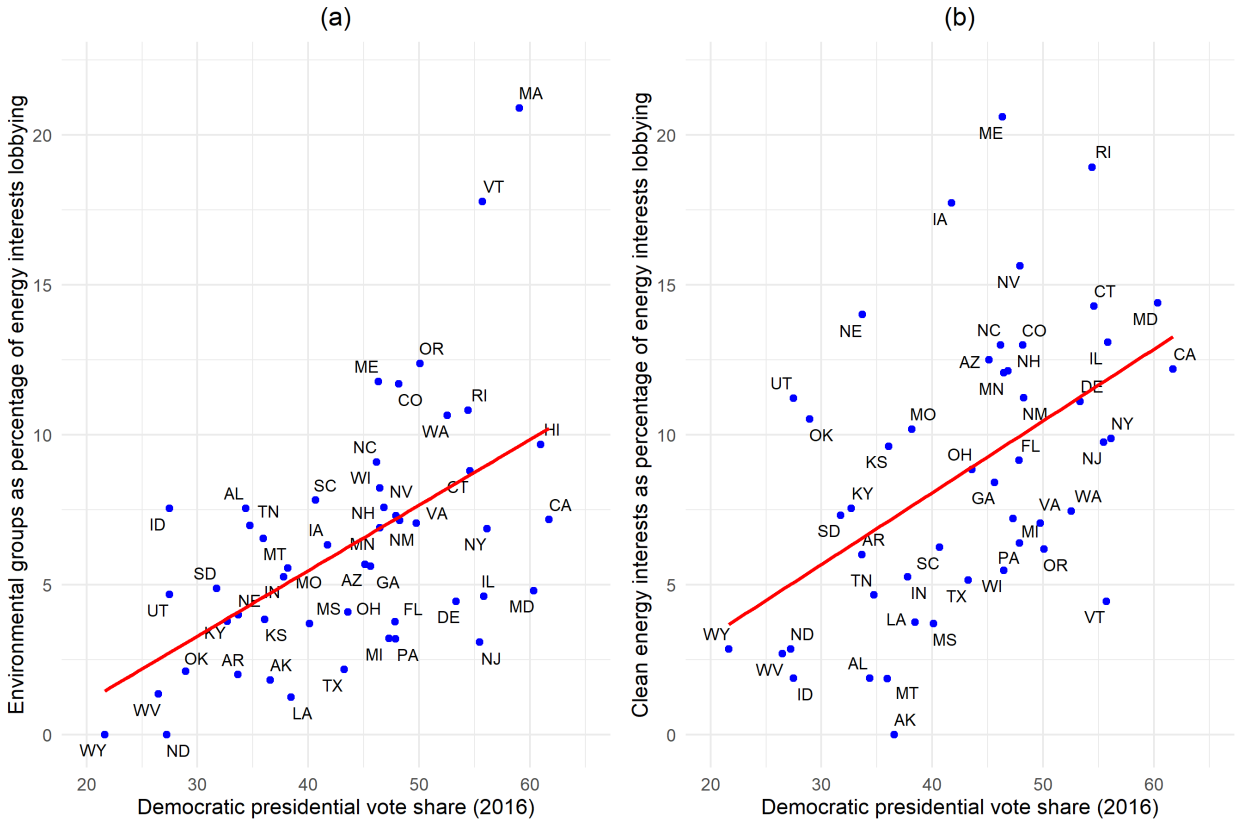

Figure 2 Pro-climate interest group lobbying and political lean. (a) presents climate advocacy lobbying as a percentage of energy interests lobbying, and **(b)** presents clean energy interests lobbying as a percentage of energy interests lobbying. Outlier MA is excluded from **(b)**.

We identify some important deviations from this overall pattern: Republican-leaning states with relatively high shares of clean energy interests (Fig. 2b). States like Iowa, Nebraska, Kansas, Oklahoma, and Utah—all states rich in renewable energy resources—have greater representation of clean energy interests than their politics would suggest. Here, the economic opportunity of renewable energy development creates and attracts clean energy interests, to some extent narrowing the pro-climate advocacy gap in Republican-leaning states.

Third, our data demonstrate lower levels of pro-climate interest group presence—particularly from environmental groups—in states with greater levels of emissions. In theory, environmental groups aiming to reduce overall emissions might focus lobbying efforts on shifting policy in states with greater emissions to reduce. However, as demonstrated by Fig. 3, we find that the representation of environmental interests is *negatively* associated with total state-level emissions (and also per capita emissions). By contrast, the representation of clean energy interests—driven to a significant degree by renewable energy resources—is similar across high-emissions and low-emissions states.

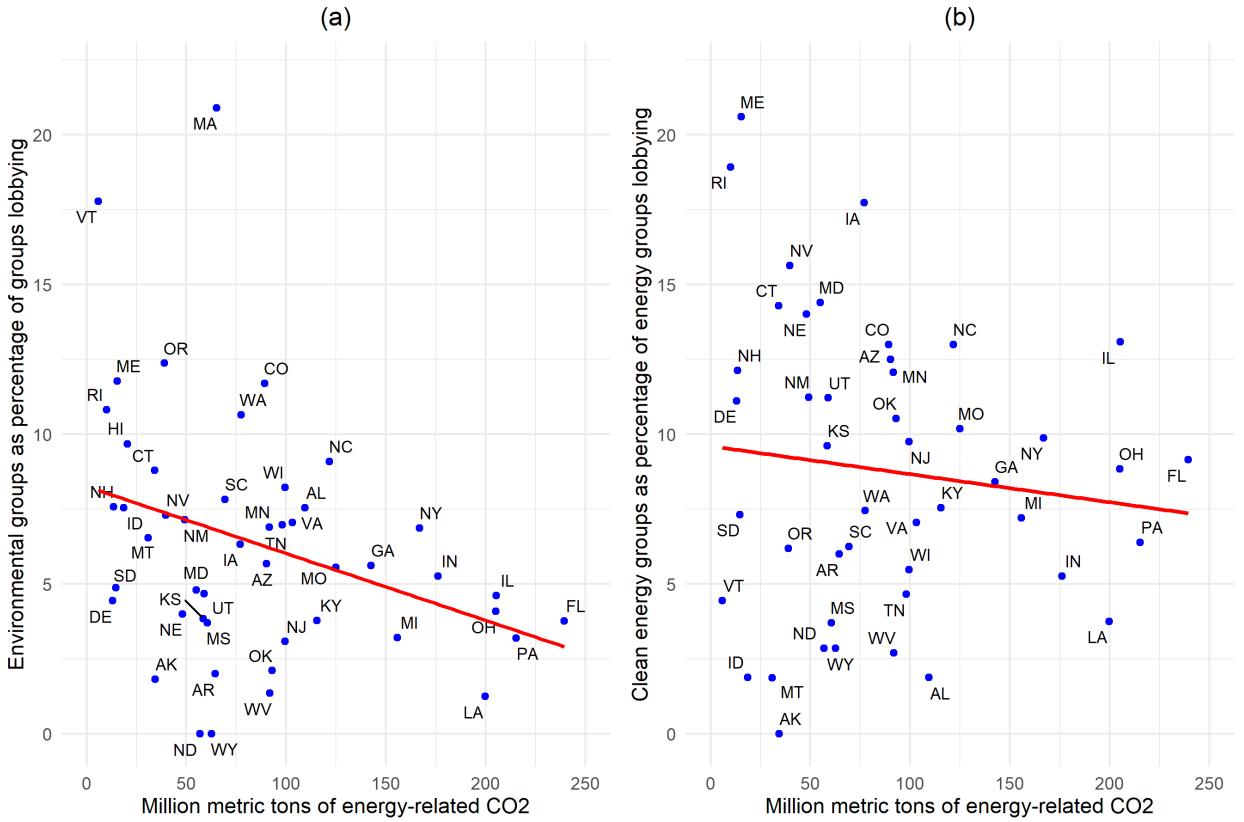

Figure 3 Pro-climate interest group lobbying and carbon emissions. (a) presents climate advocacy lobbying as a percentage of energy interests lobbying, and **(b)** presents clean energy interests lobbying as a percentage of energy interests lobbying. Outliers CA and TX are excluded, and outlier MA is excluded from **(b)**.

4. Discussion

Our finding that climate advocacy in the US follows a logic of political opportunity—rather than a logic of emissions—raises important questions for political strategy. While the logic of political opportunity seems rational in a short to medium term, it is unclear if this is a sufficient long-term advocacy strategy for deep decarbonization of the US. Per capita emissions are generally higher in Republican-leaning areas. In addition, in the absence of climate advocacy in Republican states, policymaker attitudes may further polarize. This would present continued challenges to future state and federal climate policy.

This raises the question of whether environmental groups might focus more resources on establishing a greater presence in Republican-leaning states, even if their engagement does not produce policy victories in the short term. The promise of this strategy, though, is tempered by the limited influence that climate advocacy by environmental groups seems to have in Republican-leaning states, given deep-seated ideological resistance to climate science and policy (Egan and Mullin 2017, Hazlett and Mildenberger 2020).

The growth of clean energy interests in renewable-resource rich states represents an alternative avenue toward strengthening climate advocacy in Republican-leaning areas and

developing a more even distribution of climate advocacy across US states. Indeed, clean energy opportunities have at times mobilized both voters and interest groups in Republican-leaning states (Stokes 2020). This comes, however, with the potential caveat that clean energy interests are special climate advocates. They often mobilize for technology-specific support policies, but their mobilization for overarching climate goals and economy-wide policies is more tenuous. In addition, clean energy growth has remained slow in some Republican-leaning areas, particularly in the Southeast, that lack supportive state policy environments.

Indeed, growing clean energy interests does not hinge on renewable energy resources alone—it also depends on public policies and investment. In the current context, climate-related investments under the Biden administration's climate investment policies offer an important opportunity. The distribution of these investments across US states will depend on many technical and economic questions and constraints of decarbonization. But policymakers may also want to leverage them as a way to shift the landscape of climate advocacy in the medium to long-run by creating and growing clean energy interests. In times of ideological polarization, the development of economic advocacy groups represents a pragmatic approach to strengthening climate advocacy in laggard states and to begin to narrow the climate advocacy gap.

Statements & Declarations

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Competing Interests

The authors have no relevant financial or non-financial interests to disclose.

Author Contributions

All authors contributed to the study conception and design. [Remainder of this note to be completed after acceptance to ensure blind review.]

Data Availability

The datasets generated during and/or analysed during the current study will be made available in the Harvard Dataverse repository.

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