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Pathways to policy: Partisanship and bipartisanship in renewable energy legislation

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ABSTRACT

The effort to transition energy sources away from dependence on fossil fuels has become highly divided along partisan lines in some countries, but the social-science literature has not yet caught up with this important problem. Policy-adoption studies do not address the specific problem of polarization and gridlock, and the literature on gridlock does not examine conditions for breaking gridlock for renewable energy and energy efficiency (REEE) policy. Qualitative research can help to fill the void by identifying strategies that legislators use for achieving support for REEE policy where there is gridlock, polarization, and/or strong opposition. Interview data from a stratified sample of US states reveals three strategies that state-government legislators use to enhance REEE policy development under these conditions: bring to the process countervailing industrial interests to align REEE with business; transfer decision making to public service commissions; and use extra-legislative consultation processes to develop stakeholder consensus.

KEYWORDS renewable energy; energy efficiency; polarization; gridlock; state governments; bipartisanship

Introduction

Although there are important health and environmental benefits associated with the transition to energy systems toward greater reliance on renewable energy and energy efficiency (REEE), opposition to such policies has emerged in many countries and has resulted in an uneven pattern of policy development (Rootes *et al.* 2012). Opponents voice concerns about the threat to jobs in fossil-fuel industries, the high cost of renewable energy, and the technical problems of managing an electricity grid based on intermittent energy sources. These concerns could be addressed through the political process by helping utilities and energy companies to diversify their energy portfolios, by retraining workers, by providing low-income energy assistance, and by providing

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research and investment in new technologies. However, in some countries, the political process for developing energy-transition policies has become highly polarized, and proposed reforms have been stalled in legislative gridlock.

This situation is particularly acute in the US, but it has also begun to appear in other countries. In the US, environmental policy was a relatively bipartisan issue in 1970, but along with other issues, it has become increasingly partisan since then (Layzer 2012, McCright *et al.* 2014). Likewise, conservative parties in Australia, Canada, and the UK have also opposed energy-transition policies (Bailey *et al.* 2012, Fielding *et al.* 2012, Young and Coutinho 2013, Carter and Clements 2015). Even in Germany, where there is broad support for a transition to low-carbon energy, there is evidence of increasing concern with the costs of Germany's energy transition policies (Hoppmann *et al.* 2014). Although we focus on the US in this study, the analysis of the strategies for overcoming industrial opposition to REEE policy development has implications for environmental politics in other countries.

Political and policy background

The US provides a good case for analyzing the problem of overcoming opposition to REEE policy because it has the dubious distinction of being a deeply polarized country for environmental politics. Of the various definitions of the term 'polarization,' we mean the difference in levels of party support for REEE policy among elected officials, a phenomenon that is part of a broader process of issue polarization in state legislatures and in Congress (Shor and McCarty 2011, McCright *et al.* 2014). However, our project is not framed as a contribution to the study of polarization; rather, we treat it as a background condition and then define the literature and our contribution to it in the next section. This section reviews some of policy background on the issue in the US.

Although the federal government passed a suite of landmark environmental laws during the 1970s, there were no new major environmental laws passed after the Clean Air Act Amendments of 1990, and the passage of the Byrd–Hagel resolution in 1997 ended the possibility of US participation in the Kyoto Protocol. Due to the closing of most policy reform opportunities at the federal government level, environmental and energy transition legislation in the US has been developed mainly at the state level (Byrne *et al.* 2007). Reforms have been most extensive in states controlled by Democrats, but Republican governors and legislators have supported them as well. For example, in 2003, with the leadership of Republican Governor of New York, George Pataki, states in New England and the mid-Atlantic formed the Regional Greenhouse Gas Initiative (RGGI), and in 2006, under Republican

Governor Arnold Schwarzenegger, California passed AB 32, which set in motion a similar system for greenhouse-gas emissions reductions.

However, the willingness of the Republican Party to support REEE policy development decreased after Barack Obama was elected to the presidency in 2008. Republicans in Congress opposed efforts to create national carbon trading legislation and a national renewable portfolio standard (Clean Energy Jobs and America Power Act, S. 1733), and the coalition between fossil-fuel industries and political conservatives tightened. After the purging of moderate Republicans in the 2010 and 2012 primary elections, the bipartisan spirit at state government level also declined. By 2014, Republican Party control of state legislatures was at its highest level in recent history (Elliot and Balz 2013), and the conservative American Legislative Exchange Council (2016) was estimated to have support from more than a fourth of all state legislators. Conservative legislators have utilized model laws from that organization to support rollbacks of major energy transition policies such as REEE standards. Furthermore, the utilities have also called for the end of support for distributed solar energy, especially net-metering policies. These policies pay generators of distributed electricity, such as rooftop solar, at the retail rate for the electricity that they contribute to the grid.

Although polarization on REEE policies at state government level is increasingly evident, some states have continued to support REEE policy development, and support is not strictly determined by party control of the legislature. Indeed, we found more than 20 REEE laws that passed – often with little opposition – in Republican-controlled legislatures in the years 2013–2014 (Hess *et al.* 2016). The apparent paradox between, on the one hand, issue polarization, increased partisanship, and Republican dominance in state legislatures and, on the other hand, the continued passage of REEE policy, including in states with mixed legislatures or complete Republican Party control, yields our central research question: what strategies are legislators using in state governments to overcome the deepening opposition to REEE policy development?

Theoretical background: policy adoption and gridlock

We draw on and contribute to two literatures on REEE policy. Much of the REEE policy-adoption literature can be summarized in terms of the ‘three Is’ of ideology, interests, and institutions (Rootes *et al.* 2012). With respect to ideology, passage of REEE laws is often related to control of a legislature by a left/progressive party and to general measures of political preference for left/progressive ideology or parties (e.g., Yi and Feiock 2012, Matisoff and Edwards 2014). Concerning actors and interests, studies of REEE policy point to the importance of environmentalists and the strength of the fossil-

fuel sector (e.g., Vasi 2009, Coley and Hess 2012). With respect to institutional factors, the literature has documented diffusion effects in some cases but not others (e.g., Wiener and Koontz 2012, Yi and Feiock 2012, Matisoff and Edwards 2014, Vasseur 2014). Other institutional factors that can favor policy adoption are strong executive powers in a government, the independence of relevant energy agencies, and strong implementation capacity (May and Koski 2007, Nelson 2012).

The policy-adoption literature provides a good overall picture of the causes of successful adoption, but it is largely quantitative, and it does not focus on our specific problem: characterizing strategies for gaining passage of REEE policies in a situation of strong political opposition. The literature on gridlock provides an important background for this situation. One of the causes of gridlock is an institutional arrangement that is intended to provide checks and balances on political power. The level of gridlock also depends on the type of policy, the number of moderates who can build bipartisan coalitions, and the degree of ideological distance between legislative chambers (Binder 1999, 2015, Bowling and Ferguson 2001).

Although political polarization does not automatically lead to gridlock (Harbridge 2015), it is generally recognized as an important factor. American political parties and politicians have become more ideological and polarized across a number of issues (McCarty *et al.* 2006), but polarization varies by issue (Snyder and Groseclose 2000) and is often less pronounced among the broader public than among political leaders (Fiorina and Abrams 2008). Furthermore, there are important differences within parties, and these within-party differences are important for the REEE policy field. For example, the ‘Tea Party’ side of the Republican Party shows much lower levels of support for most types of REEE policy than do Republicans as a whole (Leiserowitz *et al.* 2011).

Within the sizeable literature on gridlock and polarization, we focus on the most relevant portion for our research question, which is the analysis of solutions. A prominent approach is normative and proposes political reforms regardless of the likelihood of the reforms being enacted. For example, procedural reforms that strengthen cloture can enable the majority party to overcome gridlock (Smith 2015). Another type of institutional reform involves changing the electoral process, which in the US can include nonpartisan redistricting, bipartisan primaries with runoffs, and national primary elections held on the same day (Kamarck 2015). Stronger party discipline and reforms to inform and empower moderate voters could also decrease gridlock (Persily 2015, Prior and Stroud 2015).

In this study, we follow an alternative approach that, instead of proposing ideal solutions, delineates the strategies that are being used within existing political structures. Most of this literature, which is less extensive than the normative literature, focuses on legislative strategy and the problem of

building effective coalitions (e.g., Bailey *et al.* 2012). For example, a policy coalition must pay attention to pivotal players who can block the policy through filibusters and vetoes, and the coalition must convince them that a policy change is preferable to inaction (Brady and Volden 1998, Krehbiel 1998). Policy entrepreneurs may be more likely to be successful if they develop expertise on an issue, have the support of majority-party committee leaders, and are willing to compromise, even with opponents (Volden and Wiseman 2014). On this last point, there are differences in levels of support from Republicans and conservatives across different types of REEE policies (ClearPath Foundation 2015), and the odds of adoption of a REEE bill increase when it is configured to appeal to conservative frames (Hess *et al.* 2016). Examples include measures that support REEE but do so by reducing taxes or regulations that block REEE development. Another strategy that has appeared in the literature is to turn to nonlegislative avenues for policy reform such as executive orders, the courts, and voter referenda (Klyza and Sousa 2013).

We build on this literature by focusing on specific strategies for REEE policy adoption in the context of polarization, potential gridlock, and strong industry opposition. We assume as a starting point the importance of strategies that involve coalitions, pivotal players, and policy entrepreneurship within the policy process, but we focus especially on strategies that can be used when there is strong opposition from industry to policy passage. Of paramount importance in the case of state-government REEE policy is opposition from the utility industry. However, contributions from the fossil-fuel industry (donors associated with petroleum, natural gas, and coal) have also played a role in creating general resistance among Republican legislators to REEE policy. The strategies that emerged from our interviews were focused largely on the problem of how to overcome strong and powerful industrial opposition that is connected to party divisions. Thus, we focus more on ‘outsider’ strategies in contrast with the ‘insider’ strategies of the pivotal-players framework. We adopt an ethnographic, ‘on the ground’ approach that seeks to discover what strategies legislators are using as they attempt to pass laws under these conditions. We use a relatively open-ended, qualitative method to find out how the legislators have come up with strategies for maneuvering within a situation of sharp partisan discord. This approach has general value in the context of the literatures on policy adoption, gridlock, and polarization because it can point to new factors that might affect adoption in a specific type of political context that is now quite common in the US and some other countries.

Methods and data

To identify the strategies described above, we developed a stratified sample of legislators from US state governments. The first selection criterion was

Table 1. Sample of state legislatures.

Region	State	Party control	Polarization ^a	Interviews
Midwest	Iowa	Mixed	1.97	1-D, 1-R
Midwest	Minnesota	Mixed	1.12	1-D
Northeast	Massachusetts	Democratic	1.65	1-D, 1-R
Northeast	New York	Mixed	1.06	1-D, 1-R
South	Arkansas	Republican	1.15	1-D, 1-R
South	Florida	Republican	0.95	2-D
South	Mississippi	Republican	2.03	2-D, 1-R
South	South Carolina	Republican	0.76	1-D, 1-R
South	Virginia	Republican	1.67	1-D, 1-R
West	California	Democratic	1.56	1-D, 1-R
West	Colorado	Mixed	2.43	1-D, 1-R
West	Utah	Republican	1.76	1-D, 2-R

^aMeasured as the difference of the average cf-score between Democratic and Republican legislative candidates in 2012 (Bonica 2013), $\mu = 1.5$. (See Note 1.)

that at least two states would be from each of the four US census tract regions (see Table 1). This strategy would ensure that we had national coverage and that we avoided biases based on selection from just one region of the country. We then sought to have a balance of legislatures in terms of party dominance: we chose at least six legislatures that had Republican Party dominance, and six that were either split or dominated by the Democratic Party. Because we were especially interested in polarization and gridlock, we chose to oversample Republican legislatures that are more likely to oppose REEE. General measures of state polarization do not necessarily capture issue polarization around REEE, but we also measured the general political conditions in each state regarding polarization.¹ Third, we selected states where, based on previous research and quantitative studies, we identified recent examples of the passage of laws that supported REEE with bipartisan support. We used these laws as a strategy to gain access to the legislator and as an opening topic for the interview. Finally, we attempted to speak with at least one Democrat and one Republican from each state.

For each state, we conducted semi-structured interviews, in most cases with legislators but in some cases with knowledgeable members of their staff when legislators were unwilling to be interviewed. In the cases of Florida and Minnesota, we were unable to obtain interviews with Republicans, but the results from Democrats were particularly insightful. We have included the results because we are not attempting to generate generalizations from the data. To reduce interpretive bias, we identify the party and state of the legislator.

We conducted 26 interviews, which covered three main topics. For topic 1, we began with the legislator's experience involving one or more recent REEE laws in which the legislator had been involved as a sponsor or as a committee chair. We asked how the legislator was able to get support for

the law. For topic 2, we asked about the role of interest groups, including the REEE trade associations, the utilities, labor unions, and environmentalists. Together, the open-ended discussion for topics 1 and 2 provided us with information about the strategies that were being used to gain successful passage of REEE laws in the context of general sharp partisan disagreements and industry opposition. Topic 3 involved questions about specific types of REEE laws and how easy or difficult they were to pass. The results from topic 3 are published elsewhere with quantitative analyses that show how support for different REEE law types is linked to ideology (Hess *et al.* 2016). This study discusses results from topics 1 and 2, but results from topic 3 were sometimes useful for this study because they led to some discussion of strategies for passage.

Our goal with topics 1 and 2 was to gain new information and new perspectives on the politics and strategy of passage of REEE laws in the context of political gridlock and sharp partisan differences. Because this is qualitative research, we cannot and do not claim that a particular type of strategy that we discuss below is widely used, either in the US or in other countries, or that it is generally effective. This type of question would require quantitative methods or at least a comparative qualitative analysis. Instead, we use the qualitative method to identify types of strategies that are being used to overcome opposition. We do not discuss standard strategies such as gaining bipartisan sponsorship or aligning pivotal players within the legislature and state government. Instead, we are interested in potentially new strategies that are particularly useful in a context of strong party differences on the issue. In general, a qualitative approach is appropriate to identify new perspectives on an issue, and it can potentially provide the basis for identifying new variables that could be used in comparative or quantitative research. The method aids in theory development, and it also has immediate policy implications because it addresses the conundrum of attempting to develop pathways to passage in a situation of opposition.

Results

When asked about the strategies for gaining support for REEE policies, Democrats in mixed or Republican-controlled legislatures sometimes discussed their goal of achieving full Democratic Party control of the legislature. Some also indicated that their strategy of pushing for REEE reforms in the legislature was related to an electoral strategy of gaining support from voters in their districts because voters, even many Republicans, were favorable to many types of REEE policy. For example, in Colorado, where the legislative control has switched between parties, a Democratic legislator stated that they were using the issue as part of a strategy for taking back the legislature. However, because the issue of party control is well studied in

the literature, we focus here on three strategies that have received less attention. Although the strategies did not occur together in the cases that follow, there is no reason not to interpret them as complementary.

The strategy of countervailing power

The first strategy recognized the important political influence of the utilities and other industries in reducing political support for REEE policy development, and it outlined a strategy of finding and mobilizing countervailing political interests. The typical countervailing interests for REEE legislation are environmentalists and the fledgling REEE industry, but these groups often lack resources. Furthermore, showing support from these groups generally does not appeal to Republican legislators and can even solidify opposition. Our interviews revealed instead the important role of demonstrating other business interests.

The two primary blocking interests in our data set were the utilities and the banks. With respect to the utilities, Democrats in some cases discussed the issue extensively, and they generally viewed Republican opposition as linked to the influence of campaign spending and lobbying by utilities. Indeed, some of the Republican legislators expressed positions that were closely consistent with those of the utilities, especially their opposition to net metering and to renewable portfolio standards. In Florida, where the governor has prohibited state employees from uttering the words ‘climate change,’ a Democratic legislator stated, ‘Energy policy in this state is a wholly owned subsidiary of industrial utilities.’ Another concurred, saying, ‘Utilities give a lot of money to Republicans and enough to Democrats to keep them quiet. If a legislator doesn’t go along with the utilities, they go on the attack. They put their force behind someone else and that person doesn’t get reelected.’ A Republican legislator from Mississippi told us, ‘For five or six years now, I’ve been trying to pass a tax credit on solar panels, but the power companies oppose it. They don’t want anyone producing electricity but themselves.’

Another industrial interest that appeared in the interviews was opposition from banks to property-assessed clean-energy laws. These laws use the government bond authority to loan money to building owners to make REEE improvements, which are then paid back gradually as part of the annual property tax. Banks have opposed the laws because they see them as infringing on their market. As one Democrat from New York said, ‘The banks, credit unions, and lending companies would have a fit over PACE.’ A Colorado Democrat explained that they had to make concessions to banks such as right of first refusal in order to get PACE legislation passed.

Despite these hurdles, legislators were able to overcome industrial opposition in some cases. In each of these cases, a countervailing interest was

Table 2. Examples of countervailing interests in support of REEE.

Arkansas Democrat	'There is a group that was behind PACE, and the net metering bill, called the Arkansas Advanced Energy Association. It's basically businesses that do HVAC [heating, ventilating, and air conditioning] retrofitting. They have become a player. They aren't at the status of the Chamber, but they are a player.'
Staff Member for California Democrat	'Last year we had a demand-response bill that had fierce opposition from two of the utilities (PG&E and Edison), but it explained what we did with demand-response and it also included measuring the effect of demand-response on the grid. And that flew right through both chambers. In that case, even though the utilities opposed it, it was supported by a group called KWIKI [a law firm] that represents big utility users, like Google and Anheuser-Busch.'
Colorado Democrat	'CSPACE passed in a small committee that had four Democrats and three Republicans. And one of those Republicans voted to pass it. He is a very conservative guy. But we brought in a business person who owned a lot of properties in Denver. And he came in with his perfect suit and perfect hair and talked about CSPACE as his hedge against increased cost for energy in the future. And this conservative guy listened.'
Iowa Democrat	'We have strong bipartisan support for renewables. Biodiesel and ethanol add value to products that are produced by our farmers ... Also, on wind, Iowa has a lot of capacity because of its geography. We're taking steps to take advantage of that. We use our natural resources to create a product, and wind is no different than corn in that respect.'
New York Democrat	'Greenhouse gases make strange bedfellows. The first time I heard the words "climate change" uttered, before it was in the popular discourse, was by an insurance company covering coastal properties.'
Utah Republican	'I was approached by the Business Operators Management Association, and they asked me to sponsor this bill that would allow bonding for efficiency upgrades. They said that it had already been done in other states. Utah has a lot of older buildings that could stand to be upgraded; there is work to be done there.'

important in the stories that the legislators gave of how they achieved policy passage (see Table 2). In Arkansas, heating and air conditioning companies saw room for growth in the retrofitting market through the passage of the PACE law. For California, it was the interest of large power consumers, who wanted policies that support energy efficiency and reduction of peak-load consumption (also called 'demand response'). In Colorado, real-estate investors showed the business sense behind efficiency upgrades. Iowa farmers benefited from wind turbines, and in New York, the insurance industry drew attention to the need to respond to climate change.

The important role of countervailing business interests is partially due to the tendency for Republicans to frame Democratic policies as anti-business. To show that a policy has businesses on either side is an important strategy for neutralizing this frame. When these business interests form an association or otherwise express a wide business-based appeal for REEE, they can succeed in breaking the linkage between the political conservatives and the utilities (or the banks in the case of PACE laws).

Related to this idea is the claim that the REEE sector is itself a business that creates jobs. Where the state does not have high employment in the fossil-fuel sector, shifting to local REEE can mean pursuing a strategy of import substitution that captures energy-related expenditures that would otherwise be going out of the state. However, in terms of campaign finance spending and lobbying capacity, the REEE sector is not yet as powerful as the utilities are. One Republican from Virginia noted how the REEE sector could promote itself as just another business that creates local jobs and tax revenue:

I'd love to see solar energy form its own 'Chamber of Commerce'-type trade association, a group that is more business-based. In Virginia, when the Chamber of Commerce weighs in, it sways opinion. Solar came out of the environmental movement, but now they have growing ranks of small businesses. I say bring in the entrepreneurs and the capitalists. That's great! It is a wonderful opportunity.

One reason why communities support solar energy is that it creates local jobs and can reduce expenditures of local public organizations such as schools and homes. When solar panels are included in the assessment of the value of buildings, they can also increase the tax base for local governments and school districts, which obtain much of their revenue from property taxes. The same legislator commented:

If people with disposable income put a \$60,000 solar system on their property, that is raising the assessed value of homes, and that raises the property taxes that fund schools. So it raises money for schools.

Although our interviewees drew out the especially important role of finding countervailing business interests, some also noted the role of countervailing consumer interests. Consumer interests have long been a factor in regulatory policy for both utilities and banks, especially the issues of rate-payer hikes for utilities and credit-card fees from banks. A New York Democratic legislator noted that constituent mobilization brought the Republican State Senate over to support for rooftop solar power after the Senate had previously opposed the option:

[Net metering] had a robust majority when it passed. The Assembly was on board immediately. It was the Senate that took a couple years. By the end the public outcry for it overcame utility resistance.

Likewise, a Democratic legislator in Massachusetts also cited his constituents as the source of his work promoting renewable power.

[During my campaign] I would go door to door, and if people talked about the economy, I had an answer for it. If they talked about healthcare costs, I had an answer. But what surprised me was how many people said they were worried about extreme weather events. We had a hurricane, and some other

weather events, and people were worried about climate change. My district is alarmingly well-informed on this issue.

What happens inside state legislatures cannot be divorced from developments outside the legislature. When countervailing social forces find their own growth blocked by business interests, they too will seek recourse through the state government, and business-oriented Republicans can shift their allegiance for the sake of business and consumers, rather than for the environment.

The presence of a pro-REEE countervailing interest does not produce an about-face by every business-minded legislator. Instead, it requires that policy makers weigh pressure from competing interests; however, even a few defections can alter an outcome. Neither must legislation be a zero-sum game. Legislators can be swayed away from opposition if they see an opportunity to appease both interests. In Arkansas, the HVAC trade association pushed for a PACE law that went down in defeat. But a Republican legislator from Arkansas who had worked to defeat the bill later approached the bill's Democratic sponsor and offered to co-sponsor the bill in the next session. 'I told them, "Look, let me work with you to change those things that need changing, and I'll help you pass it."' The reworked legislation made use of a state bonding authority, which reassured the banks and effectively ended their opposition.

To some degree, the idea of countervailing power is included in the broad concepts of advocacy coalitions and interest-group politics. But our interviews point more specifically to countervailing business interests – farmers, insurers, large utility consumers, the heating and air-conditioning industry, small businesses wanting to improve their efficiency, not to mention the growing REEE sector itself – as especially important partners in a situation of polarized politics. They help to undercut left–right polarities and framings, and in doing so, they make it easier to soften opposition and to build consensus.

The public service commission

Because our focus was on legislatures, we did not expect to encounter a discussion of the public service commission (PSC) as a pathway to policy development, but it came up in several interviews as another strategy in a situation of policy stasis. Historically, the PSC was developed to serve as a watchdog on the utility industry, and an appointment or election process provides it with some independence from everyday political influence from the legislature. However, this independence can lead to a principal-agent problem, that is, the tendency for agents to act based on their own interests rather than those of the principal for whom they are supposed to be

working (Jensen and Meckling 1976). For example, commissioners often develop ties with the utilities that lead them to compromise their mandate of protecting ratepayer interests. Notwithstanding these limitations, the interviewees suggested that the PSC could, under some circumstances, support REEE policy adoption and implementation.

One example of delegation occurred in Minnesota, where the state legislature granted the PSC the authority to resolve a complicated political conflict. In general, utilities across the country have been trying to end net-metering policies, which pay small generators at the retail rate. Utilities argue that the rate is too high and represents a transfer from non-solar customers who must cover the unreimbursed expenses of grid connection services for solar customers. The claims are heatedly contested and have resulted in intense mobilizations from coalitions of customers, solar companies, environmentalists, and even some libertarian conservatives. An emerging solution is the 'value of solar' approach, which calculates an actual economic value that distributed solar energy provides to the grid and bases compensation on this amount.

In Minnesota legislators opted for the 'value of solar' approach as part of a compromise pro-solar legislative reform package. In 2013, Democrats took advantage of control of the legislature to pass this law as part of a larger omnibus bill. The pro-solar proposal sparked intense opposition from the utilities, and the outcome was a compromise that supported solar but replaced net metering with a new 'value of solar' regime. Still, the details of how to value solar were contentious and could not be resolved in the legislature. As a Democratic legislator commented about the final law:

Investor-owned utilities ... were supportive, as were clean-energy organizations. But that was partly due to the fact that the details of the law were left open for the PUC [public utilities commission] to implement. In the PUC implementation, there has been disagreement between the solar industry and Xcel on how they should be utilized.

This example shows how legislators gained passage for a pro-solar bill by shifting the unresolvable issue of the valuation of solar to the PSC.

In New York, the legislature has not been active in creating policies that direct the PSC in new ways, largely because of its split composition and the resulting gridlock. The Assembly is controlled by the Democratic Party, and the Senate, which was historically Republican, has been governed by a coalition since 2009. The members of the PSC are appointed to five-year terms by the governor, who has used his authority to move the PSC toward action. For example, in 2014, Governor Cuomo, a Democrat, called for the restructuring of the state's electricity grid to move away from the centralized, power-plant model toward a system that has a greater role for

distributed energy, energy efficiency, and energy storage. Rather than seeking legislation, the governor, with the expressed support of legislative leadership, directed the state's PSC to initiate the process for implementing his plan of 'Reforming the Energy Vision,' and the PSC began to implement the plan in 2015. The implementation process involved ongoing conflicts between utilities and distributed power generators, and in 2015, the PSC adjudicated some of the issues.

More generally, our interviewees suggested that policies that likely would have been blocked in the legislature due to utility opposition could gain support directly through the PSC at the request of the governor. A Democratic legislative staff member commented:

The PSC [commissioners] can do a lot, and they can be compelled by law to take certain actions. But since I've been here [the legislature hasn't] done that. There can be a major conflict in ideology when you are regulating something like the energy sector. Their [the energy sector's] power is vast, but the action doesn't come legislatively.

Thus, for an issue that is gridlocked in the legislature and where the governor seeks change and has appointment powers over the PSC, it is possible for REEE policy development to occur in the relationship between the governor and PSC.

Of course, the opposite effect can occur where the governor and legislature are opposed to REEE policy. In Florida, in 2014, the PSC cut the state's energy-efficiency goal by 90%, phased out solar rebates, and approved billions of dollars in new power plants requested by the utilities. A Florida Democrat legislator commented:

The PSC essentially became a lap dog. They rubber stamp all the utility-rate increases and cut all the energy-efficiency goals and commitments. They do not pause long to give the utilities exactly what they want.

One solution advocated by some of the Democrats in Florida is to make the PSC an elected body. In a state where Republicans control the legislature and governor's office, a structural change in favor of an elected body could grant more independence to the PSC. The proposal is consistent with studies that have suggested that elected PSCs tend to make more consumer-friendly decisions on rates (e.g., Besley and Coate 2003). However, having an elected PSC does not guarantee pro-REEE outcomes. As the Democratic legislator in New York noted, 'It comes down to who is in control of the state, [for example], if you have elected officials who don't believe in science. Fortunately, the executive in this state does.'

In summary, these interviewees suggested that the PSC can play a favorable role for REEE policy adoption where the governor is a Democrat, holds appointment powers, and is pressuring the PSC in favor of REEE policy

adoption; and/or the legislature cannot agree on REEE policy adoption but is willing to ‘punt’ the issue to the PSC as part of a policy compromise or simply in response to policy inaction. In contrast, the interviews with the Florida legislators show that under other circumstances, the PSC can become an instrument for reversing REEE policy. The state’s political climate, the partisan commitments of individual commissioners, and the elected/appointed status of regulators are some other variables that may influence the independence of the PSC.

Stakeholder processes

A third pathway to passage of REEE legislation is through a consensus-based stakeholder process that occurs outside the legislative process. This pathway was mentioned by interviewees in only two states: South Carolina and Utah. In both states, there was strong Republican Party dominance in both houses of the legislature and, at the time of the interviews, Republican governors. These states are also both very conservative, or ‘dark red,’ but they passed significant REEE policy reforms. Although countervailing industrial interests were of some importance, especially in the Utah case, the interviewees also pointed to the central importance of this third pathway to passage.

In South Carolina, the legislature used an *ad hoc* consultation process to gain support for a landmark solar energy law (SB 1189, 2014). As a Republican legislative staffer commented:

The primary sponsor of SB 1189 was Republican. For years, the environment had really been the Democrats’ terrain. But the Republicans are in power now, so they have to take the lead.

The legislature formed a bicameral committee, the Energy Advisory Committee, to review energy policy. The staff member explained:

The Energy Advisory Committee ... knew that there needed to be some consensus to move forward. They worked to bring together all the stakeholders to set a course for renewable energy policy, and everybody had to sign off on it before they sent it to committee. They brought in everybody: the policy makers; their legal counsel; environmental groups; the investor-owned utilities; solar groups; the unregulated energy co-ops, which provide about 60% of South Carolinians’ power; Santee Cooper, which is the state-owned power company; and consumer advocates for low-income rate-payers. You name it. Every possible stakeholder was involved. So the bill was worked up and worked up, it was amended multiple times. People put in countless man-hours. It really was *the* bill for that year, 2013–2014 ... This approach was unique because there was so much work done in drafting the bill before it was ever introduced ... Usually in legislation, there are winners and losers. Either you win or lose, or you both win some and lose some. But everybody was in agreement on this bill. It was a true collaboration.

Although the bill involved concessions from the solar industry to the utilities that ended the net-metering payment structure, the bill was acceptable to the industry and to environmentalists because it allowed the state to move forward with the development of distributed solar energy.

In Utah, a similar process is much more institutionalized. The state has a part-time legislature that meets only from January to April, but unlike its part-time counterparts in other states, an interim legislative committee meets throughout the summer and fall. It is supported by a large, non-partisan staff that researches and writes legislation. One nonpartisan staff member described the process this way:

The purpose of the Interim [Committee] is to reach consensus before the session actually begins ... The legislative management committee parcels out about 300 items for further study [by the Interim Committee]. These are then divided by subject area. [We] invite all interested parties, so we see all sides of the issue. Groups come to the committee hearing ... The interested parties will give presentations, sometimes with full-blown PowerPoints. Then at some point, a legislator will make a motion for staff to draft legislation.

By the time bills reach the regular session, they are ready to pass with broad bipartisan support. Of the 500 bills passed each session in Utah, 75–80% resulted from the work of the Interim Committee. Other part-time legislatures generally do not achieve these results. With few or no staff, there is no legislative progress made when the legislators are out of session. But Utah devised a means of government that moved the public debate over policy outside of the legislative debate and was able to pass a PACE law (SB 221, 2013) and REEE incentives (HB 176, 2013).

The stakeholder-based pre-legislation process appears to hold much promise, and it can also be used in the second pathway to help to strengthen the perceived neutrality and credibility of the PSCs when they use such processes. For example, in May 2013, the investor-owned utility Xcel submitted a proposal to the Colorado Public Utilities Commission to add a charge to net-metering customers, and a month later, the state's Solar Energy Industries Association called for strengthening net-metering policy as part of its 'million roofs' campaign. In this case, the PSC moved slowly to develop an extensive stakeholder process to attempt to mediate the conflict. This PSC is also carefully structured to include at least one member from the opposition party as a strategy for protecting its political neutrality.

Conclusion

Finding political support for energy-transition policies, including REEE policy, is one of the most important problems in the study of environmental politics. Policy failure will affect climate change and the stability of

human and nonhuman populations for generations to come. However, in the US and increasingly in other countries, there is evidence of policy inaction and even reversal. These policy failures are partly due to a general rise in political partisanship, and partly to issue-related campaign spending and lobbying by donors and firms associated with the fossil-fuel sector and the utilities. Our approach is to identify the strategies that legislators themselves describe for real-world situations where there are sharp party disagreements and industry opposition. We find that legislators have successfully sought institutional support from outside the legislature in order to counterbalance the role of industries that block reforms, most notably the utilities. The interviews identified three main strategies: bring to the process countervailing industrial interests, transfer decision-making to PSCs, and use extra-legislative consultation processes to develop stakeholder consensus prior to the legislative process.

Qualitative research such as this does not demonstrate frequency and general causality; we do not know how widespread these strategies are or how effective they are. These questions have to be addressed by comparative methods or multivariate analyses. Despite their limitations, qualitative research like this can challenge the assumptions behind the construction of variables in quantitative research, and can suggest research topics for examination that could be explored as variables in comparative and quantitative studies. For example, although industrial interests affect REEE policy adoption, most quantitative research to date has focused on the role of the fossil-fuel sector, whereas our research suggests the value of examining the understudied role of countervailing industrial power. Likewise, although PSCs can be captured by utilities, they can also be used to support REEE policy development under specifiable circumstances; and although party ideology and dominance are important casual factors, there are cases where a good stakeholder process under Republican legislatures can lead to consensus in support of REEE policies. Future comparative research could include cross-country work and comparisons across state- or provincial-level units within countries. For example, it would be good to understand better the range of countervailing industrial power alliances from a comparative perspective and to understand how the three processes that we have identified can be used together.

The pathways to REEE policy that we outline here will not necessarily provide the basis for a rapid transformation in the energy sector because the policy reforms discussed here are both modest and incremental. In other words, we found little evidence of bipartisan agreement for carbon regulation and higher renewable portfolio standards, at least in states with Republican and split legislatures. Although there is a need to examine the structural and ideological bases for that lack of political will, it is also important to identify those openings where progress might be made, even in a highly contentious

political context. Our research points to such openings, and it provides immediate information that could be of benefit for legislators and other advocates who are working to overcome substantial obstacles.

Note

1. We analyzed relative polarization using Bonica's (2013) data set. We found the difference between average ideological position (cf-score) for Republican and Democratic legislative candidates for all 49 states (Nebraska is nonpartisan) in the 2012 election cycle. A *t*-test showed that our sample was not significantly different from the population. Seven of the states in our sample were above the mean difference between the parties. Although five states in our sample fall below the average difference, this measure does not capture issue polarization around REEE, which would be expected in strongly conservative states. Three of the states with lower than average polarization are also strongly conservative (Arkansas, Florida, and South Carolina). The other two (New York and Minnesota) were included for regional representation and the known passage of contentious energy policy.

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