

In 1993, the Clinton administration came to power with ambitious goals to support core constituencies in the Democratic Party, including environmentalists. Vice President Al Gore's book *Earth in the Balance* had just come out. In the book, Gore declared that "it ought to be possible to establish a coordinated global program to accomplish the strategic goal of completely eliminating the internal combustion engine over, say, a twenty-five year period."¹ Still fresh with optimism about its capability to move legislation through a Democratic-controlled Congress, the Clinton administration believed that taxes on the energy content of fuel seemed like an attractive way to provide revenue for deficit reduction but also support environmental goals.

In February 1993, the Clinton administration announced as part of its budget proposal that it would impose a Btu (British thermal unit) tax on the energy content of fuel. Designed to raise \$71.4 billion over five years, the Btu tax soon became a lightning rod for criticism.² In the first proposal of the Btu tax, coal and natural gas were taxed at the same rate, even though coal is more polluting. This was a way to avoid incurring the wrath of West Virginia Senator Robert Byrd.³ The Clinton administration made a tactical mistake by then modifying the plan in April 1993 to further appease coal interests.⁴ Once this move had been made, other interests piled on in an effort to seek exemptions from the tax while the oil and gas industry opposed it outright.⁵ At the end of May 1993, the House, then controlled by the Democrats, narrowly voted to support the Clinton budget, including the Btu tax, after much arm-twisting by the White House.⁶ Even though the House voted in favor of the remnants of the Btu tax, influential Democratic senators like David Boren of Oklahoma and John Breaux of Louisiana vigorously opposed it. In June 1993, the plan became doomed in the Senate, and the Clinton administration withdrew the measure before a vote.⁷

Ultimately, the Btu tax was replaced with a modest 4.9 cents per gallon gasoline tax. After all was said and done, the Btu tax effort proved to be a bruising legislative fight, and the gas tax was a largely inconsequential incentive for fuel efficiency or conservation. Indeed, one of the main outcomes of the Btu fight was the Republicans were handed a wedge issue in the 1994 midterm elections in which House Democrats who had voted in favor of the Btu tax

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were targeted for defeat. The failure to pass the Btu tax had a lasting impact on the White House's enthusiasm for domestic measures that would directly affect energy prices, especially gasoline. An energy tax, favored by environmentalists, became the proverbial political "third rail."⁸

The Btu tax episode is illustrative of how the nature of the U.S. system makes it very difficult to achieve more comprehensive and coherent reform in energy policy. It is but one of many examples this country has seen over the past 25 years where interest groups across the political spectrum have mobilized to defeat far-reaching energy policy measures.

This paper has two primary purposes. First, it explains how the U.S. political system structurally maximizes the ability for groups to block policy change. Second, the paper seeks to identify strategies to overcome those barriers in the interests of furthering the goals of CNAS's energy strategy including environmentally sustainable, geopolitically reliable, and physically secure sources of energy.

In **part I** of this paper, I provide a sketch of how policy is made in the United States and how our system has multiple gatekeepers empowered to block power change. This structural feature maximizes the potential power of interest groups to effectively veto policies they dislike. In that section, I provide some examples from recent history of how different groups with diverse agendas have capitalized on these structural features to stymie energy policy reform. In **part II**, I develop a strategy to overcome these political challenges looking ahead, with recent events in Congress suggesting the time is ripe for more comprehensive energy policy reform.

As I suggest in the paper, while both Democrats and Republicans are open to energy policy reform, they understand the problem differently. The explicit environmental component of the CNAS agenda makes it more attractive to Democrats, but the nature of the U.S. political system will demand significant Republican support in Congress. Much of this paper focuses on the geographic bases of political support for and opposition to energy and climate policy reforms ostensibly aligned with the CNAS agenda. Beyond the need for significant cross-party support, this paper highlights the importance of broadening the geographic basis of support beyond the East and West coasts, particularly in the Midwest and Rust Belt. In so doing, I draw attention to additional elements that will likely be important, including presidential leadership, targeting messaging, and balancing the need for political viability and substantive progress.

Part I: Many Gatekeepers, Too Little Policy Change

Political institutions privilege some elites to have decision-making authority over different policy

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arenas. Some systems empower more actors than others, and certain kinds of decisions may involve more players than others. For example, in a parliamentary system like the United Kingdom, a prime minister with a strong parliamentary majority can pursue their agenda without much legislative interference, particularly in the realm of budgets and treaties.

Elsewhere, I have described this kind of influence as the role of policy *gatekeepers*.⁹ Gatekeepers are actors with sufficient power to block or at least delay policy change. From an analytical perspective, when we think of energy policy reform, we have to ask, “who decides?” Gatekeepers analysis is based on work in political science called *veto players* theory.¹⁰ Where there are many veto players, policy stasis becomes more likely.¹¹

Different studies try to count the number of veto players in a given political system, focusing on *institutional* actors accorded influence under a country’s constitution (this gets at the influence of the legislative and judicial branches) and *partisan* actors (this gets at the influence of political parties in divided or coalition governments).¹² Others also look to dispersion of authority, taking into account federal structures and the use of referenda.¹³ When we look at the number of veto players in the U.S. system, we find that the United States possesses far more than other advanced industrialized countries, suggesting that the system of checks and balance in the United States usually will lead to more policy stasis than in other systems (see Appendix A).¹⁴

However, traditional measures may not be sufficiently fine-grained. First, there is some flux in the number of veto players. Until the 2006 elections brought the Democrats back to power in Congress, unified government likely reduced the number of veto players. More importantly, datasets of veto players do not capture actors with issue-specific blocking power, namely bureaucratic actors with delegated responsibility or legislative actors with committee oversight over spending, or societal actors with informal influence.¹⁵ On energy policy, we would expect more of these kinds of gatekeepers based on functional delegation to congressional committees.

For international issues, especially in the security arena, we would expect fewer gatekeepers. For international affairs, the number of veto players is generally truncated so the judiciary or sub-national units included in some datasets are not likely to be relevant. On issues related to national security, despite formal constitutional rules that specify a Congressional role in war powers, presidents have been able to exercise this authority with fewer legislative impediments than other policy domains. While national security policy has few gatekeepers, this does not extend to treaty ratification in the U.S. system, where a two-thirds Senate majority required for advice and consent increases the veto power of legislative gatekeepers. This helps explain why the Law of the Sea Treaty, supported by the Bush administration, the U.S. military, environmentalists, and the business community, and opposed only by fringe pro-sovereignty

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interests, has failed to secure final support in the Senate.

However, focusing on the number of gatekeepers in a particular policy area tells us only part of the story. We also have to know their policy views. If everyone is in favor of policy change in a system with many veto players, then effectively there are fewer gatekeepers and a policy will go through relatively painlessly. If everyone is opposed, then the status quo is unlikely to change much either. Where you have a diversity of preferences and a large number of veto players, you also have a great possibility of policy stasis.

In the energy policy arena in the United States, you have highly fragmented societal policy preferences that play out in the preferences of members of Congress. Some regional economies are highly dependent upon production of certain kinds of energy (e.g., coal in West Virginia, petroleum in Alaska and the Gulf Coast), others on energy-intensive manufacturing (e.g., automobiles in Michigan, steel in Pennsylvania), others have highly mobilized environmental constituencies (e.g., in California, Pacific Northwest), some places are highly dispersed and require long driving distances (the West), and some economies are highly dependent on other products that may or may not play a role in future energy needs (such as biofuels from the Midwest). There are also highly localized not-in-my-backyard (NIMBY) reactions to any facilities that will have a negative environmental or social footprint, such as drilling in the Arctic National Wildlife Refuge (ANWR), nuclear waste storage at Yucca Mountain, drilling off the coasts of Florida or California, or locating new wind turbines off of Martha's Vineyard. These attitudes, often taken up by local legislators (or in the case of the ANWR by distant ones) can impede the construction of new energy infrastructure, refineries, pipelines, nuclear power stations, wind turbines, and/or waste disposal sites.

Given the nature of energy policy, a sprawling set of committees have jurisdiction over some dimensions of the issue, giving different committee chairs the capability to block elements of policies they dislike. For example, on the House side, committees that have potential jurisdiction include Energy and Commerce, Science, Ways and Means, Transportation, and Agriculture, among others. On the Senate side, the proliferation of committees with jurisdiction is less extensive; the Senate Energy and Natural Resources is the lead committee, with Finance taking on a role where tax breaks are involved.

This gives significant power to committee chairs who set the timetable for bills to be heard, if they are heard at all. A committee chair can seek jurisdiction over a piece of legislation only to scuttle it in committee. Because committee appointments have historically been allocated on the basis of seniority (or sometimes at the discretion of the House Speaker or the Senate Majority leader), committee chairs are often long-standing members who have sought that position to defend the

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parochial interests of their district. John Dingell, for example, is a Democrat from Michigan who chairs the House Energy and Commerce committee. He has made it his mission to blunt any energy policy that would have a negative impact on automotive interests in his district and state.

There are other structural impediments to policy change. The cloture rule requires that 60 members of the Senate vote to cut off debate; this allows a minority to filibuster and prevent a bill from coming to the floor for a vote. On December 7, 2007, a far-reaching energy reform measure got fifty-three votes, seven short of the sixty needed for cloture.¹⁶

In the context of energy policy reform, what we generally therefore see is intense mobilization by partisans against particular policies they dislike. Any challenge to coal interests is taken up by states heavily reliant on coal production. Any effort to increase fuel efficiency is challenged by automotive interests and legislators from Michigan. Provisions to drill in environmentally sensitive areas are challenged by states affected or, in the case of Alaska, environmentally-sensitized legislators from the continental United States. A piece in *Politico* described the challenge these cross-pressures create for Congressional leaders even in a single political party: "For Senate Majority Leader Harry Reid (D-Nev.), managing his own caucus is like playing with a Rubik's Cube, with each advance carefully calibrated to limit simultaneous losses."¹⁷

That means that major policy change in the energy arena is almost always defeated in Congress. On the margins, we see politically powerful interests logroll to get subsidies and incentives for their pet projects, leading to greater institutionalization of the status quo. This description of policy outcomes best captures the last "significant" energy policy reform of 2005 in which Congress failed to pass any significant improvement in vehicle fuel efficiency standards; maintained restrictions on drilling in environmentally sensitive areas, including the Arctic National Wildlife Refuge and the Great Lakes; provided a fuel mandate for ethanol; included modest subsidies for the purchase of hybrid automobiles, renewables, and investment in carbon capture; but largely left untouched traditional subsidies and tax incentives for fossil fuels.

At the same time, the failure of policy reform at the national level has contributed to local variation in state policies, with efforts by the Northeast and California attempting to regulate carbon through regional emissions trading schemes. More than 20 states have renewable portfolio standards requiring that power generators in their states purchase a portion of energy from renewable sources. At the same time, states and interest groups have sought to push the margins of what is legally permissible activity, as California has done, by suing the federal government over the right to regulate carbon dioxide. These various legal efforts may also be seen as a way to goad the federal government into more comprehensive efforts through courts. For many analysts, this bottoms-up patchwork approach is a virtue, guaranteeing that no major

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transformation in energy and environmental policy will take place until a significant consensus has emerged at the state level.¹⁸

In the area of international commitments, we can see how the high bar for treaty ratification in the U.S. Senate enhances the power of interest groups on energy and environmental policy. For example, in 1997, after an intense lobbying campaign by the Global Climate Coalition—an industry-funded lobbying group—in the lead up to the Kyoto negotiations, the Senate passed the Byrd-Hagel amendment by a margin of 95-0, a nonbinding resolution that suggested the United States should not sign on to any climate treaty that did adverse harm to the U.S. economy or that failed to include major emerging emitters like India and China. The Clinton administration secured a treaty at Kyoto that possibly did both (or was perceived as such after an intense lobbying campaign by industry interests). President Clinton never submitted it to the Senate for advice and consent.

However, it was not just industry lobbying that created a context for failure. There has been growing support in the United States for a market-based cap-and-trade system, where greenhouse gas emissions would be capped and firms that needed additional permits could buy them from firms that found it inexpensive to reduce their emissions. This has been pioneered with much success for sulfur dioxide. However, a major problem has been the fear that the permit prices would become so expensive that sectors needing to buy them (such as coal-burning power plants) would find them exceedingly expensive. One idea that has been proposed to mute potential political opposition to a cap-and-trade scheme is the so-called safety valve.¹⁹ The safety valve would commit the government to offer additional permits at a certain price if the market price of permits rose to be too high. Environmental groups have, for the most part, opposed the safety valve, for fear that the permit price would be too low to induce innovation by industrial interests. Environmentalists fear it would be cheaper for firms to buy permits than change their behavior. This, of course, all depends on the safety valve price being very low.

However, the opposition to the safety valve may be part of the reason why it has taken so long for the United States to enact a carbon constraint. Not discounting the organized and shrill opposition of much of the fossil fuel industry to any sort of carbon constraint, the counterfactual we have to ask ourselves is, “Would it have been possible to enact a carbon constraint with a safety valve that would have put us farther along towards significant greenhouse gas emissions reductions?”²⁰

A related problem has been that environmental groups, despite limited overall influence on environmental and climate policy, have largely defined what it means to be pro-green or pro-environment on climate and energy policy. In the climate arena, this has meant a commitment to

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binding emissions reductions and short-term targets and timetables. In the context of the Kyoto negotiations, this put pressure on politicians, who wanted to appear to be green to satisfy core constituencies, to commit to deeper short-run binding emissions reductions than were politically viable in the U.S. Congress. However, the problem for environmentally-minded politicians was that any attempts at compromise would potentially deny them the necessary praise that environmental groups could bestow upon them to reassure green segments of the electorate.

To thread that needle, the Clinton administration negotiated a greenhouse gas emissions reduction target of minus seven percent below 1990 levels to give environmental groups a big number as an overall target. At the same time, the Kyoto Protocol included provisions for market mechanisms to reduce the overall costs of implementation and forest sinks to reduce the actual emissions reductions that would actually be required to meet their Kyoto obligation.²¹ As we now know, while the environmental community provided grudging praise to the Clinton administration for negotiating breakthroughs at Kyoto, the other gambits on mechanisms and sinks were not enough to placate opposition in the Senate, and the Kyoto Protocol was never brought to them for advice and consent.

Part II: New Developments and A Strategy for Reform

In 2006, the Democrats took over control of both houses of Congress, creating what appeared to be a sure-fire environment for stalemate on energy policy with divided government. Ironically, the time may now be ripe for comprehensive energy reform. To explain why this may be so, we need to understand several main features of the contemporary policy context that may help create opportunities for reform.

Gatekeepers and Partisan Politics

First, some gatekeepers have more authority than others. The president is the first among equals in the U.S. system and can use the power of the bully pulpit to gain support in Congress. Even in the face of Congressional opposition, presidents can “go public” by directly appealing to the American people for support. This can sometimes generate pressure on Congress to enact policies that might otherwise get blocked because of the exercise of interest group influence.²²

In the context of contemporary developments, President Bush has largely abdicated this role on energy policy, and apart from perseverance in Iraq, he is not using the power of the bully pulpit for many major political purposes as he winds down his presidency. However, in Congress, the Democratic Speaker of the House, Nancy Pelosi, and the House Majority leader, Harry Reid, are attempting to use their powers to corral their majority into supporting comprehensive pieces of

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legislation on energy and climate change. At first glance, we might think this effort would fail, given that political parties possess far less discipline in the American system compared to other advanced democracies like Britain. In the U.S. context, members of Congress have much more individualized and personalized bases of financial and political support. Despite this structural difference, House and Senate party leaders do possess some powers of agenda-setting over pieces of legislation and committee control.

For example, to overcome the policy inertia brought on by pluralistic societal preferences and fragmented committee control in Congress, House Speaker Nancy Pelosi sought to create a new House Select Committee on Energy Independence and Global Warming. However, long-time Congressman John Dingell, Chairman of the House Committee on Commerce and Energy, vigorously opposed her efforts to give the new committee legislative powers and secured a deal with her that the committee would have an expiration date by the end of October 2008. Despite these limits on the committee's prerogative, Pelosi has been successful shepherding an important pending piece of legislation through Congress that, if passed by both chambers and signed by the president, will represent the most significant piece of energy legislation passed in the last 25 years. Rather than subject their preferred legislation to a formal conference across the House and Senate, Reid and Pelosi have been attempting to hammer out an agreement in secret just among the Democrats.²³

However, in usual circumstances, this activity would not likely insulate members of Congress from interest group pressure to strip the bill of controversial elements. Two thousand and seven is somewhat different. Going into an election year in 2008, the Congress is exceedingly unpopular and the tenure of Pelosi and Reid has been seen as ineffectual. Approval ratings of Congress hover in the twenties.²⁴ While voters may punish the president's party in 2008 for his lackluster performance, so too may they punish Congressional Democrats for having demonstrated so little leadership of their own. This creates more intense pressure on individual legislators to support achievements in Congress that might redound to them at the ballot box.

The Global Context and Policy Windows

They now have reason to believe that voters will give them credit in the energy arena. As the political scientist John Kingdon has argued, events sometimes create open "policy windows" in which entrepreneurs are able to match apparent problems with policy solutions.²⁵ Several problems related to energy, the environment, the economy, and national security have come together to create a sense of urgency for reform in energy policy. September 11, 2001 created a new understanding of the potential security externalities of dependence on foreign oil from volatile parts of the world. Subsequent events in the Middle East, Venezuela, and Nigeria have

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underscored how political volatility is likely to be a perennial problem, as long as the United States imports more and more oil from abroad. The market, responding to strong Chinese and Indian demand, has made these concerns more salient in 2007, as prices of oil rose to nearly \$100 per barrel. The steady drum of reporting on climate change, from Al Gore's film *An Inconvenient Truth* to the IPCC's Fourth Assessment Report, have solidified public perception that the problem is real and increasingly urgent for government to attend to, even if there is still disagreement about what policies are appropriate. Together these factors have opened the window for advocates of comprehensive energy reform to pursue their policy agenda.

Public Opinion: Open but not Completely

Public opinion may not be the main barrier to policy reform in the energy arena. On climate change, for example, a variety of polls show rising recognition by the American people that climate change is real.²⁶ One 2007 poll found that the public strongly supports higher fuel efficiency standards (67 percent), energy efficient buildings (64 percent), and a renewable portfolio standard (55percent). That said, while public opinion supports these reform measures, other policies, particularly tax policies, face significant opposition: 48 percent strongly opposed a gas tax and 49% strongly opposed an electricity tax.²⁷ Earlier 2002 to 2003 polls found only soft support for emissions trading compared to other policies.²⁸

However, several of these are complex policies that the public likely knows little about and where attitudes are likely to be malleable in response to leadership and events.²⁹ Both the president, members of Congress, and interest groups can shape public sentiment. Moreover, these patterns are less revealing than at first glance, particularly since they conceal regional and partisan differences. For example, partisan differences remain fairly significant on climate change. While a majority of Republicans acknowledge global warming is real, only a quarter are convinced strong evidence links climate change to human activity.³⁰ Thus, while public opinion writ large may not pose an insurmountable burden for many policy initiatives, reforms that demand more sacrifice of the American people, that upset the past comfort of low energy policies, are likely to face fierce resistance. Moreover, strong if not overwhelming skepticism about climate change among Republicans provides Republican members of Congress with cover and incentive to cater to the most vocal extreme views.

Presidential Leadership is Likely Necessary

In 2007, two pieces of legislation were in front of Congress. The first, the Clean Energy Act of 2007, included a number of measures, perhaps most important a revision in the fuel efficiency standards for automobiles for the first time in 32 years.³¹ The bill, in its initial form, also included

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a federal renewable energy portfolio standard.³² The second, the Lieberman-Warner America's Climate Security Act, would impose an economy-wide cap-and-trade system (see Appendix B for a description of the energy bill and the provisions in Lieberman-Warner).³³

However, President Bush signaled his intent to veto both bills in their original form. The energy bill was signed by the president but only after it was stripped of tax increases for the petroleum sector and the renewable portfolio standard. The cap-and-trade bill will likely be vetoed, even if it survives a Congressional vote. Like the failed cloture of December 7th, the cap-and-trade bill may suffer a similar fate and never be brought before the Senate for a full vote.

These recent cases suggest presidential acquiescence may be insufficient to guarantee more far-reaching energy policy reform. To that end, a new president in 2009 should make this policy arena one of his or her highest priorities for their first year in office. By the time of their first State of the Union address in January 2010, the president should be able to tell the nation, "This is what we have done." But, the president will likely need to "go public" and appeal directly to the American people in order to prevent a variety of regional and parochial interests from capturing the legislation and jettisoning its more expansive provisions.

The Geographic Patterns of Support and Opposition

Beyond sustained presidential engagement, the strategy for overcoming political barriers requires a clear-eyed assessment of the geographic bases of support (and potential support) for energy policy reform. While the turnover and sheer number of House members makes a fine-grained analysis of legislator motivations difficult, the smaller size of the Senate can provide some insight into where support and opposition to energy policy reform is based and which states and legislators might be considered swing states/interests if the vote is close. The House approved the 2007 energy bill by a relatively wide margin, 235 to 181. The Senate proved harder to move and will likely remain so, unless the Republicans recapture the House in the 2008 elections or subsequent pieces of energy legislation seek even more dramatic policy change.³⁴

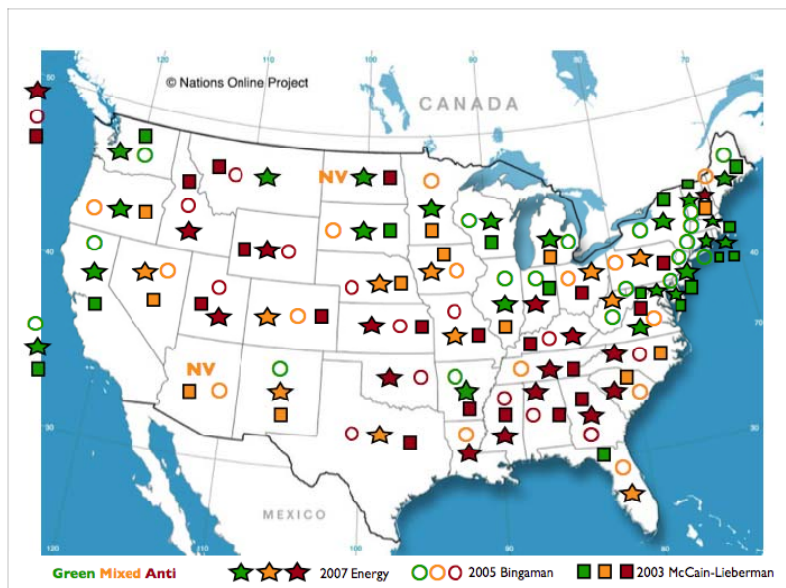
To provide traction on the geographic bases of support, I look at three votes in the Senate: (1) the December 7th, 2007 failed cloture vote on the energy bill, (2) the 2005 Bingaman sense of the Senate resolution on a cap-and-trade system, and (3) the failed 2003 vote for the McCain-Lieberman cap-and-trade bill.³⁵ These votes reveal states where both senators consistently favored energy and climate policy reform and those with senators consistently opposed. We can also observe states with split delegations or where there appeared to be flux. I suggest that these states are likely swing states where changes in representation and/or public pressure

could result in a shift in the state's position. From these votes, we can ascribe possible motives to legislators in all three categories: *Green, Mixed, and Anti* (see Figure 1).

Both senators voted the green position across all three votes in thirteen states: California, Connecticut, Delaware, Hawaii, Maine, Maryland, Massachusetts, New Jersey, New York, Rhode Island, Vermont, Washington, and Wisconsin. These were concentrated in the *Northeast*. By contrast, senators consistently opposed the green position in ten states: Alabama, Alaska, Georgia, Idaho, Kansas, Kentucky, Mississippi, Oklahoma, Utah, and Wyoming. These were concentrated in the *South* and *West*. Senators voted against two of the three measures in six other states: Louisiana, Missouri, Montana, North Carolina, Tennessee, and Texas.

In terms of pivotal swing states, senators supported the environmental position on two of three votes in five states: Arkansas, Illinois, Indiana, Michigan, and South Dakota. Senate delegations split on 2 or more of the votes in another twelve states including Arizona, Florida, Iowa, Minnesota, Nebraska, Nevada, New Hampshire, New Mexico, Ohio, Oregon, Pennsylvania, and South Carolina. Thus, the Rust Belt and the upper Midwest and pockets of the Southwest appear to be critical areas of potential support.

Figure 1: Map of Senate Voting Patterns on (1) 2007 Cloture (2) 2005 Bingaman and (3) 2003 McCain-Lieberman³⁶



Source: Generated by the author from Senate Roll Call Votes

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Looking at the 2007 cloture vote more closely, both senators opposed the cloture motion in sixteen states, meaning they did not want to allow a vote to move forward on a far-reaching energy bill. In 22 states, both senators supported cloture. In ten states, one senator supported the measure and the other did not (or one senator missed the vote). Supporters were concentrated along both coasts while opponents were concentrated in the South. Five Republicans (Coleman of Minnesota, Collins and Snowe of Maine, Smith of Oregon, and Thune of South Dakota) joined 48 Democrats to support cloture. Several Democratic senators voted against cloture, including Bayh of Indiana, Byrd of West Virginia, and Landrieu of Louisiana.³⁷ Indiana's reliance on coal-based electricity was cited as one rationale for Bayh's opposition as well as moderate Republican Senator Dick Lugar.³⁸ Coal concerns likely animate Byrd's opposition while the importance of petroleum concerns to Louisiana likely explain Landrieu's opposition.

The interesting cases are where the senators voted differently. In West Virginia, fellow Democrat Jay Rockefeller voted for cloture. Other split delegations include Colorado, Iowa, Missouri, Nebraska, New Mexico, Ohio, and Pennsylvania.³⁹ These are states where changes in representation or political pressure might be expected to switch the position. Of these states, Allard of Colorado, Hagel of Nebraska, and Domenici of New Mexico are retiring. Republican Senator Sununu of New Hampshire is down in the polls, and the region, aside from New Hampshire, overwhelmingly supports energy and environmental policy reform.⁴⁰

On December 13th, the Senate dropped the renewable portfolio standard portion of the energy bill, which was fiercely opposed by the Southern Company, a holding company for utility companies in the Southeast where renewables have yet to have much of an impact.⁴¹ Other strong opponents of the measure included the Edison Electric Institute, a member institution of investor-owned electric utilities, as well as the National Association of Manufacturers and the U.S. Chamber of Commerce.

Dropping the RPS provision brought six more senators to support cloture but a new cloture vote fell one short of the sixty-vote majority.⁴² Three of the six were from the Midwest (Grassley of Iowa, Bayh and Lugar of Indiana); others voting to support cloture included Byrd of West Virginia, Murkowski of Alaska, and Hatch of Utah. After the second failed cloture vote, the Senate dropped another controversial measure from the bill, a package of taxes on the petroleum industry. This move left the new fuel efficiency standard on autos and the mandate on ethanol as principal remaining reforms; the Senate passed the bill by a wide margin of 86 to 8 on December 13, and the president signed it into law on December 19th (see Appendix B for a breakdown of the bill's major provisions, including measures that were dropped).⁴³

We can seek additional support for these results by looking at which states possess renewable portfolio standards (RPS) or have expressed support for regional cap-and-trade initiatives. As of June 2007, 24 states had an RPS; four others -- Illinois, Missouri, Virginia, and Vermont -- had voluntary goals. Figure 2 below shows shaded states with RPS.

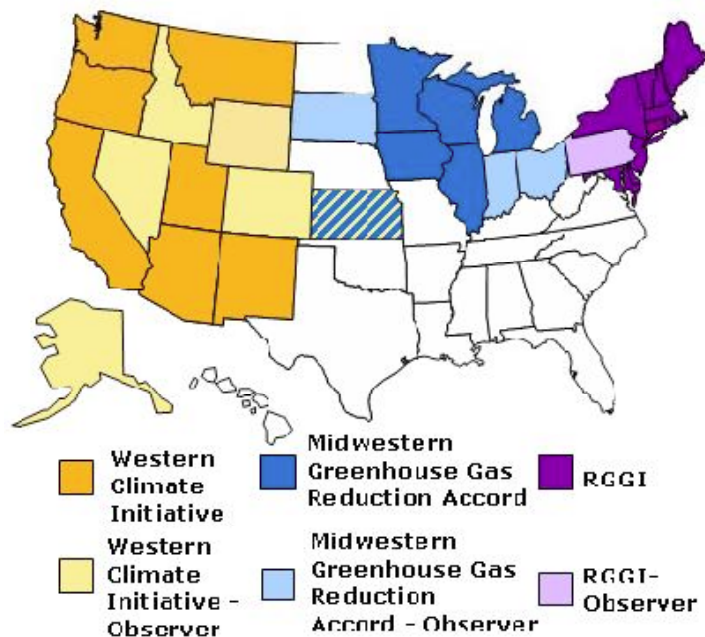
Figure 2: States with Renewable Portfolio Standards



Source: U.S. Department of Energy⁴⁴

Regional support for cap-and-trade schemes shows similar patterns (see Figure 3 below): strong support on the West Coast, the Northeast, the upper Midwest, and several states in the Southwest. Southern and southeastern states and the Plains states are among the laggards.

Figure 3: Map of Regional Cap-and-trade Initiatives



Source: Pew Center on Global Climate Change⁴⁵

States that have both standards but where both senators have not supported energy/climate policy reform might be thought of as swing states. States like this include: Arizona, Iowa, Minnesota, New Hampshire, New Mexico, and Oregon. Other possible swing states might have one standard and not the other, or those where they have a voluntary portfolio standard or an observer status with cap-and-trade initiatives. Among these states are Colorado, Pennsylvania, Indiana, South Dakota, and Ohio.

Regionally, the pattern that emerges from all these cases is that legislators from Rust Belt states (Ohio, Pennsylvania, Michigan), Midwestern farm states (Iowa, Indiana, Minnesota, Missouri, South Dakota), and several western states (Arizona, Colorado, New Mexico, Oregon) likely hold the keys to comprehensive energy policy reform. New Hampshire is an outlier in the Northeast and may be moved (see Figure 4).

Figure 4: Regional Bases of Support and Opposition

Core Support

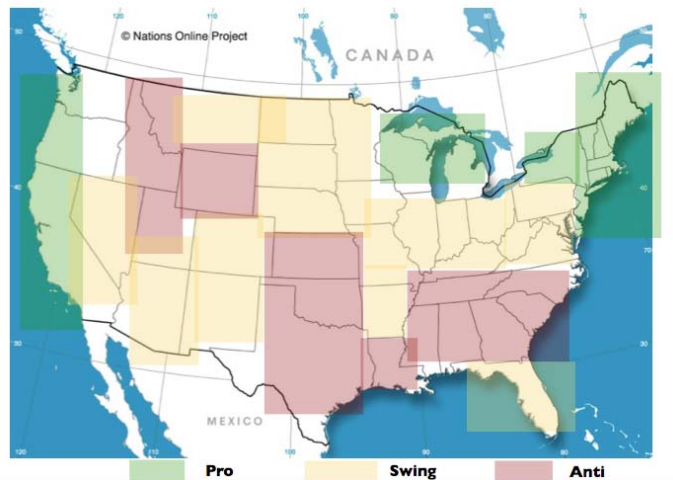
- Coasts (Northeast, West)

Core Opposition

- Southeast and South

Swing States

- Rust Belt (Ohio, Pennsylvania, Michigan)
- Midwest (Iowa, Indiana, Minnesota, Missouri, South Dakota)
- Southwest (Arizona, Colorado, New Mexico)
- Regional outliers (New Hampshire)



Partisanship is Important

While both Democrats and Republicans favor policy reform in the energy arena, they may have very different ideas of what constitutes reform. Where Republicans tend to favor lifting environmental restrictions on domestic exploration of oil and gas resources and nuclear power, Democrats tend to favor alternative energy sources. The parties may set aside their differences in support for biofuels, which has the rhetorical attraction of being domestically generated rather than imported from abroad. However, as I note below, biofuels, despite their bipartisan appeal, may be limited in their ability to provide much of U.S. energy needs and be saddled with all sorts of other problems.

At this juncture, Democrats are far more likely than Republicans to support the kind of energy strategy supported by CNAS, particularly the environmental component. However, unless their majority increases after the 2008 elections, support from more Republicans will be needed. On the environmental aspects of energy policy, a real information divide looms large. Republicans

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and Democrats have very different beliefs, for example, about the factual basis behind climate change. In 2006, in a poll of some 113 members of Congress, only 13 percent of Republicans said it had been proven beyond a reasonable doubt that man-made causes were responsible for warming compared to 95 percent of Democrats.⁴⁶ An information strategy among Republicans, led by convinced Republicans (such as John McCain, John Warner, Richard Lugar), might be a way to bring in a few more supporters, particularly in swing states that are also politically competitive. For those seeking a change in energy policy, any political strategy has to determine what level of concessions are necessary to get sufficient support without undermining the substance of the bill. Where could this support come from? Already, a number of swing states have been identified in the Midwest, the Rust Belt, and the Southwest.

The Economic Bases of Regional Preferences

We can dig a little deeper into state-level preferences by looking at the underlying regional economy. For example, a national map of coal mines demonstrates their concentration in a handful of states (West Virginia, Ohio, Pennsylvania, Kentucky, Wyoming, North Dakota, Texas, New Mexico, Colorado, and Utah). Any bill that puts a price on carbon will likely face opposition from legislators from these states, unless coupled with grandfathered permits for coal-fired power plants or incentives for clean coal (see Appendix C for national maps of coal mines, refineries, and renewables).

Similarly, when we look at refineries, we see they are concentrated on the Gulf Coast, New Jersey, California, Washington, and dispersed in a few other localities. While not always determinative of legislative preferences, particularly in states with more diverse economies, measures that tax the oil and gas industry or increase their operating costs through environmental and other measures may draw opposition by local legislators from these areas. Other interests have more to gain from energy policy reform. Non-hydro renewables are concentrated in the plains states (wind) and the Southwest (solar), making legislators from these states more likely to back support for renewables. While countervailing economic interests also shape legislative preferences, understanding the likely material underpinning of legislative behavior can provide a more nuanced appreciation of local preferences and their likely support for reform measures.

For some policies, it may be necessary to allow for local heterogeneity rather than mandate a one-size-fits-all federal policy. On the renewable portfolio standard, a more delayed timetable to accommodate other regions like the Southeast (that claim they have fewer renewable resources) might be required to get the bill passed. That said, states with standards that exceed the federal requirement (if one is passed) should have the flexibility to retain them. In other areas, where

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firms produce for a national market, it may be desirable to have a single federal standard to prevent problems like high-cost boutique fuels that currently create regional distortions in gas prices. In December 2007, the EPA, in dismissing California's claims of being able to regulate carbon dioxide emissions on cars, made this argument in defense of the new federal fuel efficiency standard which has a slower timetable for implementation.⁴⁷

Regional policy preferences also derive from other sources of production, not purely based on energy sources. Some regions like the Midwest produce products (like agriculture) that could be used as energy sources while other regions are big users of energy or produce energy-intensive manufactures (the Rust Belt). The Midwest economy remains heavily based on farming, and while biofuels loom larger as a part of the Midwest economy, this sector's preferences are a bit up for grabs, depending upon what additional opportunities farmers can extract from the mix of biofuels or the use of farmland as sinks for carbon, among other considerations. The need for support from Midwestern farm states helps explain why the House bill on energy includes a provision dramatically increasing the target for biofuels. That target mandates the increase in the use of ethanol as a fuel in transportation to 36 billion gallons a year by 2020, up from about 6 billion today (36 billion gallons would be about 25 percent of our transportation fuel needs today).⁴⁸ Two-thirds of that would have to be cellulosic, derived from non-corn sources such as switchgrass.⁴⁹ Similarly, the need for Rust Belt support helps explain the compromise on fuel efficiency. John Dingell's open support for the bill largely was a result of the agreement on fuel efficiency which maintained separate classes for cars and light trucks, meaning that automakers will be able to meet the standard for their fleet by building some cars that exceed the 35mpg standard and other heavier vehicles that do not.

Values and Religion Matter, Too

However, not all preferences derive solely from the bases of production. Regional differences in religiosity and values may also be important. For example, in recent years, the evangelical community, through campaigns like the "What Would Jesus Drive?" effort, has increasingly mobilized to address climate change from a values perspective. However, not all evangelical leaders have endorsed this approach. The Southern Baptist leader Richard Land, for example, has tried to tamp down on formal statements from the evangelical community on the need to address climate change.⁵⁰ Interestingly, the Southeast, the primary basis of opposition to energy policy reform, is where Baptists in the United States are overwhelmingly concentrated (see Appendix D). If opposition from the Southeast continues to stymie reform, those seeking energy policy reform might follow the lead of campaigners for debt relief and global AIDS efforts and go directly to some of their most vocal opponents like Land to persuade them to change their views.

In addition to religious attitudes, environmental values may also vary by region. The patterns we observed with the strongest bicoastal support for the three key Senate votes likely reflects, in part, the heavy concentration of environmental group members in those states (see Appendix E).

Without more sophisticated statistical analysis, we cannot say which of these different parameters (security concerns, oil prices, public opinion, partisanship, energy sources, industry, religion, environmental values, etc.) is most important in explaining legislative preferences on energy policy reform. Nonetheless, we have a clearer idea of patterns and the places where policy change is more likely to occur.

Conclusion

Beyond the hope that the next president will seize this issue as his or her own and a geographic focus on swing states, what should energy advocates do? Success will require attention to both the message and substance of the campaign.

The Message

With respect to the message, there are a number of different potential “frames” by which an appeal for comprehensive energy reform could be cast. Frames serve as mental shortcuts by which policymakers can sort information and understand a problem’s causes, its consequences, and what solutions exist.⁵¹ As suggested earlier, events—9/11, high oil prices, climate change—have made energy and climate policy more salient. Each of these and other dimensions—national security, economics, environmental impact, religion—could be the basis of an appeal.⁵² They already have.

The Energy Future Coalition’s appeal has based some appeals on national security: “Energy is fundamental to U.S. prosperity and national security. With the advent of globalization, the onset of global warming, and the war on terrorism, the complex ties between energy and U.S. national interests have drawn tighter over time.”⁵³ The Apollo Alliance framed the energy problem in terms of economic opportunity and industrial revitalization: “The Apollo Alliance provides a message of optimism and hope, framed around rejuvenating our nation’s economy by creating the next generation of American industrial jobs and treating clean energy as an economic and security mandate to rebuild America.”⁵⁴ Former Vice President Al Gore, in his film and testimony to Congress, has spoken of climate change as a planetary emergency and a moral calling: “I want to testify today about what I believe is a planetary emergency—a crisis that threatens the survival of our civilization and the habitability of the Earth...This is a moral moment of similar magnitude. This is not ultimately about any scientific discussion or political dialogue. It is about

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who we are as human beings and our capacity to transcend our limitations and rise to meet this challenge.”⁵⁵ An evangelical group’s appeal on climate change made the argument in terms of Christian values: “Christians must care about climate change because we love God the Creator and Jesus our Lord, through whom and for whom the creation was made. This is God’s world, and any damage that we do to God’s world is an offense against God Himself.”⁵⁶

Which of these messages will work best? This is likely to vary by group. As pollsters of consumer products and politics have found, persuasive appeals can often be finely tuned or “micro-targeted” to the individual concerns of the consumer or voter.⁵⁷ A pluralistic society may demand a similar variety of frames. There is perhaps one generalizable lesson from the frames mentioned above. On climate change, polling and focus groups by the Frameworks Institute found that optimistic messages based on what could be done to resolve the problem were more persuasive than tactics that emphasized fear of consequences, which seemed to demobilize and lead people to think the problem was insolvable.⁵⁸ Survey research my coauthor Bethany Albertson and I have conducted on climate change through Pacific Market Research suggests arguments about the economic opportunities of clean energy are perceived to be stronger than either national security or secular or religious moral appeals.⁵⁹

If our concern is convincing seven U.S. senators to vote for cloture, then choosing a dozen senators we think might be persuadable (based on political vulnerability, regional dynamics, etc.) may be appropriate. For them, highly personalized appeals based on the interests of their state, people who they know and trust, and their individual values may work very well.

Presidential leadership may be especially important to convince that handful of legislators to be supportive. Leadership can take two forms, an “inside” and an “outside” strategy. Presidents can bring in potential opponents through personal appeals. A president can seek to play to legislators’ egos by inviting them to be part of history and to single them out in the signing ceremony at the White House. Lyndon Johnson co-opted Minority Leader Everett Dirksen in this way to get the 1964 Civil Rights Act passed. Similarly, Harry Truman brought in Arthur Vandenberg to ensure passage of the Marshall Plan after World War II. Presidents may also, to the extent possible, seek to negotiate concessions on the legislation at hand or provide side incentives on other issues of importance. At the same time, a president may need to run an “outside” Washington strategy, a quasi-presidential campaign to directly appeal to voters in swing parts of the country to support reform. Here, visits to the state by the president or high-level functionaries could help shift the political balance by animating local activists to contact their legislators to support energy policy reform. Part of that strategy might involve enlisting influential advocates at the state-level to join as surrogates. Republican Governor Arnold Schwarzenegger of California is one prospect. So too would be CEOs of firms that are now

active on climate change such as Lee Scott of Wal-Mart and business members of the USCAP (United States Climate Action Partnership).⁶⁰

The Substance

In their quest to persuade swing state leaders and opponents to support broader energy policy measures, reformers will be tempted to offer concessions. Some deals of political expedience, however, may detract from the substantive contribution to U.S. energy needs or extend subsidies to technologies that offer little gain over the status quo. The energy bill recently passed by Congress had some elements like allowing automobile manufacturers to average across the fleet and incentives for ethanol that may qualify.

Ethanol incentives, in particular, are problematic. A number of analysts have raised concerns particularly about corn-based ethanol. The net savings of greenhouse gases and energy may be little to none. The 2005 energy bill included a mandate that 7.5 million barrels of ethanol be added annually to the fuel supply by 2012, setting off a spike in demand. The amount of corn dedicated to ethanol has increased from 13 percent in 2004 to about 24 percent in 2007.⁶¹ As a result, the price of corn has increased, leading to increased food prices both in the United States and abroad, contributing to political instability in countries like Mexico.⁶² There are real limits to the capacity of biofuels to make a substantial contribution to U.S. fuel consumption needs, even with subsidies. The corrosive nature of ethanol requires a new distribution system. Moreover, the non-corn based ethanol sources that are supported by the current bill are not yet market-ready and may not be for some time. Some concessions are the political price of getting a larger reform package through, but advocates must always ask, “Are these tradeoffs worth it?” This question must be answered authoritatively to the extent possible. Otherwise, advocates will make a series of debilitating concessions that will undercut the goals of the campaign.

Finally, perhaps one lesson of the 2007 energy bill is that seeking comprehensive reform all at once may be a bridge too far. Dividing the reform package into different bills—on fuel efficiency, a renewable portfolio standard, on a cap-and-trade system, on investments in technology—may be more politically feasible than bundling a number of controversial provisions that may spur influential constituencies to band together in common opposition. As more discrete packages, the logrolling of opponents (“let’s all oppose this thing together”) may give way to a more politically tractable vote on the merits of the individual or small set of reforms at hand. To that end, CNAS has to decide what constitutes reform, what falls in the basket and what sorts of acceptable compromises are needed to get the bigger pieces passed. What about clearing the way for new nuclear power plants? What about clean coal and carbon sequestration? What about a safety valve? What kind of support for ethanol is appropriate? Would any drilling

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domestically be desirable or permissible?

The new president will likely have a limited political window—based on the continued salience of the issue and his or her limited stock of political capital—to guide more far-reaching reform through the Congress. Other issues—the winding down of the war in Iraq, a possible recession, new security threats, competing domestic initiatives on health care—could potentially derail or detract from policy change in the energy arena. While significant reforms on energy could be passed in the first year of the new president’s term, he or she will have to be sufficiently inclusive in their consultative process to garner sufficient buy-in from important constituencies but not so poll-driven to allow the enterprise to be captured by parochial interests.

This paper has described the pluralistic nature of energy politics in the United States and offered some preliminary observations on the regional underpinning of support and opposition to more comprehensive energy reform. The timing for policy change is propitious. Indeed, additional reform packages might survive Senate negotiations and come before the president in the coming weeks and months. Even if that happens, the negotiations process will likely make the project an unfinished business. Unless President Bush experiences a dramatic conversion, the new president in 2009 will likely still face the challenge of passing additional policies—such as a cap-and-trade system—to set the stage for longer-term innovation and guidance of the country’s broader energy and environmental needs. In this setting, this paper’s identification of swing states, the basis of legislative preferences, the rhetorical opportunities for messaging, and cautions about political concessions ought to serve advocates well.

Appendix A: Veto Players in the G7

Here is one measure of veto players in the G7 advanced industrialized countries. The average in 1996 for 23 OECD countries was 1.78.



Data from Armingeon, Leimgruber, Beyeler and Menegale 2005.

Appendix B: Elements of 2007 energy bill and other bills⁶³

<p>Passed Provisions (from the Clean Energy Act, also referred to as the Renewable Fuels, Consumer Protection, and Energy Efficiency Act and the Energy Independence and Security Act)</p>	<p><i>Increased fuel efficiency standards</i></p> <ul style="list-style-type: none"> by 2020, a fuel economy standard of 35 miles per gallon. Auto companies can still average across their fleet of cars. <p><i>Enhanced mandate for biofuels</i></p> <ul style="list-style-type: none"> by 2022, establishes a total Renewable Fuel Standard of 36 billion gallons, up from the current level of 7.5 billion gallons. 2/3 must come from cellulosic sources (i.e., non-corn). <p><i>New standards on light bulbs</i></p> <ul style="list-style-type: none"> by 2012 to 2014, all light bulbs must use 25 to 30 percent less energy than they currently use, setting the stage for the phasing out of incandescent bulbs. <p><i>Additional standards on home appliances</i></p> <ul style="list-style-type: none"> additional standards on washing machines, dishwashers, and other home appliances. <p><i>Sustained subsidies for nuclear and coal</i></p> <ul style="list-style-type: none"> a different bill, the Omnibus spending bill, provided \$30 billion in subsidies for nuclear power and coal.
<p>Dropped Provisions</p>	<p><i>Renewable Portfolio Standard (RPS)</i></p> <ul style="list-style-type: none"> a national Renewable Portfolio Standard that required utilities to buy 15% of their energy from renewable sources (solar, wind, hydro, biomass, geothermal) by 2020 <p><i>Elimination of tax breaks for oil companies</i></p> <ul style="list-style-type: none"> a \$22 billion tax package that would have cut tax breaks for oil companies. <p><i>Extended tax credits for renewables</i></p> <ul style="list-style-type: none"> an extension to an investment tax credit for renewable power generation from solar, wind, and biomass.

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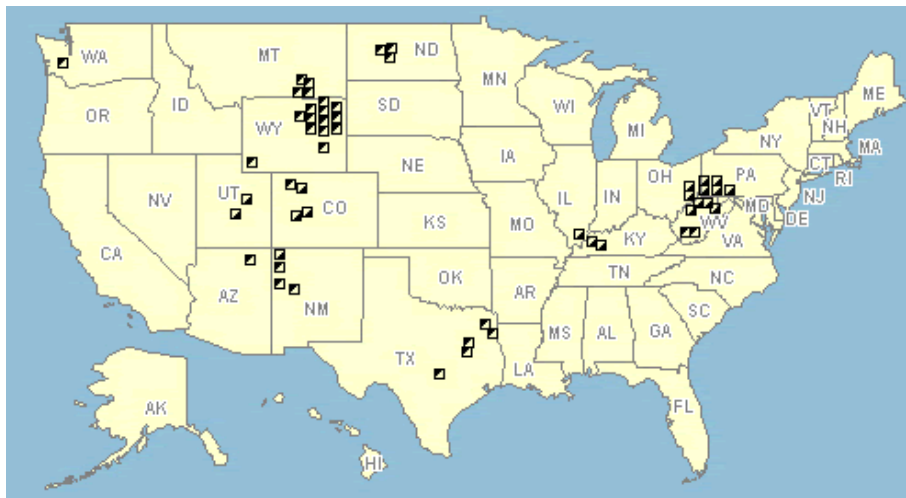
Other Pending Bills (Lieberman-Warner is one example of several pending bills)⁶⁴

Cap-and-trade

- economy wide, all six greenhouse gases
- upstream for transport, downstream for coal users
- 4% below 2005 level in 2012, 19% below 2005 level in 2030
- 37% below 2005 level in 2030, 55% below in 2040
- Increasing auction: 26.5% in 2012, rising to 69.5% from 2031-2050
- Some sectoral allocations
- Limits on domestic, international offsets, company borrowing (15%)

Appendix C: Map of Coal Mines, Refineries, and Renewables⁶⁵

Map of Coal Mines

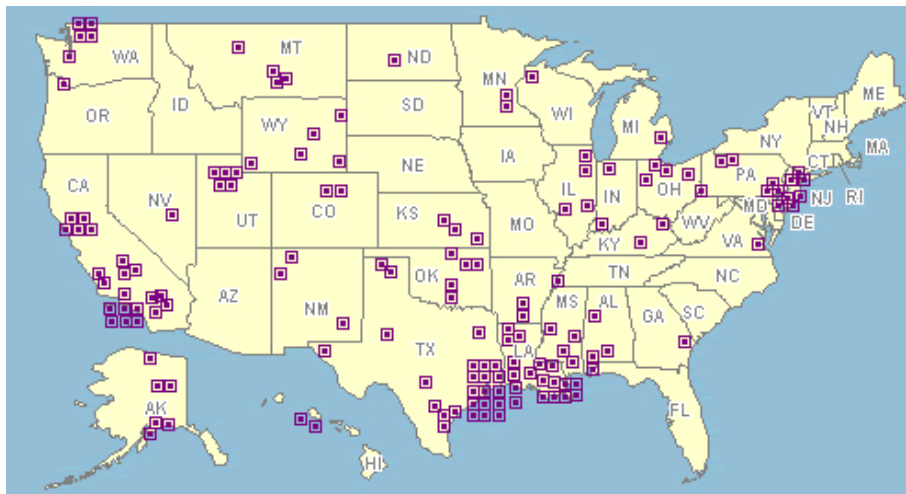


Coal Mines

Min. production of 4 million short tons in 2005
(Values below are U.S. totals)

- Surface (33)
- ▨ Underground (20)

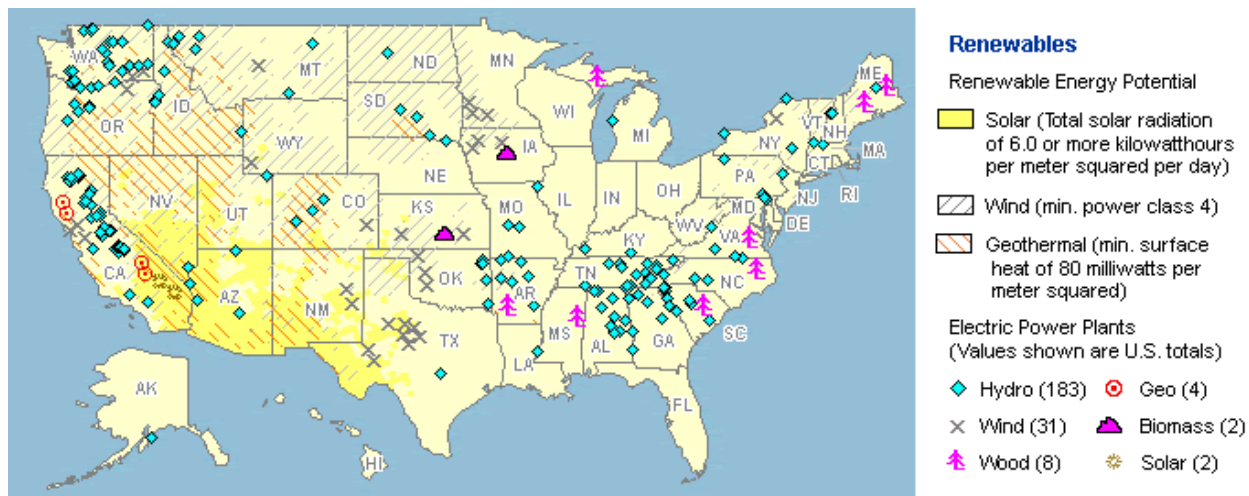
Map of Refineries



Petroleum Refineries

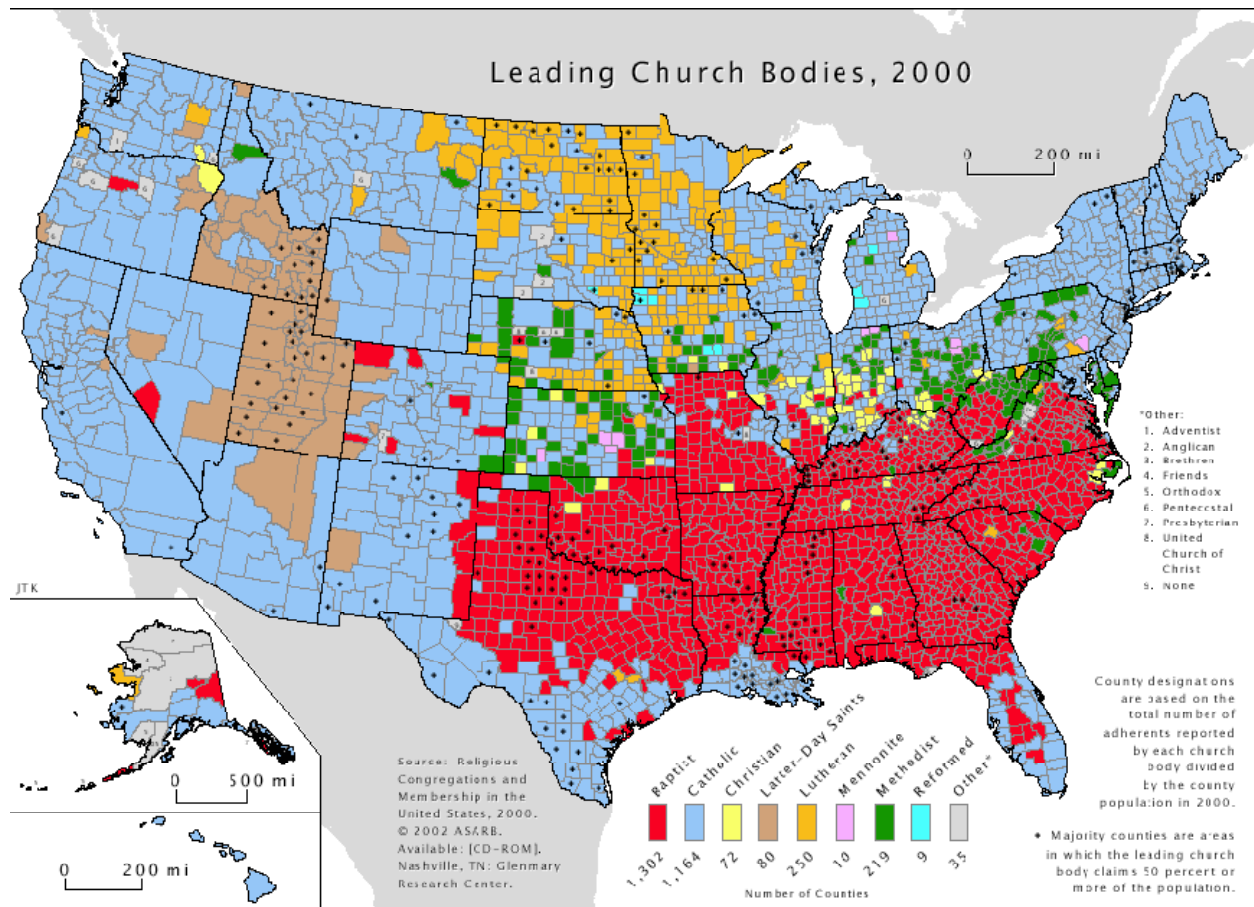
- Operable Petroleum Refinery
U.S. Total = 149

Map of Renewables



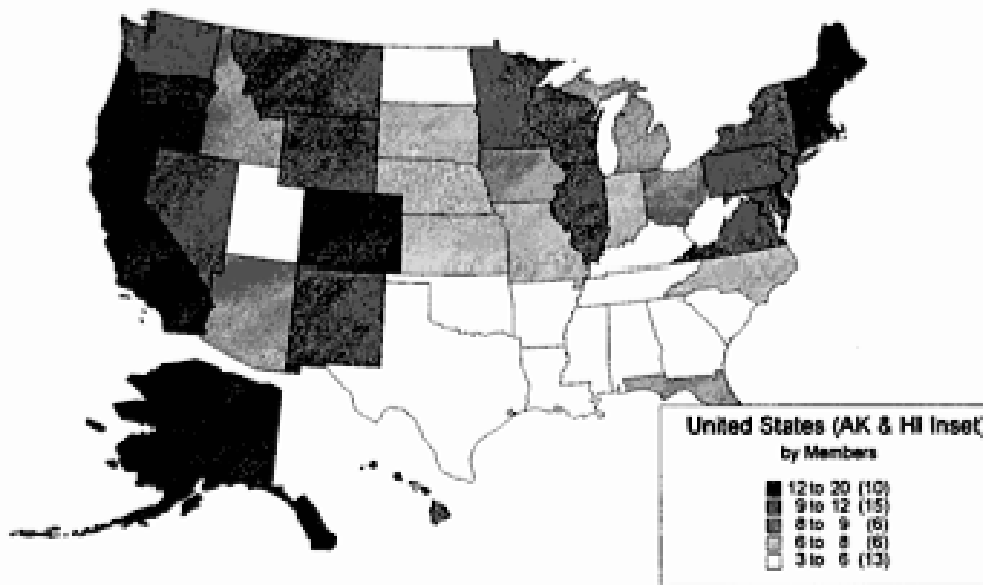
Source: Energy Information Administration

Appendix D: Leading Church Bodies by Region⁶⁶



Source: Glenmary Research Center

Appendix E: Environmental Membership by State⁶⁷



Source: Mazur and Welch

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⁴ The tax was modified to be collected where the ultimate end-user takes delivery rather than an earlier stage in the process. *New York Times* 1993.

⁵ UNFCCC 1998.

⁶ The vote was close 219-213. Pianin and Hilzenrath 1993.

⁷ Hilzenrath 1993.

⁸ Bodansky 2001, 52; O'Keefe 2003.

⁹ Busby 2007.

¹⁰ Veto players theory is rooted in comparative politics but has been increasingly incorporated into international political economy Vreeland 2004; Mansfield, Milner and Pevehouse 2005.

¹¹ Tsebelis 2002, 25.

¹² Tsebelis 2002, 25.

¹³ Huber and Stephens 2001, 55-56.

¹⁴ Data from Armingeon, Leimgruber, Beyeler and Menegale 2005. This is an additive index of five measures of constitutional structure including federalism, presidentialism, bicameralism, proportional representation, and use of referenda. For alternative measures, contact the author.

¹⁵ Tsebelis 2002, 81.

¹⁶ Mufson and Weisman 2007a.

¹⁷ Cummings 2007.

¹⁸ Victor, House and Joy 2005.

¹⁹ For a discussion of safety valve politics, see Bodansky 2001; Nesmith 2003.

²⁰ I discuss the politics of the safety valve in more detail in Chapter 6 of Busby 2004.

²¹ I discuss how environmental groups shaped the metrics of acceptable “green” policies at Kyoto in Chapter 5 of Busby 2004.

²² Kernell 1997.

²³ Hebert 2007.

²⁴ PollingReport.com 2007.

²⁵ Kingdon 1995.

²⁶ This was the conclusion of a review of sixteen polls taken in 2006 and 2007, several of which contained multi-year tracking data showing increased concern among Americans about climate change. Environmental and Energy Study Institute 2007.

²⁷ Leiserowitz 2007.

²⁸ A 2002-2003 poll found only 40% supported emissions trading compared to the 90% that favored reduction of U.S. emissions and 88% that supported the Kyoto Protocol. Leiserowitz 2006.

²⁹ For example, a March 2007 Gallup poll found that the percentage of people who worry a great deal about climate change had increased by 15% in just three years, up to 41%. Environmental and Energy Study Institute 2007.

³⁰ In 2006, a Pew Center poll found that a majority of Democrats (81%), Republicans (58%), and Independents (71%) agree that there is solid evidence of global warming. However, only 24% of Republicans were willing to say there was solid evidence that this was due to human activity, compared to 54% of Democrats and 47% of Independents. The Pew Research Center for the People & the Press 2006.

³¹ Vehicle fleets would be required to average 35 miles per gallon by 2020, a 40 percent increase over the current standard. Automakers would still be able to achieve this standard by averaging across their fleet. Broder and Maynard 2007.

³² By 2020, utilities would have to generate at least 15 percent of their electricity sources using renewable energy such as wind or solar power.

³³ On December 5, 2007, this bill got reported out of the Senate Environment and Public Works Committee by a vote of 11-8. All of the Democrats on the committee voted in favor. John Warner was the sole Republican to vote in favor.

³⁴ Only 14 of 188 Republicans who voted on the energy bill supported it. House of Representatives 2007.

³⁵ A yes vote on cloture was the environmental vote. The vote on the Bingaman amendment was for tabling the amendment. A no vote was the environmental vote. This was a non-binding resolution so perhaps less telling than other votes. A yes vote on the McCain-Lieberman bill was the pro-environment position.

³⁶ Contact the author for the data. U.S. Senate 2003; U.S. Senate 2005; U.S. Senate 2007a.

³⁷ U.S. Senate 2007a.

³⁸ Groppe 2007.

³⁹ Three other cases (Florida, Nevada, and Texas) included one non-voting member.

⁴⁰ Wilson 2007.

⁴¹ The Southern Company is a holding company for Georgia, Alabama and Mississippi utilities. In the first half of 2007, the firm spent more than \$7 million on its own in-house lobbyists and an additional \$1.1 million for outside lobbying firms on energy and environmental issues. Mufson and Weisman 2007b. Other RPS opponents included the Tennessee Valley Authority and Duke Energy.

⁴² U.S. Senate 2007b.

⁴³ Broder 2007.

⁴⁴ Department of Energy 2007.

⁴⁵ Pew Center on Global Climate Change 2007b.

⁴⁶ National Journal 2007.

⁴⁷ Thomas and Werner 2007.

⁴⁸ Hargreaves 2007.

⁴⁹ Weisman and Mufson 2007.

⁵⁰ Goodstein 2006.

⁵¹ Zald 1996, 262.

⁵² See for example, page 57 in Busby and Ochs 2004.

⁵³ Energy Future Coalition Undated.

⁵⁴ Apollo Alliance Undated.

⁵⁵ Gore 2007.

⁵⁶ Evangelical Climate Initiative 2006.

⁵⁷ Sosnik, Dowd and Fournier 2006.

⁵⁸ Retallak 2006.

⁵⁹ This is unpublished material. Contact the author for more information.

⁶⁰ See the USCAP website for a list of members <http://www.us-cap.org/>

⁶¹ Simon 2007. In late 2007, a bushel of corn cost \$3.5, up from \$2 about two years earlier. Ethanol demand was blamed as was a deep frost.

⁶² Runge and Senauer 2007.

⁶³ Environmental News Services 2007; LaMonica 2007; Morse 2007.

⁶⁴ Pew Center on Global Climate Change 2007a.

⁶⁵ Energy Information Administration 2007.

⁶⁶ Glenmarry Research Center 2000.

⁶⁷ Mazur and Welch 1999.