Explaining Growing Climate Policy Differences between the European Union and the United States

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Abstract

Strong rhetorical differences between the European Union (EU) and the United States on climate matters have been evident for almost two decades. Since the mid-2000s, such differences are becoming visible in their respective climate policies as well. We propose three explanations for differences in climate policy outcomes in the EU and the US. First, the agenda-setting privileges of their policy-makers are significantly different, influencing how agenda setters shape policies and link issues, such as energy and climate policy. Second, while issue linkage has helped overcome distributional obstacles in the EU, it has led to more complexity and greater policy obstacles in the US. Finally, legislative rules, procedures, and norms have constrained the coalition-building efforts of lawmakers in the two systems in different ways, affecting negotiation processes and outcomes. Such differences in agenda-setting privileges, potential for issue linkages, and legislative procedures in the EU and the US have left them wide apart in international climate negotiations.

With the Kyoto Protocol's first commitment period ending in 2012, and a successor global climate treaty not yet in sight, the wide gap between EU and US approaches to climate change is a timely and relevant research topic. Differences in policy ambitions, stringency, and scope have grown, as the EU has legislated broadly on climate change but the US has not.

In March 2007, the European Council adopted the so-called 20-20-20 targets. These called for a 20 percent reduction of greenhouse gas (GHG) emissions below 1990 levels by 2020; a 20 percent increase in the share of renewable energies in overall energy consumption, including a 10 percent binding minimum target for transport fuels; and a 20 percent cut in primary energy consumption compared to projected levels through energy-efficiency improvements. These targets require a 14 percent reduction in GHG emissions and an 11.5 percent increase in the share of renewable energy compared to 2005.¹

In December 2008, the 27 EU heads of state and government, and the European Parliament (henceforth Parliament), adopted comprehensive legislation to realize these targets. This included strengthening the EU Emissions Trading System (ETS), promoting renewable energy sources, adopting differentiated national targets for sectors not covered by the ETS, and adopting new rules on carbon capture and storage (CCS). They also adopted regulations on emission performance standards for new passenger cars and a directive on fuel quality mandating a reduction in CO₂emissions . Simultaneously, the EU has facilitated development of new technologies by establishing several European technology platforms for CCS, wind, solar, and electricity grids.

^{1.} Delbeke 2009.

In contrast, the US Congress failed to pass climate legislation in 2009-2010, despite an alignment of strong policy-change drivers. These included warnings in the 2006 Stern Review that failure to act on global warming would impose major costs on the global economy; public concern about climate change raised by Al Gore's award-winning documentary "An Inconvenient Truth"; a sharp rise in oil prices; and improved scientific understanding about climate change presented in the 2007 Fourth Assessment Report of the Intergovernmental Panel on Climate Change.

Because of increased attention to the need for a climate policy, lawmakers from both the Democratic Party and the Republican Party introduced and debated several climate and energy bills. The bills seemingly mirrored EU climate policy, promoting cap-and-trade, CCS, renewables, and energy-efficient transport. Policy change appeared eminent. When Barack Obama took office in 2009, he proposed strengthening federal climate policy, and a comprehensive and ambitious climate bill passed in the House of Representatives in June 2009. Yet, the bill did not have sufficient support to be put up for a vote in the Senate. President Obama could only use his powers under the Clean Air Act to instruct the Environmental Protection Agency (EPA) to prepare and implement stricter emissions rules for the transport sector and reporting requirements for stationary emission sources.

The EU and US are frequently compared because of their importance in international environmental and climate policies, even though one is a supranational body consisting of countries linked to each other through a series of treaties, and the other is a single country. ² Their different policy responses to climate change have been traced back to distinct relationships between the state and society in each context. Differences in their interregional carbon intensity, commitment to the welfare state, public opinion, party politics, international

^{2.} Jordan et al. 2012; Menon and Schain 2006; Schreurs, Selin, and VanDeveer 2009; Schreurs and Tiberghien 2010; Wheeler 2010.

climate leadership ambitions, and governance systems also figure prominently as explanations. These explanations have significant merit, but are largely unable to explain why differences in the depth and scope of enacted climate policy between the EU and the US have increased over the past few years.

Why have differences in EU and US climate policy outcomes developed, despite similarities in policy proposals and the timing of initiatives? Major differences in agendasetting privileges, potential for issue linkages, and legislative procedures that constrain coalition-building efforts among veto-players can at least partially explain such policy differences. Policy differences should also be understood in light of the EU as a supranational multi-level governance structure and the US as a federal state. The EU departs from a classic federal state in important ways, including separation of powers and cooperative norms. Power dispersion among EU institutions (the Council, Commission, and Parliament) encourages cooperation and consensus seeking among agenda-setters and veto-players. In contrast, institutional relationships and processes in the US often lead to policy stalemate and failure to reach consensus. In clarifying these differences, this article introduces three complementary explanations that draw on theories of veto-players, issue-linkages, and coalition formation. We use these theories to explain the differences in EU and US climate policy development. The concluding section summarizes main findings.

Three Explanations for Policy Divergence

To explain divergent developments in EU and US climate policies we consulted three bodies of literature and analyzed two phases of policymaking. We focus particular attention on

policy design because a proposal's contents can constrain decision-making.³ The first strand of literature addresses pivotal actors in the policy-making process and emphasizes the agendasetter's role in initiating new policies. To be re-elected, lawmakers must respond to and promote constituency interests; hence such interests often influence policy-makers' positions on issues. This in turn can create veto-players.⁴ Veto-players are a set of specific individuals or collective actors whose agreement is necessary to change policy.⁵

The number of veto-players, the ideological distance between them, and their internal cohesion determines their configuration and role in a specific policy debate. Their configuration also affects the room that veto-players have to change the status quo. The set of policy options acceptable to all veto-players that may replace the status quo represents a "win set." The privilege of the agenda-setters is that they can present a policy alternative that is as closely positioned as possible to their own ideal position, but is still acceptable to most policy-makers. Hence, the number of formal agenda-setters is crucial. More than one agenda-setter means higher complexity because more issues can be inserted into the policy debate. Changes in constituency interests and need for policy-makers to be responsive to these shifts can also affect the prospects for agenda-setters to initiate new policies that depart from the status quo.

These expectations will be compared in relation to the roles of the European Commission (henceforth, Commission) and members of the US Congress, the formal agenda-

^{3.} McKibben 2010.

^{4.} Chiou and Rothenberg 2003; Krehbiel 1998; Lee 2005; Mayhew 2005; Tsebelis 2002.

^{5.} Tsebelis 2002.

^{6.}Ibid.

^{7.} Mahoney 2007: 39.

setters in both systems.⁸ In examining policy initiation, we focus on the number of agendasetters, changes in constituency interests, and policy-makers' responsiveness to such changes.

The second strand of literature argues that additional agenda items can create or constrain new possibilities for effective issue-linkage. This literature is very relevant for to discussions about new policy design and content. When simultaneously discussed for joint settlement, issues can be added, combined or linked. New agenda items can help overcome distributional obstacles, change power relationships, and yield joint gains for the veto-players involved. Issues can also be removed from the agenda or be considered in an independent forum. In Issue linkage essentially involves jointly negotiating two or more issues. It generally occurs because at least one party believes that linkages improve the chances for a (favorable) agreement.

We consider two countervailing propositions regarding the consequences of issue-linkages, which help to explain differences in EU and US climate policies. The first argues that adding issues can yield joint gains that create or enhance probabilities for achieving a successfully negotiated outcome. The joint gains assumption helps explain why the EU has succeeded in adopting (relatively) ambitious climate policy. Agreement results when unrelated but differently valued issues are combined, distributional obstacles are overcome with side-payments, and synergies among issues are exploited by combining them. 13

^{8.} We focus on actors with a formal role in agenda setting in line with the veto-player theory.

^{9.} For example, Hovi and Skodvin 2008; McKibben 2010; Sebenius 1983.

^{10.} Sebenius 1983, 287-288.

^{11.} Hovi and Skodvin 2008.

^{12.} Sebenius 1983, 292.

^{13.} Ibid. 298.

In contrast, adding issues can also reduce the chances for successfully negotiated outcomes. ¹⁴ Issue-linkages fail when individual issues have little or no commonality, or when the basis of any agreement could destroy common ground. Adding issues makes policymaking more complex and cumbersome. It can also cause a redistribution of current benefits that is unattractive to veto-players. Increased complexity and unwanted re-distributional effects may help explain why the US failed to adopt a new climate policy. Negotiations attempting to create compensatory schemes for potential losers did not succeed in US climate policy debates after 2006. As argued more fully below, different approaches to linking climate and energy policies, to help overcome distributional obstacles and change power relationships, led to very different outcomes in the EU and the US.

The third strand of literature deals with coalition formation within political institutional settings. It applies to legislative bargaining on specific proposals for policy change and institutional rules and procedures affecting coalition building. ¹⁵ In the US, few lawmakers engage as leaders or bill sponsors or build coalitions, given their time and staff limitations and the numerous policy issues they must address. Consequently, a few dedicated lawmakers, principally members of relevant committees, tend to be the ones who champion policy proposals during debates.

Such coalition builders can highlight their conceptions of problems and solutions, thereby making prioritization of their solutions more likely. Yet legislative rules, norms, and procedures shape consensus-building processes, and restrict the provisions that can be traded for support. Other lawmakers may be persuaded to support a coalition when small concessions are made. At times, however, coalition builders may have to make significant

14. Ibid. 300.

15. For example, Lee 2000; Mahoney 2007; Strom 1997; Wiseman 2004.

compromises in order to gain wider acceptance.¹⁶ We examine whether combining issues and policies in the EU and US climate packages affected bargaining and final outcomes. We focus on the importance of leaders in the coalition building process, the impacts of rules, procedures and norms in the legislature, and the potential for establishing winning coalitions in negotiations.

In summary, three complementary explanations are used to examine differences in two crucial policy-making phases—the phase of initiating and designing new policy proposals, and the legislative negotiation phase. In explaining differences in the initiation phase, we first focus on the number of formal agenda-setters and their responsiveness to changes in constituency interests. Second, we analyze whether issue linkages yielded joint gains, or made the decision-making process complex and cumbersome. Issue-linkages are analyzed in the content of new policy proposals that affect subsequent negotiations. To explain negotiation-phase differences, we compare the role of formal leadership in coalition-building processes, the legislative process's rules, procedures, and norms, and the subsequent scope for establishing winning coalitions in negotiations.

Explaining Divergence in Recent EU and US Climate Policies

Significant change in EU climate policy occurred in the mid-2000s, with the adoption of emissions trading (2003), binding integrated climate and energy targets (2007) and a package of mandatory instruments covering most relevant sectors (2008).¹⁷ In contrast, despite many

^{16.} Kingdon 2005, 198-199.

^{17.} For a comprehensive analysis of the EU ETS, see Skjærseth and Wettestad 2008. For a comprehensive analysis of the EU climate and energy package, see Skjærseth, 2013.

initiatives, climate legislation failed to pass in the US Congress. We advance three complementary explanations for the differences in climate policy outcomes in the US and the EU, despite increasing convergence around policy ideas. We do so by comparing and explaining the initiation, design and negotiation of climate proposals and policies.

Developments in EU Climate Policy

Since the 1990s, the EU has sought a leadership role in international climate change negotiations. However, such leadership did not take on legal form until the mid-2000s. The move from rhetoric to action required agenda setters, issue linkages that brought in potential veto players, and effective coalition building tactics. We examine below why the EU formally adopted the climate and energy package in 2008 that was first initiated by the Commission in 2006.

Explanation 1: Pivotal Agenda-Setting Actors

In 2006, oil prices were rising, climate 'hype' was sweeping Europe, and EU public opinion supported action on climate change. ¹⁹ Energy security was also high on the political agenda, in large part because of the Ukraine-Russia energy dispute that threatened European gas supplies. The ten central and eastern European countries (CEECs) that joined the EU between 2004 and 2007 were economically poorer and less energy efficient than the EU-15. Enlargement increased the EU's interregional disparity in carbon intensity and Gross Domestic Product (GDP) per capita. Most of the EU-15 members favored more stringent

18. Oberthür and Kelly 2008.

19. Eurobarometer 2008.

climate policy, whereas the new CEECs were more concerned about energy security. These asymmetrical energy-economic interests made designing ambitious climate policy more challenging, but also focused attention on available opportunities to negotiate a broader climate policy package in which energy security would receive a more prominent place.

The Commission has exclusive rights to propose new EU legislation. Favorable external conditions for integrating climate and energy policies placed the issue on the Commission's agenda, but these conditions did not drive policy development. The link between constituent groups and the Commission is relatively weak. The nonpartisan Commission, led by Commissioners from each Member State, is collectively responsible for decisions, and is appointed to serve EU interests. This enables it to think in a more long-term manner than most Member States. Nevertheless, Commissioners are also a link to national publics and serve as a crucial clearinghouse for interests of the Member States vis-à-vis the Commission.²⁰

In addition to policy initiation, the Commission also has responsibility for implementation. Thus, consultation with non-state actors is important to strengthening policy acceptance and legitimacy among stakeholders. In this case, structured consultation with industry and green groups has occurred through the European Climate Change Programme (ECCP), which was launched in 2000 to review progress and develop new climate policies. Stakeholders have included different branches of the Commission, Member-State experts, industry, and NGOs.

The Commission is divided into different directorate generals (DGs). The initiative to strengthen EU climate policy by integrating energy and climate policies came from DG Environment (later DG Climate Action) given a belief that stronger coordination between these issues would strengthen the case for a more ambitious climate policy within the

^{20.} Egenhofer et al. 2011.

Commission and among the 27 Member States.²¹ A handful of individuals with close ties to the environment and energy DGs and the top level of the Commission were able to make this happen (Skjærseth, 2013).

In January 2007, the Commission simultaneously published two key communications on energy and climate policy strategies for 2020 and beyond that proposed the 20-20-20 targets. ²² The energy and environmental DGs published these communications on the same day, illustrating the close coordination between them. Commission President Barroso backed the communications, which aimed to integrate climate policy targets and measures with energy security and competitiveness policies. Existing measures for renewable energy and energy efficiency lacked the coherence needed to realize these broader goals. ²³

The communications specifically called on the European Council and Parliament to endorse the ambitious plan before it was officially proposed as new legislation. The Parliament responded swiftly.²⁴ In February, it published a resolution on climate change that argued for even more stringent targets than those proposed by the Commission. In March 2007, the European Council adopted key elements of the new climate and energy policies.²⁵ The Commission had received backing from the highest political level before the package entered the negotiation phase. This process illustrates that power is dispersed across EU institutions.²⁶ A lack of clear separation of powers and competences between institutional

^{21.} This was also made possible by the change in the UK position from resisting to supporting coordination of energy policy at the EU level at Hampton Court in 2005.

^{22.} Commission 2007a and b.

^{23.} Commission 2007a, 6.

^{24.} EP 2007.

^{25.} European Council 2007.

^{26.} Egenhofer et al. 2011.

actors promotes tighter cooperation between the Commission and collective veto-players (Council and Parliament) when legislation is initiated.

The discussion above suggests that the Commission as a formal agenda-setter and one that is relatively weakly tied to specific Member State constituency interests initiated new EU climate and energy policies in cooperation with the Member States and Parliament. This was done after consultation with target groups and winning the cooperation of potential vetoplayers.

Explanation 2: Issue linkages Increased Joint Gains

In January 2008, the Commission formally proposed the climate and energy package designed to attain the 20-20-20 targets. The package aimed at reducing emissions in ETS sectors (electric power production and energy-intensive industries) by 21 percent below 2005 emission levels, by decreasing the number of allowances annually, and stipulating a 10 percent reduction in emissions for sectors not covered by the ETS. These were based on different national targets in a so-called effort sharing decision (ESD). A Renewable Energy Sources (RES) directive also based on different national targets addressed the renewable energy target

In addition to the measures being mutually supportive and cost-effective, burden- or effort sharing was also key in facilitating political feasibility. ²⁷ Effort sharing was particularly important to bring new Member States on board. The new policies aimed at being fair, balanced, and proportionate, and took into account individual circumstances in Member States and industries. As some Member States are more able than others to finance necessary investments, the main criterion for calculating differentiated national targets in ESD and RES

^{27.} Commission 2008b.

was GDP per capita. The package was composed of four legislative proposals to realize the targets: revising the EU ETS, effort sharing in non-ETS sectors, promoting renewable energy sources, and rules for CCS.

The EU climate and energy package was based on thoroughly assessing how the ETS, ESD, and RES proposals would work together. The assessment included different scenarios based on varying oil prices, access to the Clean Development Mechanism (CDM), and sensitivity tests for different targets. The overall costs to European economies were estimated at just under 0.5 percent of GDP by 2020. In principle, no Member State was expected to make investments that diverged too far from this average. The consequences for Member States of a purely cost-efficiency criterion were assessed as a reference option. Results showed significant differences in costs across Member States by 2020. These differences were leveled out and the issues were linked in three ways to make the package politically acceptable. These included::

- Setting different national targets in the non-ETS sectors based on GDP/capita;
- Setting different national targets for the share of EU energy consumption to be
 achieved by renewable energy, based on a combination of GDP and flat-rate increase
 in the share of renewable energy;
- Using auctioning revenues (from the revised ETS) to compensate lower income
 Member States.

A similar analysis was undertaken for energy-intensive industries exposed to significant international competition and at risk of carbon leakage. Results of the analysis showed that access to CDM credits and free allowances through benchmarking would be effective strategies to limit any potentially negative effects of the revised ETS.

Other policies simultaneously proposed by the Commission were delinked from the impact assessment and the core package, because they could increase burdens for specific

Member States or make negotiations more complex. For instance, as regulation covering new car emissions applied only to Member States with car manufacturers, it was not included in the package. Similarly, a directive on fuel quality, which required reduction of the carbon footprint of road fuels from well-to-wheel but applied primarily to oil companies, was not made part of the package. Finally, the Commission proposed no new binding measures to achieve the 20 percent energy-efficiency target. This could have particularly burdened the CEECs, which face significant challenges in enhancing energy efficiency but also have the highest potential to do so. The burden sharing agreement would have been even more complex if energy efficiency had been included in the climate and renewable energy targets.

In summary, the breadth of the climate and energy package made possible complex bargaining within the package's main structure. The proposed package increased joint gains by linking energy and climate policies and promoting fairness and burden sharing.

Furthermore, it did not contain issues that could divide Member States and reduce joint gains.

EU institutional actors and stakeholders seek to build consensus and large coalitions to avoid decisions based on simple majorities. Majorities tend to be unstable because they shift with the issues. Constructive cooperation and consensus seeking tend to prevail over power struggles and competition among Member States. Still, nothing guarantees that the Commission's legislative proposals will survive negotiations. However, the main structure of the energy and climate package survived the 2008 negotiations. As a result, Member States unanimously adopted the package and the Parliament unanimously endorsed it. The package

^{28.} Egenhofer et al. 2011; Wallace and Wallace 2000.

^{29.} An example is the failed EU carbon/energy tax.

included reduction targets for ETS and non-ETS sectors and different national targets in the ESD and RES Directives.³⁰

The four legislative proposals were complex and the schedule for their development was tight. The EU needed an ambitious package to show leadership by example before the 2009 Copenhagen climate meeting and the June 2009 Parliament elections. Deliberations commenced with informal negotiations among high-level representatives from the Commission, the Parliament and the Council. The package's most important climate policy element was the proposal for revising the EU ETS, including changing allocation procedures for emission allowances from a free allowance-based system to auctioning. Two main areas of disagreement existed in negotiations on reforming the ETS. First, the new CEECs, led by Poland, demanded more economic 'solidarity' than was originally included in the Commission's proposal, and second, energy-intensive industries demanded more free allowances to reduce the risk that they would abandon Europe (so-called carbon leakage). These demands were made with increasing intensity in fall 2008, fueled by the unfolding global economic crisis and rising concerns about the costs of the package.

France assumed the half-year rotating EU Presidency from Slovenia in fall 2008 and French leadership proved extremely important to forging a compromise by the end of the year. One institutional tool they used was to introduce more demanding decision-making procedures specifically, the replacement of qualified majority in the Council of Ministers with unanimity in the European Council. Because the elements of the package were broad and

^{30.} The EU ETS is enforced by a financial penalty at the level of industrial installations, which is significantly higher than the market price for allowances.

^{31.} Skjærseth and Wettestad 2010.

mutually reinforcing, decision-makers were pressurized to adopt all legislative proposals simultaneously. This meant that each Member State plus the Parliament would have a veto.

In defense of its energy-intensive industries, Germany demanded more free allowances, but the Parliament opposed this. Germany got its way, however, in exchange for accepting more stringent car emissions rules than it had originally proposed. For accepting the request for more free allowances, the Parliament got 300 million allowances from the ETS new entrants' reserve to co-finance up to 12 CCS demonstration projects and other new renewable technologies, linking the new CCS legislation to the ETS. The CEECs demanded changes in the baseline and structure of the effort sharing decision proposal that were incompatible with the package's overall design. These demands did, however, eventually increase revenues from auctioning to a solidarity fund and increase concessions to the CEECs regarding some free allowances for the power sector under the ETS, linking the effort sharing decision to the ETS. The RES legislation on renewable energy was agreed in principle before the rest of the package, thus preventing direct linking of issues in the final negotiations.

In sum, the EU case shows how one major agenda-setter, weakly tied to specific constituency interests, could initiate an integrative climate and energy package based on fairness and burden sharing. Aided by strong French leadership, the integrative package proposal made negotiations among decision-makers cooperative, and provided extensive room for side-payments through issue-linkages, resulting in unanimous adoption of new climate and energy policies.

Developments in US Climate Policy

A new phase of US climate policy started when the Democrats began seriously pushing for federal climate legislation after they won the 2006 mid-term election, and captured House and

Senate majorities. Congressional Democrats made climate change a top agenda item, riding a wave of dissatisfaction with climate and energy policies of President George Bush, and responding to increased concern about global warming in the public.. We examine below why their initiatives failed in the formal negotiations from 2009 onwards. ³²

Explanation 1: Pivotal actors involved in agenda-setting

The US public expressed record-high levels of concern about climate change in 2006–2007.³³ In the absence of federal legislation, states and regions were pursuing relatively ambitious policies. Twenty-seven states established mandatory Renewable Portfolio Standards and 23 states adopted statewide emission targets and goals.³⁴ Energy security concerns also heavily influenced the climate policy debate as rising world oil prices caused anxiety about oil import dependency.³⁵ Given that the US imported about 60 percent of its annual oil consumption at the time, the 2006-2007 oil price hike hit Americans hard, and made consumers demand quick fixes.³⁶ Responding to such constituency concerns, Democratic Congressional majority leaders explicitly linked energy security and climate change, and recommended the development of alternative, fossil-free energy as a joint solution for both problems. However, the fossil fuel industry and many other supporters of the Republican Party questioned climate change science and the seriousness of the climate change threat, and argued that climate policy was premature. Responding to this voter base, Republican politicians decoupled energy

^{32.} This section benefited greatly from interviews with legislative advisors on Capitol Hill in November 2008 and November 2010.

^{33.} McCright and Dunlap 2011; Weber and Stern 2011.

^{34.} Pew Center on Global Climate Change 2011.

^{35.} EIA 2008b; EIA 2008a.

^{36.} Bang 2010.

security and climate change, and proposed more domestic oil and gas drilling to solve energy security problems.³⁷

All 535 members of Congress are potential *formal* agenda-setters as they can introduce *individual* climate bills. Many did so to signal their debate positions. During the 110th Congress (2007-2008), a record number of competing climate change and energy security bills were debated in committee in both chambers. However, Congress as a whole only seriously deliberated on a few bills. Despite mounting public concern, it became increasingly clear that deep cleavages remained between policy-makers representing states with different natural resource bases.³⁸ Climate policy proposals reflected their sponsor's attention to key constituency groups in their home state, regardless of party affiliation. Democrats representing coal-producing states, such as West Virginia, emphasized different aspects of climate policy than did Democrats from states with fewer fossil-energy resources, such as Massachusetts.

As is typical of US lawmaking, interest groups lobbied Congressional representatives intensely to express their positions and to influence the debate agenda. In this policy phase, technology firms (e.g. General Electric and DuPont), the wind and solar energy sectors, and others who would gain from more stringent climate policy supported a rhetorical link between energy security and climate change, as well as subsidies for renewable energy development and a clean energy transition. Actors in these sectors formed the US Climate Action Partnership to lobby Congress for climate policy action. Conversely, the Chamber of Commerce, the American Petroleum Institute, and others who stood to lose from stricter climate policy emphasized the dangers of adding economic burdens to firms and sectors, especially those that provided cheap electricity for homes and workplaces in most states, and

^{37.} Jacques 2009; Jacques, Dunlap, and Freeman 2008; McCright and Dunlap 2003.

^{38.} Fisher 2006; Skodvin 2010.

were important economic pillars. In sum, politicians competed to dominate agenda setting while responding to interest groups and their constituents' preferences. Such agenda setting by pivotal actors set the stage for Congressional legislative bargaining on climate policy.

Explanation 2: Did issue linkages complicate the bill's design and content?

In January 2009, Barack Obama expressed his wish to see the 111th Congress pass a climate law. In doing so, he emphasized links to clean energy technologies and expanding job opportunities—so-called green jobs. No previous president had been so clear in supplying a climate policy program to the Congress. Furthermore, both his administration and Congressional Democratic leaders emphasized the importance of protecting US interests by positioning the country to compete in the global clean energy investment race with emerging economies. Congressmen Waxman (D-CA) and Markey (D-MA) introduced the standard bearing climate change bill for the Democrats. Reflecting President Obama's priorities, and with many similarities with what had been legislated in Europe, it included proposals for:

- a federal renewable electricity standard; CCS technology support; performance standards for new coal-fuelled power plants; a low-carbon fuel standard; and smart grid advancement;
- building, lighting, and appliance energy-efficiency programs, and efficiency standards for the transport sector;
- a cap-and-trade program with economy-wide coverage of emission sources over
 25,000 tons/year, with GHG emissions reduction targets for all covered entities of 3
 percent below 2005 levels in 2012, 18 percent in 2020, 42 percent in 2030, and 83
 percent in 2050. 39

^{39.} Pew Center on Global Climate Change 2009.

The content of this proposal attempted to reconcile the many different views on climate policy in Congress. A formula allocating emissions credits in the proposed cap-and-trade system, developed by the utility sector's leading association (Edison Electric Institute), was particularly important. This formula bridged long-time disputes among power producers reliant on coal, natural gas, and nuclear sources of energy. The utility sector's agreement was crucial to gathering House votes for the bill, because it helped to overcome distributional obstacles among key interest groups in the coal industry, agriculture, the utility sector, and manufacturing—all reliant on cheap electricity. Consequently, the bill passed the House with a razor-thin margin (219-212) in June 2009.

It then moved to the Senate, where senators Kerry (D-MA), Lieberman (I-CT), and Graham (R-SC) became its lead sponsors. In addition to a renegotiation of the titles in the House-passed bill, the sponsors inserted new items, like subsidies for nuclear and clean coal. These provisions were included to attract votes of lawmakers close to the nuclear and coal industries. They had the unintended consequence, however, of limiting support for the bill from Senators (especially liberal Democrats) with an environmentalist voter base, given their deep interest in reducing carbon emissions and preventing nuclear energy development. Further complicating matters, the stricter Senate rules for budget deficits shaved proposed cap-and-trade allowances by 10 percent in the trading system's first 10 years, increasing to a 25 percent reduction by 2040. Such allowance reductions required renegotiation of the utility sector formula, given that power companies could lose up to \$50 billion in allowances, compared to the House-passed bill. With more agenda items, and fewer benefits to be shared, Senate negotiations became complicated. All

^{40.} Samuelsohn 2009.

^{41.} Ibid.

New legislation proposing major policy change normally engenders opposition bills, as indeed happened here as well. The Republican leadership supported Senator Graham's competing bill, introduced in February 2010, which promoted the benefits of a clean energy standard (CES) rather than cap-and-trade. A CES would significantly boost nuclear power and clean coal as part of a nationwide clean energy standard. The bill required the country to increase the share of "clean energy" to 13 percent by 2012, 20 percent by 2020, and 25 percent by 2025. Power sources included in the program were new nuclear capacity built after the bill became law, and coal-fired plants that capture and permanently sequester 65 percent of the GHGs they produce. Traditional renewables (wind and solar) also qualified, as did certain types of biomass and hydropower. Retired fossil-fuel plants that had produced more than 2,500 pounds of carbon dioxide per megawatt-hour of generation also qualified. Other proposed bills gained less support.

In sum, competing Senate bills sought to accommodate the constituency interests of pivotal, fence-sitting, lawmakers. Consequently, complex provisions inserted into the debate did not increase the joint gains for Senators, primarily because their preference intensity was strong across all energy issues discussed—especially electricity prices—making issue linkage attempts unsuccessful.

Explanation 3: Coalition Building, Leadership, and Legislative Procedures

As competing Senate climate bills were introduced, sponsors started building coalitions,
knowing that positions and preferences in the Senate on climate policy have been relatively
stable over time. Climate change has been a contested policy issue in US politics for the past

^{42.} Samuelsohn and Ling 2010.

^{43.} Ibid.

15 years. Recurrent debates have addressed the need for passing federal legislation to price carbon. However, Senate votes on cap-and-trade legislation in 2003, 2005, and 2008 came nowhere near the required 60-vote majority. The Byrd–Hagel resolution passed in July 1997 warned instead about measures that could seriously harm the US economy. 44

Home-state economics largely explains why Senators vote as they do. Politicians representing coal, agricultural, and manufacturing states thus usually vote against carbon pricing. ⁴⁵ Energy and climate debates are characterized by distributive battles, whereby proposed projects, programs, and grants concentrate benefits in geographically specific constituencies (e.g., renewable industries), while spreading costs across all constituencies through generalized taxation. Geography is an important characteristic of distributive politics, and the basis for political organization and representation. ⁴⁶ A cap-and-trade scheme would target the current winners of distributive battles, i.e. fossil fuel intensive industries. Thus, politicians representing such winning constituents naturally tried to avoid policy change that would reduce these gains.

Senate procedural rules imply that a broad, bipartisan compromise is instrumental for a policy proposal's success. The Senate's open rules, allowing for extended debate (filibusters), leads to a distribution of subsidies and incentives to larger-than-minimal coalitions. Hence, successful Senate coalitions must include large majorities. ⁴⁷ To muster large majorities, coalition builders must reach across the aisle. For each of the 2009 climate bill's provisions, Senators Kerry, Lieberman, and Graham had to negotiate with individual Senators representing states with high stakes in key energy producing or consuming sectors.

44. Hovi, Sprinz and Bang 2012.

45. Fisher 2006; Skodvin 2010.

⁴⁶. Weingast, Shepsle and Johansen 1981.

47. Krehbiel 1998; Lee 2000.

A provision protecting coal-fired utilities from devastating economic risks was included to attract Senator Levin's (D-MI) vote. Similarly, a provision protecting farmers from increased energy costs aimed at securing Senators Lincoln (D-AR) and Conrad's (D-ND) votes. 48 Coalition building implies bargaining, and coalition builders in the 111th Congress (2009-2010) targeted Senators playing veto-player roles resulting from their state's energy resource profile and economic dependence on fossil-fuel-generated electricity.

Importantly, strong presidential leadership in tandem with Congressional coalition builders is often required for major policy shifts to occur in Congress. Lack of such coordinated leadership between President Obama and the Senate bill sponsors seems to have been instrumental in derailing the climate bill in the 111th Congress. Observers have claimed that the Obama administration did not work closely enough with Kerry, Lieberman, and Graham to convince pivotal Senate fence sitters of the climate law's benefits. ⁴⁹ Scholars have pointed out that engaged participation of a president in negotiating a compromise can help attract votes even from the minority, making procedural tactics from the minority, like filibuster threats or demands for complex unanimous consent agreements, easier to overcome. ⁵⁰ President Obama was probably hesitant to provide such leadership for several reasons, including the financial crisis, ⁵¹ the corresponding decline in support for federal climate policy, ⁵² and the increasing influence of the conservative Tea Party movement. ⁵³ Furthermore, Obama prioritized exercising leadership to push a major health care reform

48. Samuelsohn 2010a.

^{49.} Lizza 2010.

^{50.} See e.g., Sinclair 2007.

^{51.} Lehmann 2010.

^{52.} Scruggs and Benegal 2012.

^{53.} Skocpol 2013; Nelson 2010.

through Congress in 2009-2010, which clearly delayed and weakened the chances of the climate bill.⁵⁴

Republican senators used various procedural tactics to delay the process and prevent Kerry, Lieberman, and Graham from building a winning coalition. They demanded additional hearings related to aspects of the bill and more economic analysis from EPA and the Department of Energy to clarify potential economic consequences. They also proposed alternative bills and amendments to force discussion on subjects closer to their agenda. Finally, Senator Inhofe (R-OK) promised to filibuster if the bill reached the floor. Ultimately, the opposition built a coalition sufficient to block climate policy change.

In summary, the US policy-making process allows for multiple agenda-setters, thereby instigating competition among lawmakers to dominate the agenda's initiation phase. In the climate bill case, agenda-setters responded closely to constituency interests when proposing climate policy programs, and consequently introduced many provisions as stakes in the forthcoming distributive battle. The resulting complexity of the climate bill did not ultimately increase joint gains because lawmakers' preference intensity was strong across the board, especially concerning electricity production and related consumer prices. Negotiations among Senators became competitive, and the strategic use of legislative rules and procedures by opponents combined with weak leadership by proponents made establishing a winning coalition impossible. When Congress failed to enact federal legislation, the Obama Administration used executive power to implement several initiatives to reduce US GHG emissions, although not as effectively as a cap-and trade system might have done.⁵⁵

^{54.} Samuelsohn 2010b.

^{55.} EPA 2012.

Concluding Analysis

When new opportunities emerged to strengthen climate action, why did the EU respond by adopting climate policies, but the US did not? We tested three complementary explanations in this article to explain this divergence: differences in agenda-setting privileges, potential for issue linkages, and lawmaking procedures and formal leadership. The analysis reveals, first, that significantly different rules, norms, and procedures constrain agenda-setters in the EU and the Unites States. All 535 US Congressional members are potential formal agenda-setters, who respond primarily to key constituent interests and secondarily to party politics. Multiple agenda-setters contributed to fierce competition regarding problem framing and agenda-setting, and to rival consultation processes with stakeholders. In the EU, different actors can also affect the agenda, but there is only one formal nonpartisan agenda-setter relatively weakly tied to specific constituency interests, who proposes common legislation based on unified consultation processes. These persistent differences can explain divergent responses to new opportunities, but are insufficient to explain increasing differences in enacted climate policy over time.

Second, the content of policy proposals emerging from the policy initiation phase in the EU and the US succeeded to varying degrees in linking key issues. The EU succeeded in developing a policy package that integrated climate and energy concerns. Issue linkages promoted fairness and burden sharing among Member States, at the expense of cost effectiveness. Those issues that could divide Member States or make negotiations too complex were kept outside the package. In the US, attempts to link energy security and climate change failed, because Democrats were unsuccessful in composing an attractive policy package. Additionally, because Congress is a competitive arena where lawmakers and

^{56.} Lee 2005; Mahoney 2007; Mayhew 2005; Theriault 2009.

political parties constantly struggle to maintain constituency support and ensure re-election, classic distributive politics deeply affected the relationship among veto-players and the political feasibility of passing climate legislation. To entice support, lawmakers introduced ever more provisions to satisfy special interests. Ultimately, joint gains from doing so did not increase. Liberals felt that the bill had been too watered down, and conservatives saw it as too radical. The proposal was ultimately a complex, lengthy (more than 1000 pages) legislative measure that most Senators considered unattractive.

Finally, the integrative nature of the proposed EU climate and energy package made the formal negotiations constructive and cooperative. When difficulties arose, the wide scope of the package also made side payments through issue linkages and horse-trading possible. The French Presidency's strong leadership and a tight time schedule also contributed to the successful outcome. The tight time schedule contributed to reaching the package agreement in December 2008, thus making the EU negotiations less vulnerable to the full impact of the financial crisis. In contrast, coalition-building efforts in the US Senate were characterized by regional cleavages between states with carbon-intensive economies, and others. Senators, attentive to home-state interests, found taxes on fossil energy unattractive and the potential benefits from supporting clean energy development and green jobs unconvincing. Senate procedures and voting rules allowed opponents to apply procedural tactics to delay and eventually stymie Democratic efforts to develop a more ambitious and stringent climate policy.

In conclusion, two important differences between the EU and the US explain policy-making dynamics in the initiation, design, and negotiation phases of new climate policies.

First, the separation of powers between EU institutions is not as clear as that between US institutions. This forces the Commission to participate in extensive consultation and cooperation with veto-players when initiating new policies, even though it has the exclusive

right to propose new legislation. Likewise, it ensures that decision-making bodies cooperate

with the Commission during the negotiation phase, although the Commission does not have

formal voting rights. Second, the EU focuses on consensus building, while policy-making in

the US is much more competitive. In combination, these features enabled the EU to respond

swiftly to new opportunities by designing a climate and energy package containing measures

based on effort sharing and providing ample room for issue linkages.

A final lesson from this analysis is that timing of legislative negotiations matter.

Because of differences in the timing of their negotiations, contextual factors played out in

ways that reinforced political system differences. In the US, the negotiations continued into

2009, implying that the financial crisis and decline in public support effectively closed the

window for significant climate and energy reforms. In the EU, the negotiations on the climate

and energy package concluded in December 2008, effectively limiting the impact of the

financial crisis on the climate package negotiations.

Interviews:

European Union

European Commission:

DG Climate Action:

Yvon Slingenberg, 12.09-2011

Jürgen Salay, 13.09-2011

Stefan Vergote, 14.09-2011

Tom van lerland, 14.09-2011

Peter Vis, 15.09-2011

DG Energy:

Paul Hodson, 13.09-2011

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Matti Supponen, 13.09-2011

Center for European Policy Studies: Christian Egenhofer, 13.09-2011

European Petroleum Industry Association: Chris Beddoes, 15.09-2011

Climate Action Network: Tomas Wyns, 15.09-2011

US:

All US interviewees requested anonymity. Interviews in November 2008 included: five

legislative advisors for Democratic Senators and House Representatives, two legislative

advisors for Republican Senators, and two climate policy analysts employed in the US

government and a Washington DC think tank. Interviews in November 2010 included: three

legislative advisors for Democratic Senators and two advisors for Democrats working on the

House Energy and Commerce committee, one legislative advisor for a Republican Senator,

and three long-time climate policy analysts working for a think tank, the US government, and

an environmental organization.

References

Bang, Guri. 2010. Energy Security and Climate Change Concerns: Triggers for Energy Policy

Change in the United States? *Energy Policy* 38 (4): 1645-1653.

Chiou, Fang Yi, and Lawrence S. Rothenberg. 2003. When Pivotal Politics Meets Partisan

Politics. American Journal of Political Science 47 (3): 503-522.

Commission. 2007a. An Energy Policy for Europe. European Commission, January 10:

COM(2007) 1 final.

Commission. 2007b. Limiting Global Climate Change to 2 degrees Celsius. European

Commission, January 10: COM(2007) 2 final.

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- Commission. 2008a. 20 20 by 2020: *Europe's Climate Change Opportunity*. European Commission, January 23: COM(2008) 30 final.
- Commission. 2008b. *Impact Assessment*. Document accompanying the Package of Implementation measures for the EU's objectives on climate change and renewable energy for 2020. European Commission, January 23: SEC(2008)85/3.
- Delbeke, Jos. 2009. *The EU Climate Change and Energy Package*. Brussels: European Commission. Available at www.ies.be/files/repo/Slides_JosDelbeke.pdf, accessed February 24, 2012.
- Egenhofer, Christian, Sebastian Kurpas, Piotr Maciej Kaczynski and Louise G. van Schaik.

 2011. The Ever-Changing Union. An Introduction to the History, Institutions and

 Decision-making Processes of the European Union. 2nd edition. Brussels: Centre for

 European Policy Studies.
- Energy Information Administration (EIA). 2008a. Annual Energy Outlook 2008. DOE/EIA-0383(2008). Available at http://www.eia.doe.gov/oiaf/aeo/index.html, accessed May 21, 2012
- Energy Information Administration (EIA). 2008b. U.S. Petroleum imports by country of origin. Available at http://tonto.eia.doe.gov/dnav/pet/pet_move_impcus_a2_nus_ep00_im0_mbbl_m.htm, accessed May 21, 2012.
- Environmental Protection Agency (EPA). 2012. Climate Change Regulatory Initiatives.

 Available at http://www.epa.gov/climatechange/EPAactivities/regulatory-initiatives.html, accessed October 21, 2012.
- EP. 2007. European Parliament Resolution on Climate Change. European Parliament: P6_TA(2007)0038.

- Eurobarometer. 2008. Europeans' Attitudes towards Climate Change. Special

 Eurobaromenter 300. Brussels: European Parliament and European Commission.
- European Council. 2007. Presidency Conclusion. Brussels: European Council, 8/9 March.
- Fisher, Dana R. 2006. Bringing the Material Back In: Understanding the U.S. Position on Climate Change. *Sociological Forum* 21 (3): 467-494.
- Hovi, Jon and Tora Skodvin. 2008. Which Way to U.S. Climate Cooperation? Issue Linkage versus a U.S.-Based Agreement. *Review of Policy Research* 25 (2): 129-148.
- Hovi, Jon, Detlef F. Sprinz and Guri Bang, 2012. Why the United States Did Not Become a Party to the Kyoto Protocol: German, Norwegian and U.S. Perspectives. *European Journal of International Relations*, 18 (1): 129-150.
- Jacques, Peter J. 2009. Environmental Skepticism: Ecology, Power and Public Life.

 Aldershot, UK: Ashgate.
- Jacques, Peter J., Riley E. Dunlap, and Mark Freeman. 2008. The Organization of Denial:

 Conservative Think Tanks and Environmental Skepticism. *Environmental Politics* 17

 (3): 349-385.
- Jordan, Andrew, Harro van Asselt, Frans Berkhout, Dave Huitema and Tim Rayner. 2012.

 Understanding the Paradoxes of Multi-level Governing: Climate Change Policy in the European Union. *Global Environmental Politics* 12 (2): 41-64.
- Kingdon, John W. 2005. *Agendas, Alternatives and Public Policies*. 2nd edition. New York: Addison Wesley Longman, Inc.
- Krehbiel, Keith. 1998. *Pivotal Politics: A Theory of U.S. Lawmaking*. Chicago: University of Chicago Press.
- Lee, Frances E. 2000. Senate Representation and Coalition Building in Distributive Politics. *American Political Science Review* 94 (1): 59-72.

- Lee, Frances E. 2005. Interests, Constituencies, and Policy Making. In *Institutions of American Democracy: The Legislative Branch*, edited by P.A. Quirk and S.A. Binder, 281-313. Oxford: Oxford University Press.
- Lehmann, E. 2010. Senate Is More Conservative, and So Is Its Approach to Climate. *Climate Wire*, November 3.
- Lizza, Ryan. 2010. As the World Burns: Washington's Climate Change Catastrophe. *The New Yorker*, October 11: 70-83.
- Mahoney, Christine. 2007. Lobbying Success in the United States and the European Union. *Journal of Public Policy* 27 (1): 35-56.
- Mayhew, David R. 2005. *Divided We Govern. Party Control, Lawmaking, and Investigations,* 1946-2002. 2nd edition. New Haven: Yale University Press.
- McKibben, Heather Elko. 2010. Issue Characteristics, Issue Linkage, and States' Choice of Bargaining Strategies in the European Union. *Journal of European Public Policy* 17 (5): 694-707.
- McCright, Aaron M., and Riley E. Dunlap. 2003. Defeating Kyoto: The Conservative

 Movement's Impact on U.S. Climate Change Policy. *Social Problems* 50: 348-373.
- McCright, Aaron M., and Riley E. Dunlap. 2011. The Politicization of Climate Change and Polarization in the American Public's Views of Global Warming, 2001-2010. *The Sociological Quarterly* 52: 155-194.
- Menon, Anand, and Martin A. Schain (eds). 2006. *Comparative Federalism: The European Union and the United States in Comparative Perspective*. Oxford: Oxford University Press.
- Nelson, G. 2010. Republican Victories Boost Effort to Block Climate Rules. *Greenwire*November 3.

- Oberthür, Sebastian and Clair R. Kelly. 2008. EU Leadership in International Climate Policy: Achievements and Challenges. *The International Spectator* 43 (3): 35-50.
- Pew Center on Global Climate Change. 2009. Analysis of the Waxman-Markey American Clean Energy and Security Act of 2009. Available at:

 www.pewclimate.org/federal/congress/111/acesa, accessed February 24, 2012.
- Pew Center on Global Climate Change 2011. Climate Action in US States and Regions.

 Available at http://www.c2es.org/us-states-regions, accessed February 22, 2012.
- Samuelsohn, Darren. 2009. Reality Sets In: Senate Bill's Allocation Pie Smaller than House's. *Environment and Energy Daily News Service*, 29 October.
- Samuelsohn, Darren. 2010a. Senate Trio Pushes for Feedback Before Spring Break.

 Environment and Energy Daily News Service. March 24.
- Samuelsohn, Darren. 2010b. Pressure Builds for Obama to Take Larger Role in Senate Debate. *Greenwire*. January 25, 2010.
- Samuelsohn, Darren and Katherine Ling. 2010. Sen. Graham Promotes Nuclear Power,

 "Clean Coal" in Draft Renewables Bill. *Environment and Energy Daily News Service*,

 February 17.
- Schreurs, Miranda, Henrik Selin, and Stacy D. VanDeveer, eds. 2009. *Transatlantic Environment and Energy Politics*. *Comparative and International Perspectives*. Aldershot, UK: Ashgate.
- Schreurs, Miranda A. and Yves Tiberghien. 2010. European Union Leadership in Climate

 Change: Mitigation through Multilevel Reinforcement. In *Global Commons, Domestic Decisions: The Comparative Politics of Climate Change*, edited by K. Harrison and L. McIntosh Sundstrom, 23-66. Cambridge, MA: The MIT Press.
- Skocpol, Theda. 2013. Naming the Problem: What It Will Take to Counter Extremism and

- Engage Americans in the Fight against Global Warming. *Working Paper*. Cambridge, MA: Harvard University.
- Scruggs, Lyle, and Salil Benegal. 2012. Declining Public Concern About Climate Change:

 Can We Blame the Great Recession? *Global Environmental Change* 22 (2), 505-515.
- Sebenius, James K. 1983. Negotiation Arithmetic: Adding and Subtracting Issues and Parties. *International Organization* 37 (2): 281-317.
- Shepsle, Kenneth A. 1974. On the Size of Winning Coalitions. *American Political Science Review* 68 (June): 505-518.
- Sinclair, Barbara. 2007. *Unorthodox Lawmaking: New Legislative Processes in the U.S. Congress*. Washington, DC: CQ Press.
- Skjærseth, Jon Birger and Jørgen Wettestad. 2008. EU Emissions Trading: Initiation,

 Decision-making and Implementation. Aldershot, UK: Ashgate.
- Skjærseth, Jon Birger and Jørgen Wettestad. 2010. Fixing the EU Emissions Trading System?

 Understanding the Post-2012 Changes. *Global Environmental Politics* 10 (4): 101123.
- Skjærseth, Jon Birger.2013. *Unpacking the EU Climate and Energy Package: Causes,*Content, Consequences. FNI-Report 2/2013. Lysaker: The Fridtjof Nansens Institute.
- Skodvin, Tora. 2010. "Pivotal politics" in US Energy and Climate Legislation. *Energy Policy* 38 (8): 4214–4223.
- Strøm, Kaare. 1997. Democracy, Accountability, and Coalition Bargaining: The 1996 Stein Rokkan Lecture. *European Journal of Political Research* 31 (1-2): 47-62.
- Theriault, Sean M. 2009. *Party Polarization in Congress*. Cambridge: Cambridge University Press.
- Tsebelis, George. 2002. *Veto Players: How Political Institutions Work*. Princeton, NJ: Princeton University Press.

- Wallace, Helen and William Wallace, eds. 2000. *Policy-Making in the European Union*.

 Oxford: Oxford University Press.
- Wheeler, David. 2010. Confronting the American Divide on Carbon Emissions Regulation.

 Working Paper 232. Washington: Center for Global Development.
- Wiseman, Alan E. 2004. Tests of Vote-Buyer Theories of Coalition Formation in Legislatures. *Political Research Quarterly* 57 (3): 441-450.
- Weber, Elke U. and Paul C. Stern. 2011. Public Understanding of Climate Change in the United States. *American Psychologist* 66 (4): 315-328.
- Weingast, B.R., Shepsle, K.A., Johnsen, C., 1981, 'The political economy of benefits and costs: a neoclassical approach to distributive politics', Journal of Political Economy 89, 642–664.