

# Why the United States did not become a party to the Kyoto Protocol: German, Norwegian, and US perspectives

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## Abstract

According to two-level game theory, negotiators tailor agreements at the international level to be ratifiable at the domestic level. This did not happen in the Kyoto negotiations, however, in the US case. We interviewed 26 German, Norwegian, and US participants in and observers of the climate negotiations concerning their views on three explanations for why the United States did not become a party to Kyoto. Explanation 1 argues that Kyoto delegations mistakenly thought the Senate was bluffing when adopting Byrd–Hagel. Explanation 2 contends that Europeans preferred a more ambitious agreement without US participation to a less ambitious agreement with US participation. Finally, explanation 3 suggests that in Kyoto the Clinton–Gore administration gave up on Senate ratification, and essentially pushed for an agreement that would provide them a climate-friendly face. While all explanations received *some* support from interviewees, explanation 1 and (particularly) explanation 3 received considerably *more* support than explanation 2.

## Keywords

climate negotiations, Kyoto Protocol, ratification, two-level games, US climate policy

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## Introduction

Why did the United States not become a party to the Kyoto Protocol (hereafter ‘Kyoto’)? A seemingly obvious answer is that Kyoto’s design gave it practically no chance of US Senate ratification. In July 1997, five months *before* the Kyoto meeting, the Senate passed the Byrd–Hagel resolution (hereafter ‘Byrd–Hagel’), stating that:

the United States should not be a signatory to any protocol ... which would (A) mandate new commitments to limit or reduce greenhouse gas emissions for the Annex I Parties, unless the protocol ... also mandates new specific scheduled commitments ... for Developing Country Parties within the same compliance period, or (B) result in serious harm to the economy of the United States.<sup>1</sup>

Byrd–Hagel was not legally binding; rather, it was a sense-of-the-Senate resolution. However, while Senate ratification requires a two-thirds majority, Byrd–Hagel was passed by a 95–0 vote. Thus, to achieve ratification, the US administration would have had to change the minds of at least 67 senators — a formidable task. Unsurprisingly, President Bush, when repudiating Kyoto in February 2001, echoed the requirements of Byrd–Hagel: ‘I oppose the Kyoto Protocol because it exempts 80 percent of the world, including major population centers such as China and India, from compliance, and would cause serious harm to the US economy.’<sup>2</sup> Bush also referred to Byrd–Hagel directly, stating, ‘the Senate’s vote, 95–0, shows that there is a clear consensus that the Kyoto Protocol is an unfair and ineffective means of addressing global climate change concerns’.<sup>3</sup>

Yet on closer inspection, this apparently plausible explanation for US non-participation is less than fully satisfactory. According to the oft-cited theory of two-level games (Putnam, 1988), negotiators will look ahead and consider only such agreements that can reasonably be expected to be ratified by all countries’ legislatures. Regarding the United States, this prediction was not borne out in Kyoto. The United States signed Kyoto having tremendously influenced major elements of the final agreement, such as the flexibility mechanisms. Yet it declined to ratify and, following President Bush’s repudiation of Kyoto in 2001, did not become a party. Hence, the Kyoto negotiations appear to be a *deviant case* concerning the theory of two-level games. That Byrd–Hagel was passed by the US Senate several months *before* the Kyoto meeting makes this outcome all the more puzzling. Indeed, Cutajar (2004: 63) terms it ‘something of a mystery’. We try to shed light on this mystery.

We interviewed 26 German, Norwegian, and US participants in and observers of the climate-change negotiations regarding their views on three explanations of why the United States did not become a party to Kyoto. Explanation 1 argues that delegations in Kyoto mistakenly thought the US Senate was bluffing when adopting Byrd–Hagel. Explanation 2 contends that Europeans preferred a more ambitious agreement without US participation to a less ambitious agreement with US participation. Finally, explanation 3 suggests that in Kyoto the Clinton–Gore administration had already given up on achieving Senate ratification, and therefore essentially pushed for an agreement that would provide them a climate-friendly face.

We focus on these three explanations for two reasons. First, our three explanations have considerable intuitive appeal. When we asked interviewees whether they considered some other explanation more plausible than our three, most replied that ours catch the essence of what happened, and none offered more than the rudiments of an alternative explanation. Second, our three explanations are theoretically related in that they represent only moderate deviations from standard two-level game theory. Indeed, we show in the fourth section how each explanation can be derived by relaxing one of the assumptions that explicitly or implicitly underlie the two-level game hypothesis that negotiators will consider only such agreements that are ratifiable in all countries.

Although all three explanations received at least *some* support from interviewees, explanation 1 and (particularly) explanation 3 received *more* support than explanation 2. However, while explanation 3 received most support, it also proved most controversial. Whereas several interviewees expressed strong support for explanation 3, others voiced harsh criticism.

The second section reviews relevant previous research and provides a theoretical background. The third section describes US ratification requirements. The fourth section shows how each of our three explanations can be derived by relaxing one assumption that implicitly or explicitly underlies the hypothesis that negotiators will consider only such agreements that are ratifiable in all countries. The fifth section describes our data and research design. The sixth, seventh and eighth sections present interviewees' comments and arguments for and against each explanation. Finally, the ninth section concludes.

## Previous research and theoretical background

The United States is a key actor for reducing global warming. The US climate-policy literature, consisting of three main strands, is substantial. The first strand considers the international level, addressing issues such as US participation and strategy in international climate negotiations (see Aldy and Stavins, 2007; Andresen and Agrawala, 2002; Bodansky, 2001; Harris, 2000; Hovi and Skodvin, 2008; Jacoby and Ellerman, 2004; Lisowski, 2002; Paterson, 2009; Schreurs, 2004; Victor, 2001). The second strand analyzes the federal level, focusing on interest groups' impact on the policymaking process, and the consequences for climate policy of the separation of powers between the US executive, legislative, and judicial branches (see Bang, 2010; Bryner, 2008; Fisher, 2004; Jacques et al., 2008; Skjærseth and Skodvin, 2003; Victor, 2004; Wiener, 2004). The third examines climate policy at state and local levels, including developments in individual states and cities, and differences between policy initiatives in different states and regions (see Betsill and Bulkeley, 2004; Mazmanian et al., 2008; Rabe, 2008; Selin and VanDeveer, 2007; Urpelainen, 2009). In addition to these three main strands, a few scholars have recently begun to study how policymaking levels *interact*. For example, Fisher (2010) considers interaction between the federal, state, and local levels in US climate policy. Moreover, Harrison (2007) argues that international-level decisions, such as ratification, hinge on federal-level factors such as the administration's normative commitment, and federal institutional capacity. We too contribute to this emerging fourth strand by focusing on the interaction between international-level bargaining and

federal-level decision-making such as Senate resolutions and ratification. However, we use a two-level game approach. As far as we know, Lisowski (2002) represents the only previous attempt to use a two-level game approach to US climate policy. Whereas Lisowski addresses the Bush administration's repudiation of Kyoto, we consider the role of US ratification requirements and how they influenced Kyoto negotiations.

The theory of two-level games, advanced most prominently by Putnam (1988), suggests that international negotiations take place at two levels. At level I (international) negotiators bargain for an agreement. At level II (domestic) separate discussions take place within each country about whether to accept and ratify the agreement. Hence, negotiators face a dual task. First, they must reach agreement at level I. Second, they must persuade interest groups and legislators at home to accept and ratify it (Putnam, 1988: 436). A country's 'win-set' is defined as 'the set of all possible level I agreements that would "win" — that is, gain the necessary majority ... — when simply voted up or down' (Putnam, 1988: 437). The size of a country's win-set depends on: preferences and coalitions at level II; political institutions such as ratification procedures at level II; and level I negotiators' tactics (Putnam, 1988: 442ff.). For ratification in all countries to be feasible, these countries' win-sets must overlap. If they do, a country having a small win-set might be able to extract larger concessions — such as a more generous emissions allowance — than if it were to have a large win-set (Putnam, 1988: 443). This hypothesis is also known as the 'Schelling conjecture' (Schelling, 1960/1980: 19–28). Unless other countries grant such concessions, they risk ending up with no agreement or — at best — an agreement without participation by the country having a small win-set. In particular, two-level negotiations entail a risk of 'involuntary defection': failure to achieve ratification at level II *despite* agreement at level I. The risk that a country will involuntarily defect depends on its win-set, which in turn depends on its ratification procedures:

If a two-thirds vote is required for ratification, the win-set will almost certainly be smaller than if only a simple majority is required.... The US separation of powers imposes a tighter constraint on the American win-set than is true in many other countries. This increases the bargaining power of American negotiators, but it also ... raises the odds for involuntary defection. (Putnam, 1988: 448)

## US ratification requirements

Under the US Constitution, the president 'shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two-thirds of the Senators present concur' (US Constitution, Article II, Section 2, Clause 2). When the Senate considers a treaty, it may approve it as written, approve it with conditions, reject and return it, or prevent US participation by withholding approval (by not holding a vote in the Foreign Relations Committee or on the Senate floor). The Senate has traditionally given its advice and consent unconditionally to the vast majority of treaties submitted to it; however, it has ratified very few environmental treaties in the last 20 years (Schreurs et al., 2009: 8–9).

The negotiation and conclusion of a treaty is the president's exclusive prerogative. The president chooses and instructs the negotiators and decides whether to sign

an agreement after its terms have been negotiated. Nevertheless, the Senate or House sometimes proposes negotiations and influences them through advice and consultation. Moreover, the executive is supposed to advise appropriate congressional leaders and committees of its intention to negotiate significant new agreements and consult them regarding the form of an agreement. The Senate has sometimes appointed observer groups to negotiations of important treaties, especially treaties on arms control and environmental matters (US Senate, 2001).

In the Kyoto negotiations, senators were relatively highly engaged. Congressional observers were present at international meetings, where they had close contact with the negotiating team. At their first Conference of the Parties (COP1) in 1995, the UNFCCC (United Nations Framework Convention on Climate Change) parties agreed on the Berlin Mandate in which they (1) stated their intent to agree on quantified emissions limitation targets, (2) emphasized that industrialized countries have a particular responsibility to take the first steps, and (3) confirmed the UNFCCC clause of ‘common but differentiated responsibilities’. According to this clause, developing countries would not be required to cut or limit their emissions under the new protocol. US consent to the Berlin Mandate went against the advice of several lawmakers who feared negative consequences for their constituents if the United States were to cut emissions while other large economies were exempted. For instance, in March 1995, the House Energy and Commerce Committee held a hearing where legislators asked for reassurances that the United States would not sign a treaty that did not include all major emitters (US Senate, 1997a).

In the Senate, the Clinton–Gore administration’s acceptance of the Berlin Mandate caused anger, frustration, and a feeling of not being heard on a major issue (e.g. see Senator Inhofe’s statement, US Senate, 1997b). As the Kyoto negotiations progressed, and this sense of not being consulted continued, the idea of a sense-of-the-Senate resolution developed. Sending a powerful signal, Byrd–Hagel made sure the president knew about the senators’ concerns, and became a red flag against US acceptance and ratification of Kyoto. In the upcoming sections, we show how participants and observers perceived Byrd–Hagel’s impact on the outcome of the Kyoto negotiations.

### Three explanations

Below we explain how our three explanations of why the United States did not become a party to Kyoto can be derived by relaxing various assumptions that explicitly or implicitly underlie the hypothesis that negotiators will consider only such agreements that are ratifiable in all countries.

#### *Explanation I*

A first assumption that must be fulfilled for this hypothesis to hold is that negotiators have complete information about win-sets. If negotiators do *not* have complete information they cannot perfectly foresee whether a level I agreement will achieve ratification at level II. As Putnam emphasizes, ‘Uncertainty about the opponent’s win-set increases one’s concern about the risk of involuntary defection’ (Putnam, 1988: 453; see also Iida, 1993).

However, with incomplete information negotiators might also pretend that their country's win-set is smaller than it actually is. If negotiators can convince other negotiators that their hands are tied, they might successfully extract a larger portion of the agreement's gains for their country (Evans, 1993). Similar tactics can be used by domestic actors. However, Senator Byrd later said that it was *not* the intention of Byrd–Hagel that the United States should withdraw from the multilateral process. According to Byrd, the resolution is better seen as:

an effort to strengthen the hand of the administration as it undertook international negotiations. It enabled our negotiators to walk into talks and point to the ever-present Congress, looking over their shoulders, to ensure that the interests of the US would be protected in any agreement that eventually came to fruition.<sup>4</sup>

However, with incomplete information a danger also exists that an attempt to convey *real* domestic constraints may be dismissed by other countries' negotiators as *bluffing*. If this happens, these other countries' negotiators might push for an agreement that has little or no chance of being ratified by the country in question.

Thus, explanation 1 suggests that non-US negotiators saw the conditions of Byrd–Hagel as a bluff meant as a bargaining chip for the US delegation in Kyoto. According to this explanation, negotiators underestimated the determination of the US Senate to insist that Byrd–Hagel's requirements be fulfilled, and mistakenly believed that the US administration could deliver ratification even if the agreement were to violate those requirements. One should recall that not until President Bush's repudiation of Kyoto in March 2001 did it become unequivocally clear that the United States would not ratify. During his 2000 presidential campaign, Bush declared his opposition to Kyoto, but also spoke in favor of domestic regulations on carbon dioxide emissions, and promised to propose legislation covering four pollutants: carbon dioxide, mercury, nitrogen oxide, and sulfur dioxide. As president, he consistently opposed Kyoto, but changed his position on domestic, mandatory controls of carbon dioxide (Bryner, 2008: 325). While some analysts (and some interviewees) consider that this repudiation of Kyoto was unavoidable, others have described it as 'unexpected' (Hirono and Schröder, 2004), pointing out that several world leaders expressed 'shock and dismay at the announcement' (Lisowski, 2002: 101).

Moreover, explanation 1 suggests that the Clinton–Gore administration believed that Byrd–Hagel gave it room to renegotiate the exact obligations under the agreement after the signing, and hence to secure Senate support. After Kyoto, the Clinton–Gore administration promoted the idea of voluntary, indexed targets in meetings with several developing countries including China, albeit without immediate success (Aldy, 2004). Then, at COP4 in Buenos Aires in November 1998, Argentina's President Menem announced that his government would accept a voluntary, binding target for GHG (greenhouse gas) emissions under the UNFCCC. Within 24 hours of Menem's statement, the Clinton–Gore administration signed Kyoto. Working closely with US advisors over the following year, the Argentine government developed a proposal for an emissions reduction target linked to carbon intensity (emissions relative to GDP) (Argentine Republic, 1999; Barros and Grand, 2002).

## Explanation 2

A second assumption that must be fulfilled for the hypothesis that negotiators will consider only such agreements that are ratifiable in all countries to hold, is that the parties consider the agreement only on its merits. It is not evident that this was the case in the Kyoto negotiations. Scholars, practitioners, and environmentalists alike have argued that Kyoto must be seen as part of a larger, more overarching, process. They claim that because Kyoto marks only the beginning of a regime that will eventually develop into something stronger, it cannot be judged exclusively by what it accomplishes in the period 2008–12. Today it is far from obvious that the Kyoto Protocol will actually develop into something stronger. However, during the Kyoto negotiations, and (particularly) in the first few years after 1997, many thought that it would.

Explanation 2 contends that countries other than the United States were more concerned with long-term developments than with the agreement's short-term strength. According to explanation 2, Kyoto negotiators looked even *further* ahead than to the ratification phase. In particular, it holds that they considered that a relatively ambitious agreement *without* US participation would in the end be better than an unambitious agreement *with* US participation. An underlying premise of this explanation is that the existence of a relatively ambitious climate agreement would — over time — cause mounting pressure on the United States either to join Kyoto eventually or, failing that, to re-engage in negotiations for Kyoto's successor.

Hence, explanation 2 suggests that there were limits to what other countries were prepared to concede to get the United States on board in Kyoto. This argument may be particularly relevant for assessing the actions of negotiators from countries such as Germany, having a strong green lobby. Delegations from such countries were under considerable public pressure to return from Kyoto with an environmentally ambitious treaty.

## Explanation 3

Finally, a third assumption underlying the hypothesis that negotiators will consider only such agreements that are ratifiable in all countries is that each country's negotiator has 'no independent policy preferences, but seeks simply to achieve an agreement that will be attractive to his constituents' (Putnam, 1988: 435–436). If at least one country's delegation acts on the basis of policy preferences that conflict with what is attractive to its domestic veto players, the resulting agreement might not achieve ratification in all countries.

In addition to the requirement of 67 votes to ratify international treaties, the US Congress must pass enabling legislation to ensure fulfillment of a treaty's objectives. Because of supermajority procedures in the Senate, such as the filibuster, significant policy shifts often require a three-fifths majority (60 votes) to pass. Consequently, votes on enabling legislation potentially face a supermajority hurdle that centrally placed veto players can exploit. During the Kyoto negotiations, it was reasonably clear that the climate-change issue caused conflicting positions in the Senate not only because of partisan politics, but also because of deep regional differences. Senators representing states at risk of



suffering economic loss (job losses or higher energy prices) increasingly perceived it as politically difficult to support a global climate treaty that would result in domestic federal legislation to price carbon emissions. Coal, oil, manufacturing, and agricultural states were generally negative to carbon pricing, and to Kyoto in particular. Politicians from such states voiced these views in pivotal congressional debates, most significantly in debating Byrd–Hagel.

Explanation 3 suggests that the US Kyoto delegation acted on the basis of instructions motivated by other considerations than the agreement's attractiveness to the Senate. It holds that because of strong Senate opposition to carbon pricing, the Clinton–Gore administration had already given up, by the time of the Kyoto meeting, on reaching an agreement acceptable to the Senate. Hence, explanation 3 suggests that in Kyoto the administration essentially pushed for an agreement that would provide them a climate-friendly face. Signing an agreement with relatively ambitious emissions reduction targets, but with little or no chance of Senate ratification, allowed the administration, according to explanation 3, to look climate-friendly without committing the United States to costly emissions reductions.

## **Data and research design**

We conducted nine semi-structured interviews in Germany, eight in Norway, and nine in the United States. Commonly used to interview elites or experts, semi-structured interviews offer a combination of flexibility and structure that 'can provide detail, depth, and an insider's perspective, while at the same time allowing hypothesis testing' (Leech, 2002: 665). As our interview structure shows (see below), we offered our interviewees flexibility by asking them, without their knowing our three explanations in advance, to reflect freely on why the United States did not become a party to Kyoto. Later in the interviews, we imposed structure by reading aloud and verbatim our three explanations and asking interviewees to comment on them. Thus, the use of semi-structured interviews (1) permitted interviewees a real possibility to propose other, possibly rival, explanations to the three proposed by the authors, yet (2) enabled us to obtain responses that could be compared across interviewees, and thereby (3) helped us determine which of our three explanations received most support. Given our group of high-level experts, the alternative method of using closed-ended questionnaires would unlikely have found favor with the selected experts who were privy to internal decision-making in their respective countries and who therefore were the only credible sources for our specific explanations.

We included US interviewees to get first-hand information about the reasoning and decisions of the US delegation and the US administration. We included German interviewees because Germany is a major EU member, and the EU is a major player in climate negotiations. Finally, we included Norwegian interviewees because Norway is a small non-EU country, often considered a 'pusher' in climate-change negotiations (at least it was during the Kyoto negotiations), yet also has some affinity with the concerns of US decision-making on this specific issue. It would have been interesting to include interviewees from other countries, particularly interviewees from one or more developing countries, but time and resource constraints prevented this.



The interviewees were participants at COP3 in Kyoto, participants at other COPs, and observers (such as researchers and NGO representatives) present in Kyoto and/or other COPs.<sup>5</sup> All interviewees were Germans, Norwegians, or Americans.

In each country, we established a pool of eligible interviewees by approaching long-term observers of global climate-change policy, soliciting names of potential interviewees from the government, the legislature, industry, environmental NGOs, and academia. We also asked interviewees to suggest other potential interviewees.<sup>6</sup>

For each country, our selection included core members of its Kyoto delegation as well as highly qualified observers of the climate negotiations. We have no particular reason to believe that had we selected other interviewees (from a pool consisting of equally qualified and involved experts), they would have suggested a significantly different picture of what happened.

Interviews had the following structure. First, interviewees presented themselves for the record. Second, interviewers briefly described the project's purpose and theoretical background. Third, interviewers encouraged interviewees to reflect freely on our general research question, on the fruitfulness of the two-level game logic for understanding international climate negotiations, and on possible explanations of why the United States did not become a party to Kyoto. Explanations offered in this part of the interviews invariably drew on some aspect(s) of our three explanations (typically explanations 1 or 3). Fourth, interviewers read aloud and verbatim our three potential explanations and encouraged the interviewees to comment on each of them. Finally, interviewers asked whether the interviewees considered some other explanation to be more plausible than the explanations mentioned by interviewers. No interviewee offered more than the rudiments of an alternative explanation. However, it is probably fair to say that the US interviewees on balance were more critical towards our three explanations than were the Europeans.

We offered each interviewee the opportunity to screen citations included from their interview. We also asked for permission to mention the interviewee's name and affiliation. In the text, we refer to German interviewees as GE1, GE2, and so on, Norwegian interviewees as NO1, NO2, and so on, and US interviewees as US1, US2, and so on. The Appendix lists the names and affiliations of those interviewees who permitted such listing. The numbering used in the text does not follow the alphabetical order of the interviewees' last names used in the Appendix.

## **Explanation 1: Underestimating the Senate's resolve**

Numerous interviewees said explanation 1 had some merit, mentioning at least five points supporting it. First, European delegations generally considered passage through the Senate to be the US administration's problem, and saw no need to remind the US delegation that US ratification required a two-thirds majority. According to NO2, 'the US delegation's backing at home was not a big issue in Kyoto'. NO2 further said that the Europeans had 'read about and heard of the Byrd-Hagel resolution', but believed that 'Clinton and Gore had enough political experience to know what it would take to achieve ratification'.

Second, the European delegations had limited knowledge about the US political system and ratification process at the time. According to GE1, the general opinion among Europeans was that:

the Clinton administration was strong enough to push the agreement through the Senate. People said that the US president is so powerful that if he really wants, he can override the Senate's decision. So most delegations overestimated the power of the US president.

Third, perhaps the Clinton–Gore administration initially did not realize the full implications of Byrd–Hagel. For instance, US2 emphasized that:

The Clinton administration seems to have believed that if major developing country trading partners could be persuaded to participate, they could sway the Senate. Hence, the administration thought they could deal with the concerns expressed in Byrd–Hagel, and that the resolution gave enough wiggle room to make side agreements with developing countries.

Similarly, US5 pointed out, 'there would be no submission of the Kyoto treaty to the Senate unless key developing countries took on commitments, because we knew it was going to be shredded'. US5 further said:

The White House worked hard with developing countries, but we were in the end unsuccessful. In the absence of traction from developing countries, coupled with the strong hostility to the Kyoto Protocol among many senators, there was no point in sending it to the Senate. We could possibly have moved a few senators, but not enough to get the necessary majority.

Fourth, European delegations suspected that Byrd–Hagel was used as a bargaining chip. For example, GE8 stated that the resolution influenced the negotiations, and that the United States used Byrd–Hagel actively in the negotiations:

There was a huge interest in having the United States on board, and in having it on board with an adequate commitment. The US delegation was fully aware of that, and pushed us to show flexibility, especially concerning flexibility mechanisms and sinks. Byrd–Hagel was clearly a bargaining chip and it was used.

Similarly, GE1 said that Byrd–Hagel was 'used as a bargaining chip in order to bring developing countries on board. However, other countries' reaction was that this was wishful thinking.' Yet other interviewees emphasized that it was difficult to decide whether the US delegation used the ratification issue as a bargaining chip. GE7 said, 'it was difficult for us to understand whether US hints of a possible ratification problem were real or just part of a poker game, but the problem was always present'. According to NO5, European delegations suspected that the US delegation might be 'hiding behind the Senate', and that Byrd–Hagel was 'simply a way of trying to put pressure on the Europeans'.

Finally, GE3 said European delegations failed to take Byrd–Hagel seriously. According to GE3, the general reaction was that Byrd–Hagel was 'just another resolution' issued by

a legislature: ‘But so what? Parliaments pass resolutions all the time, without governments paying attention’.

Although many interviewees provided some support for explanation 1, exceptions certainly existed. Two main weaknesses of explanation 1 were mentioned. First, several interviewees doubted that the delegations really thought Kyoto could achieve US ratification. NO3 remarked, ‘I can’t believe in explanation 1, because I think it was quite clear that it would be difficult to get the agreement through in the Senate’. Similarly, GE5 said, ‘the US administration *knew* that the Senate wasn’t bluffing and even those who did the negotiating were aware that the Senate wasn’t going to ratify’. NO8 said:

Nearly all delegations knew about the Byrd–Hagel resolution. There were a number of concessions given to the Americans — that was one way the negotiators tried to get the United States to accept the agreement. It is quite possible that Byrd–Hagel was intended as a bargaining chip, but this does not mean that it was not sincere.

Finally, US3 emphasized:

Byrd–Hagel was a unanimous resolution — if other countries’ delegations thought the Senate did not mean business they could not understand the US system. A two-thirds majority is needed to ratify, which would be an enormous turnaround from Byrd–Hagel, requiring at least 67 senators to switch position!

Second, the US political climate at the time made it difficult for the US administration to achieve the unity required to design and implement a strategy providing bargaining leverage in Kyoto. According to US1, ‘there were really bad relations between the Senate, the House and the Administration. Under such conditions it was not possible to coordinate a tying-hands strategy, but maybe foreign delegations *perceived* it as an attempt at using such a strategy.’

## Explanation 2: Looking beyond ratification

Explanation 2 clearly received less support than the other two explanations. Nevertheless, some interviewees provided *indirect* support for explanation 2 through statements such as ‘the truth might be something in between the three explanations’ (GE8), ‘all three are plausible elements of the explanation of what happened’ (GE6), and ‘the correct explanation is probably a mixture of the three’ (GE9).

Some interviewees also offered more *direct* support. Four main points were mentioned. First, the German and other EU delegations in Kyoto expected an *unambitious* agreement to be heavily criticized at home. They therefore had difficulty accepting an unambitious agreement even if this were to make US ratification more likely. According to GE3:

Byrd–Hagel came at a point when it was too late for it to have a real impact on the outcome. There were high public expectations to deliver an agreement with ambitious emissions limitation targets and the European delegations tried to negotiate an agreement with which they

could fly home. European ministers decided to go for an environmentally sound agreement and then to address other problems later.

Similarly, GE8 said, 'explanation 2 is true in a way, although I would describe it somewhat differently'. GE8 explained:

We as Germans, and we as the European Union, were not willing to give everything away to get the United States on board. We needed to be able to go home to justify to our ambitious constituencies what we agreed to in Kyoto. If we had come home with something far weaker than what we finally got, we would have been in big trouble.

Second, EU delegations saw Kyoto as only a first step, and feared that giving in to even more US demands might endanger the entire long-term venture. According to GE7, some Europeans thought it might be better to conclude an agreement among the countries that were motivated. The idea was, according to GE7, 'why don't we move on without the United States? Let's reach an agreement before the whole process breaks down.' However, GE7 also emphasized that in the negotiations' final phase this idea was no longer considered. Similarly, GE6 pointed out that pursuing an unambitious agreement just to get the United States on board 'might well have slowed down the long-term process'. GE6 said, 'it was always clear that Kyoto was the first step in a longer process and we did not want to let the United States have a veto'. GE8 supported this view:

As reflected by the rules for entry into force [ratification by at least 55 countries representing at least 55% of carbon emissions in Annex I countries], we did not want to exclude the possibility that the Kyoto Protocol could enter into force without the United States. We believed that US businesses would be attracted by, and would not want to be left out of, the global emissions trading system and the other flexibility mechanisms. Well, it did not turn out that way, but recent developments at the state and local levels in the United States show that these expectations were not totally unrealistic.

Third, GE1 said the long-term nature of the process is built into Kyoto itself. For example, Kyoto states that negotiations for the second commitment period must begin in 2005 and be concluded no later than 2009. Also, Kyoto's compliance system assumes a second commitment period.

Finally, even the US administration may have preferred an ambitious agreement. According to NO6, 'going for a relatively ambitious agreement was probably better not only for the European countries, but for the Clinton–Gore administration as well'. For the administration, at least one potential outcome (to have an *unambitious* agreement rejected by the Senate) would have been even worse than the actual outcome (an ambitious agreement with little chance of Senate ratification). NO6 continued:

In any event, based on the experience from the negotiations of the UNFCCC five years earlier, we knew that any agreement with legally binding commitments for emission reductions would be difficult for the United States. At Kyoto, the threshold for Annex I Country emissions covered was 55% in order to allow the Protocol to get into effect even without the US ratifying.

While such comments provide at least some support for explanation 2, most interviewees were highly skeptical of this explanation. They offered seven objections. First, getting the United States on board was clearly a major issue in the negotiations. NO1 said explanation 2 had little relevance: 'I know of no evidence supporting it. At Kyoto few considered the possibility of negotiating an agreement without the United States.' NO1 explained, 'the parties thought an agreement without the United States would not be worth much' and that 'it would be better to have a weak agreement with the United States *in* than to have a strong agreement with the United States *out*. This was the general opinion across all major delegations.' US2 supported this view, remarking, 'since the Europeans conceded so much to US ideas and design of the treaty, they sincerely believed that the US would sign it, and made concessions to make that happen'.

Second, the delegations probably did not think as far ahead as explanation 2 assumes. GE5 remarked:

I would not rule out that there were certain individuals, say heads of delegations, who thought that far, but most of them probably did not. They are not scientists. Nothing to be said against negotiators, but they deal with issues under so many constraints that they usually do not get down to thinking that far ahead. The vast majority of non-US negotiators probably thought they could achieve US ratification.

Third, it was not certain that Kyoto would even come to life without US participation. NO4 said:

I'm having a hard time believing explanation 2. What we saw after the US repudiation of the treaty was this enormous amount of work by Europeans attempting to save the treaty. So, it was not obvious at the time that the treaty could even survive without the United States.

NO3 expressed a similar view:

I can't believe in explanation 2, because at that stage most people believed that if the United States were to withdraw, the agreement would not be implemented. It came as a big surprise that the EU decided to move on without the United States, and that it put so much effort into getting Russia on board so that the treaty could enter into force.

Similarly, NO8 said: 'I have a problem with explanation 2, because it assumes that US participation was not considered essential. I think this is a weak point.'

Fourth, taking a rather technical approach, the negotiators did not think very much about issues such as ratification. NO7 emphasized, 'in general there was not a very analytical approach in Kyoto. The US delegation and other delegations were extremely well prepared, but also very technically oriented.' Similarly, GE3 said, 'because their schedules were very full, most participants had to focus on their own dossiers and on technicalities. As a result they had little time to analyze things like ratification in other countries.'

Fifth, *principles* played an important role in the negotiations. According to NO7, the European delegations were 'very ideological' in that they wanted the United States' emissions reduction target to be comparable to the EU's. This desire made it difficult 'to

tailor the agreement so as to comply with the requirements of the Byrd–Hagel resolution without compromising the environmental effect of the agreement’.

Sixth, the claim that the EU preferred a strong agreement with the United States *out* to a weak agreement with the United States *in* is at odds with other aspects of the outcome in Kyoto. According to US2, ‘the EU gave too many concessions to the United States [for example CDM (Clean Development Mechanism) and emissions trading] for that to be likely’.

Finally, two interviewees specifically commented on the widespread claim that Kyoto might entail positive long-term benefits although its direct environmental effect might be limited. Both GE3 and US3 pointed out that such considerations gained ground only years later, in particular after President Bush’s repudiation of Kyoto, and mostly as a rationalization of this outcome by environmentalists. However, they pointed out, such considerations played little role in the Kyoto negotiations.

### **Explanation 3: ‘Blaming’ Clinton and Gore**

Predictably, explanation 3 provoked responses that were more polarized than those provoked by the other two explanations. On one hand, some interviewees expressed strong support for this explanation. For example, GE7 said, ‘explanation 3 is cynical, but comes very close to what actually happened, as we saw it’. Interviewees mentioned three main points in support of explanation 3.

First, several interviewees believed that in Kyoto the US administration had little or no intention of getting the agreement through the Senate. According to US1, ‘explanation 3 is the best explanation; Clinton and Gore wanted to build their international standing, and use the Protocol as a bargaining chip in the domestic politics discussions’. Similarly, NO8 said, ‘I think explanation 3 has some strength. It is quite possible that in Kyoto the US administration had already given up on getting the agreement ratified.’ US8 went further: ‘Clinton was not even thinking about sending the Kyoto Protocol to the Senate. He did not even try to move politicians or advocate the Kyoto Protocol as a good treaty for the United States.’ US7 argued, ‘Clinton had no intention in the short term of following through with the Kyoto Protocol, although there was a belief in the Administration that having a treaty in place would facilitate a later agreement in the Senate’. US7 added:

Gore loved scientific briefings. In 1993–94 he called in top people from all over the world to the White House, got Clinton involved, and engaged in the climate-change issue. They arranged top events, but the events did not help address the lack of acceptance of Kyoto or issues related to defining an acceptable domestic climate policy. Consistent with this, EPA administrator Carol Browner had no meetings on climate change during her tenure.

Until Vice President Gore arrived in Kyoto, the US delegation was bargaining hard for a US emissions reduction target of a 0 percent increase compared to 1990 levels. However, the situation changed dramatically when Gore arrived in Kyoto and instructed the US delegation ‘to show more flexibility’. Confirming this impression, GE3 emphasized that the US delegation held their position until Gore arrived and made it clear that the United States *would* make a deal. According to GE3, the European delegations inferred from this that they ‘could strike a deal on their own terms’.

Second, some interviewees suggested that Clinton and Gore did not do their jobs properly in relation to the Kyoto negotiations. GE5 commented:

I have heard rumors that Clinton and Gore *knew* the treaty wouldn't go through [the Senate]. It is possible, I do not know. However, what I would blame them for is not this, but rather the fact that they did not fight for a better treaty instead of insisting on all these loopholes.

NO4 said:

I can't think of any specific objection to explanation 3. There is a general impression in the environmental NGO movement that in Kyoto Gore did not solely play a positive role, although right now [at the time of our interview with NO4, after Gore was awarded the Nobel Peace Prize] he is somewhat of a hero for these NGOs.

Similarly, GE6 said, 'there was a bit of window dressing; they wanted to look nice but did little to get the treaty ratified'. NO6 emphasized, 'by going for a relatively ambitious target, the Clinton–Gore administration could at least keep their heads up high'. GE9 remarked that pursuing an ambitious target enabled the administration to 'show activity and commitment', even though 'they probably knew that an agreement with an ambitious US target had little or no chance of being ratified'. US9 stated that it 'was a political advantage for Clinton that Congress was to blame for not ratifying' and that, therefore, 'it was better to sign the Kyoto Protocol even if he knew that it was not going to be ratified'. US9 also emphasized that the Clinton–Gore administration had 'no strategy to move the Kyoto Protocol through the Senate'. To do that the administration would have needed 'champions in the Senate that could advocate from within and coalitions like states and industries in states to pressure from the outside'. They would also have needed to 'quiet the losers and create winners'. US6 remarked, 'The president must still pursue leadership internationally even if there is resistance domestically. He must establish a goal to try to reach. The Kyoto Protocol was part of such a process for Clinton.' In US9's opinion, the Clinton–Gore administration did too little to create a domestic climate-policy agenda, or a plan for how to act on such an agenda:

This was treated as an international issue, and there was too little focus on creating domestic policy. Hundreds of people worked at the international level on a very strong team, but the administration did not make the same effort on domestic policy.

US5 said:

There were more PR events before Kyoto than after. I think Clinton could have done more after the Kyoto meeting to convince the public of the benefits of the agreement. Clinton had less frequent public speeches about climate change after Kyoto than before.

Third, personal ambition might have played a role in the Kyoto negotiations' final phase. NO3 commented, 'my view is close to explanation 3. Al Gore was the Vice President and he believed in the seriousness of this issue. It was important for him to appear as engaged and to signal a climate-friendly position.' Others suggested that Gore was concerned



about his environmental legacy. They argued that Gore, planning to run for president in 2000, anticipated that climate-change policy would become a vote-getting issue. By accepting an ambitious US target he wanted to signal that the administration were the 'good guys'. However, US8 pointed out that Gore risked losing politically if he tied himself too closely to the climate-change issue, explaining:

The fact that Gore ran for president meant that there was less focus on the domestic policy consequences of ratifying the Kyoto Protocol. Gore was advised by his staffers not to advocate the Kyoto Protocol simply because it had become so contested in US politics.

According to GE3, however, the US administration reasoned as follows in Kyoto: 'The agreement will not be ratifiable, but who cares? We can always blame the bad guys [the Republicans].' A possible objection to this reasoning is that if the Clinton–Gore administration had really wanted to blame the Republicans, the best strategy would seemingly have been to send the Kyoto Protocol to the Senate, so that the Republicans would have had to block ratification. However, the administration made no serious attempt in the Senate. According to GE3, the explanation might be that the Monica Lewinski scandal made it difficult for Clinton to approach the Senate. Note that much of the support for explanation 3 amongst US interviewees hinges on the part of the explanation that suggests that the Clinton–Gore administration wished to take a climate-friendly stand, rather than on the more controversial part, which suggests that such a stand would be cost-free.

While many interviewees offered strong support for explanation 3, others voiced harsh criticism. Several characterized explanation 3 as 'cynical' (indeed, both proponents and opponents used this term). Three main objections were mentioned.

First, Clinton and Gore were and are genuinely concerned about climate change. US5 said, 'Clinton found the issue [of climate change] profoundly important; he thought the Kyoto Protocol was going to be the first important step for an important issue and has continued to promote the climate-change issue also after his presidency'. Similarly, NO7 said he did not believe in explanation 3 because he considered both Clinton and Gore to be 'genuinely concerned about climate change'. GE8 went further, saying:

Explanation 3 is just power politics and I don't know what Clinton and Gore would have gained from it. Having known Al Gore for 10 years already in 1997, and seeing what he has done since then, I can say that he certainly would have wanted a result in Kyoto, not just a climate-friendly face. I think he acted with the intention that his former colleagues in the Senate could be brought on board.

Second, in the years after Kyoto the Clinton–Gore administration continued to negotiate for a ratifiable solution. NO5 said he had heard explanation 3 advanced by others, adding that he did not consider it a very good explanation: 'One should remember that the Clinton administration tried to achieve a reparation [a less ambitious but ratifiable agreement] in the Hague'. US4, US5, and US6 all mentioned the White House Climate Change Task Force as an instrument used by Clinton to focus on the need for domestic climate-policy actions. US6 said the Task Force:

focused on domestic persuasion that this was an important policy issue, and used communication events to put the issue on the agenda. After the Kyoto meeting, the Task Force interacted with important sectors of industry. They had a series of discussions to map industry interests, and how greenhouse gas reductions could be implemented.

Similarly, US5 emphasized:

Clinton tried to educate the public. The Task Force arranged public events with Clinton focused on putting the climate-change issue on the agenda. For instance, Nobel Prize-winning scientists and CEOs were invited to a climate-change seminar, attended by Clinton, at Georgetown University, and on another occasion weather forecasters were invited to the White House for a seminar.

Finally, Clinton and Gore only did what they thought was right. US4 said, ‘Clinton felt that signing was the right thing to do — he wanted to go ahead despite opposition’. US4 added:

There was no political upside for Clinton of signing; he had no intention of submitting the treaty to the Senate and no leverage to persuade constituents or the opposition. The politics of climate change was simply not ripe at the time.

Similarly, NO2 said he had often wondered what the result in Kyoto might have looked like if the United States had stuck to its ambition of a 0 percent target. However, NO2 emphasized that Gore is ‘a good person with a real commitment to combating climate change’, and therefore NO2 did ‘not wish to believe in explanation 3’.

## Conclusions

While all three explanations received at least some support from interviewees, it is probably fair to say that explanation 3 received *somewhat* more support than explanation 1, and that explanation 1 received *considerably* more support than explanation 2. Although explanation 3 received most support, it also proved most controversial; whereas several interviewees expressed strong support, others voiced harsh criticism.

The views expressed by interviewees from different countries revealed some notable differences. First, while explanation 3 received most support amongst German and US interviewees, explanation 1 received most support amongst Norwegian interviewees (even though they also expressed considerable support for explanation 3). Second, explanation 2 received notable support only amongst German interviewees. A possible explanation may be that during the Kyoto negotiations, Germany had a stronger green lobby than the other two countries. Therefore, German negotiators may have been particularly concerned with achieving an environmentally ambitious treaty. However, even amongst German interviewees, explanation 2 received less support than the other two.

Interviewees typically justified support or rejection of explanation 1 in terms of their perceptions of (1) how US ratification rules limit presidential powers and (2) the restrictions on a president’s ability to persuade senators to ratify treaties. Similarly, interviewees

justified support or rejection of explanation 3 in terms of their interpretation of (1) the political tactics involved in the administration's disregard for the sentiments in the Senate, and (2) the administration's commitment to act on climate change. In short, interviewees' support for the explanations hinged on how much they perceived that US ratification mechanisms limit presidential powers.

Our findings suggest that the two-level game theory should be interpreted and used only with care. In particular, the hypothesis that negotiators will consider only agreements that are ratifiable in all countries does not hold for the Kyoto negotiations. Moreover, we showed in the third section that each of our explanations of the outcome in Kyoto can be derived by relaxing one of three assumptions underlying this hypothesis: explanation 1 can be derived by relaxing the assumption of complete information; explanation 2 by relaxing the assumption that parties consider the agreement only on its merits; and explanation 3 by relaxing the assumption that each country's negotiators have no independent policy preferences. Thus, our findings suggest that it may be hazardous to try to explain the outcome of international negotiations by relying on a combination of these three assumptions. If our interviewees are correct that explanations 3 and 1 (in that order) have considerably more merit than explanation 2, it would seem that researchers relying on the third or (to a slightly lesser degree) the first assumption run a significant risk of being led astray. In contrast, relying on the second assumption might be less problematic.

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### **Notes**

1. Senate Resolution 98. Congressional Record, Report No. 105-5412, June 1997.
2. <http://georgewbush-whitehouse.archives.gov/news/releases/2001/03/20010314.html>
3. <http://georgewbush-whitehouse.archives.gov/news/releases/2001/03/20010314.html>
4. Congressional Record 2003 — Senate; S13585.
5. The interviews occurred between May and December 2008, except for six interviews in the United States conducted during spring 2007. Each interview lasted 40–60 minutes. There were 1–2 interviewers.
6. All potential interviewees were approached by e-mail, phone, or letter to request an interview. In Germany we contacted 17 potential interviewees, 10 of whom agreed to be interviewed in person, over the phone, or using videoconferencing software. In Norway we contacted 13 potential interviewees, eight of whom agreed to be interviewed. Finally, in the United States we contacted 14 potential interviewees, nine of whom agreed to be interviewed. In Norway and in the United States all interviews were conducted in person.

### **Appendix: List of interviewees**

Note: Interviewees whose names are not listed spoke on the condition of anonymity.

GE: Hartmut Graßl, former Director, Max Planck Institute for Meteorology, Hamburg

- GE: Sascha Müller-Kraenner, former NGO observer at Kyoto for Deutscher Naturschutzring
- GE: Sebastian Oberthür, Professor and Academic Director, Institute for European Studies, Vrije Universiteit Brussel
- GE: Hermann E. Ott, former Head, Berlin Office, Wuppertal Institute for Climate, Environment and Energy
- GE: Claudia Quennet-Thielen, former Head of Division, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
- GE: Karsten Sach, Deputy Director General, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
- GE: Hans Schipulle, former Deputy Director General, Federal Ministry for Economic Cooperation and Development
- GE: Hendrik Vygen, former Director, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
- GE: Nicole Wilke, Head of Division, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
- NO: Georg Börsting, Senior Adviser, Ministry of Foreign Affairs
- NO: Harald Dovland, Deputy Director General, Ministry of the Environment
- NO: Bjart Holtsmark, Senior Researcher, Statistics Norway
- NO: Bård Lahn, Adviser, Friends of the Earth Norway
- NO: Audun Rosland, Senior Adviser, the Climate and Pollution Agency
- NO: Geir Sjöberg, Chef de Cabinet and Personal Adviser to the OSCE High Commissioner on National Minorities
- NO: Peer Stiansen, Senior Adviser, Ministry of the Environment
- NO: Asbjörn Torvanger, Senior Researcher, CICERO — Center for International Climate and Environmental Research, Oslo
- US: Legislative assistant in the US Senate
- US: US Government official
- US: Business lobbyist, former legislative assistant in the US Senate
- US: Former Clinton Administration White House official
- US: Former Clinton Administration White House official
- US: Former Clinton Administration White House official
- US: Former US EPA official
- US: Former Clinton Administration State Department official
- US: Former Clinton Administration State Department official

## References

- Aldy J (2004) Saving the planet cost-effectively: The role of economic analysis in climate change mitigation policy. In: Lutter R and Shogren JF (eds) *Painting the White House Green: Rationalizing Environmental Policy Inside the Executive Office of the President*. Washington, DC: Resources for the Future, 89–118.
- Aldy J and Stavins R (2007) *Architectures for Agreement: Addressing Global Climate Change in the Post-Kyoto World*. New York: Cambridge University Press.
- Andresen S and Agrawala S (2002) Leaders, pushers and laggards in the making of the climate regime. *Global Environmental Change* 12(1): 41–51.
- Argentine Republic (1999) *Revision of the First National Communication According to the UNFCCC*. Buenos Aires: Secretariat for Natural Resources and Sustainable Development.
- Bang G (2010) Energy security and climate change concerns: Triggers for energy policy change in the United States? *Energy Policy* 38(4): 1645–1653.
- Barros V and Grand MC (2002) Implications of a dynamic target of greenhouse gases emission reduction: The case of Argentina. *Environment and Development Economics* 7(3): 547–569.
- Betsill M and Bulkeley H (2004) Transnational networks and global environmental governance: The Cities for Climate Protection Program. *International Studies Quarterly* 48(2): 471–493.
- Bodansky D (2001) The history of the global climate change regime. In: Luterbacher U and Sprinz D (eds) *International Relations and Global Climate Change*. Cambridge, MA: MIT Press, 23–40.
- Bryner G (2008) Failure and opportunity: Environmental groups in US climate change policy. *Environmental Politics* 17(2): 319–336.
- Cutajar MZ (2004) Reflections on the Kyoto Protocol: Looking back to see ahead. *International Review for Environmental Strategies* 5(1): 61–69.
- Evans P (1993) Building an integrative approach to international and domestic politics: Reflections and projections. In: Evans P, Jacobson H and Putnam R (eds) *Double-Edged Diplomacy: International Bargaining and Domestic Politics*. Berkeley, CA: University of California Press, 397–430.
- Fisher D (2004) *National Governance and the Global Climate Change Regime*. Lanham, MD: Rowman and Littlefield Publishers.
- Fisher D (2010) Understanding the relationship between sub-national and national climate change politics in the United States: Toward a theory of boomerang federalism. *Policy Sciences* (forthcoming).
- Harris PG (2000) *Climate Change and American Foreign Policy*. New York: St. Martin's Press.
- Harrison K (2007) The road not taken: Climate change policy in Canada and the United States. *Global Environmental Politics* 7(4): 92–117.
- Hirono R and Schröder H (2004) The road to and from the Kyoto Protocol: The perspectives of Germany and Japan. *International Review for Environmental Strategies* 5(1): 39–60.
- Hovi J and Skodvin T (2008) Which way to US climate cooperation? Issue linkage versus a US-based agreement. *Review of Policy Research* 25(2): 129–148.
- Iida K (1993) When and how do domestic constraints matter: Two-level games with uncertainty. *Journal of Conflict Resolution* 37: 403–426.
- Jacoby H and Ellerman AD (2004) The safety valve and climate policy. *Energy Policy* 32(4): 481–491.

- Jacques PJ, Dunlap RE and Freeman M (2008) The organization of denial: Conservative think tanks and environmental skepticism. *Environmental Politics* 17: 349–385.
- Leech BL (2002) Asking questions: Techniques for semistructured interviews. *PS: Political Science and Politics* 35(4): 665–668.
- Lisowski M (2002) Playing the two-level game: US President Bush's decision to repudiate the Kyoto Protocol. *Environmental Politics* 11(4): 101–119.
- Mazmanian DA, Jurewitz J and Nelson H (2008) California's climate change policy: The case of a subnational state actor tackling climate change. *Journal of Environment and Development* 17(4): 401–423.
- Paterson M (2009) Post-hegemonic climate politics? *British Journal of Politics and International Relations* 11(1): 140–158.
- Putnam R (1988) Diplomacy and domestic politics: The logic of two-level games. *International Organization* 42(3): 427–460.
- Rabe B (2008) States on steroids: The intergovernmental odyssey of American climate policy. *Review of Policy Research* 25(March): 105–128.
- Schelling T (1960/1980) *The Strategy of Conflict*. Ann Arbor, MI: Harvard University Press.
- Schreurs M (2004) The climate change divide: The European Union, the United States, and the future of the Kyoto Protocol. In: Vig N and Faure M (eds) *Green Giants*. Cambridge, MA: MIT Press, 207–230.
- Schreurs MA, Selin H and VanDeveer SD (2009) Conflict and cooperation in transatlantic climate politics: Different stories at different levels. In: Schreurs MA, Selin H and VanDeveer SD (eds) *Trans-Atlantic Environment and Energy Politics: Comparative and International Perspectives*. Aldershot: Ashgate, 165–180.
- Selin H and VanDeveer S (2007) Political science and prediction: What's next for US climate change policy? *Review of Policy Research* 24(1): 1–27.
- Skjærseth JB and Skodvin T (2003) *Climate Change and the Oil Industry: Common Problem, Varying Strategies*. Manchester: Manchester University Press.
- Urpelainen J (2009) Explaining the Schwarzenegger phenomenon: Local frontrunners in climate policy. *Global Environmental Politics* 9(3): 82–105.
- US Senate (1997a) *Senate Resolution 98*. Congressional Record, Report No. 105-5412, June 1997.
- US Senate (1997b) *Opening Statement*. Senator Jim Inhofe, Environment and Public Works Committee, Hearing on Global Climate Change. Thursday 17 July 1997. Available at: [http://epw.senate.gov/105th/inh\\_7-17.htm](http://epw.senate.gov/105th/inh_7-17.htm) (accessed 28 January 2010).
- US Senate (2001) *Treaties and Other International Agreements: The Role of the United States Senate. A Study Prepared for the Committee on Foreign Relations, United States Senate*. Report. Congressional Research Service, Library of Congress. January.
- Victor DG (2001) *The Collapse of the Kyoto Protocol and the Struggle to Slow Global Warming*. Princeton, NJ and Oxford: Princeton University Press.
- Victor DG (2004) *Climate Change: Debating America's Policy Options*. New York: Council on Foreign Relations Press.
- Wiener JB (2004) Convergence, divergence, and complexity in US and European risk regulation. In: Vig N and Faure M (eds) *Green Giants*. Cambridge, MA: MIT Press, 73–110.

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