# The Paris Agreement on Climate Change —Made in USA?

Manjana Milkoreit

The 2015 Paris Agreement established a new logic for international climate governance: the pledge-and-review system. In 2009, the same idea had been proposed in the Copenhagen Accord, but was then forcefully rejected by the negotiation community. Explaining this turnaround, I analyze the role of the United States in the international climate negotiations, using Putnam's two-level game framework and Snidal's k-group theory. U.S. domestic politics imposed significant constraints on the terms of the Paris Agreement, contributing to the emergence of the new treaty architecture. Until 2015, U.S. negotiators were either unable or unwilling to bring the demands of political actors at the domestic and international levels in alignment. President Obama achieved this alignment in 2015 by creating international support for a treaty without legally binding obligations that could circumvent a Congressional ratification barrier. The latter required a surprising move: the proactive engagement of China despite the structural context of hegemonic transition.

he Paris Agreement on Climate Change (PA) was adopted in 2015 after a decade of contentious international negotiations and a prior, unsuccessful attempt to adopt a similar agreement in Copenhagen in 2009. The PA changed the logic of international climate governance from a model of internationally negotiated—mutually agreed upon—and legally binding mitigation obligations for some parties to a pledge-and-review system without binding mitigation obligations for anybody. The latter consists of voluntary promises of action (Nationally Determined contributions, NDCs) coupled with international transparency and review mechanisms that keep track of individual and collective achievements. Instead of

dividing the mitigation burden among negotiation parties upfront in a binding agreement, the new architecture leaves it up to each party to determine how much to contribute to the global public good.

This reversal in the trajectory of international climate

This reversal in the trajectory of international climate governance, especially the substantive logic of the climate regime, begs for explanation. States had been negotiating a new climate agreement under the United Nations Framework Convention on Climate Change (UNFCCC) since the Kyoto Protocol (KP) came into effect in 2005. The first attempt to create a new treaty in Copenhagen in 2009 failed, shattering many participants' confidence in multilateralism's ability to address climate change (Dimitrov 2010). The Copenhagen Accord was rejected by many negotiation participants as an affront in substance and process (Ciplet, Roberts, and Kahn 2015). The PA closely reflects the Copenhagen Accord (Bodansky 2016a, refer to the online appendix for a comparison of relevant text elements), which was celebrated as a major breakthrough in 2015. Why was an agreement with the same core features rejected in Copenhagen and accepted in Paris? What changes between 2009 and 2015 enabled the adoption of the specific agreement now in place?

Numerous factors facilitated the success in Paris, including good process management (Dimitrov 2016), leadership (Oberthür and Groen 2017b), and significant progress ahead of the negotiations themselves. However, these accounts are incomplete in failing to acknowledge the United States' significant role in shaping the political process and the substance of the new arrangement. Drawing on Putnam's two-level game framework and Snidal's k-group theory, I argue that the United States

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Manjana Milkoreit is Assistant Professor in the Department of Political Science at Purdue University (mmilkore@ purdue.edu). Her research integrates international relations scholarship and cognitive theory to study actor motivations and policy design in global climate change politics and diplomacy. She is interested in governance challenges at the science-policy and science-society interfaces that impact the search for and implementation of sustainable solutions to climate change. She received a Ph.D. in Global Governance from the University of Waterloo. Prior to her appointment at Purdue University she was a Postdoctoral Research Fellow at Arizona State University's Wrigley Global Institute of Sustainability.

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causally contributed to negotiation failure in Copenhagen and success in Paris, and imposed the particular logic of the PA—the pledge-and-review system (Falkner 2016b).

Structurally, the climate regime requires leadership by a k-group (Snidal 1985)—a minimum coalition of major states able to ensure regime effectiveness—because there exists no single hegemon able to provide the global public good of climate stability. The United States has been in a dominant, yet eroding, position in the climate negotiations since their initiation in 1990, while its willingness to be a k-group member has changed multiple times. Throughout this period, the American delegation's room for maneuver has been severely constrained by domestic politics, which have made Senate ratification of any new international agreement unlikely. President Obama was the first U.S. negotiator who took this obstacle seriously and developed a negotiation strategy that would render Senate ratification unnecessary. This involved negotiating an agreement that did not contain any new legal obligations for the United States, which steered the American negotiation position toward the pledge-and-review system. An agreement that relied on voluntary pledges rather than legally-binding obligations was rejected by other negotiation parties in Copenhagen in 2009, but Obama continued to pursue it. Between 2010 and 2015, the United States took various steps to influence the international negotiation context, developing and facilitating broad support for the pledge-and-review system that had been on the negotiation table since Copenhagen. The latter required a surprising move: establishing a k-group that included China, the rising hegemon and natural competitor of the United States in other policy domains. Without China, the world's largest emitter since 2006, the climate regime would be ineffective. K-group logic explains not only why the pledge-and-review logic came to dominate the PA, but also why a major power in decline and another on the rise decided to cooperate in the climate regime.

I make my argument in three steps: I first review existing explanations for the successful adoption of the Paris Agreement; I then apply Putnam's two-level game framework to the climate negotiations, highlighting the importance of the United States, but offering an ultimately incomplete explanation for its role in shaping the PA. The final puzzle piece—Snidal's k-group argument—is integrated in this analysis. Before concluding, I explore the implications of this analysis for the future of the climate regime, especially with a view to Trump administration policies.

### **Explaining Negotiation Failure and Success**

As outlined here, convincing theoretical arguments have been elucidated to explain past failures to establish an effective climate regime, but these accounts are less convincing when applied to the Paris negotiations.

#### Rational Institutionalism

Rationalist institutionalists have argued—even after the PA's adoption—that "climate change politics, as currently structured, is not conducive to much cooperation" (Keohane and Victor 2016, 570). Existing patterns of interests, power, and incentives inevitably lead to noncooperation. Applying structural analysis to the KP, such scholars (Barrett 1998; Sunstein 2007; Rosen 2015) have concluded that it was simply not in the interest of the United States or other major emitters to support a costly climate agreement. Others argue similarly about Copenhagen, expressing pessimism about the potential for multilateral agreements to address climate change (Keohane and Victor 2011; Victor 2011). Dimitrov observed that "the poor record of climate diplomacy had created a virtual consensus among academics . . . that UN talks cannot succeed" (2016, 8).

Rational institutionalists are not puzzled by the diplomatic breakthrough achieved in 2015. From their perspective, structural concerns remain in the post-Paris world despite major changes in the incentive structure for climate action. Some continue exploring the merits of climate clubs or minilateralism (Falkner 2016a); others doubt the PA's potential effectiveness (Keohane and Victor 2016; Keohane and Oppenheimer 2016).

#### Social Constructivism

Social constructivists have proposed different, but complementary (Keohane and Victor 2016, 572) explanations for the international community's failure to address climate change. Problem frames, norms and discourses shape different actors' perceived interests (Ruggie 1992; Finnemore 1996; Epstein 2008) and corresponding support for an international agreement. Different understandings of the nature of climate change as an governance problem and different norms of justice across the North-South divide have also been used to explain past failures (Roberts and Parks 2006).

From a constructivist perspective, the Copenhagen summit failed because the principled demands of the developing countries concerning climate leadership went unmet. The draft Copenhagen Accord equalized all countries' obligations to contribute to the global public good, contradicting long-standing normative expectations that developed countries lead climate action. Further, it did not contain binding obligations for developed countries to reduce emissions or provide climate finance.

However, the same principled challenges of the global South can be leveled against the PA, which contains the same conditions as the Copenhagen Accord—a voluntary pledge and review system with non-binding mitigation obligations for all and no firm promises on climate finance. Given that the normative stance of the developing world has not fundamentally changed since 2009, why did they accept in 2015 what they rejected six years earlier as "both

highly inadequate and starkly inequitable" (Ciplet, Roberts, and Khan 2015, 18)?

#### Alternative Explanations: A Combination of Factors

Most authors seeking to explain the Paris outcome rightly point to a combination of variables that contributed to its success (e.g., Dimitrov 2016; Oberthür and Groen 2017b), including good process management, strong leadership, and a generally favorable political context, including the shock of the Copenhagen failure.

Negotiation process management (Depledge 2005) has received growing attention since the contrast between the Copenhagen and Cancun meetings made the role of the COP (Conference of the Parties) presidency glaringly obvious (Monheim 2016; Park 2016). Exploring the presidency's effectiveness, this research has highlighted the necessary balance between transparency, which generates trust (Oberthür and Groen 2017b, 10–11) and process legitimacy, but also expediency and secrecy (Dimitrov 2016, 6), which can be important for outcome legitimacy.

While process management can affect negotiation dynamics and success, it does not explain the substance of the agreement reached. A president can shepherd a process and facilitate compromise, but has to remain neutral on the negotiation options put forward by different parties—neutrality on substance is key for legitimacy.

Several political actors have been credited with leadership during the Paris negotiations, including the EU, the High Ambition Coalition, the Latin American negotiation alliance AILAC (Edwards et al. 2017) and non-state actors (Jacobs 2016; Hale 2016). Building on a growing EU climate leadership literature (e.g., Bäckstrand and Elgström 2013; Parker, Karlsson, and Hjerpe 2015), Oberthür and Groen (2017a, 2017b) argue that the EU facilitated the Paris Agreement and achieved most of its negotiation goals. Concomitantly, the authors acknowledge that the EU had to scale back its initial ambitions regarding mitigation, transparency and climate finance three central negotiation issues. The EU ultimately abandoned demands for binding mitigation obligations and accepted voluntary pledges; it even gave up on developing detailed transparency rules before leaving Paris (Oberthür and Groen 2017b, 14; Obergassel et al. 2016).

There is general agreement that China's support is critical for any new agreement. One could argue that any new treaty supported by both China and the United States would leave others no choice but to fall in line. Thus, the 2014 bilateral climate initiative between the United States and China inserted important momentum into the negotiation process ahead of Paris, raising the prospect that the two largest emitters would support cooperative action globally. The EU's bilateral initiatives with India

and China might also have helped mobilize support for a new agreement (Torney 2014). More generally, emerging powers (China, India, Brazil, South Africa) have been playing an increasingly important role in in the climate negotiations over the last decade (Hurrell and Sengupta 2012; Hochstetler and Milkoreit 2014), and might have played an important, although insufficiently analyzed role in Paris (King 2015).

The newly formed High Ambition Coalition also deserves credit for the PA (Lewis 2016; Obergassel et al. 2016). The coalition convened countries from nearly all major negotiation groups (King 2015), and championed important features of the PA, such as the 1.5°C temperature goal, facilitating compromise.

Finally, the PA's success would have been impossible without Copenhagen's failure (Rajamani Dimitrov 2016; Park 2016). COP15 and COP21 were not independent events, but stages in a path-dependent trajectory driven by lessons from and responses to past experiences. The dramatic Copenhagen experience drew attention to international climate governance at the highest political level and laid the groundwork for the substance of the PA (Bodansky 2016a). The Copenhagen Accord was rejected in 2009, but most of its substantive provisions were expanded upon and formally adopted in Cancun in 2010, framing the textual negotiations that began with the Durban Platform decision in 2011. The KP was another important juncture in developing the current climate regime. While establishing many principles, processes and institutions that continue characterizing the climate regime, its core logic and feature—mutually agreed upon emission reduction targets—was later used as an example of how not to design the PA.

## The Role of the United States—A Climate Hegemon?

The literature has scarcely addressed the role of the United States in shaping the PA relative to the factors mentioned earlier. Scholars have acknowledged that "the new climate deal meets all key demands of the US," (Dimitrov 2016, 8; also Clémençon 2016, 6) and that its innovative legal framework was specifically geared towards the "constitutional peculiarities" of the United States (Obergassel et al. 2016, 3), but they do not explain how or why the United States successfully achieved its negotiation goals while co-creating a "landmark" climate agreement with global support.

The United States has always been an important but erratic negotiation participant (Depledge 2005). Periods of wary engagement (Bush Sr.) or even disengagement (Bush Jr., Trump) were interrupted by leadership efforts (Clinton, Obama). Scholars have provided third (Sunstein 2007), second (Bang, Tjernshaugen, and Andresen 2005), and first image (Lisowski 2002) explanations for this

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waxing and waning of U.S. engagement. Importantly, all major climate agreements were created with heavy American involvement, but later lost U.S. support. U.S. domestic politics are thus critical for international climate negotiations in the sense of Putnam's two-level game. It also raises the question whether U.S. leadership is a necessary (but insufficient) condition for climate regime success—is the United States a hegemon in the climate negotiations?

Putnam's two-level games. Explaining variation in U.S. negotiation behavior and associated international negotiation outcomes requires a dynamic conception of the United States' preferences over time, opening up the black box of the unitary state actor. Putnam's two-level games framework enables such a dynamic analysis, accounting for changes in domestic and international-scale variables and different constellations of their "entanglement" over time (Putnam 1988, 430).

The framework illuminates the dilemma of the international negotiator, who has to balance the demands of multiple, largely independent audiences: other states in the negotiations (Level I) and domestic political actors (Level II). Conditions on both levels can change over time, creating opportunities for and constraints on the negotiator. Throughout this paper, I refer to the U.S. president as the "negotiator".

Domestic actors with divergent interests often seek to influence the negotiator. While domestic audiences have limited influence on the negotiations themselves, their cooperation is often necessary to ratify and implement a negotiated agreement. For example, in the United States, the Senate has the sole power to ratify an international agreement establishing new legal obligations for the country. This requirement places the Senate in a powerful position to block the president's interests. If the negotiator is unable to reach a deal that sufficiently addresses the concerns of a domestic player needed for implementation, such as the U.S. Senate, the agreement might falter because implementation fails. What Putnam called "involuntary defection" is what happened with the KP. It might also happen with the Paris Agreement.

The two-level game framework has previously been applied to explain U.S. negotiation behavior (e.g., Sprinz and Weiß 2001; Lisowski 2002; Kroll and Shogren 2008). The analysis below expands on this work by analyzing the time period 1997 to 2015, and integrating hegemonic stability and k-group theory.

Hegemonic stability theory. Hegemonic stability theory predicts that when conditions are unfavorable to collective action, international regimes will be created and effective only through a hegemon—a single, strongly dominant actor (Olson 1965; Keohane 1984; Axelrod and Keohane 1985). Scholars have preferred the concept of leadership (Falkner 2005; Paterson 2009) to hegemony when ana-

lyzing the role of the United States in international environmental politics. However, hegemonic stability theory explained climate negotiation outcomes well until 2009: absent hegemonic leadership, the regime was faltering. The United States was rationally unwilling to provide costly regime support (Sunstein 2007). When President Bush withdrew from the KP in 2001, the EU moved into a leadership position (Paterson 2009), but had much less capacity to provide the global public good. Despite European efforts, the KP was ineffective in reducing global emission and slowing global temperature change (Almer and Winkler 2017). The climate regime remained unsuccessful given an unwilling and an insufficiently strong candidate for hegemon.

It is not hard to challenge the applicability of hegemonic stability theory (Falkner 2006). If one expects the hegemon to be able to singlehandedly solve the governance problem, there has never been a hegemon in the sphere of climate politics—any country's share of global emissions is too limited to assume this role. However, if one defines a hegemon as a "single strongly dominant actor" (Snidal 1985, 579) or a veto player, the United States has been in a hegemonic position since international climate diplomacy's inception in 1990.

Two variables determine dominance in the climate change context: (1) a country's share of global GHG emissions and its corresponding potential to provide the public good through mitigation, and (2) its economic size and corresponding financial capacity to mitigate and to contribute to international climate finance. In 1997, the United States was the largest global emitter of GHG (23%; PBL 2016) and had by far the largest proportion of global GDP (28%; World Bank 2017b). China surpassed the United States as the largest annual emitter in 2006 (PBL 2007), but American cumulative emissions remain the largest in the world. In 2015, the United States was still the largest global economy with 25% of GDP (US\$18tn, World Bank 2017b), while China's share reached 15% (US\$11tn, World Bank 2017a).

Continued U.S. dominance makes the climate regime U.S.-dependent in two ways: (1) the United States directly contributes to the global good or bad, and (2) other countries' willingness to cooperate depends on their perceptions of American regime support. While unable to solve the climate problem on its own, nor to impose its own approach on others, a U.S. contribution has always been necessary for creating an effective climate regime.

Given this stable role as a veto power, what explains the changing pattern of U.S. engagement in climate politics over time absent major changes in the expected pay-offs from regime support? The sudden reengagement in Copenhagen and Paris is even harder to explain with a view to the steady erosion of American dominance over the last twenty years, while a hegemonic rival—China—has been gaining power. Time periods

with a declining and a rising major power are expected to be characterized by increasing tensions and competition, diminishing prospects for cooperation (Roberts 2011). And indeed, signs of great power rivalry have become prominent in a range of policy areas, including trade, cybercrime, and security. Based on that logic, an agreement supported by the declining and rising power should have been less likely in 2015 than in 2009 or 1997. Yet U.S./China cooperation increased significantly between 2009 and 2015, providing momentum for the climate negotiations. This raises the question whether the burdensharing nature of climate change introduces an issue-specific logic that enables cooperation among rising and declining powers.

#### K-group Theory and the Climate Regime

In structural conditions like this—regime effectiveness can only be achieved if a group of dominant actors jointly supports the regime—Snidal's k-group theory applies (Snidal 1985). K stands for the minimum number of countries necessary to provide enough of the global public good to enable each of them to benefit from cooperation (Snidal 1985, 598). In an ideal case of hegemonic stability k=1, but as long as k is small enough, "collective action may be possible regardless of the number of states in the group." The k-group logic explains why the United States and China were willing to cooperate in 2015 and it also illuminates the fate of the KP.

According to Snidal, hegemonic stability theory has limited applicability under conditions of hegemonic decline. Instead of diminishing the prospects for cooperation among hegemonic rivals, he suggested that the dynamics of a hegemonic transition "may even lead to higher levels of cooperation" (Snidal 1985, 612). Differentiating between absolute and relative changes in the "size" of the hegemon, i.e., its measure of dominance, Snidal argues that if the relative size of the hegemon declines while its absolute size increases, it should be more rather than less interested in providing the public good through an international regime because of its ability to capture cooperative benefits. In this case, the second (and third . . . ) largest actor "may have an incentive to provide the good by itself" (Snidal 1985, 585), depending on its own size, the corresponding ability to provide a share of the public good and to capture the benefits of cooperation.

The size of a country is a key variable to determine the number of k-group members necessary to create regime benefits. In the case of climate change, both variables I used to determine dominance—share of global GHG emissions and size of the economy—have to be considered, as does the extent of the country's commitment to climate action. For example, if a major emitter lacks commitment to domestic climate regulation, its importance for the k-group is diminished. The country's

expected regime contribution would not be adequate to its size, and it would not create regime-related benefits. A country's political will to leverage its size for climate action heavily determines its status as a k-group member.

Both the absolute and relative U.S. share of annual global GHG emissions declined between 1997 and 2015. Regarding global GDP, the relative share of the United States declined (from 28% to 25%), but grew in absolute terms (from US\$11 to 18 trillion). In the same time period, China's relative and absolute share of global emissions and GDP increased. Hence, the two countries found themselves in a situation that favors cooperation among hegemonic rivals. Further, both countries indicated commitment to domestic climate action with a joint declaration in 2014.

As Snidal suggests, the declining hegemon continues to be interested in providing regime support as long as the regime's potential domestic benefits are large enough to outweigh the costs of cooperation. Assessments of future costs and benefits are subject to significant scientific uncertainty. The costs of cooperation include the economic costs of domestic climate policy, especially mitigation, and financial support for other countries' climate action. Regime benefits refer to a large range of avoided climate impacts, and the economic gains generated by the development of new clean-energy markets, jobs, and tax revenue. Regardless of the specific numbers, a set of general statements can be made concerning k-group members' cost-benefit assessments.

First, the United States should now be increasingly interested in cooperation because its share of the total costs of providing the global public good declines with potentially increasing contributions from China. The perceived benefits of regime support might have increased over time based on observations of domestic climate impacts, such as property loss and damages due to sealevel rise or extreme weather events, and of the benefits of the growing renewable energy sector.

Second, China might be particularly interested in "locking in" an agreement that stabilizes the United States contribution as soon as possible to ensure that the declining power bears as large a burden as possible, even if the agreement is a voluntary one.

Third, when increasing the circle of k-group members, each participating country expects to capture a share of the increasing regime benefits, and to take advantage of a relative reduction of its mitigation burden. In other words, when growing the k-group, each member can reap domestic benefits for a smaller price, assuming that all k-group members fulfill their promises.

Thus, climate change is a case of "hegemonic cooperation after hegemonic decline" (Snidal 1985, 613), illuminating the potential for collective action during changes in the global power distribution. The analysis below explores how k-group constellations in the UNFCCC have changed over time, and how these changes have affected negotiation outcomes.

## U.S. Engagement in International Climate Negotiations as a Two-level Game under k-Group Conditions

Two-level Games and Climate Change in U.S. Politics Given the power of the U.S. Senate to reject the implementation of an internationally negotiated agreement that establishes new legal obligations for the United States, the Senate has been a key domestic audience for U.S. negotiators. And congressional opposition to international climate agreements has been a stable feature of American politics since 1997. In the run-up to the Kyoto negotiations, the Senate defined what it considered the national interest in the unanimously adopted Byrd-Hagel resolution. Byrd-Hagel signaled to the negotiator at the time, President Clinton, that the Senate was not willing to ratify any agreement that would differentiate between obligations for the United States and other countries, especially major developing countries like China and India. The resolution was non-binding and might have lost in importance over the last twenty years, but it still largely reflects Congressional reality today. While this space has been complicated, with changing factions over time, and a number of regulatory attempts that garnered varying levels of Republican support (e.g., the Waxman-Markey bill in 2008), overall, Republican opposition presented a ratification barrier for any international agreement on climate change for the entire time period

This opposition has remained stable despite a number of significant domestic and international developments that have created an entirely new political context for climate action over the last two decades. First, while global emissions keep increasing, China has overtaken the United States as the largest annual emitter of GHG, redistributing global leadership expectations (Parker and Karlsson 2018). Second, driven by technological development and favorable policy-making elsewhere in the world, global energy markets have shifted in favor of renewables with rapidly declining costs for solar and wind power. Expanding clean technology industries have generated a new political constituency that is lobbying for rather than against climate action. This trend has also shifted economic assessments of mitigation policies: instead of an economic burden, the transition to a zero-carbon economy now presents major financial opportunities. Climate action is increasingly perceived as a potential economic benefit in both developed and developing countries. Reflecting this shift in economic reality and perceptions, a growing number of fossil-fuel companies now provide at least verbal support for a global agreement that levels the international playing field instead of a patchwork of national policies. Third, U.S. states, cities, communities,

analyzed here (Goode and Restuccia 2015).

and non-state actors have significantly accelerated subnational climate action. And fourth, while U.S. public opinion on the matter remains starkly divided between liberals and conservatives, there has been growing support for climate action among American voters (Roser-Renouf et al. 2015), even among supporters of President Trump (Leiserowitz et al. 2017).

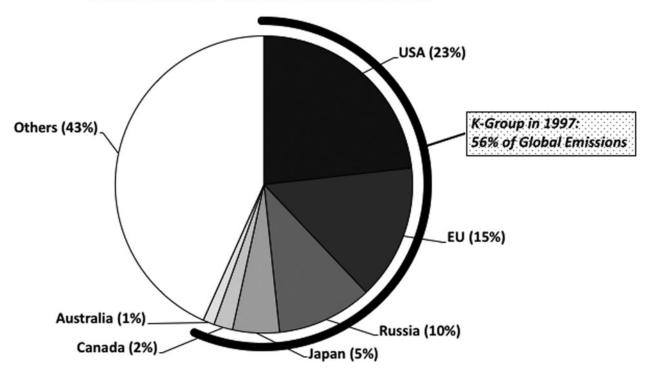
Despite these trends, the Senate remains a key domestic constituency for the president-negotiator. Given the twenty-year stability in the Senate's opposition to new international obligations, variation in UNFCCC negotiation outcomes can only be explained by the changing negotiation strategies of the different U.S. presidents since 1997, and potential changes at Level I. The following sections analyze these two dynamics and their cross-scale entanglement over time.

Clinton ignores Level II in Kyoto. In 1997, President Clinton ignored his key domestic audience and negotiated an agreement that had precisely the features that the Byrd-Hagel resolution had deemed unacceptable. The KP established legally binding mitigation requirements only for developed countries, exempting all developing countries, including China and India, from such obligations. This differential treatment imposed economic costs of mitigation on developed countries, but not on major developing ones, potentially putting the United States at a competitive disadvantage in the global economy, especially in relation to China. Further, Vice President Al Gore had pushed for a comparatively ambitious emission reduction target for the United States (7% below 1990 levels), which was more likely to hurt the U.S. economy than a less ambitious one (Hovi, Sprinz, and Bang 2012, 142). Given the discrepancy between the KP and the agreement the Senate was willing to consider, the Clinton administration avoided the certain rejection of the treaty by never submitting it for Senate ratification.

At this time, the United States was the largest global emitter of GHG as well as the largest global economy. There was no doubt about its central role in a potential kgroup, although the United States had given up its initial leadership role in global environmental politics in the early 1990s, allowing the EU to emerge as "the strongest proponent of international environmental law" (Kelemen and Vogel 2010, 428). Beyond the United States and the EU, the k-group included other OECD member states; China and India were not considered to be group members. This k-group constellation was more or less formalized in the Annex-I structure of the KP.

Given the centrality of the United States for the Kyoto-Protocol k-group, and U.S. ratification in limbo between 1998 and 2001, the international community struggled to fulfill the treaty's entry-into-force requirements: ratification by 55 countries, including Annex-I countries with at least 55% of global emissions. This specific requirement likely reflected parties' perceptions

Figure 1 K-group constellation in 1997. [International Energy Agency (2011)].



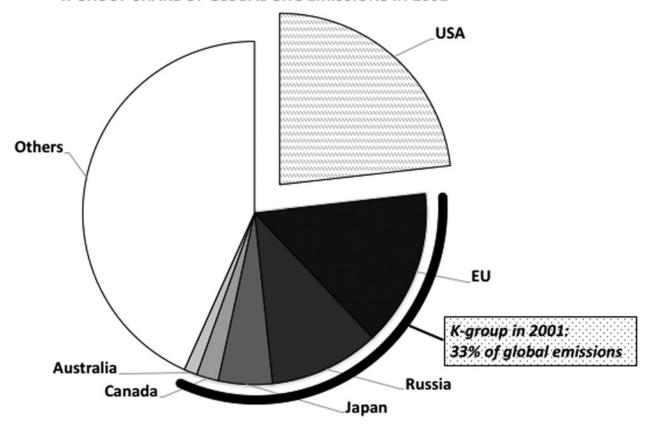
concerning the minimum collective effort required to ensure benefits from cooperation. The sluggish rate of ratification among other countries in this time period—not even the EU ratified until 2002—is a strong indicator for the perceived importance of the United States for the effectiveness of the climate regime. A more recent study confirms that the lack of U.S. involvement continues to constrain the potential of other actors to address climate change effectively after the Paris Agreement (Sprinz et al. 2017).

Bush favors Level II President Bush's negotiation goals with regard to the UNFCCC were fully aligned with the Byrd-Hagel resolution (Kahn 2003). He stated in a letter (Bush 2001): "As you know 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 U.S. economy. . . . the Kyoto Protocol is an unfair and ineffective means of addressing global climate change concerns." In terms of the two-level game, Bush rejected the KP and sided with his the Level-II audience over any demands of the international community (Lisowski 2002).

The formal withdrawal of American support in 2001 changed k-group membership and moved the EU into an undisputed leadership role. The EU was able to rally enough countries, especially Russia, to ratify the agreement, which entered into force in 2005. However, the U.S. departure significantly diminished the remaining kgroup's ability to provide the global public good. Despite the EU's efforts, the commitment of other k-group members to the treaty weakened, creating challenges down the road (Barrett and Stavins 2003). One k-group member (Canada) ignored their own mitigation obligations and withdrew from the agreement in 2011 to avoid penalties (Fjellvang 2014), while others decided not to take part in a second commitment period starting in 2012 (Japan, New Zealand, Russia). These countries' public justifications for their decisions often referred to the ineffectiveness of the KP due to its insufficient "coverage" of GHG in the absence of the United States and China (Government of Canada 2011). It became clear that although the k-group had to consist of more than two countries, the two largest global emitters were key to regime success. If the G2 presented a shared position, others would have to follow.

Ultimately, the EU was not able to replace the United States as a dominant actor in the climate regime for

Figure 2 K-group constellation in 2001. [International Energy Agency (2011)].



structural reasons, i.e., its share of global emissions and its economic weight. Despite overachieving the collective target of emission reductions by 2012, i.e., being effective in terms of goal achievement, and altering the institutional landscape of climate governance, the KP ultimately had no significant effect on climate change itself (Rosen 2015; Shishlov, Morel, and Bellassen 2016).

Nevertheless, the importance of the KP for the development of the climate regime, the initiation of national climate measures around the world, and the design of subsequent agreements is significant and often overlooked. The treaty not only set in motion important institutional changes and ensured the continuing support of the developing countries for the climate regime, it also provided important lessons for the negotiations in Copenhagen and Paris. The American bait-and-switch between 1997 and 2001 negatively affected the negotiation dynamics for more than a decade, and shaped the long-term attitudes and expectations of other negotiators towards the United States. Having observed the United

States substantively shaping, signing and then abandoning the KP made other negotiators wary of American commitments. The Kyoto-lesson learned was that the United States could not be trusted to make credible commitments (Tamura 2006). Even if the negotiator was well intentioned, there was no reason to believe in the future domestic implementation of any promises made internationally. This loss of credibility of the U.S. negotiator would play an important role in the Copenhagen negotiations in 2009.

Obama addresses Level II but ignores Level I in Copenhagen. When President Obama took office in 2009, the United States started to reengage in the international climate negotiations and to develop domestic climate policies (Obama 2008, 2009). In contrast to Clinton, Obama took his domestic audience seriously, fully recognizing that Senate ratification of any international agreement on climate was not possible. Hence, he sought an agreement that would not require Senate ratification. The

possibility for circumventing the Senate exists for presidential- (also sole-) executive agreements (Kemp 2016), which are a common U.S. practice for trade agreements. Treating the new climate agreement as an executive agreement would be conditional on the substance of the new agreement; its obligations would have to be "procedural in nature, because they reiterate(d) obligations the Senate had already approved in the UNFCCC, or because they reflect[ed] and complement[ed] existing US law" (Bodansky 2016b). In practice, that meant avoiding any legally binding obligations, including those concerning mitigation or international climate finance (Bodansky 2015). In diplomatic terms, the U.S. delegation expressed its desire for such a procedural agreement when it titled and framed its key pre-Copenhagen submission to the UNFCCC as a draft "implementation agreement" (United States and UNFCCC 2009).

Given the need to avoid new legal obligations, Obama proposed a treaty architecture that would establish mitigation obligations of the same legal character (nonbinding) for all negotiation parties, regardless of their development status. All parties' obligations would be entirely voluntary, "nationally determined" and adjustable over time rather than internationally prescribed. This structure would also address one of the key issues in the domestic discourse: opposition to differentiation between obligations of the United States and those of other countries, especially China and India. Initially, U.S. proposals formulated in submission documents to the UNFCCC still differentiated between developed and developing country parties, but indicated that all parties should take "nationally appropriate mitigation actions" that would be subject to some kind of review (United States and UNFCCC 2009). These two ideas—voluntary pledges ("communications") of mitigation action combined with detailed review mechanisms—would later become the pledge-and-review system. This logic became part of the Copenhagen Accord, and after 2009, U.S. submissions and statements always reinforced the Accord's language: "The Accord text also usefully bows in the direction of national sovereignty, . . . by deferring to Parties in terms of deriving their respective mitigation undertakings. Such an approach, in our view, promotes widespread contributions and actual implementation" (United States and UNFCCC 2010, 81). The New York Times (Broder and Kanter 2009) quoted Todd Stern, the U.S. chief negotiator in Copenhagen, justifying this proposal in the following way: "It has been my view from the beginning that unlike what happened in Kyoto we need to have our international and domestic postures in sync, so there is domestic and political support for whatever it is we do. We don't want the cart before the horse this time".

Beyond universal obligations to submit non-binding mitigation pledges, the agreement would still allow for different forms of differentiation concerning the amount each party would contribute and under what conditions of support. Nevertheless, this pledge-and-review system was a radical departure from the previous model of environmental governance (Falkner 2016b), which placed the main burden of action on the shoulders of the global North and usually relied on internationally negotiated, legally binding obligations for developed countries.

This tactical move—from seeking to satisfy the Senate to avoiding it—shifted the negotiator's key challenge from Level II (having to justify an unpopular agreement) to Level I (having to create an agreement without legally binding obligations). The key question became whether the United States could convince the international community to go along with the pledge-and-review system.

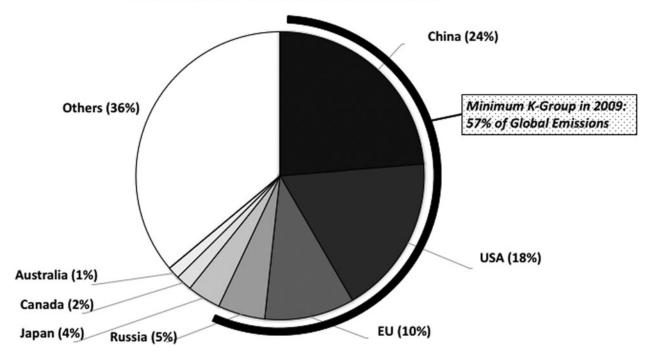
The answer to this question was no. President Obama's first eleven months in office proved too short to mobilize the UNFCCC community for this idea. The negotiations in Copenhagen failed not only because of poor process management (Dimitrov 2010), but also due to an unresolved divide between those in favor of the conventional, Kyoto-Protocol style treaty structure and those championing a new approach: pledge-and-review.

While the negotiations in Copenhagen were collapsing, Obama personally struck a closed-door, after-midnight deal with the BASIC group (Brazil, South Africa, India, China), outlining the bare-bones of a pledge-andreview system in mere twelve paragraphs (Ciplet, Roberts, and Khan 2015, 65). When reflecting back on this moment after the Paris negotiations, President Obama mused that he "essentially engaged in 24 hours of diplomacy to salvage from a pretty chaotic process the basic principle that all countries had to participate in combatting climate change" (CNN 2015). What Obama called a basic principle implied a departure from the longstanding norm that despite a common responsibility of all countries, the developed world was subject to much stronger obligations to act and to act sooner than others ("leadership").

Obama's efforts to seek an agreement with the BASIC countries was a clear indicator of the shifting k-group composition since Kyoto. The United States considered at least some of the emerging economies as future k-group members—they had to support the new agreement to make it work. Some core interests of the BASIC group, especially China's, were aligned with those of the United States, e.g., avoiding legally binding, economically costly mitigation obligations, but not with those of the EU and highly vulnerable developing countries. On other issues, such as transparency (i.e., review) and finance, American and U.S. positions differed significantly. Resolving these differences would take another five years and included a sustained bilateral effort to engage China.

The draft Copenhagen Accord forged by the United States and the BASIC countries was forcefully rejected by the Level-I audience for three reasons: it was perceived to

Figure 3
K-group constellation in 2009. [International Energy Agency (2011)].



be (1) inequitable, (2) ineffective (Ciplet, Roberts, and Khan 2015, 1), and (3) procedurally flawed due to its non-transparent drafting process (Ciplet, Roberts, and Khan 2015, 1, 66). Other countries were not only upset about the proposed normative shift towards equal responsibilities for all countries, but also lacked confidence in the ability and willingness of the United States to implement any voluntary pledges of action. Even if they trusted Obama, the Kyoto experience had demonstrated that his promises had little value. Obama failed to make credible commitments in Copenhagen due to the shadow of Kyoto (Gaubatz 1996; Tamura 2006), his limited domestic record of climate policy-making and his reckless form of past-midnight, backroom diplomacy.

Related to these credibility challenges were significant concerns about the potential effectiveness of the pledge-and-review system, especially given the not-yet-solid new k-group. The Level-I audience had no reason to believe that non-binding obligations—mere promises of action—would be able to deliver the global public good. For example, Ciplet, Roberts, and Khan (2015, 1) comment on a statement of Ian Fry, representative of Tuvalu: "Fry was furious about what he and many other representatives of developing countries considered to be

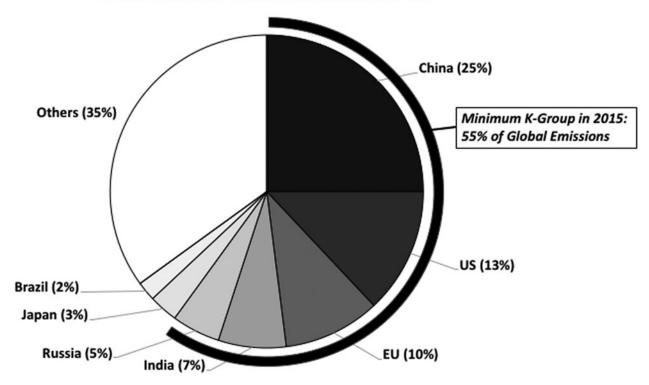
a highly unequal and ineffective framework for addressing climate change."

Obama addresses both Level I and II in Paris. The Copenhagen experience did not dissuade Obama from pursuing an agreement with exactly the same features as the Copenhagen Accord. The frozen domestic climate politics left him without much choice—he had to avoid Senate ratification. Between 2010 and 2015, Obama's delegation had made significant efforts to ensure that the potential agreement could be treated as an executive agreement, i.e., would not contain any new legally binding obligations, and to secure backing for that kind of agreement from his Level I audience. The latter required work both inside and outside of the negotiation context to (1) solidify the new k-group and its support for the pledgeand-review system, (2) to convince his negotiation partners that the pledge-and-review system could be sufficient and effective to address climate change, and (3) develop credibility for the promises of the United States as a kgroup member despite the Kyoto legacy.

#### U.S./China Cooperation: Building the k-Group Core

In the run-up to Paris, the core membership of the potential k-group looked very different than it did in the

Figure 4
K-group constellation in 2015
Calculations based on WRI 2015.



1990s. China was now in a dominant position along with the United States. The EU still needed to be part of the group, but was less important than China or the United States for the provision of the public good. The United States' ability to provide a significant share of the global public good was fading, but cooperation between the two largest emitters, China and the United States—and possibly additional actors—could ensure regime effectiveness. Achieving global emissions coverage of 55% (one of the KP's two conditions for entry into force) in 2015, China (25%), the United States (13%), the EU (10%) and India (7%) would have sufficed to form a k-group. A combination of Russia (5%) and Japan (3%) or Russia and Brazil (2%) could have replaced India.

To build support for the pledge-and-review system among k-group members, the United States had to engage first and foremost China, possibly extracting a significant, albeit voluntary, mitigation commitment—a pre-Paris Intended NDC—and with that a signal of support for the pledge-and-review system. The bilateral efforts succeeded and resulted in a highly-visible shared public announcement of U.S./China

cooperation on climate change on November 11, 2014. According to a White House statement, this event was intended for Obama's Level-I audience: "to inject momentum into the global climate negotiations and to inspire other countries to join in coming forward with ambitious actions as soon as possible" (White House 2014). The joint announcement and the perception of a shared agenda of the two largest emitters not only provided much-needed momentum for the climate negotiations, it also locked in the kind of agreement that these two k-group members were willing to support in Paris. A new agreement that would contradict the expressed interests of these two heavyweights was hardly conceivable after this point.

This raises the question to what extent was the success of COP 21 dependent on China's behavior rather than that of the United States. In light of China's quickly growing share of global emissions and economic weight, but also its role in developing renewable energy markets, experimenting with cap-and-trade and increasing support for international climate finance, its role in the new climate k-group can hardly be overstated. Without Chinese

support for the pledge-and-review system, the PA would not exist.

#### Potential Effectiveness of the Hybrid Architecture

Increasing perceptions of effectiveness of the pledge and review system among Level-I actors required first an elaboration of the components of the review mechanisms. These details would create assurances that promises would turn into actions that could be tracked and evaluated. Seeking to build confidence in the potential effectiveness of the new architecture, i.e., the ability of the future climate regime to deliver on the public good climate stability, the United States proposed to expand the negotiation agenda with a focus on the review and transparency components of the new agreement. U.S. submissions after Cancun emphasized the link between mitigation and "MRV"—stipulations about monitoring, review, and verification (United States and UNFCCC 2010, 79-81), arguing that developing these modalities should be a priority in 2011 (United States and UNFCCC 2011a). Throughout 2011, language of MRV focused on "review" (United States and UNFCCC 2011b).

These two k-group related strategies—engaging China and developing the transparency and review architecture—came together even procedurally within the UNFCCC: a U.S. and a Chinese negotiator co-facilitated a working group on transparency in the run-up to Paris and continued to do so during in the negotiations of the Paris Rulebook until 2018.

#### Credibility of U.S. Pledges

As Putnam puts it, "credibility (and thus the ability to strike deals) at Level I is enhanced by a negotiator's (demonstrated) ability to "deliver" at Level II" (Putnam 1988, 439). This task would be challenging in the face of the Kyoto legacy. Other negotiators had to receive more than signals of goodwill; they had to have evidence of Obama's ability to implement a new agreement at home. Achieving credibility for U.S. promises depended largely on the development of a serious domestic policy portfolio and a demonstration that such an action agenda was both possible in the face of Congressional opposition and effective in terms of GHG emission reductions.

Between his inauguration in January and the Copenhagen summit in December 2009, Obama had made a first domestic policy push with new vehicle emission standards, investments in the renewable energy sector and some support for a cap-and-trade bill that passed a vote in the House of Representatives in June 2009. However, these measures did not go far enough and their effects had not set in before COP 15 to give him enough clout in the negotiations.

While climate change disappeared from Obama's domestic agenda after the cap-and-trade bill died in Congress in 2010, he started to build credibility for his

international promises with an expanding climate and energy policy portfolio after his reelection in 2012. Key components of this second-term policy portfolio were increases in energy and fuel efficiency standards, investments in renewable energy, limiting methane emissions, and the effort to reduce CO<sub>2</sub> emissions from existing coal power plants with the Clean Power Plan proposal in 2014. These policy efforts benefited from parallel shifts in the U.S. energy market. A fast expansion of natural gas production facilitated by hydraulic fracturing technology (fracking) made domestic coal production increasingly uncompetitive. The replacement of coal with natural gas was a major reason for the decline of U.S. GHG emissions in the three years leading up to the Paris negotiations. These numbers buffered U.S. claims that it was not only willing but also able to reduce domestic emissions, using the levers of executive presidential power. By 2015, Obama had put himself in a much stronger position than he had been in Copenhagen; he could now credibly claim that the United States was pursuing an expanding domestic policy agenda that was successful in reducing emissions, had initiated the transformation of its energy system, and that progress on climate change did not depend on unpredictable Congressional support.

However, it is important to note that most of these policies were established through presidential executive order, which could (and would) be reversed by Obama's successor. While the international community might not have recognized it, the case for American credibility rested on a very shaky foundation.

#### Aligning Levels I and II

To sum up, U.S. climate negotiators did not align the domestic and international political contexts until 2015. Given the importance of the United States for the effectiveness of the regime, this misalignment hampered the regime's development. President Clinton struck an international agreement, but ignored a clear Congressional expression of the national interest. President Bush was not interested in pursuing an international agreement on climate change. President Obama actively sought to navigate both his domestic and international challenges, and eventually managed to shape the international bargaining process in a way would allow him to circumvent Senate ratification at home. Most importantly, he built the required k-group support, especially from China, for a pledge-and-review system that would avoid any legal obligations for the United States. Table 1 summarizes the two-level game analysis. Figure 5 reflects the combined effects of the two-level game and the k-group argument.

## Implications for the Future of the Climate Regime

This U.S.-focused perspective on the history of the climate regime offers some initial insights concerning its

Two-level game logic and climate negotiations between 1997 and 2015				
Treaty Support	1997	2001	2009	2015
Level I	✓	✓	Х	✓
POTUS	✓	X	✓	✓
Level II	Χ	X	✓	✓
Kyoto Pro		col	Copenhagen Accord	Paris Agreement

potential future trajectory, especially with a view to the presidency of Donald Trump. President Trump created a KP déjà vu: the United States dominated the negotiations of the terms of the agreement, and it announced its withdrawal once the ink of the signatures was dry. This is a second American "involuntary defection" in the two-level framework. And it is a surprising move, given that the PA is not very demanding on any party, requiring only nationally determined promises of action rather than real action. Even the PA's minimal behavioral requirements, such as submitting a pledge and participating in review processes, are not enforceable in any meaningful way. One could argue that this is the best conceivable agreement for the United States if it wishes to do nothing without any consequences.

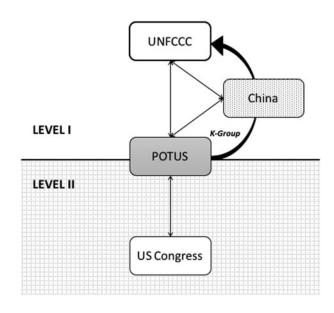
Based on the analysis above, this section explores how the announced U.S. withdrawal, which will not take formal effect until 2020, combined with strong changes in federal climate and energy policies and other domestic developments, will affect the future success of the PA. In particular, I ask whether the post-Paris context differs in meaningful ways from the post-Kyoto context for the drop-out of a key k-group member, and how this k-group change could affect regime effectiveness. A key concern is the loss of trust of other parties to the PA, especially other k-group members, in the potential effectiveness of the pledge-and-review system without the United States. If others disengage as well or simply choose to submit NDCs that are weaker than what they would have been without such an erosion of trust, the climate regime could remain ineffective.

First, one could argue that entry-into-force and global momentum towards implementation constitute major differences when comparing the PA to the KP. The PA entered into force surprisingly quickly in November 2016, following ratification by the U.S. (as an executive agreement) and China. Keeping up this momentum, countries have been taking steps towards implementation already, including the development of mid-century decarbonization strategies (Galik, DeCarolis, and Fell 2017). After President Trump announced his intention to withdraw from the treaty in June 2016, many countries, especially k-group members, publicly reconfirmed their

commitment to the PA. The situation was very different in the case of the KP, which suffered a slow and challenging ratification process, drawn out over eight years. Given the weight of the United States in the k-group, the absence of U.S. ratification drained any post-Kyoto momentum towards implementation. This made sense given the structure of the treaty: mutually agreed upon obligations of a limited number of countries that would only generate benefits if enough parties met their obligations—a standard collective action challenge in international relations.

Second, the structure of the Paris k-group (figure 4) is different than the structure the Kyoto k-group (figures 1 and 2), potentially limiting the impact of the post-Paris drop-out of the United States. While the United States was the largest emitter in 1997, the United States and the EU formed the Kyoto k-group core with a joint share of 38% of global emissions (roughly two-thirds of the k-group contribution). Not only was it structurally impossible for

Figure 5
The expanded two-level game



other countries to fill the mitigation gap left by the United States, but differences between the interests of the k-group core (Busby and Ochs 2004) might also have affected how other countries perceived the post-Kyoto leadership shift from the United States to the EU.

The Paris k-group's dependence on U.S. contributions to emission reductions (13% global share in 2015) is much weaker, although still significant. Reaching the past threshold for regime effectiveness—global emissions coverage of at least 55%—is possible with a k-group consisting of China, the EU, India, Russia, and Japan. If BASIC rallied for a collective leadership position, the k-group would be significantly strengthened. Reconstituting a k-group under the leadership of China and the EU would be challenging, but most likely easier if the United States was not part of the process.

However, as recent studies indicate, the U.S. contribution to global emissions and the potential effects of domestic Trump-policies on decarbonization pathways make it significantly harder to reach the PA's global goals, especially the temperature goal of "well below 2°C," without or with significantly delayed contributions from the United States (Sanderson and Knutti 2016; Sprinz et al. 2017). While much hope has recently been placed in the ability of sub-national actors in the United States to step into this gap, it is doubtful whether this group of actors can deliver on the American Nationally Determined Contribution. These actors will be constrained by the effects of federal policies, which favor the expansion of fossil fuels (e.g., support for pipelines, expanded leasing of public lands for oil and gas extraction, etc.) and limit the speed at which renewable energy markets expand (e.g., recent tariffs on imported solar panels). Even if non-state actors succeeded in fulfilling the American pledge, the current NDC is considered insufficient to put the world on a path to well below 2°C.

Further, what matters is not only this k-group's ability to deliver on mitigation, but the perceptions and beliefs of other negotiation participants regarding future regime effectiveness. The key question is whether China can convince the negotiation community that it can and will shoulder this k-group burden alone, or with EU or BASIC support. Arguably, China is the most important k-group member and favors the PA's pledge-and-review system, i.e., it can be expected to defend the Paris logic in the future. But it will have to form a much closer alliance with the EU and other countries to bolster perceived k-group reliability and capacity.

The withdrawal of American financial support will have to be balanced by additional commitments from other k-group members, especially China. While the emerging powers have begun to act as South-South donors, they have so far been reluctant to formalize any financial obligations in an international treaty. Their donor role will have to expand to assure other negotiation

participants that all components of the PA will be implemented.

Third, there might be a major difference between the post-Kyoto and post-Paris contexts based on the different governance logics of each agreement. In a regime with legally binding obligations, the disappearance of a kgroup member is detrimental, assuming that its initial contribution was necessary to create regime benefits. Given the PA's nature of a "gentlemen's agreement" relying on the good-will and trustworthiness of each participant to undertake voluntary actions—the loss of one party might not be as devastating, especially if one believes that the withdrawal is temporary. However, the intended withdrawal and President Trump's domestic policy agenda have undermined the three conditions that were necessary to create Level I support for the PA: (1) solidifying the new k-group with a U.S./China core, (2) developing the perceived effectiveness of the pledge-andreview system with a focus on transparency mechanisms, and (3) building credibility for U.S. pledges with domestic policy changes. With the election of Donald Trump, the G2 disappeared as a driver of the climate regime. The U.S. delegation is no longer a strong voice for rigorous transparency mechanisms in the negotiations of the Paris Rulebook and the implementation of the treaty after 2020. It can no longer counterbalance China's opposition to transparency because of sovereignty concerns. And current U.S. policies indicate that there will be no domestic effort to implement the PA, let alone an effort to ratchet up ambition over time. The Trump administration has reversed many Obama-era climate and energy policies, prioritizing global dominance in fossil fuel markets over the expansion of renewables. Given these changes, it is likely that other parties to the PA harbor doubts about the agreement's potential effectiveness and will limit their own engagement over time. Given the nature of the PA, this would not necessarily make the PA itself dysfunctional: the voluntary nature of required national pledges makes it possible for countries to be a party without suffering any political consequences for less ambitious or even lacking contributions to the global public good. However, it would severely limit the ability of the regime to address the causes and consequences of climate change.

In essence, the post-Paris context is very different than the post-Kyoto context, but a US withdrawal—even if only temporary—would significantly limit the potential effectiveness of the climate regime, both in the sense of problem-solving and goal achievement. The structure of the PA can handle such changes without risking dysfunctionality, but the negotiations risk losing momentum in response to U.S. foreign policy. It is likely that equity concerns will return to the center of the negotiations, given that a major power is (again) shirking its historically rooted responsibility to address a major global problem.

#### **Conclusions**

I have sought to explain political dynamics in the international climate negotiations between 1997 and 2015, especially the factors that contributed to the specific shape of the Paris Agreement and its new logic for global climate governance—the pledge-and-review system. This new approach abandoned legally binding mitigation obligations for specific countries in favor of voluntary action commitments for all countries. The success in Paris was particularly puzzling given that the PA mirrored closely the substance of the Copenhagen Accord, which had been rejected by the COP plenary in 2009.

The role of the United States—the dominant actor in the regime—is crucial for understanding why the pledge-and review system was rejected in 2009 and embraced by the UNFCCC community in 2015. Domestic political conditions required the American negotiator to pursue this specific new treaty architecture because it circumvented a strong ratification barrier at Level II: sustained Congressional opposition to any international climate treaty.

Responding to this domestic constraint, President Obama championed the pledge-and-review system both in Copenhagen in 2009 and in Paris in 2015. His negotiation goals, U.S. federal politics, and the core elements of the negotiated treaty remained stable in this time period, and cannot explain why one conference flopped and the other succeeded. Putnam's two-level game framework revealed that, in 2009, Obama had not been able to mobilize support from other negotiating parties for the American proposal. But by 2015, he had succeeded in aligning domestic and international interests. Obama successfully played the two-level game, addressing both a key domestic constraint and the concerns of his multifaceted international audience to create an agreement with broad international support that could be ratified as an executive agreement in the

In Copenhagen, Obama put forward this proposal jointly with the emerging powers at the very end of the conference, quite explicitly dismissing calls by the EU and many developing countries for legally binding mitigation obligations. The Copenhagen Accord was rejected by the larger negotiation community for a number of reasons, including concerns about the potential effectiveness of a pledge-and-review system and the credibility of U.S. pledges. Seeking to address these concerns required cooperation with China, developing review mechanisms that increased perceptions of regime effectiveness, and building credibility for U.S. pledges with domestic policy measures. Obama successfully attended to these three issues between 2009 and 2015.

The first measure—increasing U.S./China cooperation —was crucial for success in Paris because both countries' support was a condition for regime effectiveness and the corresponding confidence of other countries in the pledgeand-review system. At the same time, it was puzzling given the context of hegemonic transition with U.S. dominance in decline and China on the rise. Snidal's k-group theory explains the possibility and logic of hegemonic cooperation. Both the United States and China were rationally interested in capturing domestic regime benefits and in minimizing regime-related burdens. Given the structural conditions of the climate regime, cooperation among the two dominant actors was even more likely compared to regime support of a single dominant actor, because it was less costly while providing the same amount or more domestic benefits for each.

More generally, the U.S. delegation leveraged a recalcitrant Congress to convince other negotiation parties in Paris that what they offered—pledge-and-review was the only deal possible. As Putnam (1988, 453) points out, a negotiator in a two-level game can extract better international bargains if actors at Level I believe that there are strict domestic constraints. These constraints served as leverage for the American negotiators and guided their substantive positions. Hence, the PA owes its most important substantive provisions largely to the specific entanglement of U.S. domestic and international interests in a two-level game played over extended periods of time. The Senate ratification barrier combined with a U.S. negotiator determined to achieve an agreement and willing to engage China gave rise to the new logic of climate governance (Falkner 2016b). American politics did not dictate the substance of the PA, but placed significant constraints on the kind of agreement that was possible.

These insights raise a number of issues for international relations scholarship. First, what are the implications of hegemonic transition for the future global order, especially for environmental governance? Are other regimes open to a cooperative U.S./China relationship based on the k-group logic? Second, the structurally elevated position of a single, democratically elected, individual—the U.S. president—presents a potential challenge for the relationship between democracy and global environmental governance. In the case of climate change, the elections in a single country have heavily affected whether or not this challenge will be effectively addressed at the global scale. At the voting booth, the American electorate makes decisions with implications for the well-being of millions of people far beyond the United States and well into the future. Should and can elections and campaigns in the U.S. account for this kind of power? And how will the ongoing hegemonic transition affect not just international politics but the future of life on Earth?

#### **Supplementary Materials**

Appendix A. Comparison of Relevant Sections of the Copenhagen Accord and Paris Agreement

Appendix B. Byrd-Hagel Resolution

To view supplementary material for this article, please visit https://doi.org/10.1017/S1537592719000951

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