

Global Climate Policy: Actors, Concepts, and Enduring Challenges

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12 Our Conclusions

Detlef F. Sprinz

12.1 The Trump Withdrawal from the Paris Agreement

This book focuses on what political scientists and related social sciences can contribute to better understand the international response to global climate change. The Paris Agreement—concluded a quarter century after international negotiations began on the UNFCCC—has been considered a major hallmark of global climate diplomacy. It was meant to be a long-term, flexible architecture to guide global climate policy through the twenty-first century. As many of the specific obligations are not particularly onerous, it is a document of good intent whose major specifications and its effectiveness have yet to be proven in the future (Bang, Hovi, and Skodvin 2016).

On June 1, 2017, President Trump announced in the White House's Rose Garden that the United States of America intends to withdraw from the 2015 Paris Agreement. He declared the agreement not to be fair to the American people, in particular the most economically disadvantaged ones, and a giveaway of funds, principally the Green Climate Fund, to emerging economies that are still allowed to increase their GHG emissions (*New York Times* 2017). President Trump suggested that the USA will continue domestically to be a global climate leader, and that a new global agreement as a replacement of the present Paris Agreement be forged that is fair to the United States; the possibility of no future climate agreements being successfully concluded was explicitly mentioned (White House 2017). Given his announcements during the presidential election campaign of 2016, the decision to withdraw from the Paris Agreements was not surprising.

The decision historically echoes the Byrd-Hagel resolution of the US Senate, concluded prior to the finalization of the Kyoto Protocol in 1997, which suggested two benchmarks to be fulfilled for US engagement in

global climate agreements: (1) emerging economies should limit their GHG emissions in addition to industrialized countries, and (2) the measures taken should not have negative consequences for the US economy (US Senate 1997). While the first point is accommodated under the Paris Agreement by all countries submitting nationally determined contributions (NDCs) (see chapter 2 in this volume), the second point is up to the domestic policy design chosen by any US government. The US withdrawal from the Paris Agreement also echoes the decision by former president George W. Bush to remove the US signature from the Kyoto Protocol (never implemented; UNFCCC 2017) and to not submit the protocol to the US Senate for advice and consent (see chapter 2 in this volume). In response to President George W. Bush's decision in the early 2000s, the rest of the world rallied around the climate flag to collect sufficient support to allow the Kyoto Protocol to come into force. While the Paris Agreement is in force since 2016, it remains unclear how the withdrawal by the historically largest emitter of GHG emissions and the second largest current emitter will energize or retard the ambitions of other countries. Moreover, what challenge does the decision by President Trump pose to the international relations of global climate change?

In the run-up to and in the immediate response to the decision by President Trump, the G6 (the G7 minus the United States) and China, as well as France, Germany, and Italy and an EU/China resolution (European Commission 2017), suggested that they will stick to the architecture and goals of the Paris Agreement. California's Governor Brown signed an agreement with China on June 6, 2017, on joint climate policy efforts (Reuters 2017). All politically demanding obligations at Paris were included in the concluding decision of the UNFCCC's Conference of the Parties (COP), yet all legally binding and not onerous obligations were included in the Paris Agreement. The latter was annexed to the final COP decisions (UNFCCC 2015, 2016). As a consequence of its commitments in both documents, the USA was not obliged, in practice, to take additional policy steps.¹ It could even have watered down the US NDC without fearing international enforcement. As President Obama largely used executive orders and specifically the Clean Power Plan as well as a ruling by the US Environmental Protection Agency (Environmental Protection Agency 2015) to pursue his domestic climate policy rather than let the US Congress pass new laws or amend existing ones, policy reversal was always feasible by executive fiat.

The US withdrawal from the Paris Agreement should be seen against the backdrop of global GHG emissions that appeared to be leveling off, yet is projected to increase again in 2017 (Global Carbon Project 2017). This book is geared to understand how international relations can help us better understand global climate policy and the Paris Agreement. In the following, I describe the Paris Agreement in analytical terms (section 12.2), turn to the main actors engaged in global climate policy (section 12.3), select concepts and theories used (section 12.4), and provide a brief concluding outlook (section 12.5).

12.2 The Paris Agreement as a Sandwich Solution

In response to the failed attempt to conclude a successor to the Kyoto Protocol and its first compliance period at Copenhagen in 2009, this author developed the so-called “sandwich solution” (Sprinz 2010). While the architecture of the Kyoto Protocol was often perceived as a “top-down” agreement, the Copenhagen Accord opened the way to collect what were originally called intended nationally determined contributions (INDCs), now NDCs, to become a “bottom-up” agreement.²

A sandwich solution metaphorically resembles a double-faced sandwich with the top part reflecting the top-down architectural part, and the lower part the bottom-up part. The top part suggested to comprise the ultimate goal, such as an ambition to reach the 2°C goal of global mean temperature change, as well as “monitoring, reporting, and verification of emissions and impacts ... [as well as] reviews of policies and the analysis of alternative future pathways” (Sprinz 2010, 72). Complementing from the bottom, inventions and innovations of breakthrough technologies to get closer to a low-GHG transition were envisioned. Appropriate frameworks should be established to increase the probability of such innovations (Sprinz 2010, 73). In a fundamental sense, the Paris Agreement very much resembles such a double-faced sandwich, with the 1.5–2°C goal serving as the overall focal point of ambition; the reporting and assessment mechanisms needing fuller development in the future; and the NDCs—and thereby ambitions—being under the full control of national governments (see chapter 2 in this volume). While article 3 of the Paris Agreement stipulates that “[t]he efforts of all Parties will represent a progression over time,” article 4 stipulates that upgrading is expected from each country (UNFCCC 2015). Given that the Paris Agreement only

enshrines a facilitative noncompliance system (see chapter 2 as well as chapter 11 in this volume), the Paris Agreement metaphorically represents the sandwich solution of coordination of basic directions at the top with decentralized efforts that give life to such ambition by way of domestic policies.

12.3 Actors That Matter

Given that fossil fuels are engrained in many aspects of daily life, international climate policy is unthinkable without a domestic foundation. Beginning with Robert Putnam's seminal conceptualization of international negotiations as a two-level game (Putnam 1988), international negotiations have subsequently been analyzed as the confluence or divergence between domestic (level 2) and international (level 1) negotiation positions. Depending on the configuration of positions across levels, treaties can be either (1) successfully negotiated and implemented or (2) may fail at the level of agreement at the international level or at the stage of ratification or implementation at the domestic level. Various chapters in this volume attest to the importance of domestic and transnational actors (see, e.g., chapters 3, 8, 9, and 10 in this volume), and President Trump invoked domestic political reasons for leaving the Paris Agreement.³ While a systematic weighting of the importance of actors is beyond the scope of this chapter, it is worthwhile to recall the broad set of actors covered in this book.

By their sheer size of emissions, at least eight countries (Brazil, China, the EU28, India, Indonesia, Japan, Russia, and the United States) merit continuing attention (see chapter 7 in this volume). Together with the other members of the UNFCCC, they are the main subjects of international law as recognized state governments. Countries negotiate and potentially become parties to (or abstain from) signing, ratifying, implementing, and complying with multilateral environmental agreements. In view of the UNFCCC, the Paris Agreement, and to a lesser degree the Kyoto Protocol, global climate agreements show limited "bite" in terms of being the pivotal agents of emission reductions, although the Kyoto Protocol clearly sent the signal that the price for carbon emissions will henceforth be positive and has to be taken into account in business decisions. Since few multilateral environmental agreements (MEAs) concentrate power and resources at the

international level, the onus of implementing commitments largely rests with the domestic level.

Three actors stand out at the domestic level: environmental nongovernmental organizations (ENGOs), business, and a social climate movement. Since the Paris Agreement is mostly an agreement about laudable aims, architecture, and processes—as is the UNFCCC—much of naming and shaming to keep and upgrade commitments will rest with ENGOs. In particular, ENGOs will be charged with keeping the long-term policy of climate policy high on the list of national policy priorities. Lack of attention to the domestic side of a potential Kyoto Protocol, for example, afforded climate-skeptic and industry structure-preserving business NGOs opportunities to influence the political mainstream and the public to a substantial degree in the USA (see chapter 8 in this volume). But business can also be seen as the potentially greatest transmission belt for transformational change. Some of the lead in resisting the decision by President Trump to leave the Paris Agreement comes from industries that either espouse green goals as part of their core business or that wish to avoid to be perceived as “dirty” by consumers (Shear and Smale 2017; Thompson and Bajaj 2017; Victor 2017). As many businesses are not protected by monopoly rents and have to keep an eye on consumers that support their business model and changes in consumer sentiment, choices by companies to “go green” are both promising and sometimes fickle. As Paterson (chapter 9 in this volume) shows, climate markets are also a business opportunity, and higher prices for carbon offsets allow for more generous profit margins for companies operating in the carbon markets. Given the ability of business to stimulate lifestyle changes among customers and at emulating greener business models among fellow competitors, greener business sectors could hold a key multiplier and mainstreaming position in a transition to low-GHG economies. If this were amplified by technological advances and assisted by domestic legal provisions that link continued emissions to responsibilities, business could be part of a virtuous cycle toward lower emissions while also being profitable.

Science, as an actor, has not received very detailed attention in this book—although all authors are scientists and contribute themselves to and build on scientific advances by others. The degree of climate skepticism—that is, the suggestion that humans do not cause an appreciable share of the greenhouse effect—has been receding following five waves of reports by the

Intergovernmental Panel on Climate Change (IPCC) that were published since 1990. While scientists are an important source of knowledge, gaps in knowledge, innovative ideas, and political awareness raising, their reputation ultimately rests on their approval by their peers or taking courageous positions such as Copernicus did. Scientists are ultimately most likely to serve as midwives for policies that they may have helped shape but ultimately are not responsible for. In practical terms, their influence will be mostly reflected in the country positions during international negotiations.

Roughly half a century ago, the environmental movement started to gain momentum, initially in the United States, subsequently in many other industrialized and also in developing countries. There is little doubt that environmental movements have enabled environmental policies and legislation to become policy priorities, and the impact on existing parties and the creation of green parties in many countries is quite discernible. Avaaz, an Internet petition and mobilization platform, claims to have nearly forty-five million members (Avaaz 2017a) and to have mobilized four hundred thousand members to march for climate change in New York City and three hundred thousand elsewhere in the world in 2014—the year preceding the Paris Agreement (Avaaz 2017a,b; see also Alter 2014). At present, it is difficult to discern whether these are sustained efforts beyond more traditional ENGOs as mobilization shows discernible spikes. Furthermore, petition platforms often cover climate, environmental, and other concerns. As extreme climate impacts become increasingly discernible and stronger in magnitude, and combined with an evolving sustainability and sustainable development agenda, social movements must be reckoned with especially if officeholders wish to be reelected.

12.4 Concepts and Theories

Research on mitigation, adaptation, and compensation constitute the three main concepts of climate science, both in the social and in the natural sciences. The major emphasis in this book is on what political scientists and related social sciences can contribute to better understand the international response to global climate change over the past three decades.

The grand theories of international relations, neorealism, neoliberal institutionalism and constructivism have only limited explanatory power. Instead, we may wish to focus on domestic foundations and even the

micro-foundations of policies that enable experimentation and potential diffusion across countries (see chapter 3 in this volume). The conceptions of equity, embraced especially in the chapter by Michaelowa and Michaelowa (chapter 10 in this volume), underlie much of where responsibility ought to rest, yet the various preferences over particular equity norms eschew general support for one specific guiding norm. The situation is, moreover, complicated by the fact that different countries have followed different emissions trajectories at comparable levels of economic development. Whenever it comes to taking over substantial financial obligation, such as the goal for developed countries to provide US\$100 billion per year beginning 2020—and subsequently increase such amounts over time—will necessitate either creative accounting or a new willingness in domestic political systems of developed countries to spend major amounts of climate-related assistance on not yet developed countries. Given the announcement of the US exit from the Paris Agreement—and, thereby, the withdrawal of a major financier—mobilizing large amounts of funding continuously on the international level appears quite optimistic. Perhaps more prudent are current undertakings by Bangladesh and a few other countries to develop special-purpose climate impact compensation funds, endow them domestically to some degree, espouse good and transparent governance, and entice bilateral and multilateral donors to bring domestic climate compensation funds to critical size. Rather than creating an international system of compensation on the international level (Sprinz and von Büнау 2013), we may witness a federation of decentralized solutions that work by way of diffusion. As compensation for wrongs is a standard solution in the domestic context of countries under the rule of law, there is no good reason why compensation cannot be part of the solution at the international level.

Can such voluntarism thrive? This is both a conceptual and an empirical question, yet should also build on present experience with the world that we know. As chapter 4 in this volume has shown, only moderate-sized coalitions are renegotiations-proof, and experiments with punishment show that incentives to avoid punishment—and thus encouraging contributions—might work. If major polluting businesses and major polluting countries become convinced that the days of liability-free pollution are coming to an end—and markets price this into company and country valuations (such as asset prices and bond ratings)—it may not be too far-fetched to believe that a virtuous cycle may have commenced.

And since much economic growth is associated with international trade, it appears prudent to explore more courageously how the benefits from international trade can be combined with benefits from avoided climatic damages (see also chapter 6 in this volume). Nearly no constitutional provision is beyond careful reconsideration at the domestic level in democratic systems under the rule of law—and the same should apply to the world trading system. The Montreal Protocol to protect the stratospheric ozone layer has quite well managed to exclude trade with nonmembers on stratospheric ozone-depleting substances, and it does not take much imagination that this small wheel can be writ large in the context of climate change.

12.5 Outlook: Creative Destruction or Climate Clubs?

There is no guarantee that the world at large will be able to avoid the worst climatic impacts, that is, the possibility that only part of Planet Earth will be inhabitable as we presently know it and with the amenities and the richness of plants, animals, glaciers, high seas, soils, and so on, that many of us appreciate and consider worth protecting. If, however, doomsday outcomes are to be avoided, the present fossil fuel based world economy will have to be confronted with a substantial amount of “creative destruction” (Schumpeter 1994 [1942]) (i.e., innovations that may deliver comparable amenities that we presently enjoy) and avoiding a range of disutilities (such as high particle levels in inner cities or high GHG emissions) that we may not miss. We may be only a couple of decades away from renewable energies to deliver energy on a competitive level with existing coal-fired power plants. Missing the train has had large implications for German power providers E.ON and RWE that had to split themselves up during the past years (including a renewable branch) and lose substantially more than half of their historical top stock market valuation. Creative destruction may be painful in the short run, yet rewarding in the longer term. Increases in technology may certainly be helpful (Levi et al. 2010; see chapter 3 in this volume), yet any investment and diffusion opportunity generates probabilistic rather than deterministic outcomes.

While especially natural scientists see abundant problem pressure and a need to successfully cope with the climate challenge, it is important to keep an eye on and push the boundaries of what is feasible. Simply asking for

political will to be concentrated on climate change, a “man to the moon” or a climate Marshall Plan to be initiated, shortsightedness be replaced by farsightedness in political decision making, and other single-issue solutions have all been mentioned over the past decades, yet they carry more rhetorical vigor than offer politically feasible guidance.

In keeping with the bottom-up architecture reviewed above, Hovi, Sprinz, Sælen, and Underdal explored in a range of articles the possibility for and limits to incentive-driven, voluntary, bottom-up strategies among countries (Hovi et al. forthcoming, 2016; Hovi, Sprinz, and Underdal 2014). Inspired by Victor (2011, 2015), they explored the feasibility of climate mitigation clubs in the presence or absence of members-only club goods, such as enhanced trade possibilities. The club idea mostly centers on some large emitters, either by themselves or in coordination with other large emitters, to form an initial coalition of members to each spend 1 percent of GDP annually to reduce its GHG emissions (enthusiasts). Other (reluctant) countries are invited to join if they are willing to also spend 1 percent of their GDP on membership in the climate mitigation club. Reluctant members leave the club if there is no net benefit to their membership, while enthusiasts compare the net benefits of the existence of the club with the net benefits when all countries are outside the club. Our findings show that under a range of alternative sets of enthusiastic countries, climate mitigation clubs can be started, sustained, and grow to reach appreciable size by covering about half of global GHG emissions. The success of forming such clubs not only rests with the specific configuration of enthusiasts, but also the level of additional (yet profitable) conditional commitments by enthusiasts and the level of provision of the members-only club good. In some configuration of enthusiasts, clubs can even emerge in the absence of members-only club goods and without additional, conditional commitments by the enthusiasts (Hovi et al. forthcoming). Alternatively, side-payments (essentially targeted subsidies of the membership fee for reluctant countries) also prove an efficient and effective way to enable climate clubs, yet might be politically less easily feasible as countries would be enticed into the club on a one-by-one basis (Sælen 2016).

What can be learned from the idea of climate clubs? First and foremost, if some of the largest emitters club together as enthusiasts, prospects for mitigation are quite optimistic if a level of club members-only benefits can be

reached comparable to a transatlantic trade and investment agreement (Hovi et al. forthcoming). Second, assuming that enthusiasts can top up their initial offers (conditional commitments), this leads to enhancements of investment into climate mitigation. And third, many of these outcomes are robust to alternate assumptions about affinity or conflict between countries (Hovi et al. forthcoming). Fourth, even as the United States eschews such a climate club arrangement, the prospects for climate mitigation clubs become more limited, but the incentives to build such clubs among remaining countries largely endures—even as the scope of GHG emissions covered shrinks somewhat (Sprinz et al. forthcoming). Larger incentives based on climate impacts avoided combined with members-only benefits could be a winning formula, yet the automatism assumed by our model ought to be refined with the help of a domestic politics model which accounts for the within-countries forces that work in favor of or against such policies.

Overall, countries face a threefold challenge that makes global climate policy a formidable challenge: time inconsistency, domestic fragmentation, and international anarchy (Hovi, Sprinz, and Underdal 2009). First, time inconsistency is the challenge of persevering on promises when conditions have changed and revised policies could counteract the promise made earlier. As a consequence, long-term credible commitment to long-term policy becomes an enduring challenge, both within countries and across countries. Second, domestic fragmentation with its many interactions among and across domestic political forces that wish to favor or retard protection against climatic impacts is difficult to aggregate, especially if interacted with the time inconsistency challenge. And, third, international anarchy, that is, the absence of binding and enforceable central authority in international relations, leaves it to those willing to undertake costly sanctioning to enforce international agreements. The history of weakening the enforcement branch of global climate agreements from the Kyoto Protocol to the Paris Agreement is instructive. Furthermore, only countries that participate in international agreements are subject to potential enforcement under the Kyoto Protocol, while nonparties can eschew such action (see chapter 11 in this volume). The Paris Agreement “solved” the participation challenge by allowing each country to define its own goals in Nationally Determined Contributions (NDCs), yet given that the progression of NDCs over time cannot be enforced if a country is immune to naming and shaming, the

Paris Agreement is a good illustration of all three aspects highlighted by Hovi, Sprinz, and Underdal (2009).

Perhaps the international relations of global climate change by way of MEAs is, in practice, an illustration of the weak link between countries to try to overcome the tripartite challenge of time inconsistency, domestic fragmentation, and international anarchy. Governments can offer framework policies (*Ordnungspolitik*) that encourage creative investment into low-GHG futures, yet markets, domestic constituents, and transnational actors may be the ones that bring it to fruition.

Notes

I greatly appreciate comments by Alexandra Goritz and Jon Hovi on an earlier draft of this chapter.

1. While even the Sierra Club of the USA thinks that a watering down of the Obama era NDC would not be enforceable in US courts (Levitz 2017), President Trump decided in favor of leaving the international agreement that his predecessor helped to shape.
2. Equating the Kyoto Protocol with a top-down architecture is inaccurate as no country could be forced to sign up to join any of the developed or developing country lists of obligations or that countries had to take over specific emission limitations against their will. Even if the foregoing were wrong, parties not satisfied with the negotiated text could opt not to ratify the protocol or withdraw later. As of June 7, 2017, Canada has withdrawn its ratification of the Kyoto Protocol, and the United States signed but never ratified it (UNFCCC 2017).
3. There are strong indications that few geographic areas of the United States would support his decision (Marlon et al. 2016).

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