

Negotiating challenges and climate change

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The difficulties in negotiating a post-2012 regime of binding targets and timetables and the decisions of the US, Canada, and Russia on the Kyoto Protocol regime have led to pessimism about the future of the climate regime. Negotiation issues for different coalitions and actors are placed in a wider historical context by examining the key challenge facing the evolving long-term climate change negotiation process: the principled basis for the allocation of resources, responsibilities, rights, and risks between actors. Four theoretical approaches (problem structuring; negotiation theory; collective action and social practice models; legal theory) are applied to the climate regime. A principled approach is only a distributive approach from a narrow short-term perspective. It becomes an integrative approach from a longer-term perspective when it increases the pie, enhances the win-win opportunities and creates space for sustainable solutions to emerge. It is especially integrative when undertaken within the context of global rule of law, which is able to create predictable rules that apply to future global problems with different country interests. Will this happen? Climate justice movements and climate litigation have begun; statesmanship is still needed.

Keywords: climate change negotiations; integrative bargaining; problem structuring; rules of procedure; social practice models

Les difficultés liées à la négociation d'un régime post-2012 constitué de cibles contraignantes et de calendriers, et les décisions des EU, du Canada et de la Russie sur le régime du protocole de Kyoto ont créé un certain pessimisme quant à l'avenir du régime climatique. Les questions de négociation pour différentes coalitions et acteurs sont placées dans un contexte historique plus large en examinant les défis clés faisant face au processus de négociation du changement climatique à long-terme : la base de principes pour l'allocation des ressources, des responsabilités, des droits et risques entre acteurs. Quatre approches théoriques (structuration de problème; théorie de négociation; action collective et modèle de pratique sociale; théorie juridique) sont appliquées au régime climatique. Une démarche sur principes est seulement une démarche distributive selon une perspective étroite à court-terme. Elle ne devient une approche intégrative seulement dans une perspective à long-terme lorsqu'elle élargit les horizons, augmente les opportunités gagnant-gagnant et crée un espace dans lequel des solutions soutenables peuvent émerger. Elle est particulièrement intégrative lorsqu'étant entreprise dans le contexte du règne du droit mondial, et capable de créer des règles prévisibles s'appliquant à de futurs problèmes globaux avec des intérêts nationaux différents. Cela se produira-t-il? Les mouvements de justice climatique et les contentieux climatiques ont commencé ; un sens politique est encore nécessaire.

Mots clés: Structuration de problèmes; négociation intégrative; règles de procédure; modèles de pratique sociale; négociations climatiques

1. Introduction

Formal negotiations on climate change began in 1990. The 20 years of negotiation since then have revealed many country- and coalition-specific challenges, and it is these challenges that are the focus of this Special Issue. It has been argued that resources and activities are the two key bargaining tools available to countries. Many of these countries have enhanced their own bargaining power by

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using hard and soft strategies (Bailer, 2012), and some have had better strategies than others (Weiler, 2012). The evolving negotiating strategies in Russia (Andonova and Alexiva, 2012), India (Michaelowa and Michaelowa, 2012), and the Association of Small Island States (AOSIS) (Betzold et al., 2012) have been examined in this Special Issue in order to focus on the current hurdles and opportunities in the negotiation process and to analyse the changing country and coalition strategies and tactics.

This concluding article puts these preceding articles into the context of the evolving and long-term nature of the climate change negotiations and the extant global governance challenges. Considerable progress has been made in the climate change treaty regime in terms of (i) identifying the key issues on which decisions have to be taken, (ii) establishing a formal relationship with the scientific community, (iii) establishing targets and timetables for emissions control, (iv) establishing a series of mechanisms to deal with climate change, and (v) requiring country reports and monitoring the progress made in them (Gupta, 2010). However, the negotiations have not been proceeding quickly enough to reduce global GHG emissions. Indeed, the scientific literature and actors in the policy arena are generally pessimistic about the success of future negotiation challenges (Brandt and Svendsen, 2002; Gronewold and Climatewire, 2010; cf. Roberts, 2011).

This raises the following question. What insights does theory provide about what negotiators, who work on long-term problems such as climate change, should focus on? Insights from theories drawn from four disciplines – policy analysis, negotiation theory, international relations, and international law – are used and applied to the climate regime. To assess the nature of the problem that is the object of negotiation, the analysis uses problem-structuring theories. To understand how negotiation can be improved, it uses negotiation theory. Owing to the fact that such negotiations involve international cooperation, it uses theories of international relations. Finally, because these negotiations take place between state actors and within the scope of the law of treaties and the formal rules of procedure that operate within the UN system, the analysis also makes use of the relevant legal literature.

It is argued that a fundamental problem in climate change negotiations has been disagreement about the principles used to allocate responsibility between countries. This disagreement needs to be confronted and dealt with if any progress is to be made in the climate change negotiations.

2. Problem structuring: climate change needs consensus on norms

2.1. Problem structuring

Problems can be categorized into four broad types (Hisschemöller, 1993) according to whether there is agreement or disagreement (consensus) on the underlying science and the normative principles/values ('norms') used to deal with them. 'Structured' problems are problems for which there is agreement on both the underlying science and the principles. 'Unstructured' problems are those for which there is no agreement on either the science or the principles. 'Moderately' structured problems are those for which there is agreement on either the science or the principles (but not, of course, both). Structured and moderately structured problems can be further distinguished according to the nature of the agreement: as 'horizontally' structured if there is a global agreement between countries and as 'vertically' structured if there is agreement at the local level within countries.

The simpler a problem is and the more structure it has, the easier it is for the parties involved to agree. When there is disagreement on the science, work on achieving a scientific consensus is critical. When there is disagreement on the principles used to deal with the problem, attaining a principled basis for the allocation of resources, responsibilities, rights, and risks between involved actors is essential. Such moderately structured and unstructured problems call for regimes that 'learn' over time, a process by which problems gradually become structured (Hisschemöller and Gupta, 1999). A learning regime is

one in which actors at multiple levels of governance are confronted with the different views of other actors and – through dialogue and discourse – attempt to reach agreement.

2.2. Applying theory to practice

The United Nations Framework Convention on Climate Change (UNFCCC) (UN, 1992) was negotiated within two years, and entered into force within another two years. It included emissions targets for developed countries, and five principles concerning sustainable development, a precautionary approach, common but differentiated responsibilities (CBDR) of countries and their respective capabilities, an open economic order, and taking into account those countries most vulnerable to climate change. The rapid course of the negotiations *prima facie* indicates that the negotiating countries were in substantial agreement on the problem of climate change, which would imply that it was structured. However, subsequent empirical research has shown that, across time, the problem of climate change was actually becoming increasingly unstructured (Gupta, 1997) as the national and global consensus on the science and norms decreased (Hisschemöller and Gupta, 1999). The principles became contested and the wording of the targets made the targets disputable.

At the current time, some 20 years after the adoption of the UNFCCC, there is a greater global consensus on the science underlying climate change than ever before. The conclusions of such scientific research continue to be verified by large numbers of scientists in the reports of the Intergovernmental Panel on Climate Change (IPCC). The ‘Summary for Policymakers’ for each IPCC report is scrutinized and approved, line by line, by policy makers, thereby providing greater ‘ownership’ of the IPCC results in the policy community. Despite the close scrutiny of its work and the occasional faults (e.g. the so-called ‘Climategate’ scandal and the erroneous prediction regarding the disappearance of Himalayan glaciers), the basic science advocated by the IPCC is sound (NAS, 2007; IAC, 2010). Indeed, the IPCC is seen by other epistemic communities, who would like to become more institutionalized, as a role model to learn from and improve upon (Bauer and Stringer, 2009).

None of the results of the case studies in this issue suggest that the science of climate change has been contested. Even Russia, which was previously reluctant to acknowledge the urgency of the climate change problem, has, since 2009, accepted that it is a serious anthropogenic problem (Andonova and Alexiva, 2012). Although there has been (and is) little disagreement regarding the science of climate change among the Parties, the same cannot be said of the legal principles (i.e. norms) determining the form of the solution, e.g. those determining who should take action, and where, when, and why such action should be implemented. The problem of climate change is thus moderately structured: all of the five principles detailed in Article 3 of the UNFCCC (UN, 1992), the right to grow of developing countries (UN, 1992, Preamble and Article 3), and the principle that developed countries should take the lead in dealing with climate change (UN, 1992) are all now debated, as detailed below.

Although the right of developing countries to grow was in line with the adoption of the Right to Development by the UN General Assembly (UNGA, 1986), this has remained heavily contested on the grounds that people, and not countries, have a right to develop (Piron, 2002; Kirchmeier, 2006, Preface). The CBDR principle, adopted also in the 1992 Rio Declaration on Environment and Development, flowed from principles of justice such that those who have contributed to the climate change problem and those who have greater capabilities to deal with it are ascribed a greater responsibility to reduce their emissions and assist others in their own mitigation and adaptation efforts (French, 2000; Rajamani, 2000; Anand, 2004). This principle has been challenged for at least four reasons: (i) that territorial variation and per capita approaches for differential standards ignore transboundary harm (Weisslitz, 2002; Adams, 2003) and the sovereign equality of states; (ii) that static attributions of responsibility are unfair as country situations change; (iii) that if large economies such as China,

India, and Brazil are allowed to grow, the effectiveness of mitigation policy elsewhere will be reduced; and (iv) that measures that favour weak states are problematic because the very weakness of such states inhibits the effective implementation of their responsibilities (Harris, 1999; Bafundo, 2006; Honkanen, 2009).

The precautionary principle in Article 3 of the UNFCCC has also not led to a legally binding articulation of Article 2 on the long-term objective of the Convention. The Russian position, especially in relation to the G8 climate goals for 2050 (50% global emissions reduction) and 2020 (25–40% collective emissions reduction), implicitly does not give the precautionary principle much support as it has decided to withdraw from post-Kyoto negotiations (Andonova and Alexiva, 2012).

The fact that there is little consensus over the aforementioned principles shows that there is only a superficial agreement regarding who should do what (Najam et al., 2003). The change over time of the consensus regarding the principles might plausibly be attributed, on the one hand, to the end of the post-cold war euphoria and, on the other, to the realization that the environmental Kuznets curve¹ does not apply to global GHGs.

The problem of climate change is moderately structured (with respect to the underlying science), which implies that there are four critical negotiation issues to be addressed in the coming years. First, how should the precautionary principle be interpreted when adopting a legally binding long-term objective? Second, how should resources, including ecospace, responsibilities, rights, and risks between countries, be shared? Third, how should the relevant norms be applied given the changing geo-eco-political situation? Finally, which economic growth models, embodying different value/normative systems, should be chosen? Coming to an agreement or consensus over these long-term issues will require a learning and dialogue process to generate common principles (see Figure 1).

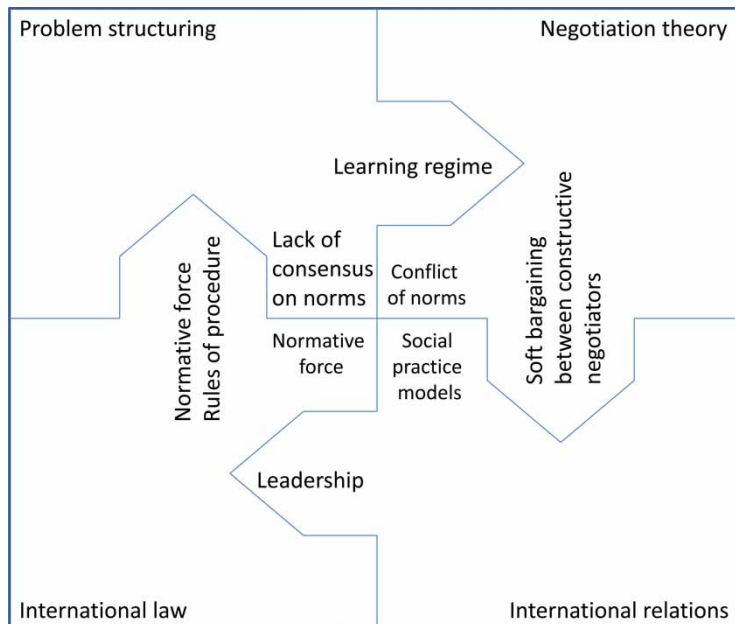


FIGURE 1 Insights from different theories and their relationships

3. Negotiation theory: need for integrative bargaining between unequal actors

3.1. Theory

Two insights from negotiation theory regarding the nature of the parties and bargaining strategies involved are used to clarify how global problems might be resolved. The first insight concerns the negotiating outcomes of strategies used by developed and developing country parties. If all parties are relatively defensive, the negotiating process yields ‘avoidant’ or ‘symbolic’ policies. If they are all constructive, ‘collaborative problem-solving’ is possible. If the weaker party is defensive and the stronger party is constructive, ‘decision-less decisions’ may occur (Bachrach and Baratz, 1970). If the weaker party is constructive and the stronger party is defensive, the concerns of the weaker party may be accommodated on paper (see Figure 2; cf. Kilmann and Thomas, 1977; Saner, 2000). For effective problem solving to occur, both sides need to be constructive (which implies moving to the top right-hand side of Figure 2). However, for collaborative problem solving to succeed, it is not necessary for both parties to be aware of the existence of a win–win situation (Berger et al., 2003, p. 3). All that is required is that they must be convinced about the underlying science and the norms that guide a potential solution, and that there is an enlightened negotiator leading the negotiation process (see Section 4.1 below).

A second insight (extensively discussed in Bailer, 2012) is that using distributive (and so-called ‘hard’) bargaining strategies leads to win–lose situations as the total pie to be shared is limited, and therefore to more conflict. Integrative (‘soft’) bargaining strategies may lead instead to an enlarged pie and the creation of win–win situations (Greenhalg, 1987), such that all involved parties are motivated to implement the negotiation results (Saner, 2000).² Using soft bargaining strategies can thus bring about less conflict than the use of hard strategies (see Bailer, 2012; Weiler, 2012). The literature supports not ignoring these problematic, ‘sharing the pie’, issues, but rather treating them as grey areas for which solutions gradually need to be found (Carrell and Heavrin, 1995; Saner, 2000; Odell, 2000).

Soft strategies include creating new values for the other party (‘value-creating’ rather than ‘value-claiming’), building mutual trust for a long-term relationship, sharing interests and information, aligning rules to norms (Sjöstedt, 2003), using a relational rather than an ‘intellectual’ approach focusing on

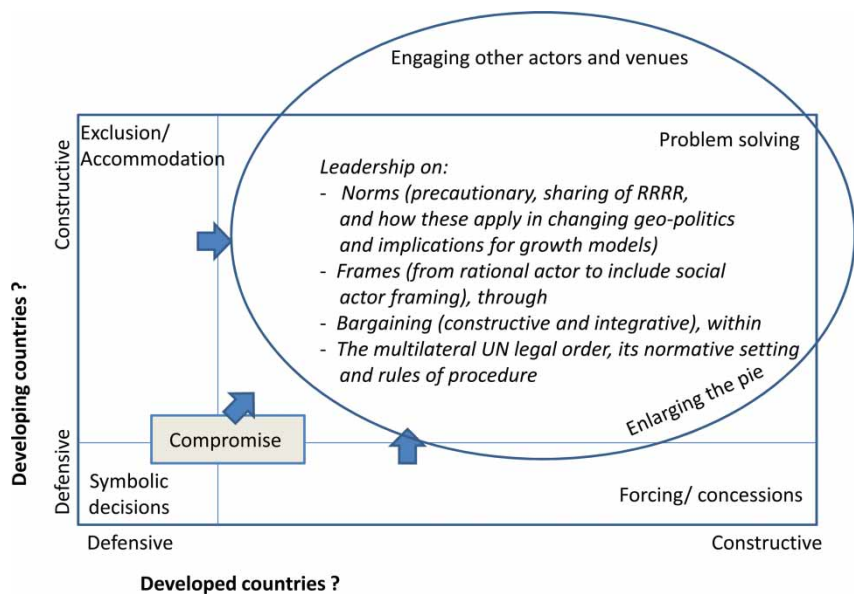


FIGURE 2 Long-term insights for the climate change regime

Pareto optimality (Berger et al., 2003), countering political behaviour that undermines and circumvents rules, and 'aligning to performance metrics not outcomes' (Zadek, 2011). Enlarging the pie could imply a greater role for the private sector (de Boer, 2011), an 'orchestra of treaties' (Sugiyama and Stinton, 2005), a 'building blocks approach' (Falkner et al., 2010), a different framing (not least cost mitigation but a low carbon framework) (Zadek, 2011), creative issue links (e.g. to intellectual property for China and India; Walsh et al., 2011), and a willingness to cede power and try to accommodate the interests of others (FMCS, 1999).

3.2. Application to climate change

The move from using hard, to using soft, bargaining strategies requires constructive (rather than defensive or offensive) negotiations. This implies that those developing countries that have been simultaneously defensive (e.g. by refusing quantitative emissions reduction obligations) and offensive (e.g. by pointing out that the North should take action first) should reframe their negotiation strategies to reflect their own constructive desire for problem solving and also offer something to the developed countries in order to convince them that action needs to be taken. This does not require them to compromise regarding their belief that developed countries ought to take action first, but does require them to move beyond moral righteousness (Bidwai, 2009). India's recent position in the climate change negotiations shows that it has understood this point (Michaelowa and Michaelowa, 2012).

This is also true for the developed countries. Although the US strategy of avoiding ratification of the Kyoto Protocol has not been constructive, the strategy of other developed and developing countries has been; e.g. the pie has been enlarged by including forests as an issue in the negotiations. The potential of forest sinks and reducing deforestation is seen by some small island states to be of help in mitigating and adapting to climate change (see Betzold et al., 2012) and by Russia as a way to decrease how much it must mitigate its own emissions (see Andonova and Alexiva, 2012). The issue of how forests are to be integrated into the climate regime has also led to the creation of new coalitions and thus opens different spaces for the discussion of issues. However, this may cause problems as it further weakens the negotiating power of smaller states such as members of AOSIS (see Betzold et al., 2012).

How global emission rights and responsibilities are to be shared among countries, and in what sequence, remains the biggest sticking point in the climate change negotiations. Although incremental rather than structural measures, sectoral rather than systemic solutions, are often recommended (Benedick, 1993; Greene, 1996), negotiation (Saner, 2000) and policy theory (Braybrooke and Lindblom, 1963, p. 114) show that difficult issues need to be dealt with using a sustainable solution. Such a solution also calls for a global learning process. Thus, if the climate change problem is to be addressed, then all the relevant parties must use constructive, soft (rather than hard) bargaining strategies in the climate change negotiations, trust each other more, enlarge the pie to allow for give-and-take, and come to some agreement regarding the normative (e.g. legal) principles involved (see Section 6 and Figure 1).

4. Rational actor and social practice models: the role of leaders

4.1. Theory

States ought to use constructive, soft bargaining strategies to deal with the climate change problem. Will they use such strategies? So-called 'rational' actors are unlikely to take action on global commons ('open-access') issues (e.g. climate change) and public goods (e.g. climate protection) because of the potential for free-riders (Posner and Sunstein, 2010; Stavins, 2011). Instead, they have an incentive to overuse these resources. This leads actors to define the issue as a distributive problem and free-ride on the policy process. Although such a framing is typical of rational actors and utilitarian

collective action models, social practice models (Young, 2001) frame problems and solutions differently. Social practice models see international regimes as potentially giving

rise to social practices that shape the identities of participating actors, supply common discourses in terms of which to address environmental problems, and draw participants into routinized activities which do not involve utilitarian calculations on a day-to-day basis. (Young, 2001, p. 11)

As such, individuals, parties, and countries can self-organize (cf. Ostrom, 2010) to create sanctionable rules. Such self-governance processes are based less on the 'logic of consequences' and more on the 'logic of appropriateness' (March and Olsen, 1998). This implies that states can become socialized into cooperative processes when they see the benefits of robust and legitimate institutions that have a strong scientific and normative basis. Such socialization can make them adopt sanctionable rules, which may subsequently change individual countries' incentive structures by bringing in the 'shadow of the future'.

In an anarchic world, according to realism, hegemonic leadership is necessary for regime development, but according to institutionalism, power configurations change relative to issue area, and institutions may thus develop without hegemonic leadership (Junné, 1992), especially in simple problems needing coordination of domestic measures. However, both realists and institutionalists realize that moderately structured and unstructured problems that require collaboration need leadership to create the conditions under which the relevant countries will be willing to adopt joint rules (Haas and Sundregren, 1993), create common norms and institutions, and end deadlocks (Skodvin and Andresen, 2006). (In other words, leadership is needed to encourage countries to move their negotiation positions to one represented by the top right-hand corner of Figure 2.) This will encourage countries to go beyond a concern for their own short-term interests to include common interests based on shared norms. According to realism, the regime will break down if negotiation outcomes do not match powerful country interests. However, viewing problems through a social practice frame, even if new measures go against a powerful state's own short-term interests, it may nevertheless have a long-term interest in establishing and maintaining stable institutions.

4.2. Application to climate change

Many scientific articles and national positions on climate change embody the short-term, rational actor collective action approach (e.g. Stavins, 2011), which explains why specific countries have been and are unwilling to take action. It is clear that both developed and developing countries have embraced short-term economic goals that have encouraged such inaction. This situation calls for leadership on five issues: (i) the significance of the social practice frame; (ii) the long-term ecological, social, economic, and political interests of the global community (rather than the short-term economic interests of individual countries); (iii) the perceived tradeoffs between environmental and developmental priorities, and between economic and equity concerns; (iv) how countries evaluate costs (Saul and Seidel, 2011); and (v) trust and effective collaboration (Walker et al., 2009).

The EU is often thought of as a good candidate to act as a leader in the climate change negotiations (Kilian and Elgström, 2010; Oberthür, 2011), whereas the US is often seen as a laggard (Andresen and Agrawala, 2002). Some have argued that China (Energy Foundation, 2007; Podesta et al., 2009), India (Michaelowa and Michaelowa, 2012), and even Russia (Andonova and Alexiva, 2012) could become more proactive. Although there are contenders for the leadership role, it is not clear what exactly they will promote or how they will define 'leadership'. For example, Russia has now made clear that

it will not participate in a post-Kyoto regime and therefore cannot be a leader as such (at least within the bounds of the current climate regime).

5. International law: normative force and rules of procedure

5.1. Theory

The preceding articles in this Special Issue have not explicitly taken into account the international treaty negotiation arena in which the climate negotiations take place. This omission is partially rectified here by focusing on insights from international legal theory: the implications of the negotiation venue for legally binding agreements, the use of legal precedents, principles and remedies, and the role of procedures.

If the relevant negotiations are to take place within the UN multilateral arena, they can be shaped as legally binding instruments that are influenced by past precedent, the Law of Treaties, and the formal Rules of Procedure, which guarantee the legality, legitimacy, and legally binding nature of the negotiation process. In addition to ensuring the legality and legitimacy of the negotiation process, stable long-term principles are also needed to ensure its predictability and equity, principles that send a signal to society about the kinds of negotiation behaviour that will be tolerated, helping social actors to shape their long-term goals.

Some of these principles will be *jus cogens* norms (e.g. the prohibition of genocide), which are accepted by the global community and acquire the status of customary international law, and apply to states even when they have not explicitly ratified them (e.g. Fassbender, 1998). These principles, the implicit or explicit implementation of which can be promoted through legal means, emerge from a number of sources and help to promote a feeling of community at the global level because of their normative force (e.g. van Dijk, 1987). Although advocates of collective action models are sceptical of the role that international norms can have in shaping the behaviour of countries, advocates of social practice models accept that countries will follow norms and rules that they see as 'normatively correct' (Young, 2001). Constructive, soft bargaining strategies can flourish and succeed when the rules of the game – the rules established by the Law of Treaties, the specific negotiation-related rules of procedure, and the international principles of law – are well structured.

5.2. Application to climate change

Although the international UNFCCC negotiation arena has been the critical arena for addressing the problem at a speed commensurate to preventing dangerous climate change, alternatives have emerged in the international sphere, such as the Global Methane Initiative, the International Partnership for a Hydrogen Economy, and the Asia–Pacific Partnership for Clean Development and Climate. The existence of a multiplicity of arenas has been referred to as 'fragmentation' (Biermann et al., 2009) or 'regime complexes' (Keohane and Victor, 2011). Some have argued that these alternative arenas (e.g. the Global Methane Initiative at the country level, the Regional Greenhouse Gas Initiative at regional level, and the C40 Cities group at the city level) may be more successful than global treaties in addressing climate change because they link like-minded countries, focus on what is possible, and try to make issue-specific progress. Others have argued, by contrast, that these arenas will be less effective than the UNFCCC as they cannot provide for the negotiation of a legally binding long-term objective nor the short-term targets that can ultimately help to keep the climate change problem under control. Indeed, any agreements made in these arenas include too few countries, are not legally binding, and are not, in fact, compatible or effectively implemented (Karlsson-Vinkhuyzen and van Asselt, 2009). I agree with this perspective as many of these alternative agreements often fade away for lack of real

motivation and because they are not legally binding as was the case of the Asia-Pacific Partnership which was dissolved in 2011. Thus, although these alternative fora may be necessary to enlarge the pie, they are not in themselves sufficient to adopt and develop a legally binding regime to achieve, in accordance with Article 2 of the UNFCCC (UN, 1992), a long-term quantitative objective that prevents dangerous climate change.

Although the UNFCCC contains five sets of principles to govern global behaviour, these exclude reference to the 'no harm' and 'polluter pays' principles, and is internally inconsistent. For example, it calls on parties to cooperate to promote an open economic system and, at the same time, sustainable development. It also obliges parties to both act according to the precautionary principle and, at the same time, use the most cost-effective measures. The principles are also contested (see Section 2.2) and only very partially implemented. As a consequence, the demand for and supply of literature on climate justice has been steadily increasing. Many have therefore argued that climate justice can be promoted through the development of common norms on equity and justice (Roberts, 2011), litigation in a variety of national or global courts³, other approaches to hold corporations and governments more accountable (Smith and Shearman, 2006; Faure and Peeters, 2011), and linking the IPCC scale of likelihood with a scale based on legal standards of proof required for different kinds of legal action (Haritz, 2010).

Overall, the UNFCCC should remain the command centre for negotiations (at least on the long-term objective and short-term targets), because it is legally binding and legitimate. Moreover, the need for an effective normative framework to guide long-term action (one that has normative force) can be implemented through judicial processes.

6. Analysis

Figure 1 depicts the relations between the four theoretical areas discussed in this article and their key messages. The common theme of these areas is that of norms and principles. Because climate change is a moderately structured problem (relative to the underlying science), it is the disputed norms that underlie the conflicts at a global level. A learning regime may thus help to address this problem. Constructive soft or integrative bargaining strategies are needed to create value in the system. Owing to the fact that climate change is a long-term problem, who contributes (and who is affected) most will change. Hence, the norms used to determine how to allocate the relevant responsibilities and rights between the various actors need to be elaborated and implemented in a way that permits the creation of a stable, dynamic, and predictable legal system. Although rational actor and collective action models tend to take short-term interests into account, social practice models point out

that actors comply with rules or live up to commitments because they are authoritative and legitimate or, to put in another way, because such behaviour is deemed normatively correct. (Young, 2001, p. 13)

Advocates of social practice models are in line with legal theorists who argue that the adoption of norms leads society to conform to them.

As argued, if dangerous climate change is to be avoided, the countries involved in climate change negotiations need a leader to encourage them to move away from the use of defensive, hard bargaining strategies and instead towards constructive, soft (integrative) bargaining strategies. Such a change in strategy is depicted by a move from the bottom left-hand corner of Figure 2 to the top right-hand corner.

At least three objections might be raised against the preceding analysis. First, it might be claimed that the issue of which norms should be adopted is a distributive issue which may lead to a situation in which one involved party wins while another loses. Thus the adoption of the precautionary

principle may require countries that are emitting large quantities of GHGs to reduce their emissions while benefitting others who emit low quantities of GHGs but are especially vulnerable to the impacts of climate change. This, arguably, disqualifies the issue from being addressed in the negotiations through the use of soft bargaining strategies. However, as argued above, one need not view the climate change negotiations through this frame. In the long term, using soft bargaining strategies can lead to the creation of win–win situations for all those concerned. This is because the system becomes predictable when there is clarity about how responsibilities are to be shared between defined categories of countries based on specific criteria. It also sends a long-term message to all concerned parties about how they should develop in the future and, moreover, that the responsibilities of a country that graduates into a different category of country will change. Such signals change the cost–benefit analyses of governments and other social actors, and help with the process of planning new infrastructure, and production and consumption patterns. If developed countries adopt targets, then all future developed countries (based on clear criteria) will be on notice that they have to modify their development paths. Thus, the question of the future emissions growth of developing countries becomes irrelevant. Even if developed countries find that such emissions reductions are not cost-effective in the short term, they will become so because developing countries will have to (in a good faith) approach *pacta sunt servanda* ('agreements must be kept'), follow suit, and indeed fairly soon.

The second objection is that the application of the precautionary principle when adopting a long-term objective limits the size of the potential pie and as such would be part of a distributive strategy. However, this would only limit the size of the GHG pie and not the development pie, which might be enlarged *inter alia* through decarbonization, dematerialization, the green economy, sustainable infrastructure, sustainable product chains, multiple land use, and sustainable procurement policies. These options will only have the space to grow and become cost-effective when a long-term legally binding GHG stabilization objective is adopted by all involved parties. Moreover, these may even be promoted in alternative fora with new actors.

The third and perhaps most worrying objection is that countries can simply opt out of treaties. Developing countries might follow the precedents of the US, Canada, and Russia, and simply decide not to participate in a post-Kyoto regime. Currently, although there are many rules at the global level, global governance is anarchic and, according to Annan (2000), there is a limited rule of law. The rule of law implies that there is a common, normative framework and that there is a non-discriminatory application of clear, consistent (and not arbitrary), equitable, and stable principles for all countries, both of which provide for a certain degree of predictability about the evolution of law. Some powerful nations reject the global rule of law because this makes them a mere subject (and not creator) of international rules (cf. Whittell, 2002), presenting a clear risk to the extant distribution of power between countries (Craig, 1997; Hager, 2000). However, promoting the global rule of law is becoming increasingly important for at least five reasons: (i) humanity is crossing global planetary boundaries (Rockström et al., 2009); (ii) long-term problems need to be addressed in a consistent and predictable manner as societies need to re-order their long-term production patterns and infrastructure; (iii) powerful countries that currently see the rule of law and good governance as essential within countries and as an 'objective of and condition for development assistance' (Santiso, 2001, p. 1) cannot subsequently and plausibly deny that it is not necessary at the global level (cf. Sandelius, 1993, Fitzpatrick, 2003); (iv) politics needs the law to make it legitimate (Fitzpatrick, 2003), such that 'those who seek to bestow legitimacy must themselves embody it; and those who invoke international law must themselves submit to it' (Annan, 2000); and (v) even if it has been in the past interest of some hegemon (such as the US) not to promote the rule of global law, it may be wiser – as the global centre of power shifts to Russia, China, India, and South Africa – to promote it rather than to wait and see how the new hegemon shape the new global (dis)order (Roberts, 2011). Indeed, further development of the

legal concept of obligations *erga omnes* ('for all') that are owed to the global community may be able to deal with the problem of free-riders (Gupta, 1997).

7. Conclusions

The aim of this article has been to complement the understanding of country- and coalition-specific negotiation challenges with the use of hard and soft bargaining strategies discussed in this Special Issue. It has been argued that an application of theories of problem structuring, soft or integrative bargaining, social practice models, and the law to the problem of climate change all point to one common problem: the disagreement between countries on the normative principles that determine how responsibilities should be shared between countries.

Reaching agreement and elaborating on these legal principles does not require viewing the problem of climate change as a distributive issue such that one country wins and another loses. All concerned parties will win in the long term if the solution to the problem is predictable and clear and each party can make its own cost–benefit analysis of how to redesign its development process. All parties will win if the problem is brought under control by reducing the scale of adaptation measures needed, something that makes sense under both social practice and rational actor collective action frames. States must, however, take a longer-term view when engaging in their decision-making processes.

The major obstruction to progress in the climate change negotiations is the free-rider problem. It has been argued that the legal principles governing how responsibility is to be shared need to be embedded in a global legal system. This will go some way to alleviating worries regarding free-riders. Although different specific problems will have different configurations of country interests, on the whole each country will be dealt with if the rule of law applies in a non-discriminatory manner. This will be beneficial for all concerned.

The current, relatively short timescales for political election are not adequate to deal with society-wide and century-long problems. It will take a statesperson of enormous stature to be able to convince states that it is in their own long-term interests to embrace common norms and the rule of global law. In the meantime, court cases and social movements (e.g. Climate Justice Action, Climate Justice Now) may help to create the pressure needed to push states to embrace them.

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Notes

1. The environmental Kuznets curve illustrates a hypothesis regarding the relationship between income per capita and environmental pollution per capita. The curve is an inverted U-shape, so as income per capita increases, so does pollution per capita. However, after reaching a critical point, pollution starts to decline. Thus, according to the hypothesis, societies can grow without necessarily increasing their pollution levels.
2. For a discussion of 'hard' versus 'soft' bargaining strategies, see Dür and Mateo (2010).
3. For litigation in the UK, see Kaminskaitė-Salters (2011); in the US, see Kosolapova (2011); in the Netherlands, see van Dijk (2011). For the case of global litigation, see Verheyen (2005), Smith and Shearman (2006), Gupta (2007), de Cendra de Larragán (2011), Gouritin (2011), and Peeters (2011).

References

- Adams, T.B., 2003, 'Is there a legal future for sustainable development in global warming? Justice, economics and protecting the environment', *Georgetown International Environmental Law Review* 16, 77–126.
- Anand, R., 2004, *International Environmental Justice: A North–South Dimension*, Ashgate, Aldershot, UK.
- Andonova, L.B., Alexiva, A., 2012, 'Continuity and change in Russia's climate negotiations position and strategy', *Climate Policy* 12(5), 614–629.
- Andresen, S., Agrawala, S., 2002, 'Leaders, pushers and laggards in the climate regime', *Global Environmental Change* 12, 41–51.
- Annan, K., 2000, *Secretary-General's Address to the General Assembly*, 21 September 2004, United Nations, New York, NY [available at www.un.org/apps/sg/sgstats.asp?nid=1088].
- Bachrach, P.S., Baratz, M.S., 1970, *Power and Poverty: Theory and Practice*, Oxford University Press, New York, NY.
- Bafundo, N.E., 2006, 'Compliance with the ozone treaty: weak states and the principle of common but differentiated responsibilities', *The American University International Law Review* 21, 461–495.
- Bailer, S., 2012, 'Strategy in the climate change negotiations: do democracies negotiate differently?', *Climate Policy* 12(5), 534–551.
- Bauer, S., Stringer, L.C., 2009, 'The role of science in the global governance of desertification', *The Journal of Environment & Development* 18, 248–267.
- Benedick, R.E., 1993, 'Perspectives of a negotiation practitioner', in: G. Sjöstedt (ed), *International Environment Negotiation*, IIASA, Laxenberg, Austria, 219–243.
- Berger, G., Kern, M.C., Thompson, L., 2003, 'The enlightened negotiator: what is the best type of interaction?', *16th Annual Conference of the IACM*, 15–18 June 2003, Melbourne, Victoria, Australia [available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=400780].
- Betzold, C., Castro, P., Weiler, F., 2012, 'AOSIS in the UNFCCC negotiations: from unity to fragmentation?', *Climate Policy* 12(5), 591–613.
- Bidwai, P., 2009, *An India That Can Say Yes: A Climate-Responsible Development Agenda for Copenhagen and Beyond*, Heinrich Böll Stiftung, New Delhi, India.
- Biermann, F., Pattberg, P., van Asselt, H., Zelli, F., 2009, 'The fragmentation of global governance architectures: a framework for analysis', *Global Environmental Politics* 9, 14–40.
- de Boer, Y., 2011, 'Bring private sector into UN climate talks', *Euractiv*, 22 April [available at www.euractiv.com/climate-environment/ex-climate-chief-calls-private-sector-seat-un-talks-news-504246?utm_source=EurActiv%20Newsletter&utm_campaign=2fc3330d51-my_google_analytics_key&utm_medium=email].
- Brandt, U.S., Svendsen, G.T., 2002, 'Hot air in Kyoto, cold air in The Hague – the failure of global climate negotiations', *Energy Policy* 30, 1191–1199.
- Braybrooke, D., Lindblom, C.E., 1963, *A Strategy of Decision: Policy Evaluation as a Social Process*, The Free Press, New York, NY.
- Carrell, M.R., Heavrin, C. (eds), 1995, 'Integrative bargaining', *Negotiating Essentials: Theory, Skills and Practices*, Pearson Prentice Hall, Upper Saddle River, NJ.
- de Cendra de Larragán, J., 2011, 'Liability of member states and the EU in view of the international climate change framework: between solidarity and responsibility', in: M. Faure, M. Peeters (eds), *Climate Change Liability*, Edward Elgar Publishing, Cheltenham, Gloucester, UK, 55–89.
- Craig, P., 1997, 'Formal and substantive conceptions of the rule of law: an analytical framework', *Public Law* (Autumn), 467–487.
- van Dijk, P., 1987, 'Normative force and effectiveness of international norms', *German Yearbook of International Law* 30, 9–35.
- van Dijk, C., 2011, 'Civil liability for global warming in the Netherlands', in: M. Faure, M. Peeters (eds), *Climate Change Liability*, Edward Elgar Publishing, Cheltenham, Gloucester, UK, 206–226.
- Dür, A., Mateo, G., 2010, 'Choosing a bargaining strategy in EU negotiations: power, preferences, and culture', *Journal of European Public Policy* 17(5), 680–693.
- Energy Foundation, 2007, *Energy in China: the Myths, Reality, and Challenges*, Annual Report 2007, Energy Foundation, San Francisco, CA, and Beijing, China [available at www.ef.org/documents/2007_EF_Annual_Report.pdf].

- Falkner, R., Stephan, H., Vogler, J., 2010, 'International climate policy after Copenhagen: towards a "building blocks" approach', *Global Policy* 1, 252–262.
- Fassbender, B., 1998, 'The United Nations charter as constitution of the international community', *Columbia Journal of Transnational Law* 36(3), 529–590.
- Faure, M., Peeters, M. (eds), 2011, *Climate Change Liability*, Edward Elgar Publishing, Cheltenham, Gloucester, UK.
- Fitzpatrick, P., 2003, '"Gods would be needed...": American empire and the rule of (international) law', *Leiden Journal of International Law* 16(3), 429–466.
- FMCS, 1999, *Interest Based Bargaining: A Different Way to Negotiate*, Federal Mediation and Conciliation Service, Washington, DC.
- French, D., 2000, 'Developing states and international environmental law – the importance of differentiated responsibilities', *International and Comparative Law Quarterly* 49(1), 35–60.
- Gouritin, A., 2011, 'Potential liability of European states under the ECHR for failure to take appropriate measures with a view to adaptation to climate change', in: M. Faure, M. Peeters (eds), *Climate Change Liability*, Edward Elgar Publishing, Cheltenham, Gloucester, UK, 134–164.
- Greene, O., 1996, 'Lessons from other international environmental agreements', in: M. Paterson, M. Grubb (eds), *Sharing the Effort – Options for Differentiating Commitments on Climate Change*, The Royal Institute of International Affairs, London, UK, 23–44.
- Greenhalg, L., 1987, 'The case against winning in negotiations', *Negotiation Journal* 3, 167–173.
- Gronewold, N., Climatewire, 2010, 'Game theory: climate talks destined to fail', *Scientific American*, 20 December [available at www.scientificamerican.com/article.cfm?id=game-theorist-predicts-failure-at-climate-talks].
- Gupta, J., 1997, *The Climate Change Convention and Developing Countries – From Conflict to Consensus?*, Kluwer Academic Publishers, Dordrecht, Netherlands.
- Gupta, J., 2007, 'Legal steps outside the climate convention: litigation as a tool to address climate change', *Review of European Community and International Environmental Law* 16, 76–86.
- Gupta, J., 2010, 'A history of international climate change policy', *Wiley Interdisciplinary Reviews* 1(5), 636–653.
- Haas, P.M., Sundregren, J., 1993, 'Evolving international environmental law: changing practices of national sovereignty', in: N. Choucri (ed), *Global Accord: Environmental Challenges and International Responses*, MIT Press, Cambridge, MA, 401–429.
- Hager, B., 2000, *The Rule of Law, A Lexicon for Policy Makers*, The Mamsfield Center for Pacific Affairs, Washington, DC.
- Haritz, M., 2010, *An Inconvenient Deliberation: The Precautionary Principle's Contribution to the Uncertainties Surrounding Climate Change Liability*, PhD thesis, Maastricht University, Box Press Publishers, Oisterwijk, Netherlands.
- Harris, P.G., 1999, 'Common but differentiated responsibility: the Kyoto protocol and United States policy', *New York University Environmental Law Journal* 7, 27.
- Hisschemöller, M., 1993, *De democratie van problemen. De relatie tussen de inhoud van beleidsproblemen en methoden van politieke besluitvorming*, Vrije Universiteit, Amsterdam, Netherlands.
- Hisschemöller, M., Gupta, J., 1999, 'Problem-solving through international environmental agreements: the issue of regime effectiveness', *International Political Science Review* 20, 153–176.
- Honkanen, T., 2009, 'The principle of common but differentiated responsibilities in post-2012 climate negotiations', *Review of European Community and International Environmental Law* 18(3), 257–267.
- IAC, 2010, *Climate Change Assessments: Review of the Processes and Procedures of the IPCC*, InterAcademy Council, Amsterdam, Netherlands.
- Junne, G., 1992, 'Beyond regime theory', *Acta Politica* 27, 9–28.
- Kaminskaitė-Salters, G., 2011, 'Climate change litigation in the UK: its feasibility and prospects', in: M. Faure, M. Peeters (eds), *Climate Change Liability*, Edward Elgar Publishing, Cheltenham, Gloucester, UK, 165–188.
- Karlsson-Vinkhuyzen, S.I., van Asselt, H., 2009, 'Special issue: Exploring and explaining the Asia Pacific Partnership on clean development and climate', *International Environmental Agreements: Politics, Law and Economics* 9(3), 195–336.
- Keohane, R., Victor, D., 2011, 'The regime complex for climate change', *Perspectives on Politics* 9, 7–23.
- Kilian, B., Elgström, O., 2010, 'Still a green leader? The European Union's role in international climate negotiations', *Cooperation and Conflict* 45, 255–273.

- Kilmann, R.H., Thomas, K.W., 1977, 'Developing a forced choice measure of conflict handling behaviour: the 'MODE' instrument', *Educational and Psychological Measurement* 37, 309–325.
- Kirschmeier, F., 2006, *The Right to Development: Where do we Stand? State of the Debate on the Right to Development*, Occasional Papers No. 23, Dialogue on Globalization, Friedrich-Ebert-Stiftung, Geneva, Switzerland.
- Kosolapova, E., 2011, 'Liability for climate change-related damage in domestic courts: claims for compensation in the USA', in: M. Faure, M. Peeters (eds), *Climate Change Liability*, Edward Elgar Publishing, Cheltenham, Gloucester, UK, 189–205.
- March, J.G., Olsen, J.P., 1998, 'The institutional dynamics of international political orders', *International Organization* 52, 943–969.
- Michaelowa, K., Michaelowa, A., 2012, 'India as an emerging power in international climate negotiations', *Climate Policy* 12(5), 575–590.
- Najam, A., Huq, S., Sokona, Y., 2003, 'Climate negotiations beyond Kyoto: developing countries concerns and interests', *Climate Policy* 3, 221–231.
- NAS, 2007, *Analysis of Global Change Assessments: Lessons Learned*, Committee on Analysis of Global Change Assessments, National Research Council, National Academy of Sciences, Washington, DC.
- Oberthür, S., 2011, 'Global climate governance after Cancun: options for EU leadership', *The International Spectator* 46, 5–13.
- Odell, J., 2000, *Negotiating the World Economy*, Cornell University Press, Ithaca, NY.
- Ostrom, E., 2010, 'Polycentric systems for coping with collective action and global environmental change', *Global Environmental Change* 20, 550–557.
- Peeters, M., 2011, 'The regulatory approach of the EU in view of liability for climate change damage', in: M. Faure, M. Peeters (eds), *Climate Change Liability*, Edward Elgar Publishing, Cheltenham, Gloucester, UK, 90–133.
- Piron, L.-H., 2002, *The Right to Development: A Review of the Current State of the Debate*, Department of International Development, UK Government, London, UK.
- Podesta, J., Light, A., Wong, J. L., 2009, *Cooperation Is the Key: Proposal for U.S.–China Collaboration on Climate Technology*, 4 November, Center for American Progress, Washington, DC [available at www.americanprogress.org/issues/2009/11/china_ccs.html].
- Posner, E., Sunstein, C., 2010, 'Justice and climate change: the unpersuasive case for per capita allocations of emissions rights', in: J. Aldy, R. Stavins (eds), *Post-Kyoto International Climate Policy*, Cambridge University Press, Cambridge, UK, 343–371.
- Rajamani, L., 2000, 'The principle of common but differentiated responsibility and the balance of commitments under the climate regime', *Review of European Community and International Environmental Law* 9(2), 120–131.
- Roberts, J.T., 2011, 'Multipolarity and the new world (dis)order: US hegemonic decline and the fragmentation of the global climate regime', *Global Environmental Change* 21, 776–784.
- Rockström, J., Steffen, W., Noone, K., Persson, A., Chapin, F.S., Lambin, E.F., Lenton, T.M., Scheffer, M., Folke, C., Schellnhuber, H.J., Nykvist, B., de Wit, C.A., Hughes, T., van der Leeuw, S., Rodhe, H., Sörlin, S., Snyder, P.K., Costanza, R., Svedin, U., Hansen, J., Walker, B., Liverman, D., Richardson, K., Crutzen, P., Foley, J.A., 2009, 'A safe operating space for humanity', *Nature* 461, 472–475.
- Sandelius, W., 1933, 'National sovereignty versus the rule of law', *American Political Science Review* 25(1), 1–20.
- Saner, R., 2000, *The Expert Negotiators*, Kluwer Academic Publishers, The Hague, Netherlands.
- Santiso, C., 2001, 'Good governance and aid effectiveness: the World Bank and conditionality', *The Georgetown Public Policy Review* 7(1), 1–22.
- Saul, U., Seidel, C., 2011, 'Does leadership promote cooperation in climate change mitigation policy?', *Climate Policy* 11(2), 901–921.
- Sjöstedt, G., 2003, 'Norms and principles as support to postnegotiation and rule implementation', in: B.I. Spector, I.W. Zartman (eds), *Getting It Done: Post-agreement Negotiation and International Regimes*, US Institute of Peace Press, Washington, DC, 89–114.
- Skodvin, T., Andresen, S., 2006, 'Leadership revisited', *Global Environmental Politics* 6, 13–27.
- Smith, J., Shearman, D., 2006, *Climate Change Litigation: Analysing the Law, Scientific Evidence and Impact on the Environment, Health and Property*, Presidian Legal Publications, Adelaide, Australia.
- Stavins, R.N., 2011, 'The problem of the commons: still unsettled after 100 years', *American Economic Review* 101, 81–108.

- Sugiyama, T., Stinton, J., 2005, 'Orchestra of treaties: a future climate regime scenario with multiple treaties among like-minded countries', *International Environmental Agreements: Politics, Law and Economics* 5, 65–88.
- UN, 1992, *United Nations Framework Convention on Climate Change*, FCCC/INFORMAL/84, United Nations, New York, NY.
- UNGA, 1986, *Declaration on the Right to Development*, A/RES/41/128, United Nations General Assembly, New York, NY.
- Verheyen, R., 2005, *Climate Change Damage and International Law*, PhD thesis, University of Hamburg, Martinus Nijhoff Publishers, Leiden, Netherlands.
- Walker, B., Barrett, S., Polasky, S., Glaz, V., Folke, C., Engström, G., Ackerman, F., Arrow, K., Carpenter, S., Chopra, K., Daily, G., Ehrlich, P., Hughes, T., Kautsky, N., Levin, S., Mäler, K.-G., Shogren, J., Vincent, J., Xepapadeas, T., de Zeeuw, A., 2009, 'Looming global-scale failures and missing institutions', *Science* 325, 1345–1346.
- Walsh, S., Tian, H., Whalley, J., Agarwal, M., 2011, 'China and India's participation in global climate negotiations', *International Environmental Agreements: Politics, Law and Economics* 11, 261–273.
- Weiler, F., 2012, 'Determinants of bargaining success in the climate change negotiations', *Climate Policy* 12(5), 552–574.
- Weisslitz, M., 2002, 'Rethinking the equitable principle of common but differentiated responsibility: differential versus absolute norms of compliance and contribution in the global climate change context', *Colorado Journal of International Environmental Law and Policy* 13, 473–509.
- Whittell, G., 2002, 'Albright attacks US foreign policy as schizophrenic', *The Times*, 21 May, p. 8.
- Young, O.R., 2001, 'The behavioral effects of environmental regimes: collective-action vs. social-practice models', *International Environmental Agreements: Politics, Law and Economics* 1, 9–29.
- Zadek, S., 2011, 'Beyond climate finance: from accountability to productivity in addressing the climate challenge', *Climate Policy* 11(3), 1058–1068.